

Fire & Industrial Signalling

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| | | | |

Combined:

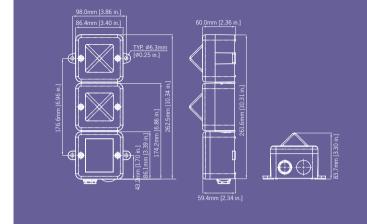
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Combined:

| uzzers with lights |
|--------------------|
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| |

STB2 Xenon & L.E.D. Tower with Junction Box

The STB2 is a customisable visual signal featuring a tower of 2 AlertAlight ST-L101X type beacon. Each beacon position can contain either a Xenon or high output L.E.D. light source. The STB2 assembly features a pre-wired junction box and cable loom enabling the end user to determine beacon type and position during installation.



ST-L101X Xenon Beacon:

| Version: | | Voltage: | Current: |
|-----------|---------|----------|-------------|
| 12V dc/ac | | 10-14V | 500mA/380mA |
| 24V dc/ac | | 20-28V | 250mA/300mA |
| 115V ac | 50/60Hz | +/-10% | 70mA |
| 230V ac | 50/60Hz | +/-10% | 35mA |

ST-L101H L.E.D. Beacon:

| Version: | | Voltage: | Current: |
|----------|---------|---------------|----------------|
| DC | | 10-30V dc | 155mA (24V dc) |
| AC/DC | 50/60Hz | 90-260V ac/dc | 35mA (230V ac) |

STB4

Part codes:

| STB2 Junction box assembly for 2 x L101 beacons | | |
|---|------------------------|--|
| Part Code: | STB2DC[x] STB2AC[x] | |
| Voltage: | 12/24Vdc / 115/230Vac | |
| Housing Colour: | Grey/Red/White | |

[x]: G=Grey, R=Red, W=White

| ST-L101X L101 Xenon Beacon 5J | | |
|-------------------------------|--|--|
| Part Code: | ST-L101XDC012[x] | |
| | ST-L101XDC024[x] | |
| | ST-L101XAC115[x] | |
| | ST-L101XAC230[x] | |
| Voltage: | 12Vdc / 24Vdc / 115Vac / 230Vac | |
| Lens Colour: | Amber, Blue, Clear, Green, Red, Yellow | |
| ST-L101H L101 | L.E.D. Beacon | |
| Part Code: | ST-L101HDC030[x] | |
| | ST-L101HAC230[x] | |
| Voltage: | 10-30Vdc / 90-260Vac | |
| L.E.D. Colour: | Amber, Blue, Clear, Green, Red | |

[x]: A=Amber, B=Blue, C=Clear, G=Green, R=Red

Lens colour: All L.E.D. colours use a Clear lens to maximise output and to ensure the signal is most effective in high ambient light levels.

Example: For a tower of two beacons using one Xenon beacon in red plus one L.E.D. beacon in green using a 24Vdc supply in a red housing, order the following part codes: STB2DCR ST-L101XDC024R ST-L101HDC024G

Specification:

| opcomeation. | | |
|---------------------|--|--|
| General: | | |
| Cable entries: | 2 x M20 clearance | |
| Ingress Protection: | IP66 | |
| Housing material: | UL94V0 & 5VA FR ABS | |
| Housing colour: | RAL3000 Red, RAL7038 Grey and White | |
| Lens material: | PC | |
| Fixings: | Stainless Steel | |
| Operating temp: | -25° to +55°C | |
| Storage temp: | -40° to +70°C | |
| Relative humidity: | 90% at 20°C | |
| STB2 Weight: | 0.65kg | |
| ST-L101X - Xenon: | | |
| Energy: | 5 Joules (5Ws) | |
| Flash rate: | 1Hz (60 fpm) | |
| Peak Candela: | 500,000 cd - calc. from energy (J) | |
| Effective candela: | 250 cd - calc. from energy (J) | |
| Peak Candela: | 86,935 cd* - measured ref. to I.E.S. | |
| Effective candela: | 200 cd* - measured ref. to I.E.S. | |
| Terminals: | 0.5 to 4.0mm ² cables. | |
| Lens colours: | Amber, Blue, Clear, Green, Opal, Red, Yellow | |
| Tube life : | Emissions are reduced to 70% after 8 million flashes | |
| ST-L101H - L.E.D: | | |
| Light source: | High intensity L.E.D. array. 24 x Superflux type high ouput L.E.D's | |
| Options: | Steady or 2Hz flash mode (on board selection) | |
| Effective candela: | 176 cd (Green L.E.D.) | |
| Terminals: | 0.5 to 4.0mm ² cables | |
| L.E.D. colours: | Amber Blue, Green, Red and White | |

*Candela measurements representative of performance with clear lens at optimum voltage.

Features:

- L.E.D. beacons. • Internal cable loom and termination PCB simplifies installation.
- Common negative/neutral supply minimises cabling.
- steady or flashing.
- · Sealed to IP66.

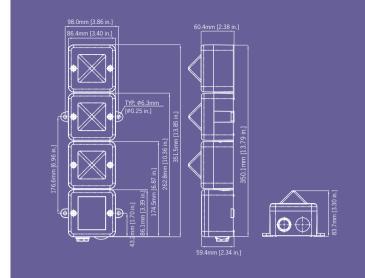
- Can be combined with Sonora SONF1 audible signal.



- Multiple configurations of Xenon and
- Available with red, white or grey housing. • High output L.E.D. unit can be set to
- Tropicalisation available on request.

STB3 Xenon & L.E.D. Tower with Junction Box

The STB3 is a customisable visual signal featuring a tower of 3 AlertAlight ST-L101X type beacon. Each beacon position can contain either a Xenon or high output L.E.D. light source. The STB3 assembly features a pre-wired junction box and cable loom enabling the end user to determine beacon type and position during installation.



ST-L101X Xenon Beacon:

| Version: | | Voltage: | Current: |
|-----------|---------|----------|-------------|
| 12V dc/ac | | 10-14V | 500mA/380mA |
| 24V dc/ac | | 20-28V | 250mA/300mA |
| 115V ac | 50/60Hz | +/-10% | 70mA |
| 230V ac | 50/60Hz | +/-10% | 35mA |

ST-L101H L.E.D. Beacon:

| Version: | | Voltage: | Current: |
|----------|---------|---------------|----------------|
| DC | | 10-30V dc | 155mA (24V dc) |
| AC/DC | 50/60Hz | 90-260V ac/dc | 35mA (230V ac) |

Part codes:

| STB3 Junction box assembly for 3 x L101 beacons | |
|---|------------------------|
| Part Code: | STB3DC[x] STB3AC[x] |
| Voltage: | 12/24Vdc / 115/230Vac |
| Housing Colour: | Grey/Red/White |

[x]: G=Grey, R=Red, W=White

| ST-L101X L101 Xenon Beacon 5J | | |
|-------------------------------|--|--|
| Part Code: | ST-L101XDC012[x] | |
| | ST-L101XDC024[x] | |
| | ST-L101XAC115[x] | |
| | ST-L101XAC230[x] | |
| Voltage: | 12Vdc / 24Vdc / 115Vac / 230Vac | |
| Lens Colour: | Amber, Blue, Clear, Green, Red, Yellow | |
| ST-L101H L101 | L.E.D. Beacon | |
| Part Code: | ST-L101HDC030[x] | |
| | ST-L101HAC230[x] | |
| Voltage: | 10-30Vdc / 90-260Vac | |
| L.E.D. Colour: | Amber, Blue, Clear, Green, Red | |

Lens colour: All L.E.D. colours use a Clear lens to maximise output and to ensure the signal is most effective in high ambient light levels.

[x]: A=Amber, B=Blue, C=Clear, G=Green, R=Red

Example: For a tower of three beacons using two Xenon beacons, one red, one amber plus one L.E.D. beacon in green using a 24Vdc supply in a red housing, order the following part codes: STB3DCR ST-L101XDC024R ST-L101XDC024A ST-L101HDC024G

Specification:

| opcontoution. | | |
|---------------------|--|--|
| General: | | |
| Cable entries: | 2 x M20 clearance | |
| Ingress Protection: | IP66 | |
| Housing material: | UL94V0 & 5VA FR ABS | |
| Housing colour: | RAL3000 Red, RAL7038 Grey and White | |
| Lens material: | PC | |
| Fixings: | Stainless Steel | |
| Operating temp: | -25° to +55°C | |
| Storage temp: | -40° to +70°C | |
| Relative humidity: | 90% at 20°C | |
| STB3 Weight: | 0.85kg | |
| ST-L101X - Xenon: | | |
| Energy: | 5 Joules (5Ws) | |
| Flash rate: | 1Hz (60 fpm) | |
| Peak Candela: | 500,000 cd - calc. from energy (J) | |
| Effective candela: | 250 cd - calc. from energy (J) | |
| Peak Candela: | 86,935 cd* - measured ref. to I.E.S. | |
| Effective candela: | 200 cd* - measured ref. to I.E.S. | |
| Terminals: | 0.5 to 4.0mm ² cables. | |
| Lens colours: | Amber, Blue, Clear, Green, Opal, Red, Yellow | |
| Tube life : | Emissions are reduced to 70% after 8 million flashes | |
| ST-L101H - L.E.D: | | |
| Light source: | High intensity L.E.D. array. 24 x Superflux type high ouput L.E.D's | |
| Options: | Steady or 2Hz flash mode (on board selection) | |
| Effective candela: | 176 cd (Green L.E.D.) | |
| Terminals: | 0.5 to 4.0mm ² cables | |
| L.E.D. colours: | Amber Blue, Green, Red and White | |

Features:

- Common negative/neutral supply minimises cabling.

- Sealed to IP66.

- audible signal.



ts representative of performance with cle lens at optimum voltage.

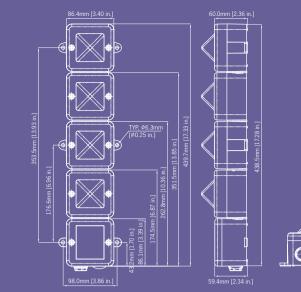


- Multiple configurations of Xenon and L.E.D. beacons.
- Internal cable loom and termination PCB simplifies installation.
- Available with red, white or grey housing. • High output L.E.D. unit can be set to steady or flashing.
- Tropicalisation available on request.
- Can be combined with Sonora SONF1



STB4 Xenon & L.E.D. Tower with Junction Box

The STB4 is a customisable visual signal featuring a tower of 4 AlertAlight ST-L101X type beacon. Each beacon position can contain either a Xenon or high output L.E.D. light source. The STB4 assembly features a pre-wired junction box and cable loom enabling the end user to determine beacon type and position during installation.



Features:

ST-L101X Xenon Beacon:

| Version: | | Voltage: | Current: |
|-----------|---------|----------|-------------|
| 12V dc/ac | | 10-14V | 500mA/380mA |
| 24V dc/ac | | 20-28V | 250mA/300mA |
| 115V ac | 50/60Hz | +/-10% | 70mA |
| 230V ac | 50/60Hz | +/-10% | 35mA |

ST-L101H L.E.D. Beacon:

| Version: | | Voltage: | Current: |
|----------|---------|---------------|----------------|
| DC | | 10-30V dc | 155mA (24V dc) |
| AC/DC | 50/60Hz | 90-260V ac/dc | 35mA (230V ac) |

Part codes:

| STB4 Junction box assembly for 4 x L101 beacons | |
|---|------------------------|
| Part Code: | STB4DC[x] STB4AC[x] |
| Voltage: | 12/24Vdc / 115/230Vac |
| Housing Colour: | Grey/Red/White |

[x]: G=Grey, R=Red, W=White

| ST-L101X L101 Xenon Beacon 5J | | |
|-------------------------------|--|--|
| Part Code: | ST-L101XDC012[x] | |
| | ST-L101XDC024[x] | |
| | ST-L101XAC115[x] | |
| | ST-L101XAC230[x] | |
| Voltage: | 12Vdc / 24Vdc / 115Vac / 230Vac | |
| Lens Colour: | Amber, Blue, Clear, Green, Red, Yellow | |
| ST-L101H L101 | L.E.D. Beacon | |
| Part Code: | ST-L101HDC030[x] | |
| | ST-L101HAC230[x] | |
| Voltage: | 10-30Vdc / 90-260Vac | |
| L.E.D. Colour: | Amber, Blue, Clear, Green, Red | |

Lens colour: All L.E.D. colours use a Clear lens to maximise output and to ensure the signal is most effective in high ambient light levels.

[x]: A=Amber, B=Blue, C=Clear, G=Green, R=Red

Example: For a tower of four beacons using three Xenon beacons, one red, one amber, one clear plus one L.E.D. beacon in green using a 24Vdc supply in a red housing, order the following part codes: STB4DCR ST-L101XDC024R ST-L101XDC024A ST-L101XDC024C ST-L101HDC024G

Specification:

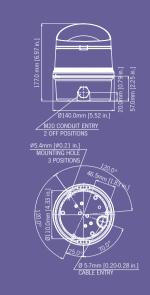
| Cable entries: | 2 x M20 clearance | |
|---------------------|--|--|
| Ingress Protection: | IP66 | |
| Housing material: | UL94V0 & 5VA FR ABS | |
| Housing colour: | RAL3000 Red, RAL7038 Grey and White | |
| Lens material: | PC | |
| Fixings: | Stainless Steel | |
| Operating temp: | -25° to +55°C | |
| Storage temp: | -40° to +70°C | |
| Relative humidity: | 90% at 20°C | |
| STB4 Weight: | 1.05kg | |
| ST-L101X - Xenon: | | |
| Energy: | 5 Joules (5Ws) | |
| Flash rate: | 1Hz (60 fpm) | |
| Peak Candela: | 500,000 cd - calc. from energy (J) | |
| Effective candela: | 250 cd - calc. from energy (J) | |
| Peak Candela: | 86,935 cd* - measured ref. to I.E.S. | |
| Effective candela: | 200 cd* - measured ref. to I.E.S. | |
| Terminals: | 0.5 to 4.0mm ² cables. | |
| Lens colours: | Amber, Blue, Clear, Green, Opal, Red, Yellow | |
| Tube life : | Emissions are reduced to 70% after 8 million flashes | |
| ST-L101H - L.E.D: | | |
| Light source: | High intensity L.E.D. array. 24 x Superflux type high ouput L.E.D's | |
| Options: | Steady or 2Hz flash mode (on board selection) | |
| Effective candela: | 176 cd (Green L.E.D.) | |
| Terminals: | 0.5 to 4.0mm ² cables | |
| L.E.D. colours: | Amber Blue, Green, Red and White | |

*Candela measurements representative of performance with clea lens at optimum voltage.

- (**2**25 STB4
- Multiple configurations of Xenon and L.E.D. beacons.
- Internal cable loom and termination PCB simplifies installation.
- Common negative/neutral supply minimises cabling.
- Available with red, white or grey housing.High output L.E.D. unit can be set to steady or flashing.
- Sealed to IP66.
- Tropicalisation available on request.
- Can be combined with Sonora SONF1 audible signal.

B450TLA L.E.D Traffic Light

The B450 series of traffic light beacons are available in single E27 filament lamp, dual E14 filament lamp or high output L.E.D array versions.





Part codes:

| Version: | Part code: |
|--------------------|---|
| 10-30V dc | B450TLA030B/[x] |
| 90-230V ac 50/60Hz | B450TLA230B/[x] |
| [x] = Lens colour: | A: Amber G: Green R: Red Y: Yellow |

Note: B450TLA units are supplied with 'clear' lenses to maximise the light output in environments with high ambient light levels.

Mounting brackets:

| MB-B450T-S | Mounting bracket kit for a single B450 type unit. |
|------------|--|
| MB-B450T-M | Mounting bracket kit for linked multiple B450 type units. |
| | |

Note: Multiple unit connector is supplied with each product.

Current consumption:

| Version: | | Current: |
|------------|---------|----------|
| 10-30V dc | | 130mA |
| 90-230V ac | 50/60Hz | 10-30mA |

Specification:

| Light source: | High output L.E.D. |
|---------------------|---|
| Light output: | 24 x L.E.D. array |
| Function: | Permanent |
| L.E.D. colours: | Amber, Green, Red & Yellow |
| Effective candela: | 89 cd* - measured ref. to I.E.S. |
| Lens type: | Prismatic |
| Mounting: | Surface mount (Wall mount bracket available) |
| Entries: | 1 x 5-7mm push through grommet 2 x M20 cable entry |
| Dimensions: | ø140 x 177mm |
| Ingress protection: | IP65 |
| Housing material: | High impact UL94 VO (f1) PC |
| Terminals: | 0.5 to 4.0mm ² |
| Operating temp: | -25 to +50°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| | |

*Candela measurements representative of performance with clear lens at optimum voltage.

Features:

Approvals:

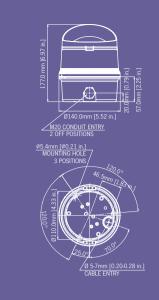


• Bayonet fixing lens. • Anti-tamper locking screw. • Stainless steel fixings. • Unit is supplied with a clear prismatic lens to optimise visibility in applications with high ambient light levels.



B450TSB Filament Lamp Traffic Light

The B450 series of traffic light beacons are available in single E27 filament lamp, dual E14 filament lamp or high output L.E.D array versions.





Part codes:

| Version: | Part code: |
|--------------------|-----------------|
| 12-250V | B450TSB250B/[x] |
| [x] = Lens colour: | A: Amber |
| | B: Blue |
| | C: Clear |
| | G: Green |
| | R: Red |
| | Y: Yellow |

Note: Filament lamps not included.

Mounting brackets:

| MB-B450T-S | Mounting bracket kit for a single B450 type unit. |
|------------|--|
| MB-B450T-M | Mounting bracket kit for linked multiple B450 type units. |

Note: Multiple unit connector is supplied with each product.

Filament lamp part codes:

| Version: | Wattage: | Type: | Part code: |
|----------|----------|-------|-------------|
| 24V dc | 25W | E27 | BGS2525C27 |
| 115V ac | 25W | E27 | BGS11025C27 |
| 230V ac | 25W | E27 | BGS24025C27 |

Note: Filament lamps to be ordered separately.

| ight source: | Filament Lamp E27 |
|--------------------|---|
| ight output: | 25W |
| unction: | Permanent |
| E.D. colours: | Amber, Blue, Clear, Green, Red & Yellow |
| ffective candela: | 32cd* - measured ref. to I.E.S. |
| ens type: | Prismatic |
| Mounting: | Surface mount (Wall mount bracket available) |
| Intries: | 1 x 5-7mm push through grommet 2 x M20 cable entry |
| Dimensions: | ø140 x 177mm |
| ngress protection: | IP65 |
| Housing material: | High impact UL94 V0 (f1) PC |
| erminals: | 0.5 to 2.5mm ² |
| Operating temp: | -25 to +50°C |
| torage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |

*Candela measurements representative of performance with clear lens at optimum voltage.

Features:

pprovals:

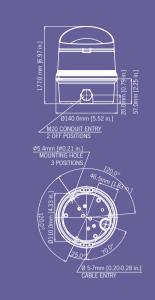


Bayonet fixing lens. Anti-tamper locking screw. Stainless steel fixings.



B450TDB Dual Filament Lamp Traffic Light

The B450 series of traffic light beacons are available in single E27 filament lamp, dual E14 filament lamp or high output L.E.D array versions.



Specification:



Part codes:

| Version: | Part code: |
|--------------------|-----------------|
| 12-250V | B450TDB250B/[x] |
| [x] = Lens colour: | A: Amber |
| | B: Blue |
| | C: Clear |
| | G: Green |
| | R: Red |
| | Y: Yellow |

Note: Filament lamps not included.

Mounting brackets:

MB-B450T-S Mounting bracket kit for a single B450 type unit. MB-B450T-M Mounting bracket kit for linked multiple B450 type units.

Note: Multiple unit connector is supplied with each product.

Filament lamp part codes:

| Wattage: | Type: | Part code: | |
|----------|--------------------------|---|--|
| 15W | E14 | BB261215E | |
| 15W | E14 | BB263015E | |
| 15W | E14 | BB264815E | |
| 15W | E14 | BB2613015E | |
| 15W | E14 | BB2623515E | |
| | 15W 15W 15W 15W | 15W E14 15W E14 15W E14 15W E14 15W E14 | 15W E14 BB261215E 15W E14 BB263015E 15W E14 BB264815E 15W E14 BB2613015E |

Note: Filament lamps to be ordered separately.

Light source: Dual Filament Lamp E14 2 x 15W Light output: Function: Permanent L.E.D. colours: Amber, Blue, Clear, Green, Red & Yellow Effective candela: 24cd* - measured ref. to I.E.S. Lens type: Prismatic Mounting: Surface mount (Wall mount bracket available) Entries: 1 x 5-7mm push through grommet 2 x M20 cable entry Dimensions: ø140 x 177mm IP65 Ingress protection: Housing material: High impact UL94 VO (f1) PC Terminals: 0.5 to 2.5mm² Operating temp: -25 to +50°C Storage temp: -40 to +70°C Relative humidity: 90% at 20°C.

*Candela measurements representative of performance with clear lens at optimum voltage.

Features:

Approvals:

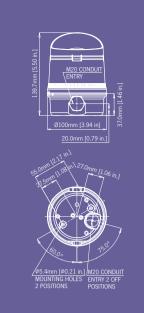


• Bayonet fixing lens. • Anti-tamper locking screw. • Stainless steel fixings.



B350TLA L.E.D Traffic Light

The B350 series of traffic light beacons are available in single E14 filament bulb or high output L.E.D array versions. The compact housing is ideal for space constrained applications or for mounting directly onto machinery.





Part codes:

| Version: | Part code: |
|--------------------|---|
| 10-30V dc | B350TLA030B/[x] |
| 90-230V ac 50/60Hz | B350TLA230B/[x] |
| [x] = Lens colour: | A: Amber G: Green R: Red Y: Yellow |

Note: B350TLA units are supplied with 'clear' lenses to maximise the light output in environments with high ambient light levels.

Mounting brackets:

| MB-B350T-S | Mounting bracket kit for a single B350 type unit. |
|------------|--|
| MB-B350T-M | Mounting bracket kit for linked multiple B350 type units |
| | |

Note: Multiple unit connector is supplied with each product.

Current consumption:

| Version: | Current: | |
|------------|----------|---------|
| 10-30V dc | | 110mA |
| 90-230V ac | 50/60Hz | 10-30mA |

Specification:

| Light source: | High output L.E.D. | |
|---------------------|---|---|
| Light output: | 15 x L.E.D. array | _ |
| Function: | Permanent | _ |
| L.E.D. colours: | Amber, Green, Red & Yellow | _ |
| Effective candela: | 54 cd* - measured ref. to I.E.S. | _ |
| Lens type: | Prismatic | _ |
| Mounting: | Surface mount (Wall mount bracket available) | |
| Entries: | 1 x 5-7mm push through grommet 1 x M20 cable entry | _ |
| Dimensions: | ø100 x 140mm | _ |
| Ingress protection: | IP65 | _ |
| Housing material: | High impact UL94 V0 (f1) PC | _ |
| Terminals: | 0.5 to 1.5mm ² | _ |
| Operating temp: | -25 to +50°C | _ |
| Storage temp: | -40 to +70°C | _ |
| Relative humidity: | 90% at 20°C. | _ |
| Weight: | 350g | |

*Candela measurements representative of performance with clear lens at optimum voltage.

Features:

- **Approvals:**

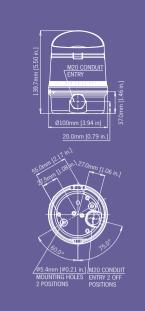


• Bayonet fixing lens. • Anti-tamper locking screw. • Stainless steel fixings. • Unit is supplied with a clear prismatic lens to optimise visibility in applications with high ambient light levels.



B350TSB Filament Lamp Traffic Light

The B350 series of traffic light beacons are available in single E14 filament bulb or high output L.E.D array versions. The compact housing is ideal for space constrained applications or for mounting directly onto machinery.



Specification:



Part codes:

| Version: | Part code: |
|--------------------|-----------------|
| 12-250V | B350TSB250B/[x] |
| [x] = Lens colour: | A: Amber |
| | B: Blue |
| | C: Clear |
| | G: Green |
| | R: Red |
| | Y: Yellow |

Note: Filament lamps not included.

Mounting brackets:

MB-B350T-S Mounting bracket kit for a single B350 type unit. MB-B350T-M Mounting bracket kit for linked multiple B350 type units.

Note: Multiple unit connector is supplied with each product.

Filament lamp part codes:

| Version: | Wattage: | Туре: | Part code: |
|----------|----------|-------|------------|
| 12V dc | 25W | E14 | BB261225E |
| 24V dc | 25W | E14 | BB263025E |
| 48V dc | 25W | E14 | BB264825E |
| 115V ac | 25W | E14 | BB2613025E |
| 230V ac | 25W | E14 | BB2623525E |

Note: Filament lamps to be ordered separately.

Light source: Filament Lamp E14 25W Light output: Function: Permanent L.E.D. colours: Amber, Blue, Clear, Green, Red & Yellow Effective candela: 21cd* - measured ref. to I.E.S. Lens type: Prismatic Mounting: Surface mount (Wall mount bracket available) Entries: 1 x 5-7mm push through grommet 1 x M20 cable entry Dimensions: ø100 x 140mm IP65 Ingress protection: Housing material: High impact UL94 VO (f1) PC Terminals: 0.5 to 1.5mm² Operating temp: -25 to +50°C Storage temp: -40 to +70°C Relative humidity: 90% at 20°C. Weight: 350g

*Candela measurements representative of performance with clear lens at optimum voltage.

Features:

Approvals:



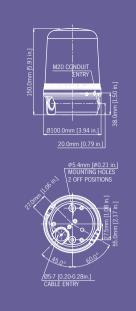
• Bayonet fixing lens. • Anti-tamper locking screw. • Stainless steel fixings.



B300RTH Rotating Beacon [Halogen Bulb]

The B300 series is comprised of a Xenon strobe beacon, permanent filament bulb or halogen beacon, blinking filament bulb or halogen beacon, rotating beacon and a multi-function L.E.D. array beacon.

The surface mount base can also be supplied with a right angle bracket or with a pole mounted assembly.



Accessories:



B300TMA001 Pole mount assembly (140mm)



Part codes:

| Version: | Wattage: | Part code: |
|--------------------|----------|--|
| 12V dc | 20W | B300RTH012B/[x] |
| 24V dc | 20W | B300RTH024B/[x] |
| 115V ac | 25W | B300RTH115B/[x] |
| 230V ac | 25W | B300RTH230B/[x] |
| [x] = Lens colour: | | A: Amber B: Blue C: Clear G: Green R: Red Y: Yellow |

Spare bulb/lamp part codes:

| Version: | Wattage: | Туре: | Part code: |
|----------|----------|--------------|---------------|
| 12V dc | 20W | G6,35/GY6,35 | BJC20W12VCL |
| 24V dc | 20W | G6,35/GY6,35 | BJC20W24VCL |
| 115V ac | 25W | G6,35/GY6,35 | BJCD25W120VCL |
| 230V ac | 25W | G6,35/GY6,35 | BJCD25W230VCL |

Current consumption:

| Version: | | Current: |
|----------|---------|----------|
| 12V dc | | 1.72A |
| 24V dc | | 0.91A |
| 115V ac | 50/60Hz | 216mA |
| 230V ac | 50/60Hz | 117mA |
| 115V ac | , | 216mA |

| Light source: | Halogen Lamp G6,35/GY6,35 |
|---------------------|---|
| Light output: | 20/25W |
| Peak Candela: | 821 cd |
| Effective candela: | 125cd* - measured ref. to I.E.S. |
| Rotation speed: | 180RPM (+/-30RPM) |
| Drive life: | >5,000 hrs |
| Duty cycle: | 100% |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow |
| Lens type: | Plain |
| Mounting: | Surface mount (right angle or pole mount accessories available) |
| Entries: | 1 x 5-7mm push through grommet 1 x M20 cable entry |
| Dimensions: | ø100 x 150mm |
| Ingress protection: | IP65 |
| Housing material: | High impact UL94 V0 (f1) PC |
| Lens material: | High impact UL94 V0 (f1) PC |
| Terminals: | 1.5 mm ² flying lead assembly |
| Operating temp: | -25 to +50°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | 370g |

*Candela measurements representative of performance with clear lens at optimum voltage.

Features:

Approvals:



• Bayonet fixing lens. • Anti-tamper locking screw. • Stainless steel fixings.



B400RTH Rotating Beacon [Halogen Bulb]

The B400 series comprises Xenon strobe beacons, permanent filament bulb or halogen beacon, blinking filament bulb or halogen beacon, rotating halogen beacon and a multi-function L.E.D. array beacon.

The surface mount base can also be supplied with a right angle bracket or with a pole mounted assembly.





Accessories:





Part codes:

| Version: | Wattage: | Part code: |
|--------------------|--|-----------------|
| 12V dc | 35W | B400RTH012B/[x] |
| 24V dc | 35W | B400RTH024B/[x] |
| 48V dc | 20W x 2 | B400RTH048B/[x] |
| 115V ac | 40W | B400RTH115B/[x] |
| 230V ac | 40W | B400RTH230B/[x] |
| [x] = Lens colour: | A: Amber B: Blue C: Clear G: Green R: Red Y: Yellow | |

Spare bulb/lamp part codes:

| Version: | Wattage: | Туре: | Part code: |
|----------|----------|--------------|---------------|
| 12V dc | 35W | G6,35/GY6,35 | BJC35W12VCL |
| 24V dc | 35W | G6,35/GY6,35 | BJC35W24VCL |
| 48V dc | 20W x 2 | G6,35/GY6,35 | BJC20W24VCL |
| 115V ac | 40W | G6,35/GY6,35 | BJCD40W120VCL |
| 230V ac | 40W | G6,35/GY6,35 | BJCD40W230VCL |

Current consumption:

| Version: | | Current: |
|----------|---------|----------|
| 12V dc | | 3.0A |
| 24V dc | | 1.54A |
| 48V dc | | 840mA |
| 115V ac | 50/60Hz | 338mA |
| 230V ac | 50/60Hz | 186mA |

Specification: Halogen Lamp G6,35/GY6,35 Light source: 35/40W Light output: 1,204 cd Peak Candela: Effective candela: 325cd* - measured ref. to I.E.S. Rotation speed: 180RPM (+/-30RPM) Drive life: >5,000 hrs Duty cycle: 100% Lens colours: Amber, Blue, Clear, Green, Red & Yellow Lens type: Plain Mounting: Surface mount (right angle or pole mount accessories available) Entries: 1 x 5-7mm push through grommet 2 x M20 cable entry ø140 x 220mm Dimensions: IP65 Ingress protection: High impact UL94 VO (f1) PC Housing material: Lens material: High impact UL94 VO (f1) PC Terminals: 1.5 mm² flying lead assembly -25 to +50°C Operating temp: -40 to +70°C Storage temp: Relative humidity: 90% at 20°C.

*Candela measurements representative of performance with clear lens at optimum voltage.

578g

Weight :

Features:

Approvals:



• Bayonet fixing lens. • Anti-tamper locking screw. • Stainless steel fixings. • Multiple cable entries



L101X 5 Joule Xenon

The L101X is a compact, robust 5 Joule Xenon strobe beacon ideal for all general signalling applications including fire, security and process control. CPR compliant, approved to EN54-23:2010 for use in fire alarm systems, the L101X also carries GOST approval and cULs approval for general signalling. Featuring an automatically synchronised flash rate of 1Hz (60 flashes per minute) as standard, the DC voltage versions also have user selectable 1.5Hz (90 flashes per minute) and double-strike flash rates.



Category C-x-y (Ceiling mounted):

Category W-x-y

(Wall mounted):

Wall mounted, where x is the

maximum mounting height from

the floor and y is the maximum length of the sides of the square

floor area covered by the VAD.

Ceiling mounted, where x is the maximum ceiling height and y the diameter of the cylindrical volume covered by the VAD.

| Unit: | Cat. C [Ceiling] | Cat. W [Wall] | Cat. O [Open] | Power |
|--------------------|----------------------------------|-----------------------------------|-----------------------------------|-------|
| L101XDC024[b][x]/C | C-9-6.8 V=326.9m ³ | W-2.4-4.8 V=55.3m ³ | 0-4.8-10 V=230.4m ³ | 6W |
| L101XDC024[b][x]/R | C-3-2.6 V=15.9m ³ | n/a n/a | 0-1.9-3.6 V=13.0m ³ | 6W |
| L101XDC048[b][x]/C | C-9-7 V=346.4m ³ | W-2.5-5 V=62.5m ³ | 0-5-10 V=250.0m ³ | 8.4W |
| L101XDC048[b][x]/R | C-3-3 V=21.2m ³ | n/a n/a | 0-2-4 V=16.0m ³ | 8.4W |

L101X Strobe Beacon:

| Version: | Voltage: | Current: | Part Code: |
|-----------|----------|-------------|----------------------|
| 12V dc/ac | 10-14V | 500mA/380mA | L101XDC012[b][x]/[y] |
| 24V dc/ac | 20-28V | 250mA/300mA | L101XDC024[b][x]/[y] |
| 48V dc | 42-52V | 175mA | L101XDC048[b][x]/[y] |
| 48V ac | +/-10% | 250mA | L101XA0C48[b][x]/[y] |
| 115V ac | +/-10% | 70mA | L101XAC115[b][x]/[y] |
| 230V ac | +/-10% | 35mA | L101XAC230[b][x]/[y] |

Part codes:

| [b] = Back box type: | B: standard L101 type M: Multi-purpose type | A: A100 type S: Sonora type |
|-----------------------|---|--------------------------------|
| [x] = Housing colour: | G: Grey, R: Red, W: White | |
| [y] = Lens colour: | A: Amber, B: Blue. C: Clear, G: Green, M: Magenta, R: Red, Y: Yellow | |
| | | |

Suffix part number with '-UL' for UL approved version (M: Multi-purpose back box version only).

| Specification: | | Feature |
|--------------------|--|--|
| Energy: | 5 Joules (5Ws) | Back |
| Flash rate: | 1Hz (60 fpm) | • Plugg |
| | DC units: Optionally 1.5Hz & double strike | In and Multip |
| Peak Candela: | 500,000 cd - calc. from energy (J) | • User |
| Effective candela: | 250 cd - calc. from energy (J) | Tropic |
| Peak Candela: | 86,935 cd* - measured ref. to I.E.S. | Can b |
| Effective candela: | 200 cd* - measured ref. to I.E.S. | Can b |
| Terminals: | 0.5 to 4.0mm ² cables. | audib |
| Lens colours: | Amber, Blue, Clear, Green, Red, Yellow | Approva |
| Tube life : | Emissions are reduced to 70% after 8 million flashes | • CPD a |
| | | VdS c |
| General: | | |

| General: | |
|---------------------|--|
| Ingress Protection: | IP66 |
| Housing material: | UL94V0 & 5VA FR ABS |
| Housing colour: | RAL3000 Red, RAL7038 Grey and White |
| Lens material: | PC |
| Fixings: | Stainless Steel |
| Operating temp: | -25° to +55°C |
| Storage temp: | -40° to +70°C |
| Relative humidity: | 90% at 20°C |
| Weight : | 0.20kg |
| | |

*Candela measurements representative of performance with clear lens at optimum voltage.

es:

als:

Category O-x-y (Open class):

Centrally wall mounted, where x is the max height and width of the wall area covered by the VAD and y is the max depth of the volume covered by the VAD. Or ceiling mounted where x is the max width and length of the floor area covered by the VAD and y is the max ceiling height.



boxes available with and without mounting lugs. gable terminals.

- nd out terminals.
- iple, user selectable flash rates.
- replaceable Xenon tube lamp.
- calisation available on request.
- be stacked to create multi-signal units.
- be combined with AlertAlarm & Sonora ble signals.

approval: 0786-CPD-21247 to EN54-23:2010.

certificate: G211077 (24 & 48Vdc versions).

• UL approved version available (non-fire alarm use).









L101FLASHTEL Telephone Initiated Xenon Beacon

The L101FLASHTEL is a compact telephone initiated 5 Joule Xenon beacon. With a Candela output of 196cd the L101FLASHTEL is an effective signal even in applications with high ambient light levels.



Part codes:

| L101FLASHTEL[x]/[y] | |
|-----------------------|---|
| [x] = Housing colour: | G: Grey R: Red W: White |
| [y] = Lens colour: | A: Amber B: Blue C: Clear |
| | G: Green, M: Magenta, R: Red, Y: Yellow |

Specification: Energy: 5 Joules (5Ws) 1Hz (60 fpm) Flash rate: Peak Candela: 500,000 cd - calc. from energy (J) Effective candela: 250 cd - calc. from energy (J) Peak Candela: 86,935 cd* - measured ref. to I.E.S. Effective candela: 200 cd* - measured ref. to I.E.S. Lens colours: Amber, Blue, Clear, Green, Opal, Red & Yellow Tube life: Emissions are reduced to 70% after 8 million flashes Supply: 230V ac (telephone initiated) IP66 Ingress protection: Housing material: High impact UL94 V0 & 5VA FR ABS Lens material: PC Red (RAL3000), grey (RAL7038) Colour: & white. Cable entries: 1 x M20 clearance gland knockouts in back Terminals: 0.5 to 2.5mm² cables. -25 to +55°C Operating temp: -40 to +70°C Storage temp: 90% at 20°C. Relative humidity: Weight : 0.20Kg

*Candela measurements representative of performance with clear lens at optimum voltage. *SPL data +/-3dB(A). Measured at optimum voltage

Features:

Approvals:



• Continuously rated.

- Stainless steel fixings.
- Unit mounted via internal BESA compatible
- fixing positions.
- Tropicalisation available on request.

• GOST-R approved. Cert: POCC GB-JB05-H00144



B300STR Xenon Strobe Beacon

The B300 series is comprised of a Xenon strobe beacon, permanent filament bulb or halogen beacon, blinking filament bulb or halogen beacon, rotating beacon and a multi-function L.E.D. array beacon.

The surface mount base can also be supplied with a right angle bracket or with a pole mounted assembly.





Accessories:

B300RAB001 Wall bracket



B300TMA001 Pole mount assembly (140mm)



Part codes:

| Version: | | Part code: |
|--------------------|--|-----------------|
| 12V dc/ac | 5 Joules | B300STR012B/[x] |
| 24V dc/ac | 5 Joules | B300STR024B/[x] |
| 48V dc/ac | 5 Joules | B300STR048B/[x] |
| 115V ac | 5 Joules | B300STR115B/[x] |
| 230V ac | 5 Joules | B300STR230B/[x] |
| [x] = Lens colour: | A: Amber B: Blue C: Clear G: Green M: Magenta R: Red Y: Yellow | |

Current consumption:

| Version: | | Current: |
|-----------|---------|-------------|
| 12V dc/ac | | 500mA/600mA |
| 24V dc/ac | | 250mA/300mA |
| 48V dc/ac | | 175mA/250mA |
| 115V ac | 50/60Hz | 70mA |
| 230V ac | 50/60Hz | 35mA |

| Specification: | |
|---------------------|---|
| • | Xenon Strobe |
| Light source: | |
| Energy: | 5 Joules (5Ws) |
| Flash frequency: | 1Hz |
| Peak Candela: | 500,000 cd - calc. from energy (J) |
| Effective candela: | 250 cd - calc. from energy (J) |
| Peak Candela: | 49,788 cd* - measured ref. to I.E.S. |
| Effective candela: | 125 cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow |
| Lens type: | Prismatic (default) or plain |
| Mounting: | Surface mount (right angle or pole mount accessories available) |
| Entries: | 1 x 5-7mm push through grommet 1 x M20 cable entry |
| Dimensions: | ø100 x 150mm |
| Ingress protection: | IP65 |
| Housing material: | High impact UL94 VO (f1) PC |
| Lens material: | High impact UL94 VO (f1) PC |
| Terminals: | 1.5 mm ² flying lead assembly |
| Operating temp: | -25 to +50°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | 370g |
| weight. | 5705 |

*Candela measurements representative of performance with clear lens at optimum voltage.

Features:

Approvals:



• Bayonet fixing lens. • Anti-tamper locking screw. • Stainless steel fixings.



B400STR Xenon Strobe Beacon

The B400 series comprises Xenon strobe beacons, permanent filament bulb or halogen beacon, blinking filament bulb or halogen beacon, rotating halogen beacon and a multi-function L.E.D. array beacon.

The surface mount base can also be supplied with a right angle bracket or with a pole mounted assembly.





Specification:

| Light source: | Xenon Strobe | |
|---------------------|---|-------------------------------|
| Energy: | 15 Joules (15Ws) | |
| Flash frequency: | On board selection of 3 flash patterns: (AC versions only) Flash pattern 1: 1x flash 15J @ 1Hz Flash pattern 2: 1x flash 15J @ 1.5Hz Flash pattern 3: 2 x flash 15J + 15J | Features: |
| Peak Candela: | 1,500,000 cd - calc. from energy (J) | Bayonet f |
| Effective candela: | 750 cd - calc. from energy (J) | Anti-tamp |
| Peak Candela: | 94,790 cd* - measured ref. to I.E.S. | Stainless |
| Effective candela: | 500 cd* - measured ref. to I.E.S. | On board |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow | 1: 1Hz (6 2: 1.5Hz |
| Lens type: | Prismatic (default) or plain | 3: Double |
| Mounting: | Surface mount (right angle or pole mount accessories available) | Approvals: • GOST-R c |
| Entries: | 1 x 5-7mm push through grommet 2 x M20 cable entry | |
| Dimensions: | ø140 x 220mm | |
| Ingress protection: | IP65 | |
| Housing material: | High impact UL94 V0 (f1) PC | |
| Lens material: | High impact UL94 V0 (f1) PC | |
| Terminals: | 1.5 mm ² flying lead assembly | |
| Operating temp: | -25 to +50°C | |
| Storage temp: | -40 to +70°C | |
| Relative humidity: | 90% at 20°C. | |
| Weight : | 535g | |
| | | |

 $^{\ast}\mbox{Candela}$ measurements representative of performance with clear lens at optimum voltage.

Accessories:

B400RAB001 Wall bracket



B400TMA001 Pole mount assembly



Part codes:

| Version: | | Part code: |
|--------------------|--|-----------------|
| 24V dc/ac | 15 Joules | B400STR024B/[x] |
| 48V dc/ac | 15 Joules | B400STR048B/[x] |
| 115V ac | 15 Joules | B400STR115B/[x] |
| 230V ac | 15 Joules | B400STR230B/[x] |
| [x] = Lens colour: | A: Amber B: Blue C: Clear G: Green R: Red Y: Yellow | |

Current consumption:

| Version: | | Current: |
|-----------|---------|----------|
| 24V dc/ac | | 870mA |
| 48V dc/ac | | 480mA |
| 115V ac | 50/60Hz | 400mA |
| 230V ac | 50/60Hz | 225mA |



- yonet fixing lens.
- ti-tamper locking screw.
- ainless steel fixings.
- board selection of 3 flash patterns:
- 1Hz (60fpm)
- 1.5Hz (90FPM)
- Double Strike



B100STR Panel Mount Xenon Strobe Beacon

The B100 series is comprised of a Xenon strobe beacon, permanent filament bulb, blinking filament bulb and a permanent L.E.D. array beacon version.

The panel mount base incorporates a pluggable terminal block ensuring rapid installation and maintenance.



Part codes:

| Version: | | Part code: | |
|--------------------|--|-----------------|--|
| 10-30V dc/ac | 1 Joule | B100STR030B/[x] | |
| 115V ac | 1 Joule | B100STR115B/[x] | |
| 230V ac | 1 Joule | B100STR230B/[x] | |
| [x] = Lens colour: | A: Amber B: Blue C: Clear G: Green R: Red Y: Yellow | | |

Current consumption:

| Version: 10-30V dc/ac | | Current: |
|--------------------------|---------|---------------------------------|
| | | 82mA (24V dc) 145mA (24V ac) |
| 115V ac | 50/60Hz | 30mA |
| 230V ac | 50/60Hz | 20mA |
| | | |

| ight source: | Xenon Strobe | |
|--------------------|-------------------------------------|--|
| Energy: | 1 Joule (1Ws) | |
| | · · · | |
| lash frequency: | 0.75 Hz | |
| ens colours: | Amber, Blue, Clear, Green, | |
| | Red & Yellow | |
| ens type: | Prismatic (default) or plain | |
| Peak Candela: | 100,000 cd - calc. from energy (J) | |
| ffective candela: | 50 cd - calc. from energy (J) | |
| Peak Candela: | 59,155 cd* - measured ref. to I.E.S | |
| ffective candela: | 37 cd* - measured ref. to I.E.S. | |
| Nounting: | Panel mount PG29 | |
| ngress protection: | IP65 | |
| lousing material: | High impact UL94 VO (f1) PC | |
| erminals: | 0.5 to 1.5mm ² pluggable | |
| Operating temp: | -25 to +50°C | |
| Storage temp: | -40 to +70°C | |
| Relative humidity: | 90% at 20°C. | |
| Veight : | 93g | |

*Candela measurements representative of performance with clear lens at optimum voltage.

atures:

- screw.

provals:



Bayonet fixing lens. Anti-tamper locking

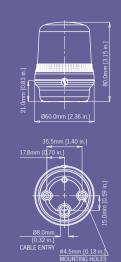
Stainless steel fixings.



B200STR Xenon Strobe Beacon

The B200 series is comprised of a Xenon strobe beacon, permanent filament bulb, blinking filament bulb and a permanent L.E.D. array beacon version.

The surface mount base can also be supplied with a right angle bracket or with a pole mounted assembly.



Accessories:



Part codes:

| Version: | | Part code: | |
|--------------------|---|-----------------|--|
| 10-30V dc/ac | 1 Joule | B200STR030B/[x] | |
| 115V ac | 1 Joule | B200STR115B/[x] | |
| 230V ac | 1 Joule | B200STR230B/[x] | |
| [x] = Lens colour: | A: Amber B: Blue C: Clear G: Green R: Red | | |
| | Y: Yellow | | |

Current consumption:

| Specification: | |
|---------------------|---|
| Light source: | Xenon Strobe |
| Energy: | 1 Joule (1Ws) |
| Flash frequency: | 0.75 Hz |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow |
| Lens type: | Prismatic (default) or plain |
| Peak Candela: | 100,000 cd - calc. from energy (J) |
| Effective candela: | 50 cd - calc. from energy (J) |
| Peak Candela: | 59,155 cd* - measured ref. to I.E.S. |
| Effective candela: | 37 cd* - measured ref. to I.E.S. |
| Mounting: | Surface mount (right angle or pole mount accessories available) |
| Ingress protection: | IP65 |
| Housing material: | High impact UL94 VO (f1) PC |
| Terminals: | 0.5 to 1.5mm ² |
| Operating temp: | -25 to +50°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | 78g |

*Candela measurements representative of performance with clear lens at optimum voltage.

Features:

provals:



Bayonet fixing lens. Anti-tamper locking screw. Stainless steel fixings.



MB005 Xenon Strobe Beacon

The MB005 is a 5 Joule Xenon strobe beacon featuring a robust, fire retardant, IP66 & IP67 housing; suitable for harsh environments.





Specification:

Housing material:

Colour:

Guard:

Terminals:

Weight:

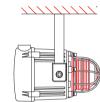
Operating temp:

Storage temp: Relative humidity:

Cable entries:

Lens material:













111/1/

Part codes:

| Version: | Part code: |
|---------------------|------------------|
| 12V dc | MB005DC12G-[xx] |
| 24V dc | MB005DC24G-[xx] |
| 48V dc | MB005DC48G-[xx] |
| 115V ac | MB005AC115G-[xx] |
| 230V ac | MB005AC230G-[xx] |
| [xx] = Lens colour: | AM: Amber, |
| | BL: Blue, |
| | CL: Clear, |
| | GN: Green, |
| | RD: Red, |
| | YW: Yellow |

Also available as the MCA112-05 combined alarm sounder and Xenon beacon and the MCL15-05 15W PA Loudspeaker with Xenon beacon

Current consumption:

| Version: | | Voltage: | Current: | |
|----------|---------|-----------|----------|--|
| 12V dc | | 10-14V dc | 750mA | |
| 24V dc | | 20-28V dc | 270mA | |
| 48V dc | | 42-54V dc | 180mA | |
| 115V ac | 50/60Hz | +/-10% | 140mA | |
| 230V ac | 50/60Hz | +/-10% | 55mA | |

Energy: 5 Joules (5Ws) 1Hz (60 fpm) Flash rate: Peak Candela: 500,000 cd - calc. from energy (J) Effective candela: 250 cd - calc. from energy (J) Peak Candela: 16,428 cd* - measured ref. to I.E.S. Effective candela 51 cd* - measured ref. to I.E.S. Amber, Blue, Clear, Green, Lens colours: Red & Yellow Voltages DC: 12V dc; 24V dc; 48V dc Voltages AC: 115V ac; 230V ac IP66 & IP67 (Third party tested) Ingress protection:

Grey (RAL7038)

2 x M20 supplied with 1 blanking plug

prismatic lens cover.

0.5 to 4.0mm² cables. -25 to +55°C

as standard

-40 to +70°C

90% at 20°C. 1.48kg

High impact UL94 V0 & 5VA FR ABS

Borosilicate glass dome with PC

Stainless Steel dome guard

- Features:
- alternating mode.
- Continuously rated.
- Large termination area.
- Stainless steel fixings.
- Ratchet adjustable stainless steel 'U' bracket for 360° positioning.
- Duplicate cable terminations (in & out for daisy-chain installations).
- Tropicalised as standard.

Approvals:

*Candela measurements representative of performance with clear lens at optimum voltage.



- Automatic synchronised flash, or Flip-Flop
- Xenon tube mechanically secured against vibration.



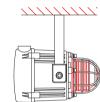
MB010 Xenon Strobe Beacon

The MB010 is a 10 Joule Xenon strobe beacon featuring a robust, fire retardant, IP66 & IP67 housing; suitable for harsh environments.



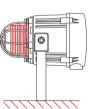














Part codes:

| Version: | Part code: |
|---------------------|------------------|
| 12V dc | MB010DC12G-[xx] |
| 24V dc | MB010DC24G-[xx] |
| 48V dc | MB010DC48G-[xx] |
| 115V ac | MB010AC115G-[xx] |
| 230V ac | MB010AC230G-[xx] |
| [xx] = Lens colour: | AM: Amber, |
| | BL: Blue, |
| | CL: Clear, |
| | GN: Green, |
| | RD: Red, |
| | YW: Yellow |

Current consumption:

| Version: | | Voltage: | Current: |
|--------------|---------|-----------|----------|
| 12V dc | | 10-14V dc | 1.45A |
| 24V dc | | 20-28V dc | 660mA |
| 48V dc | | 42-54V dc | 340mA |
| 115V ac | 50/60Hz | +/-10% | 250mA |
| 230V ac | 50/60Hz | +/-10% | 110mA |

Specification: 10 Joules (10Ws) Enorm

| Energy: | IU JOUIES (IUWS) |
|---------------------|---|
| Flash rate: | 1Hz (60 fpm) |
| Peak Candela: | 1,000,000 cd - calc. from energy (J) |
| Effective candela: | 500 cd - calc. from energy (J) |
| Peak Candela: | 43,920 cd* - measured ref. to I.E.S. |
| Effective candela: | 183 cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow |
| Voltages DC: | 12V dc; 24V dc; 48V dc |
| Voltages AC: | 115V ac; 230V ac |
| Ingress protection: | IP66 & IP67 (Third party tested) |
| Housing material: | High impact UL94 V0 & 5VA FR ABS |
| Colour: | Grey (RAL7038) |
| Cable entries: | 2 x M20 supplied with 1 blanking plug |
| Lens material: | Borosilicate glass dome with PC prismatic lens cover. |
| Guard: | Stainless Steel dome guard as standard |
| Terminals: | 0.5 to 4.0mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight: | 1.48kg |
| | |

*Candela measurements representative of performance with clear lens at optimum voltage.

Features:

- alternating mode.
- Continuously rated.
- Large termination area.
- Stainless steel fixings. • Ratchet adjustable stainless steel 'U' bracket for 360° positioning.
- Duplicate cable terminations (in & out for daisy-chain installations).

Approvals:



- Automatic synchronised flash, or Flip-Flop
- Xenon tube mechanically secured against vibration.

• Tropicalised as standard.

• GOST-R approved. Cert: POCC GB.JB05.H00144.



MCB005-05 Dual Xenon Strobe Beacon

The MCB005-05 is a dual 5 Joule Xenon strobe beacon featuring a robust, fire retardant, IP66 & IP67 housing; suitable for harsh environments.

The unique design minimises installation time and allows the beacons to be operated simultaneously from the single power source (either in synchronisation or in 'flip-flop' mode) or independently.



Part codes:

| Version: | Part code: |
|-----------------------------|---|
| 12V dc | MCB00505DC12G-[xx]/[yy] |
| 24V dc | MCB00505DC24G-[xx]/[yy] |
| 48V dc | MCB00505DC48G-[xx]/[yy] |
| 115V ac | MCB00505AC115G-[xx]/[yy] |
| 230V ac | MCB00505AC230G-[xx]/[yy] |
| [xx] / [yy] = Lens colours: | AM: Amber, BL: Blue, CL: Clear, GN: Green, RD: Red, YW: Yellow |

Current consumption (per beacon):

| Version: | | Voltage: | Current: |
|----------|---------|-----------|----------|
| 12V dc | | 10-14V dc | 750mA |
| 24V dc | | 20-28V dc | 270mA |
| 48V dc | | 42-54V dc | 180mA |
| 115V ac | 50/60Hz | +/-10% | 140mA |
| 230V ac | 50/60Hz | +/-10% | 55mA |

| Specification: | | Features: |
|---------------------|---|---|
| Energy: | 5 Joules x 2 (5Ws) | Automat |
| Flash rate: | 1Hz (60 fpm) | alternati |
| Peak Candela: | 2 x 500,000 cd - calc. from energy (J) | • Xenon ti |
| Effective candela: | 2 x 250 cd - calc. from energy (J) | Continue |
| Peak Candela: | 2 x 16,428 cd* - measured ref. to I.E.S. | Large te |
| Effective candela: | 2 x 51 cd* - measured ref. to I.E.S. | Stainless |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow | Ratchet 360° pc |
| Voltages DC: | 12V dc; 24V dc; 48V dc | Duplicat |
| Voltages AC: | 115V ac; 230V ac | (in & ou |
| Ingress protection: | IP66 & IP67 (Third party tested) | Tropicali |
| Housing material: | High impact UL94 V0 & 5VA FR ABS | - ' |
| Colour: | Grey (RAL7038) | Approvals: |
| Cable entries: | 2 x M20 supplied with 1 blanking plug | • GOST-R |
| Lens material: | Borosilicate glass dome with PC prismatic lens cover. | - |
| Guard: | Stainless Steel dome guards as standard | - |
| Terminals: | 0.5 to 4.0mm ² cables. | - |
| Operating temp: | -25 to +55°C | - |
| Storage temp: | -40 to +70°C | - |
| Relative humidity: | 90% at 20°C. | - |
| Weight : | 1.48kg | - |
| | | |

- alternating mode. Xenon tubes mechanically secured against vibration.
- Continuously rated.
- Large termination area.
- Stainless steel fixings.
- Ratchet adjustable stainless steel 'U' bracket for 360° positioning.
- Duplicate cable terminations
- (in & out for daisy-chain installations).
- Tropicalisation available on request.

pprovals:

*Candela measurements representative of performance with clear lens at optimum voltage.



Automatic synchronised flash, or Flip-Flop

GOST-R approved. Cert: POCC GB-JB05-H00144

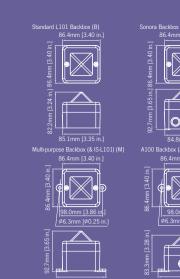


L101H High Output L.E.D.

The L101H is a compact, robust L.E.D array beacon ideal for all general signalling applications including status indication, security and process control.

The array of 24 Superflux type high output L.E.D's generates over 120 candela of light output and can be user set to either steady of flashing mode.

Available in cULs approved version for general signalling use.



L101H L.E.D. Beacon:

| Version: | | Voltage: | Current: | Part Code: |
|----------|---------|-----------|-------------|----------------------|
| DC | | 10-30V dc | 155mA | L101HDC024[b][x]/[y} |
| | | | (@24V dc) | |
| AC/DC | 50/60Hz | 90-260V | 35mA | L101HAC230[b][x]/[y] |
| | | ac/dc | (@ 230V ac) | |

Part codes:

| [b] = Back box type: | B: standard L101 type | A: A100 type |
|-----------------------|--|----------------|
| | M: Multi-purpose type | S: Sonora type |
| [x] = Housing colour: | G: Grey, R: Red, W: White | |
| [y] = L.E.D. colour: | A: Amber, B: Blue, C: Clear G: Green , R: Red | (white L.E.D.) |

Note: To maximise output in high ambient light environments the L101H uses clear lenses for all L.E.D colours.

Suffix part number with '-UL' for UL approved version (M: Multi-purpose back box version only)

Specification: Light s

| Light source: | High intensity L.E.D. array. 24 x Superflux type high ouput L.E.D's |
|--------------------|--|
| Options: | Steady or 2Hz flash mode (on board selection) |
| Effective candela: | 176 cd (Green L.E.D.) |
| Terminals: | 0.5 to 4.0mm ² cables |
| L.E.D. colours: | Amber Blue, Green, Red and White |
| Lens colour: | All L.E.D. colours use a Clear lens to maximise output and to ensure the signal is most effective in high ambient light levels. |

Features:

audible signals

- Approvals:

General:

| Ingress Protection: | IP66 |
|---------------------|--|
| Housing material: | UL94V0 & 5VA FR ABS |
| Housing colour: | RAL3000 Red, RAL7038 Grey and White |
| Lens material: | PC |
| Fixings: | Stainless Steel |
| Operating temp: | -25° to +55°C |
| Storage temp: | -40° to +70°C |
| Relative humidity: | 90% at 20°C |
| Weight : | 0.20kg |
| | |



• Back boxes available with and without mounting lugs • Tropicalisation available on request

- Can be stacked to create multi-signal units.
- Can be combined with AlertAlarm & Sonora

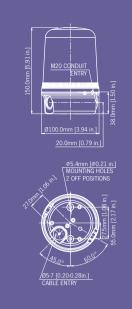
UL approved version available (non-fire alarm use).



B300LDA L.E.D Beacon [Multi-function array]

The B300 series is comprised of a Xenon strobe beacon, permanent filament bulb or halogen beacon, blinking filament bulb or halogen beacon, rotating beacon and a multi-function L.E.D. array beacon.

The surface mount base can also be supplied with a right angle bracket or with a pole mounted assembly.



Accessories:



Part codes:

| Version: | Part code: |
|--------------------|--|
| 10-50V dc | B300LDA050B/[x] |
| 90-230V ac | B300LDA230B/[x] |
| [x] = Lens colour: | A: Amber B: Blue C: Clear G: Green R: Red Y: Yellow |

Current consumption:

| Version: | Current: |
|--------------------|----------------------------------|
| 10-50V dc | 130mA @ 24V dc |
| 90-230V ac 50/60Hz | 90mA @ 115V ac 50mA @ 230V ac |

Flash patterns:

| Stage 1 | Stage2 [DC only] |
|--------------------------|--------------------------|
| All L.E.D's on | Alternate Side Flash 2Hz |
| Rotating: Slow1 | Alternate Side Flash 2Hz |
| Single Strike Flash 2Hz | Rotating: Fast 2 |
| Rotating: Fast 1 | Single Strike Flash 2Hz |
| Rotating: Slow 2 | Double Strike Flash 1Hz |
| Double Strike Flash 2Hz | Rotating: Fast 2 |
| Rotating: Fast 2 | Double Strike Flash 2Hz |
| Double Strike Flash 1Hz | Alternate Side Flash 2Hz |
| Alternate Side Flash 2Hz | Rotating: Fast 2 |
| | |

Specification: Features: Light source: Array of 16 High output L.E.D.'s Functions: 4 rotating configurations. 4 flashing configurations. Steady mode for status applications. Peak candela: 19 cd* - measured ref. to I.E.S. Effective candela: 19 cd* - measured ref. to I.E.S. Amber, Blue, Clear (White L.E.D.), Lens colours: Green, Red & Yellow Prismatic (default) or plain Lens type: Mounting: Surface mount (right angle or pole mount Approvals: accessories available) Entries: 1 x 5-7mm push through grommet 1 x M20 cable entry ø100 x 150mm Dimensions: Ingress protection: IP65 Housing material: High impact UL94 V0 (f1) PC High impact UL94 VO (f1) PC Lens material: Terminals: 1.5 mm² flying lead assembly -25 to +50°C Operating temp: -40 to +70°C Storage temp: Relative humidity: 90% at 20°C. Weight 370g

*Candela measurements representative of performance with clear lens at optimum voltage.

- Bayonet fixing lens. • Anti-tamper locking screw. • Stainless steel fixings. • Total of 9 user selectable operation modes: - 4 rotating configurations.
- 4 flashing configurations.
- Steady mode for status applications. • The multi-voltage DC unit also features a remotely
- selectable 2nd stage flash pattern.





B400LDA L.E.D Beacon [Multi-function array]

The B400 series comprises Xenon strobe beacons, permanent filament bulb or halogen beacon, blinking filament bulb or halogen beacon, rotating halogen beacon and a multi-function L.E.D. array beacon.

The surface mount base can also be supplied with a right angle bracket or with a pole mounted assembly.





Flash patterns:

| Stage 1: [Selectable on board] | Stage 2: DC only [Remotely selectable] | Stage 3: DC only [Remotely selectable] |
|-----------------------------------|---|---|
| All L.E.D's on | Alternate Side Flash 1:1 2Hz | Double Strike Flash 2Hz |
| Rotating: Fast 1 | Rotating: Fast 2 | All L.E.D's on |
| 3 Rotating: Fast 2 | Double Strike Flash 2Hz | All L.E.D's on |
| Rotating: Slow 1 | Alternate Side Flash 1:1 2Hz | All L.E.D's on |
| Rotating: Slow 2 | Double Strike Flash 1Hz | All L.E.D's on |
| Double Strike Flash 1Hz | Alternate Side Flash 1:1 2Hz | All L.E.D's on |
| Single Strike Flash 2Hz | Rotating: Fast 2 | All L.E.D's on |
| Double Strike Flash 2Hz | Rotating: Fast 2 | All L.E.D's on |
| Alternate Side Flash 1:1 2Hz | Rotating: Fast 2 | All L.E.D's on |

Part codes:

| Version: | Part code: | |
|--------------------|--|--|
| 10-50V dc | B400LDA050B/[x] | |
| 115V ac | B400LDA115B/[x] | |
| 230V ac | B400LDA230B/[x] | |
| [x] = Lens colour: | A: Amber B: Blue C. Clear G: Green R: Red Y: Yellow | |

Current consumption:

| Version: | | Current: |
|-----------|---------|----------------|
| 10-50V dc | | 400mA @ 24V dc |
| 115V ac | 50/60Hz | 140mA |
| 230V ac | 50/60Hz | 70mA |

Accessories:

B400RAB001 Wall bracket

B400TMA001 Pole mount assembly (140mm)



Specification: Light source: Array of 32 high output L.E.D.'s Function: Total of 9 user selectable operation modes: • 4 rotating configurations. • 4 flashing configurations. • Steady mode for status applications. DC unit: remotely selectable Stages: 2nd & 3rd stage pattern. Peak candela: 30 cd* - measured ref. to I.E.S. Effective candela 30 cd* - measured ref. to I.E.S. Lens colours: Amber, Blue, Clear, Green, Red & Yellow Lens type: Prismatic (default) or plain Mounting: Surface mount (right angle or pole mount accessories available) Entries: 1 x 5-7mm push through grommet 2 x M20 cable entry ø140 x 220mm Dimensions: IP65 Ingress protection High impact UL94 VO (f1) PC Housing material: High impact UL94 VO (f1) PC lens material: Terminals: 1.5 mm² flying lead assembly -25 to +50°C Operating temp: -40 to +70°C Storage temp: 90% at 20°C. Relative humidity: Weight: 845g AC 595g DC

*Candela measurements representative of performance with clear lens at optimum voltage.

Features:

Approvals:



• Bayonet fixing lens. • Anti-tamper locking screw. • Stainless steel fixings.

• Multiple cable entries



B100LDA Panel Mount L.E.D. permanent beacon

The B100 series is comprised of a Xenon strobe beacon, permanent filament bulb, blinking filament bulb and a permanent L.E.D. array beacon version.

The panel mount base incorporates a pluggable terminal block ensuring rapid installation and maintenance.



Part codes:

| Version: | Part code: |
|--------------------|--|
| 10-30V dc | B100LDA030B/[x] |
| 90-230V ac | B100LDA230B/[x] |
| [x] = Lens colour: | A: Amber B: Blue C: Clear G: Green R: Red Y: Yellow |

Current consumption:

| Version: | | Current: | |
|------------|---------|----------|--|
| 10-30V dc | | 80mA | |
| 90-230V ac | 50/60Hz | 32mA | |

Specification: Light source: 9 x High power L.E.D's Lens/L.E.D. colours: Amber, Blue, Clear (White L.E.D), Green, Red & Yellow Lens type: Prismatic (default) or plain Mounting: Panel mount PG29 Peak candela: 5.5 cd* - measured ref. to I.E.S. 5.5 cd* - measured ref. to I.E.S. Effective candela: IP65 Ingress protection: Housing material: High impact UL94 VO (f1) PC Terminals: 0.5 to 1.5mm² pluggable Operating temp: -25 to +50°C -40 to +70°C Storage temp: Relative humidity: 90% at 20°C. Weight : 93g

*Candela measurements representative of performance with clear lens at optimum voltage.

Features:

- Approvals:

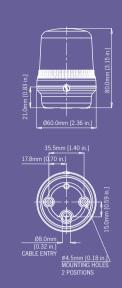




B200LDA L.E.D. permanent beacon

The B200 series is comprised of a Xenon strobe beacon, permanent filament bulb, blinking filament bulb and a permanent L.E.D. array beacon version.

The surface mount base can also be supplied with a right angle bracket or with a pole mounted assembly.



Specification:

Peak candela:

Effective candela: Mounting:

Ingress protection: Housing material:

Lens material: Terminals:

Operating temp:

Storage temp: Relative humidity:

Weight :

Accessories:



Part codes:

| Version: | Part code: |
|--------------------|--|
| 10-30V dc | B200LDA030B/[x] |
| 90-230V ac | B200LDA230B/[x] |
| [x] = Lens colour: | A: Amber B: Blue C: Clear G: Green R: Red Y: Yellow |

Current consumption:

| Version: | | Current: |
|------------|---------|----------|
| 10-30V dc | | 80mA |
| 90-230V ac | 50/60Hz | 32mA |

Light source: 9 x High power L.E.D's Lens/L.E.D. colours: Amber, Blue, Clear (White L.E.D), Green, Red & Yellow Lens type: Prismatic (default) or plain

5.5 cd* - measured ref. to I.E.S.

5.5 cd* - measured ref. to I.E.S.

High impact UL94 VO (f1) PC High impact UL94 VO (f1) PC

Surface mount (right angle or pole mount accessories available)

0.5 to 1.5mm²

-25 to +50°C -40 to +70°C

90% at 20°C.

IP65

Features:

| 20.9 | <u> </u> | | | |
|------|----------|----|---|---|
| Anti | -ta | ٩n | n | n |

Approvals:

*Candela measurements representative of performance with clear lens at optimum voltage.

78g



• Bayonet fixing lens. • Anti-tamper locking screw. • Stainless steel fixings.



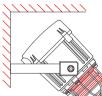
MBL1 Multi-function L.E.D. Beacon

The MBL1 is a multi-function L.E.D. beacon featuring a robust, fire retardant, IP66 & IP67 housing; suitable for harsh environments.

The array of 32 high output L.E.D.'s have a total of 9 operating modes; 4 rotating sequences, 4 flashing patterns and a steady mode for indicator or status applications.



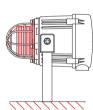












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Part codes:

| Version: | Part code: |
|------------------------------|--------------------------------|
| 24V dc | MBL1DC24G-[xx] |
| 48V dc | MBL1DC24G-[xx] |
| 24V ac | MBL1AC24G-[xx] |
| 115V ac | MBL1AC115G-[xx] |
| 230V ac | MBL1AC230G-[xx] |
| [xx] = L.E.D. / Lens colour: | AM: Amber, BL: Blue, |
| | GN: Green, RD: Red, YW: Yellow |

Current consumption:

Alt Side Flash 1:1 2Hz

| | Version: | | Voltage: | Current: |
|------------|----------|---------|-----------|----------|
| | 24V dc | | 10-50V dc | 400mA |
| <u>"</u> U | 48V dc | | 10-50V dc | 230mA |
| | 24V ac | 50/60Hz | +/-10% | 380mA |
| | 115V ac | 50/60Hz | +/-10% | 140mA |
| | 230V ac | 50/60Hz | +/-10% | 70mA |

Stage 3:

[Remotely

selectable]

All L.E.D's on

All L.E.D's on

All L.E.D's on

All L.E.D's on

2x Flash 2Hz

All L.E.D's on

All L.E.D's on

All L.E.D's on

All L.E.D's on

Flash patterns: Stage 1: Stage 2: [Selectable [Remotely on board] selectable] Alt Side Flash 1:1 2Hz All L.E.D's on Rotating: Fast 1 Rotating: Fast 2 Rotating: Fast 2 Double Strike Flash 2Hz Alt Side Flash 1:1 2Hz Rotating: Slow 1 Rotating: Slow 2 2x Flash 1Hz Alt Side Flash 1:1 2Hz 2x Flash 1Hz 1x Flash 2Hz Rotating: Fast 2 2x Flash 2Hz Rotating: Fast 2

Rotating: Fast 2

| Specification: | |
|----------------|--|
|----------------|--|

| Light source: | Array of 32 high output L.E.D.s |
|---------------------|--|
| Peak candela: | 11 cd* - measured ref. to I.E.S. |
| Effective candela: | 11 cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Green, Red & Yellow |
| Voltages DC: | 10-50V dc |
| Voltages AC: | 24V ac; 115V ac; 230V ac |
| Ingress protection: | IP66 & IP67 (Third party tested) |
| Housing material: | High impact UL94 VO & 5VA FR ABS |
| Colour: | Grey (RAL7038) |
| Cable entries: | 2 x M20 supplied with 1 blanking plug |
| Lens material: | Borosilicate glass dome with PC prismatic lens cover. |
| Guard: | Stainless Steel dome guard as standard |
| Terminals: | 0.5 to 4.0mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight: | 1.48kg |

*Candela measurements representative of performance with clear lens at optimum voltage.

Features:

- Stainless steel fixings. Ratchet adjustable stainless steel 'U' bracket or 360° positioning.
- Duplicate cable terminations (in & out for daisy-chain installations).
- Tropicalisation available on request.

provals:



- Continuously rated.
- Large termination area.

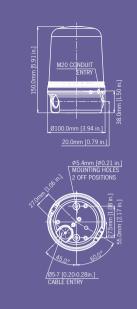
GOST-R approved. Cert: POCC GB.JB05.H00144.



B300SLF Status Beacon [Filament Lamp]

The B300 series is comprised of a Xenon strobe beacon, permanent filament bulb or halogen beacon, blinking filament bulb or halogen beacon, rotating beacon and a multi-function L.E.D. array beacon.

The surface mount base can also be supplied with a right angle bracket or with a pole mounted assembly.



Accessories:

B300RAB001 Wall bracket



Pole mount assembly (140mm)

Part codes:

| Version: W | lattage | Part code: |
|----------------------|------------|-----------------|
| 12-250V 2 | 5W | B300SLF250B/[x] |
| [x] = Lens colour: A | : Amber | |
| В | : Blue | |
| С | : Clear | |
| G | : Green | |
| Μ | 1: Magenta | |
| R | : Red | |
| Y: | Yellow | |

NOTE: Filament lamps not included.

Filament bulb/lamp part codes:

| Voltage: | Wattage: | Type: | Part code: |
|----------|----------|-------|------------|
| 12V dc | 25W | E14 | BB261225E |
| 24V dc | 25W | E14 | BB263025E |
| 48V dc | 25W | E14 | BB264825E |
| 115V ac | 25W | E14 | BB2613025E |
| 230V ac | 25W | E14 | BB2623525E |

NOTE: Filament lamps to be ordered separately.

| Specification: | |
|---------------------|---|
| Light source: | Filament lamp E14 |
| Light output: | 25W |
| Function: | Permanent |
| Effective candela: | 15cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow |
| Lens type: | Prismatic (default) or plain |
| Mounting: | Surface mount (right angle or pole mount accessories available) |
| Entries: | 1 x 5-7mm push through grommet 1 x M20 cable entry |
| Dimensions: | ø100 x 150mm |
| Ingress protection: | IP65 |
| Housing material: | High impact UL94 VO (f1) PC |
| Lens material: | High impact UL94 VO (f1) PC |
| Terminals: | 1.5 mm ² flying lead assembly |
| Operating temp: | -25 to +50°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | 370g |

*Candela measurements representative of performance with clear lens at optimum voltage.

Features:

- Approvals:



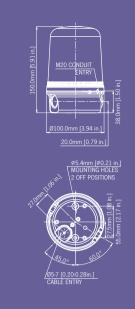
• Bayonet fixing lens. • Anti-tamper locking screw. • Stainless steel fixings.



B300SLH Status Beacon [Halogen Lamp]

The B300 series is comprised of a Xenon strobe beacon, permanent filament bulb or halogen beacon, blinking filament bulb or halogen beacon, rotating beacon and a multi-function L.E.D. array beacon.

The surface mount base can also be supplied with a right angle bracket or with a pole mounted assembly.



Accessories:

B300RAB001 Wall bracket



B300TMA001 Pole mount assembly (140mm)



Part codes:

| Version: | Wattage | Part code: |
|--------------------|------------|-----------------|
| 12-250V | 20/25W | B300SLH250B/[x] |
| [x] = Lens colour: | A: Amber | |
| | B: Blue | |
| | C: Clear | |
| | G: Green | |
| | M: Magenta | |
| | R: Red | |
| | Y: Yellow | |

NOTE: Halogen lamps not included.

Halogen bulb/lamp part codes:

| Voltage: | Wattage: | Туре: | Part code: |
|----------|----------|--------------|---------------|
| 12V dc | 20W | G6,35/GY6,35 | BJC20W12VCL |
| 24V dc | 20W | G6,35/GY6,35 | BJC20W24VCL |
| 115V ac | 25W | G6,35/GY6,35 | BJCD25W120VCL |
| 230V ac | 25W | G6,35/GY6,35 | BJCD25W230VCL |

NOTE: Halogen lamps to be ordered separately.

Current consumption:

| Version: | | Current: | |
|----------|---------|----------|--|
| 12V dc | | 1.75A | |
| 24V dc | | 1.1A | |
| 48V dc | | 0.8A | |
| 115V ac | 50/60Hz | 255mA | |
| 230V ac | 50/60Hz | 130mA | |
| | | | |

Specification:

| Light source: | Halogen Lamp G6,35/GY6,35 |
|---------------------|---|
| Light output: | 20/25W |
| Function: | Permanent |
| Effective candela: | 21cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow |
| Lens type: | Prismatic (default) or plain |
| Mounting: | Surface mount (right angle or pole mount accessories available) |
| Entries: | 1 x 5-7mm push through grommet 1 x M20 cable entry |
| Dimensions: | ø100 x 150mm |
| Ingress protection: | IP65 |
| Housing material: | High impact UL94 VO (f1) PC |
| Lens material: | High impact UL94 VO (f1) PC |
| Terminals: | 1.5 mm ² flying lead assembly |
| Operating temp: | -25 to +50°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight: | 370g |

*Candela measurements representative of performance with clear lens at optimum voltage.

Features:

Approvals:



Bayonet fixing lens. • Anti-tamper locking screw. • Stainless steel fixings.



B300FLF Blinking Beacon [Filament Lamp]

The B300 series is comprised of a Xenon strobe beacon, permanent filament bulb or halogen beacon, blinking filament bulb or halogen beacon, rotating beacon and a multi-function L.E.D. array beacon.

The surface mount base can also be supplied with a right angle bracket or with a pole mounted assembly.



Accessories:



Part codes:

| Version: | Wattage | Part code: |
|--------------------|--|-----------------|
| 12V dc | 25W | B300FLF012B/[x] |
| 24V dc | 25W | B300FLF024B/[x] |
| 48V dc | 25W | B300FLF048B/[x] |
| 115V ac | 25W | B300FLF115B/[x] |
| 230V ac | 25W | B300FLF230B/[x] |
| [x] = Lens colour: | A: Amber B: Blue C: Clear G: Green M: Magenta R: Red Y: Yellow | |

Spare bulb/lamp part codes:

| Voltage: | Wattage: | Туре: | Part code: |
|----------|----------|-------|------------|
| 12V dc | 25W | E14 | BB261225E |
| 24V dc | 25W | E14 | BB263025E |
| 48V dc | 25W | E14 | BB264825E |
| 115V ac | 25W | E14 | BB2613025E |
| 230V ac | 25W | E14 | BB2623525E |

Current consumption:

| Version: | | Current: |
|----------|---------|----------|
| 12V dc | | 1.75A |
| 24V dc | | 1.1A |
| 48V dc | | 0.8A |
| 115V ac | 50/60Hz | 255mA |
| 230V ac | 50/60Hz | 130mA |

Specification: Light source: Filament lamp E14 25W Light output: Flash frequency: User selectable during installation: 0.5Hz, 1Hz, 2Hz Effective candela: 15cd* - measured ref. to I.E.S. Lens colours: Amber, Blue, Clear, Green, Red & Yellow Prismatic (default) or plain Lens type: Mounting: Surface mount (right angle or pole mount accessories available) Entries: 1 x 5-7mm push through grommet 1 x M20 cable entry ø100 x 150mm Dimensions: IP65 Ingress protection: Housing material: High impact UL94 VO (f1) PC High impact UL94 VO (f1) PC Lens material: Terminals: 1.5 mm² flying lead assembly Operating temp: -25 to +50°C -40 to +70°C Storage temp:

90% at 20°C.

370g

*Candela measurements representative of performance with clear lens

Relative humidity:

at optimum voltage.

Weight:

Features:

- Anti-tamper locking screw.
- User selectable flash frequencies.

Approvals:

• GOST-R certificate: POCC GB.JB05.H00144.



• Bayonet fixing lens.

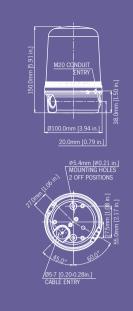
• Stainless steel fixings.



B300FLH Blinking Beacon [Halogen Lamp]

The B300 series is comprised of a Xenon strobe beacon, permanent filament bulb or halogen beacon, blinking filament bulb or halogen beacon, rotating beacon and a multi-function L.E.D. array beacon.

The surface mount base can also be supplied with a right angle bracket or with a pole mounted assembly.



Accessories:



Part codes:

| Version: | Wattage | Part code: |
|--------------------|--|-----------------|
| 12V dc | 20W | B300FLH012B/[x] |
| 24V dc | 20W | B300FLH024B/[x] |
| 115V ac | 25W | B300FLH115B/[x] |
| 230V ac | 25W | B300FLH230B/[x] |
| [x] = Lens colour: | A: Amber B: Blue C: Clear G: Green M: Magenta R: Red Y: Yellow | |

Spare bulb/lamp part codes:

| Voltage: | Wattage: | Туре: | Part code: |
|----------|----------|--------------|---------------|
| 12V dc | 20W | G6,35/GY6,35 | BJC20W12VCL |
| 24V dc | 20W | G6,35/GY6,35 | BJC20W24VCL |
| 115V ac | 25W | G6,35/GY6,35 | BJCD25W120VCL |
| 230V ac | 25W | G6,35/GY6,35 | BJCD25W230VCL |

Current consumption:

| Version: | | Current: |
|----------|---------|----------|
| 12V dc | | 1.7A |
| 24V dc | | 1.0A |
| 115V ac | 50/60Hz | 208mA |
| 230V ac | 50/60Hz | 116mA |

| Specification: | |
|---------------------|---|
| Light source: | Halogen Lamp G6,35/GY6,35 |
| Light output: | 20/25W |
| Flash frequency: | User selectable during installation: 0.5Hz, 1Hz, 2Hz |
| Effective candela: | 21cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow |
| Lens type: | Prismatic (default) or plain |
| Mounting: | Surface mount (right angle or pole mount accessories available) |
| Entries: | 1 x 5-7mm push through grommet 1 x M20 cable entry |
| Dimensions: | ø100 x 150mm |
| Ingress protection: | IP65 |
| Housing material: | High impact UL94 V0 (f1) PC |
| Lens material: | High impact UL94 VO (f1) PC |
| Terminals: | 1.5 mm ² flying lead assembly |
| Operating temp: | -25 to +50°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | 370g |

*Candela measurements representative of performance with clear lens at optimum voltage.

atures:

provals:



Bayonet fixing lens. Anti-tamper locking screw. Stainless steel fixings. User selectable flash frequencies



B400SLF Status Beacon [Filament Lamp]

The B400 series comprises Xenon strobe beacons, permanent filament bulb or halogen beacon, blinking filament bulb or halogen beacon, rotating halogen beacon and a multi-function L.E.D. array beacon.

The surface mount base can also be supplied with a right angle bracket or with a pole mounted assembly.





Specification:

Accessories:



B400TMA001 Pole mount assembly (140mm)



Part codes:

| Version: | Wattage: | Part code: |
|-------------------|-----------|-----------------|
| 12-250V | 40W | B400SLF250B/[x] |
| [x]= Lens colour: | A: Amber | |
| | B: Blue | |
| | C: Clear | |
| | G: Green | |
| | R: Red | |
| | Y: Yellow | |

Note: Filament lamp not included.

Filament bulb/lamp part codes:

| Voltage: | Wattage: | Туре: | Part code: |
|----------|----------|-------|-------------|
| 12V dc | 40W | E14 | BG351240E |
| 24V dc | 40W | E14 | BG352440E |
| 115V ac | 40W | E14 | B457513040E |
| 230V ac | 40W | E14 | B457523040E |

Note: Filament lamp to be ordered separately.

Current consumption:

| Version: | | Current: |
|----------|---------|----------|
| 12V dc | | 3.1A |
| 24V dc | | 2.05A |
| 115V ac | 50/60Hz | 321mA |
| 230V ac | 50/60Hz | 178mA |

Light source: Filament lamp E14 40W Light output: Function: Permanent Effective candela: 27cd* - measured ref. to I.E.S. Amber, Blue, Clear, Green, Lens colours: Red & Yellow Lens type: Prismatic (default) or plain

Features:

Approvals:

| Mounting: | Surface mount (right angle or pole mount accessories available) |
|---------------------|---|
| Entries: | 1 x 5-7mm push through grommet 2 x M20 cable entry |
| Dimensions: | ø140 x 220mm |
| Ingress protection: | IP65 |
| Housing material: | High impact UL94 V0 (f1) PC |
| Lens material: | High impact UL94 V0 (f1) PC |
| Terminals: | 1.5 mm ² flying lead assembly |
| Operating temp: | -25 to +50°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight: | 535g |
| | |

*Candela measurements representative of performance with clear lens at optimum voltage.



• Bayonet fixing lens. • Anti-tamper locking screw. • Stainless steel fixings.

• Multiple cable entries.



B400SLH Status Beacon [Halogen Lamp]

The B400 series comprises Xenon strobe beacons, permanent filament bulb or halogen beacon, blinking filament bulb or halogen beacon, rotating halogen beacon and a multi-function L.E.D. array beacon.

The surface mount base can also be supplied with a right angle bracket or with a pole mounted assembly.





Accessories:



Part codes:

| Version: | Wattage: | Part code: |
|--------------------|-----------|-----------------|
| 12-250V | 35/40W | B400SLH250B/[x] |
| [x] = Lens colour: | A: Amber | |
| | B: Blue | |
| | C: Clear | |
| | G: Green | |
| | R: Red | |
| | Y: Yellow | |

Note: Halogen lamp not included.

Halogen bulb/lamp part codes:

| Voltage: | Wattage: | Туре: | Part code: |
|----------|----------|--------------|---------------|
| 12V dc | 35W | G6,35/GY6,35 | BJC35W12VCL |
| 24V dc | 35W | G6,35/GY6,35 | BJC35W24VCL |
| 115V ac | 40W | G6,35/GY6,35 | BJCD40W120VCL |
| 230V ac | 40W | G6,35/GY6,35 | BJCD40W230VCL |

Note: Halogen lamp to be ordered separately.

Current consumption:

| Version: | | Current: | |
|----------|---------|----------|--|
| 12V dc | | 3.1A | |
| 24V dc | | 2.05A | |
| 115V ac | 50/60Hz | 321mA | |
| 230V ac | 50/60Hz | 178mA | |

Specification:

| Light source: | Halogen lamp G6,35 / GY6,35 |
|---------------------|---|
| Light output: | 35/40W |
| Function: | Permanent |
| Effective candela: | 43cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow |
| Lens type: | Prismatic (default) or plain |
| Mounting: | Surface mount (right angle or pole mount accessories available) |
| Entries: | 1 x 5-7mm push through grommet 2 x M20 cable entry |
| Dimensions: | ø140 x 220mm |
| Ingress protection: | IP65 |
| Housing material: | High impact UL94 VO (f1) PC |
| Lens material: | High impact UL94 V0 (f1) PC |
| Terminals: | 1.5 mm ² flying lead assembly |
| Operating temp: | -25 to +50°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight: | 535g |

*Candela measurements representative of performance with clear lens at optimum voltage.

Features:

pprovals:



Bayonet fixing lens. Anti-tamper locking screw. Stainless steel fixings. Multiple cable entries



B400FLF Blinking Beacon [Filament Lamp]

The B400 series comprises Xenon strobe beacons, permanent filament bulb or halogen beacon, blinking filament bulb or halogen beacon, rotating halogen beacon and a multi-function L.E.D. array beacon.

The surface mount base can also be supplied with a right angle bracket or with a pole mounted assembly.





Accessories:



Part codes:

| Version: | Wattage: | Part code: |
|--------------------|--|-----------------|
| 24V dc | 40W | B400FLF024B/[x] |
| 24V ac | 40W | B400FLF24AB/[x] |
| 115V ac | 40W | B400FLF115B/[x] |
| 230V ac | 40W | B400FLF230B/[x] |
| [x] = Lens colour: | A: Amber B: Blue C: Clear G: Green R: Red Y: Yellow | |

Spare bulb/lamp part codes:

| Voltage: | Wattage: | Type: | Part code: |
|-----------|----------|-------|-------------|
| 24V dc/ac | 40W | E14 | BG352440E |
| 115V ac | 40W | E14 | B457513040E |
| 230V ac | 40W | E14 | B457523040E |

Current consumption:

| Version: | | Current: | |
|----------|---------|----------|--|
| 24V dc | | 2.2A | |
| 24V ac | | 1.5A | |
| 115V ac | 50/60Hz | 320mA | |
| 230V ac | 50/60Hz | 178mA | |

Specification: Light source: Filament lamp E14 40W Light output: Flash frequency: User selectable during installation: 0.5Hz, 1Hz, 2Hz Effective candela: 29cd* - measured ref. to I.E.S. Lens colours: Amber, Blue, Clear, Green, Red & Yellow Lens type: Prismatic (default) or plain Mounting: Surface mount (right angle or pole mount accessories available) Entries: 1 x 5-7mm push through grommet 2 x M20 cable entry ø140 x 220mm Dimensions: IP65 Ingress protection: Housing material: High impact UL94 VO (f1) PC High impact UL94 V0 (f1) PC Lens material: 1.5 mm² flying lead assembly Terminals: Operating temp: -25 to +50°C Storage temp: -40 to +70°C 90% at 20°C. Relative humidity:

*Candela measurements representative of performance with clear lens at optimum voltage.

535g

Weight:

Features:

Approvals:



• Bayonet fixing lens. • Anti-tamper locking screw. • Stainless steel fixings.

• Multiple cable entries



B400FLH Blinking Beacon [Halogen Lamp]

The B400 series comprises Xenon strobe beacons, permanent filament bulb or halogen beacon, blinking filament bulb or halogen beacon, rotating halogen beacon and a multi-function L.E.D. array beacon.

The surface mount base can also be supplied with a right angle bracket or with a pole mounted assembly.





Accessories:



Part codes:

| Version: | Wattage: | Part code: |
|--------------------|--|-----------------|
| 12V dc | 35W | B400FLH012B/[x] |
| 24V dc | 35W | B400FLH024B/[x] |
| 115V ac | 40W | B400FLH115B/[x] |
| 230V ac | 40W | B400FLH230B/[x] |
| [x] = Lens colour: | A: Amber B: Blue C: Clear G: Green R: Red Y: Yellow | |

Spare bulb/lamp part codes:

| Voltage: | Wattage: | Туре: | Part code: |
|----------|----------|--------------|---------------|
| 12V dc | 35W | G6,35/GY6,35 | BJC35W12VCL |
| 24V dc | 35W | G6,35/GY6,35 | BJC35W24VCL |
| 115V ac | 40W | G6,35/GY6,35 | BJCD40W120VCL |
| 230V ac | 40W | G6,35/GY6,35 | BJCD40W230VCL |

Current consumption:

| | Current: | |
|---------|----------|--------------------------------|
| | 3.1A | |
| | 2.05A | |
| 50/60Hz | 321mA | |
| 50/60Hz | 178mA | |
| | , | 3.1A 2.05A 50/60Hz 321mA |

| Specification: | | Features |
|---------------------|---|---|
| Light source: | Halogen lamp G6,35 / GY6,35 | Bayon |
| Light output: | 35/40W | • Anti-ta |
| Flash frequency: | User selectable during installation: 0.5Hz, 1Hz, 2Hz | Stainle Multip |
| Effective candela: | 34cd* - measured ref. to I.E.S. | |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow | Approval GOST- |
| Lens type: | Prismatic (default) or plain | - |
| Mounting: | Surface mount (right angle or pole mount accessories available) | _ |
| Entries: | 1 x 5-7mm push through grommet 2 x M20 cable entry | - |
| Dimensions: | ø140 x 220mm | - |
| Ingress protection: | IP65 | - |
| Housing material: | High impact UL94 VO (f1) PC | _ |
| Lens material: | High impact UL94 VO (f1) PC | _ |
| Terminals: | 1.5 mm ² flying lead assembly | _ |
| Operating temp: | -25 to +50°C | _ |
| Storage temp: | -40 to +70°C | |
| | | |

*Candela measurements representative of performance with clear lens at optimum voltage.

535g

Weight:



ayonet fixing lens. nti-tamper locking screw. tainless steel fixings. Iultiple cable entries



B100SLF Panel Mount Status Beacon [Filament Lamp]

The B100 series is comprised of a Xenon strobe beacon, permanent filament bulb, blinking filament bulb and a permanent L.E.D. array beacon version.

The panel mount base incorporates a pluggable terminal block ensuring rapid installation and maintenance.



Specification:

Features:

Approvals:

Part codes:

| Version: | Wattage: | Part code: | |
|--------------------|-----------|-----------------|--|
| 12-250V | 5W | B100SLF250B/[x] | |
| [x] = Lens colour: | A: Amber | | |
| | B: Blue | | |
| | C: Clear | | |
| | G: Green | | |
| | R: Red | | |
| | Y: Yellow | | |

NOTE: Filament lamps not included.

Spare bulb/lamp part codes:

| Voltage: | Wattage: | Туре: | Part code: |
|----------|----------|-------|------------|
| 12V dc | 5W | BA9s | BR10125B |
| 24V dc | 5W | BA9s | BR10245B |
| 48V dc | 5W | BA9s | BR10485B |
| 115V ac | 5W | BA9s | BR101305B |
| 230V ac | 5W | BA9s | BR102305B |

| Light source: | Filament lamp BA9s |
|---------------------|--|
| Light output: | 5W |
| Function: | Permanent |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow |
| Lens type: | Prismatic (default) or plain |
| Effective candela: | 5cd* - measured ref. to I.E.S. |
| Mounting: | Panel mount PG29 |
| Ingress protection: | IP65 |
| Housing material: | High impact UL94 V0 (f1) PC |
| Terminals: | 0.5 to 1.5mm ² pluggable |
| Operating temp: | -25 to +50°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | 93g |

*Candela measurements representative of performance with clear lens at optimum voltage.



• Bayonet fixing lens. • Anti-tamper locking screw. • Stainless steel fixings.



B100FLF Panel Mount Blinking Beacon [Filament Lamp]

The B100 series is comprised of a Xenon strobe beacon, permanent filament bulb, blinking filament bulb and a permanent L.E.D. array beacon version.

The panel mount base incorporates a pluggable terminal block ensuring rapid installation and maintenance.



Part codes:

| Version: | Wattage: | Part code: |
|--------------------|-----------|-----------------|
| 12V dc | 5W | B100FLF012B/[x] |
| 24V dc | 5W | B100FLF024B/[x] |
| 48V dc | 5W | B100FLF048B/[x] |
| 115V ac | 5W | B100FLF115B/[x] |
| 230V ac | 5W | B100FLF230B/[x] |
| [x] = Lens colour: | A: Amber | |
| | B: Blue | |
| | C: Clear | |
| | G: Green | |
| | R: Red | |
| | Y: Yellow | |

Spare bulb/lamp part codes:

| Voltage: | Wattage: | Туре: | Part code: |
|----------|----------|-------|------------|
| 12V dc | 5W | BA9s | BR10125B |
| 24V dc | 5W | BA9s | BR10245B |
| 48V dc | 5W | BA9s | BR10485B |
| 115V ac | 5W | BA9s | BR101305B |
| 230V ac | 5W | BA9s | BR102305B |

Current consumption:

| Version: | | Current: |
|----------|---------|----------|
| 12V dc | | 500mA |
| 24V dc | | 250mA |
| 48V dc | | 120mA |
| 115V ac | 50/60Hz | 35mA |
| 230V ac | 50/60Hz | 25mA |

| Specification: | | |
|---------------------|--|--|
| Light source: | Filament lamp BA9s | |
| Light output: | 5W | |
| Flash frequency: | 1Hz | |
| Effective candela: | 2cd* - measured ref. to I.E.S. | |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow | |
| Lens type: | Prismatic (default) or plain | |
| Mounting: | Panel mount PG29 | |
| Ingress protection: | IP65 | |
| Housing material: | High impact UL94 VO (f1) PC | |
| Lens material: | High impact UL94 VO (f1) PC | |
| Terminals: | 0.5 to 1.5mm ² pluggable | |
| Operating temp: | -25 to +50°C | |
| Storage temp: | -40 to +70°C | |
| Relative humidity: | 90% at 20°C. | |
| noiativo nannaity. | 50/0 G(20 0) | |

*Candela measurements representative of performance with clear lens at optimum voltage.

93g

Weight :

atures:

- provals:



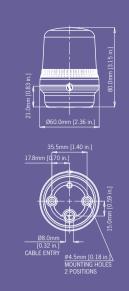
Bayonet fixing lens. Anti-tamper locking screw. Stainless steel fixings.



B200SLF Status Beacon [Filament Lamp]

The B200 series is comprised of a Xenon strobe beacon, permanent filament bulb, blinking filament bulb and a permanent L.E.D. array beacon version.

The surface mount base can also be supplied with a right angle bracket or with a pole mounted assembly.



Accessories:



Pole mount assembly (140mm)



| Version: | Wattage: | Part code: |
|--------------------|-----------|-----------------|
| 12-250V | 5W | B200SLF250B/[x] |
| [x] = Lens colour: | A: Amber | |
| | B: Blue | |
| | C: Clear | |
| | G: Green | |
| | R: Red | |
| | Y: Yellow | |

NOTE: Filament lamps not included.

Bulb/lamp part codes:

| Voltage: | Wattage: | Туре: | Part code: | |
|----------|----------|-------|------------|--|
| 12V dc | 5W | BA9s | BR10125B | |
| 24V dc | 5W | BA9s | BR10245B | |
| 48V dc | 5W | BA9s | BR10485B | |
| 115V ac | 5W | BA9s | BR101305B | |
| 230V ac | 5W | BA9s | BR102305B | |

Specification:

| Light source: | Filament lamp BA9s |
|---------------------|---|
| Light output: | 5W |
| Function: | Permanent |
| Effective candela: | 5cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow |
| Lens type: | Prismatic (default) or plain |
| Mounting: | Surface mount (right angle or pole mount accessories available) |
| Ingress protection: | IP65 |
| Housing material: | High impact UL94 VO (f1) PC |
| Lens material: | High impact UL94 V0 (f1) PC |
| Terminals: | 0.5 to 1.5mm ² |
| Operating temp: | -25 to +50°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | 78g |

*Candela measurements representative of performance with clear lens at optimum voltage.

Features:

Approvals:



• Bayonet fixing lens. • Anti-tamper locking screw. • Stainless steel fixings.

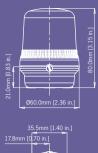
• GOST-R certificate: POCC GB.JB05.H00144.



B200FLF Blinking Beacon [Filament Lamp]

The B200 series is comprised of a Xenon strobe beacon, permanent filament bulb, blinking filament bulb and a permanent L.E.D. array beacon version.

The surface mount base can also be supplied with a right angle bracket or with a pole mounted assembly.



Accessories:



Pole mount assembly (140mm)



| Version: | Wattage: | Part code: |
|--------------------|--|-----------------|
| 12V dc | 5W | B200FLF012B/[x] |
| 24V dc | 5W | B200FLF024B/[x] |
| 48V dc | 5W | B200FLF048B/[x] |
| 115V ac | 5W | B200FLF115B/[x] |
| 230V ac | 5W | B200FLF230B/[x] |
| [x] = Lens colour: | A: Amber B: Blue C: Clear G: Green R: Red Y: Yellow | |

Spare bulb/lamp part codes:

| Voltage: | Wattage: | Туре: | Part code: |
|----------|----------|-------|------------|
| 12V dc | 5W | BA9s | BR10125B |
| 24V dc | 5W | BA9s | BR10245B |
| 48V dc | 5W | BA9s | BR10485B |
| 115V ac | 5W | BA9s | BR101305B |
| 230V ac | 5W | BA9s | BR102305B |

Current consumption:

| Version: | | Current: |
|----------|---------|----------|
| 12V dc | | 500mA |
| 24V dc | | 250mA |
| 48V dc | | 120mA |
| 115V ac | 50/60Hz | 35mA |
| 230V ac | 50/60Hz | 25mA |

| Specification: | | |
|---------------------|---|--|
| Light source: | Filament lamp BA9s | |
| Light output: | 5W | |
| Flash frequency: | 1Hz | |
| Effective candela: | 2cd* - measured ref. to I.E.S. | |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow | |
| Lens type: | Prismatic (default) or plain | |
| Mounting: | Surface mount (right angle or pole mount accessories available) | |
| Ingress protection: | IP65 | |
| Housing material: | High impact UL94 VO (f1) PC | |
| lens material: | High impact UL94 V0 (f1) PC | |
| Terminals: | 0.5 to 1.5mm ² | |
| Operating temp: | -25 to +50°C | |
| Storage temp: | -40 to +70°C | |
| Relative humidity: | 90% at 20°C. | |
| Weight : | 78g | |

*Candela measurements representative of performance with clear lens at optimum voltage.

atures:

provals:



Bayonet fixing lens. Anti-tamper locking screw. Stainless steel fixings.

GOST-R certificate: POCC GB.JB05.H00144.



Lamps / Bulbs & Accessories

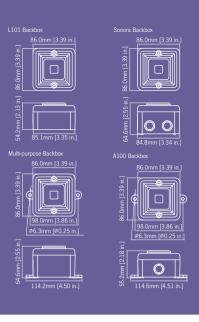
Lamps / Bulbs:

| Lamps / Bulbs: | | | Mounting Accesso | ories: | |
|----------------|-----------------------|---------------------------------|------------------|---------------------------------------|---|
| E2S Part Code: | Description: | Spectra product: | E2S Part Code: | Description: | S |
| BR10125B | 12V 5W BA9s | B100SLF B100FLF B200SLF B200FLF | B200RAB001 | Right angle bracket for wall mounting | В |
| BR10245B | 24V 5W BA9s | B100SLF B100FLF B200SLF B200FLF | | | |
| BR10485B | 48V 5W BA9s | B100SLF B100FLF B200SLF B200FLF | | | |
| BR101305B | 115V 5W BA9s | B100SLF B100FLF B200SLF B200FLF | | | |
| BR102305B | 230V 5W BA9s | B100SLF B100FLF B200SLF B200FLF | B300RAB001 | Right angle bracket for wall mounting | В |
| BB261225E | 12V 25W E14 | B300SLF B300FLF B350TSB | | | |
| BB263025E | 24V 25W E14 | B300SLF B300FLF B350TSB | | | |
| BB264825E | 48V 25W E14 | B300SLF B300FLF B350TSB | | | |
| BB2613025E | 115V 25W E14 | B300SLF B300FLF B350TSB | B400RAB001 | Right angle bracket for wall mounting | В |
| BB2623525E | 230V 25W E14 | B300SLF B300FLF B350TSB | | | |
| BJC20W12VCL | 12V 20W G6,35/GY6,35 | B300SLH B300FLH B300RTH | | | |
| BJC20W24VCL | 24V 20W G6,35/GY6,35 | B300SLH B300FLH B300RTH | | | |
| BJCD25W120VCL | 115V 25W G6,35/GY6,35 | B300SLH B300FLH B300RTH | B200TMA001 | Pole mounting assembly (140mm) | В |
| BJCD25W230VCL | 230V 25W G6,35/GY6,35 | B300SLH B300FLH B300RTH | | | |
| BG351240E | 12V 40W E14 | B400SLF B400FLF | | | |
| BG352440E | 24V 40W E14 | B400SLF B400FLF | | | |
| B457513040E | 115V 40W E14 | B400SLF B400FLF | | | |
| B457523040E | 230V 40W E14 | B400SLF B400FLF | | | |
| BJC35W12VCL | 12V 35W G6,35/GY6,35 | B400SLH B400FLH B400RTH | | | |
| BJC35W24VCL | 24V 35W G6,35/GY6,35 | B400SLH B400FLH B400RTH | B300TMA001 | Pole mounting assembly (140mm) | В |
| BJCD40W120VCL | 115V 40W G6,35/GY6,35 | B400SLH B400FLH B400RTH | | | |
| BJCD40W230VCL | 230V 40W G6,35/GY6,35 | B400SLH B400FLH B400RTH | | | |
| BB261215E | 12V 15W E14 | B450TDB | | | |
| BB263015E | 24V 15W E14 | B450TDB | | | |
| BB264815E | 48V 15W E14 | B450TDB | | | |
| BB2613015E | 115V 15W E14 | B450TDB | | | |
| BB2623515E | 230V 15W E14 | B450TDB | B400TMA001 | Pole mounting assembly (140mm) | В |
| BGS2525C27 | 24V 25W E27 | B450TSB | | | |
| BGS11025C27 | 115V 25W E27 | B450TSB | | | |
| BGS24025C27 | 230V 25W E27 | B450TSB | | | |

Spectra product: B200 B300 B400 B200 B300 B400

SONF1 Alarm Sounder

The SONF1 is a compact, high output, 100dB(A) alarm sounder. Low current consumption and high SPL in a robust fire retardant housing ensure the SONF1 is suitable for all general signalling applications including fire, security and process control.



Tone table:

| Stage 1 | Frequency Description. | Stage 2 |
|---------|--|---------|
| Tone 1 | 800/1000Hz @ 0.25 sec Alternating | Tone 8 |
| Tone 2 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 1 |
| Tone 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 8 |
| Tone 4 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 9 |
| Tone 5 | Bell | Tone 1 |
| Tone 6 | 800/1000Hz @ 7Hz Sweeping | Tone 8 |
| Tone 7 | 500-1200Hz 3.75sec / 0.25sec. Australian Evac. | Tone 10 |
| Tone 8 | 1000Hz Continuous - PFEER Toxic Gas | |
| Tone 9 | Continuous 554Hz | |
| Tone 10 | 420Hz @ 0.625 sec Australian Alert | |

Where applicable following tones are available on AC voltage versions:

| Stage 1 | Frequency Description. |
|---------|-----------------------------|
| Tono 1 | 200/1000Hz @ 0.25 coo Altor |

| Ione I | 800/1000Hz @ 0.25 sec Alternating |
|---------|--|
| Tone 2 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop |
| Tone 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. |
| Tone 4 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 |
| Tone 5 | 1000Hz Continuous - PFEER Toxic Gas |
| Tone 6 | Bell |
| Tone 7 | 800/1000Hz @ 7Hz Sweeping |
| Tone 8 | 2400/2900Hz @ 50Hz Sweeping |
| Tone 9 | 420Hz @ 0.625 sec Australian Alert |
| Tone 10 | 500-1200Hz 3.75sec / 0.25sec. Australian Evac. |

Country specific or custom tone configurations and alarm frequencies are available

upon request.

Part codes:

| ige 2 | Version: | Part code: |
|--------------|----------|---------------|
| ie 8 ie 1 | 24V dc | SONF1DC24[x] |
| le 8 | 24V ac | SONF1AC24[x] |
| ie 9 ie 1 | 115V ac | SONF1AC115[x] |
| ie 8 | 230V ac | SONF1AC230[x] |
| ie 10 | | |

Suffix part number with '-UL' for UL approved version

A100 back box with mounting lugs:

| 24V dc | SONF1DC24A[x] |
|-----------------------|-------------------------|
| 24V ac | SONF1AC24A[x] |
| 115V ac | SONF1AC115A[x] |
| 230V ac | SONF1AC230A[x] |
| [x] = Housing colour: | G: Grey R: Red W: White |

Alarm sounder:

| Version: | | Voltage: | Current: |
|----------|---------|-----------|----------|
| 24V dc | | 10-30V dc | 25mA |
| 24V ac | 50/60Hz | +/-10% | 40mA |
| 115V ac | 50/60Hz | +/-10% | 13mA |
| 230V ac | 50/60Hz | +/-10% | 13mA |

Specification:

| Maximum output: | 100dB(A) @ 1 metre |
|---------------------|---|
| Nominal output: | 99dB(A) @ 1m +/- 3dB - Tone 1 |
| No. of tones: | 10 (UKOOA / PFEER compliant) |
| No. of stages: | 2 |
| Volume control: | On board potentiometer |
| Effective range: | 30m @ 1KHz |
| Voltages DC: | 24V dc (10-30V dc) Reverse polarity diode protection on DC units. |
| Voltages AC: | 24V ac; 115V ac; 230V ac |
| Ingress protection: | IP66 (UL version Type 13 & 3R) |
| Housing material: | High impact UL94 VO & 5VA FR ABS |
| Colour: | Red (RAL3000), grey (RAL7038) & white. |
| Cable entries: | 4 x M20 clearance gland knockouts in side & back |
| Terminals: | 0.5 to 1.5mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | 0.30kg |
| | |

Features:

- Stainless steel fixings. Mounting via internal BESA compatible fixing positions
- (in & out for daisy-chain installations).
- Tropicalisation available on request.
- Available with custom tone configurations and frequencies.

pprovals:

- VdS approved to EN54-3 (CPD 89/106/EEC).
- UKOOA/PFEER compliant alarm tones.



- Automatic synchronisation on multi-sounder system.
- Continuously rated.
- (standard version) or via external mounting lugs.
- Duplicate cable terminations

- UL approved version available.
- GOST-R approved. Cert: POCC GB.JB05.H00144.



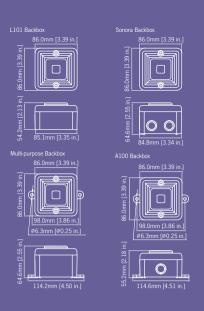






SONF1-HO Alarm Sounder

The SONF1-HO is a compact, high output, 105dB(A) alarm sounder. Low current consumption and high SPL in a robust fire retardant housing ensure the SONF1-HO is suitable for all general signalling applications including fire, security and process control.



Tone table:

| Stage 1 | Frequency Description. | Stage 2 |
|---------|--|---------|
| Tone 1 | 800/1000Hz @ 0.25 sec Alternating | Tone 8 |
| Tone 2 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 1 |
| Tone 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 8 |
| Tone 4 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 9 |
| Tone 5 | Bell | Tone 1 |
| Tone 6 | 800/1000Hz @ 7Hz Sweeping | Tone 8 |
| Tone 7 | 500-1200Hz 3.75sec / 0.25sec. Australian Evac. | Tone 10 |
| Tone 8 | 1000Hz Continuous - PFEER Toxic Gas | |
| Tone 9 | Continuous 554Hz | |
| Tone 10 | 420Hz @ 0.625 sec Australian Alert | |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Part codes:

| Version: | Part code: |
|----------|----------------|
| 12V dc | SONF1DC12[x]-H |
| 24V dc | SONF1DC24[x]-H |
| | |

A100 back box with mounting lugs:

| Allow buck box multimounting tago. | |
|------------------------------------|-------------------------|
| 12V dc | SONF1DC12A[x]-H |
| 24V dc | SONF1DC24A[x]-H |
| [x] = Housing colour: | G: Grey R: Red W: White |

Alarm sounder:

| Version: | Voltage: | Current: |
|----------|-----------|----------|
| 12V dc | 10-18V dc | 50mA |
| 24V dc | 18-30V dc | 80mA |

Specification:

| Maximum output: | 105dB(A) @ 1 metre |
|---------------------|---|
| Nominal output: | 103dB(A) @ 1m +/- 3dB - Tone 1 |
| No. of tones: | 10 (UKOOA / PFEER compliant) |
| No. of stages: | 2 |
| Effective range: | 32m @ 1KHz |
| Voltages DC: | 12V dc; 24V dc [Reverse polarity diode protection] |
| Ingress protection: | IP66 |
| Housing material: | High impact UL94 VO & 5VA FR ABS |
| Colour: | Red (RAL3000), grey (RAL7038) & white. |
| Cable entries: | 4 x M20 clearance gland knockouts in side & back |
| Terminals: | 0.5 to 1.5mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage tempe: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | 0.30kg |

Features:

- Duplicate cable terminations
- (in & out for daisy-chain installations).
- Tropicalisation available on request.
- Available with custom tone configurations and frequencies.

provals:

- VdS approved to EN54-3 (CPD 89/106/EEC).
- UKOOA/PFEER compliant alarm tones.



- Automatic synchronisation on multi-sounder system.
- Continuously rated.
- Stainless steel fixings.
- Mounting via internal BESA compatible fixing positions
- (standard version) or via external mounting lugs.

GOST-R approved. Cert: POCC GB.JB05.H00144.

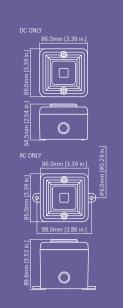






SON2 Alarm Sounder

The SON2 is a compact, high output, 104dB(A) alarm sounder. Low current consumption and high SPL in a robust fire retardant housing ensure the SON2 is suitable for all general signalling applications including fire, security and process control.



Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 |
|---------|---|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 26 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 420Hz @ 0.625 sec Australian Alert | Tone 32 | Tone 26 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | 500-1200Hz 3.75sec /0.25sec. Australian Evac. | Tone 30 | Tone 26 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Part codes:

| Version: | Part code: | | |
|---------------|-------------|---------------------|-------|
| 24V dc | SON2DC24[x] | | |
| 24V ac | SON2AC24[x] | | |
| 115V ac | SON2AC115[> | .] | |
| 230V ac | SON2AC230[x |] | |
| [x] = Housing | g colour: | G: Grey R: Red W: \ | Nhite |

5 Alarm sounder:

| 5 | Version: | | Voltage: | Current: |
|------------|----------|---------|-----------|----------|
| 5 | | | | |
| e 5 | 24V dc | | 10-30V dc | 20-80mA |
| : 5 : 5 | 24V ac | 50/60Hz | +/-10% | 25-90mA |
| 27 | 115V ac | 50/60Hz | +/-10% | 24mA |
| e 5 e 5 | 230V ac | 50/60Hz | +/-10% | 12mA |
| | | | | |

Specification:

| Maximum output: | 104dB(A) @ 1 metre | |
|---------------------|---|--|
| Nominal output: | 100dB(A) @ 1m +/- 3dB - Tone 2 | |
| No. of tones: | 32 (UKOOA / PFEER compliant) | |
| No. of stages: | 3 | |
| Volume control: | 3 levels via on board switch | |
| Effective range: | 32m @ 1KHz | |
| Voltages DC: | 24V dc (10-30V dc) Reverse polarity diode protection on DC units. | |
| Voltages AC: | 24V ac; 115V ac; 230V ac | |
| Stage switching: | Reverse polarity stage switching on DC units. | |
| Ingress protection: | IP66 | |
| Housing material: | High impact UL94 V0 & 5VA FR ABS | |
| Colour: | Red (RAL3000), grey (RAL7038) & white. | |
| Cable entries: | 4 x M20 clearance gland knockouts in side & back | |
| Terminals: | 0.5 to 1.5mm ² cables. | |
| Operating temp: | -25 to +55°C | |
| Storage temp: | -40 to +70°C | |
| Relative humidity: | 90% at 20°C. | |
| Weight : | DC: 0.30kg AC:0.40kg | |
| | | |

Features:

- Continuously rated.
- Duplicate cable terminations
- (in & out for daisy-chain installations). • Wire to base installation
- Tropicalisation available on request.
- Available with custom tone configurations and frequencies.

Approvals:



• Automatic synchronisation on multi-sounder system.

- Stainless steel fixings.

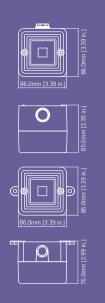
• UKOOA/PFEER compliant alarm tones.

• GOST-R approved. Cert: POCC GB.JB05.H00144.



A100 Alarm Sounder

The A100 is a compact, high output, 104dB(A) alarm sounder. Low current consumption and high SPL in a robust fire retardant housing ensure the A100 is suitable for all general signalling applications including fire, security and process control.



Tone table:

| Stage 1 | Frequency Description. | (Stage 2) | (Stage 3) |
|---------|---|-----------|-----------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Part codes:

| Version: | Part code: |
|-----------------------|-------------------------|
| 24V dc | A100DC24[x] |
| 48V dc | A100DC48[x] |
| 24V ac | A100AC24[x] |
| 115V ac | A100AC115[x] |
| 230V ac | A100AC230[x] |
| [x] = Housing colour: | G: Grey R: Red W: White |

Alarm sounder:

| Version: | | Voltage: | Current: |
|----------|---------|-----------|----------|
| 24V dc | | 10-30V dc | 25mA* |
| 48V dc | | 35-60V dc | 50mA* |
| 24V ac | 50/60Hz | +/-10% | 40mA |
| 115V ac | 50/60Hz | +/-10% | 20mA |
| 230V ac | 50/60Hz | +/-10% | 15mA |

Specification:

| Maximum output: | 104dB(A) @ 1 metre |
|---------------------|--|
| Nominal output: | 100dB(A) @ 1m +/- 3dB - Tone 2 |
| No. of tones: | 32 (UKOOA / PFEER compliant) |
| No. of stages: | 3 |
| Volume control: | Max. 100dB(A); Min. 90dB(A) - Tone 2 |
| Effective range: | 32m @ 1KHz |
| Voltages DC: | 24V dc (10-30V dc); 48V dc (35-60V dc) [DC units can use 24V ac for single stage applications.] |
| Voltages AC: | 24V ac; 115V ac; 230V ac |
| Stage switching: | Negative |
| | Reverse polarity stage switching on DC units. |
| Ingress protection: | IP66 |
| Housing material: | High impact UL94 V0 & 5VA FR ABS |
| Colour: | Red (RAL3000), grey (RAL7038) & white. |
| Cable entries: | 3 x M20 clearance gland entries in side & back |
| Terminals: | 0.5 to 1.5mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | DC: 0.26kg AC:0.37kg |

Features:

- Continuously rated.
- Unit can be mounted using external lugs or internal BESA compatible fixing positions.
- (in & out for daisy-chain installations).
- Tropicalisation available on request.
- Available with custom tone configurations and frequencies.
- 'Programmable' version available:
- 45 alarm tones
- 4 remotely selectable stages
- Any tone can be assigned to any stage
- User configurable continuous frequency tone

provals:

- UKOOA/PFEER compliant alarm tones.
- UL approved version available.
- GOST-R approved. Cert: POCC GB.JB05.H00144.



- Automatic synchronisation on multi-sounder system.
- Stainless steel fixings.
- Duplicate cable terminations

VdS approved to EN54-3 (CPD 89/106/EEC).









A100SONTEL Telephone Initiated Alarm Sounder

Part codes:

Tones:

Tone 1

Tone 2

Tone 3

A100SONTEL[x]

[x] = Housing colour:

G: Grey R: Red W: White

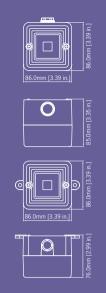
Siren Tone

Alternating tone

Sweeping tone

The A100SONTEL is a compact, high output, 100dB(A) telephone initiated alarm sounder.

The line powered A100SONTEL has a choice of three alarm tone frequencies.



Features:

Approvals:

- Volume control: Max. 100dB(A); Min. 90dB(A) Effective range: 32m @ 1KHz Supply:

3

Specification:

Nominal output:

No. of tones:

Direct power from telephone line (REN 1)

100dB(A) @ 1m +/- 3dB

| ngress protection: | IP66 | |
|--------------------|--|--|
| Housing material: | High impact UL94 V0 & 5VA FR ABS | |
| Colour: | Red (RAL3000), grey (RAL7038) & white. | |
| Cable entries: | 3 x M20 clearance gland knockouts in side & back | |
| Terminals: | 0.5 to 2.5mm ² cables. | |
| Operating temp: | -25 to +55°C | |
| Storage temp: | -40 to +70°C | |
| Relative humidity: | 90% at 20°C. | |
| Weight : | 0.26kg | |
| | | |

*SPL data +/-3dB(A). Measured at optimum voltage.



• Continuously rated.

• Stainless steel fixings.

• Unit can be mounted using external lugs or internal

BESA compatible fixing positions.

• Tropicalisation available on request.

• GOST-R approved. Cert: POCC GB-JB05-H00144



A105N Alarm Sounder

The A105N is a high output, 112dB(A) alarm sounder. Low current consumption and high SPL in a robust fire retardant IP66 housing ensure the A105N is suitable for all general signalling applications including fire, security and process control.



Tone table:

| Stage 1 | Frequency Description. | (Stage 2) | (Stage 3) |
|---------|---|-----------|-----------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Part codes:

| ige 3) | Version: | Part code: | |
|-------------|---------------------------------------|---|-----------------|
| e 5 e 5 | 24V dc | A105NDC24[| x] |
| : 5 | 48V dc | A105NDC48[| x] |
| e 5 e 20 | 100V dc | A105NDC100 |)[x] |
| 5 | 24V ac | A105NAC24[> | <] |
| e 5 e 5 | 115V ac | A105NAC115 | [X] |
| 2 | 230V ac | A105NAC230 | [X] |
| e 5 e 5 | [x] = Housing colour: | G: Grey R: Re | ed W: White |
| e 5 e 5 | Suffix part number with '-P' for pr | ogrammable, 4 stage, 45 | tone version. |
| 5 | 0.00 | | |
| 5 | | Suffix part number with '-UL' for UL approved version. [100V dc unit not available as UL approved] | |
| : 5 : 27 | | appioveuj | |
| : 27 | Suffix part number with '-M' for M | IED approved version.[24] | V dc unit onlv1 |
| 5 | · · · · · · · · · · · · · · · · · · · | | |
| 5 | | | |
| 5 | Alarm sounder: | | |
| 5 | Version: | Voltage: | Current: |
| 5 | | | |
| 5 | 24V dc | 10-30V dc | 25mA* |
| : 5 : 15 | 48V dc | 35-60V dc | 50mA* |
| e 5 | 100V dc | 72-120V dc | 27mA |
| F | | | |

| e 15 | 48V dc | | 35-60V dc | 50mA* |
|------------|---------|---------|------------|-------|
| 5 5 | 100V dc | | 72-120V dc | 27mA |
| : 5 : 5 | 24V ac | 50/60Hz | +/-10% | 40mA |
| e 5 e 5 | 115V ac | 50/60Hz | +/-10% | 20mA |
| e 15 | 230V ac | 50/60Hz | +/-10% | 15mA |

* current at nominal voltage on Tone 2

Specification:

| Maximum output: | 112dB(A) @ 1 metre | Automatic |
|-------------------------|---|--|
| Nominal output: | 105dB(A) @ 1m +/- 3dB - Tone 2 | Continuou |
| No. of tones: | 32 (UKOOA / PFEER compliant) | Stainless |
| No. of stages: | 3 | • Unit can I |
| Volume control: | Max. 105dB(A); Min. 96dB(A) - Tone 2 | BESA con • Duplicate |
| Effective range: | 60m @ 1KHz | (in & out |
| Voltages DC: | 24V dc (10-30V dc); 48V dc (35-60V dc); 100V dc (72-120V dc) [24V dc units can use 24V ac for single stage apps.] | Tropicalisa Available 'Programmer - 45 alarmer |
| Voltages AC: | 24V ac; 115V ac; 230V ac | - 4 remote |
| Stage switching: | Negative Positive switching option available Reverse polarity stage switching on DC units. | - Any tone - User cor |
| Ingress protection: | IP66 | Approvals: |
| Housing material: | High impact UL94 V0 & 5VA FR ABS | VdS appro |
| Colour: | Red (RAL3000), grey (RAL7038) & white. | • UKOOA/F |
| Cable entries: | 2 x M20 clearance gland entries in side & back | • UL approv |
| Terminals: | 0.5 to 1.5mm ² cables. | • GOST-R a |
| Operating temp: | -25 to +55°C | • Marine Ec |
| Storage temp: | -40 to +70°C | Certificate |
| Relative humidity: | 90% at 20°C. | |
| Weight: | DC: 0.75kg AC:1.00kg | - |
| *SPL data +/-3dB(A). Me | asured at optimum voltage. | - |
| | | |



- natic synchronisation on multi-sounder system.
- nuously rated.

Features:

- ess steel fixings.
- can be mounted using external lugs or internal
- compatible fixing positions.
- cate cable terminations
- out for daisy-chain installations).
- alisation available on request.
- ble with custom tone configurations and frequencies.
- ammable' version available:
- alarm tones
- notely selectable stages
- tone can be assigned to any stage
- configurable continuous frequency tone
- approved to EN54-3 (CPD 89/106/EEC).
- DA/PFEER compliant alarm tones.
- proved version available.
- -R approved. Cert: POCC GB.JB05.H00144.
- ne Equipment Directive (MED) ficate: 19 702 - 11 HH







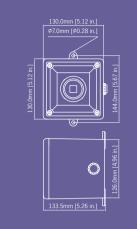




A105NSONTEL Telephone Initiated Alarm Sounder

The A105NSONTEL is a compact, high output, 105dB(A) telephone initiated alarm sounder.

The line powered A105NSONTEL has a choice of three alarm tone frequencies.



Tones:

| Tone 1 | Siren Tone |
|--------|------------------|
| Tone 2 | Alternating tone |
| Tone 3 | Sweeping tone |

Part codes:

| Version: | | |
|-----------------------|-------------------------|--|
| A105NSONTEL[x] | | |
| [x] = Housing colour: | G: Grey R: Red W: White | |

Specification: 105dB(A) @ 1m +/- 3dB Nominal output: No. of tones: 3 Max. 105dB(A); Min. 96dB(A) Volume control: Effective range: 60m @ 1KHz Supply: Direct power from telephone line (REN 1) IP66 Ingress protection: Housing material: High impact UL94 VO & 5VA FR ABS Red (RAL3000), grey (RAL7038) Colour: & white. Cable entries: 3 x M20 clearance gland knockouts in side & back Terminals: 0.5 to 2.5mm² cables. -25 to +55°C Operating temp: -40 to +70°C Storage tempe: 90% at 20°C. Relative humidity: Weight : 0.75kg

Features:

- Unit can be mounted using external lugs or internal
- BESA compatible fixing positions.

Approvals:



• Continuously rated.

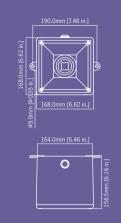
- Stainless steel fixings.
- Tropicalisation available on request.

• GOST-R approved. Cert: POCC GB-JB05-H00144



A112N Alarm Sounder

The A112N is a high output, 119dB(A) alarm sounder. High SPL in a robust fire retardant IP66 housing ensure the A112N is suitable for all general signalling applications including fire, security and process control.



Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 |
|---------|--|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| one 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| one 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| one 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| one 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| one 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| one 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| one 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| one 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| one 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| one 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| one 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| one 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| one 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| one 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| one 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| one 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| one 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| one 26 | Bell | Tone 2 | Tone 15 |
| one 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| one 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| one 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| one 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| one 32 | Two tone chime. | Tone 26 | Tone 15 |
| one 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| one 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 |
| one 35 | 420Hz @ 0.625 sec Australian Alert | Tone 36 | Tone 5 |
| one 36 | 500-1200Hz 3.75sec / 0.25sec. Australian Evac. | Tone 35 | Tone 5 |
| one 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 |
| one 38 | 2000Hz Continuous | Tone 34 | Tone 45 |
| one 39 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 |
| one 40 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 31 | Tone 27 |
| one 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 |
| one 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 |
| Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 |
| Fone 44 | Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 |
| Tone 45 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm | Tone 38 | Tone 34 |
| | | | |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Part codes:

| Version: | | Part code: | |
|-------------------|---------|----------------------|-----------------|
| 24V dc | | A112NDC24[| x] |
| 48V dc | | A112NDC48[| x] |
| 110/230V dc | | A112NDC110 |)[x] |
| 24V ac | | A112NAC24[| <] |
| 115V ac | | A112NAC115 | [X] |
| 230V ac | | A112NAC230 | [X] |
| [x] = Housing | colour: | R: Red | |
| Suffix part numbe | | approved version.[24 | V dc unit only] |
| Version: | | Voltage: | Current |
| 24V dc | | 10-30V dc | 200mA* |
| 48V dc | | 35-60V dc | 120mA* |
| 110/230V dc | | 90-250V dc | 60mA |
| 24V ac | 50/60Hz | +/-10% | 500mA |

* current at nominal voltage on Tone 2

50/60Hz

50/60Hz

+/-10%

+/-10%

100mA

60mA

115V ac

230V ac

Specification: Features: 119dB(A) @ 1 metre Maximum output: 112dB(A) @ 1m +/- 3dB - Tone 2 Nominal output: No. of tones: 45 (UKOOA / PFEER compliant) No. of stages: 3 Max. 112dB(A); Volume control: Min. 100dB(A) - Tone 2 Effective range: 125m @ 1KHz Voltages DC: 24V dc (10-30V dc); 48V dc (35-60V dc): 110V dc (90-250V dc) [24V dc units can use 24V ac for single stage apps.] Voltages AC: 24V ac; 115V ac; 230V ac Negative or optional positive Stage switching: Reverse polarity stage switching on DC units. IP66 Ingress protection: Housing material: High impact UL94 V0 & 5VA FR ABS Red (RAL3000) Colour: Cable entries: 2 x M20 clearance gland entries in side & back Terminals: 0.5 to 4.0mm² cables. Operating temp: -25 to +55°C Storage temp: -40 to +70°C Relative humidity: 90% at 20°C. DC: 1.80kg AC:2.10kg Weight :

*SPL data +/-3dB(A). Measured at optimum voltage

- Continuously rated. • Stainless steel fixings.
- Unit can be mounted using external lugs or internal BESA compatible fixing positions.
- Duplicate cable terminations (in & out for daisy-chain installations).
- Tropicalisation available on request.
- Available with custom tone configurations and frequencies.
- 'Programmable' version available:
- 45 alarm tones
- 4 remotely selectable stages
- Any tone can be assigned to any stage
- User configurable continuous frequency tone

Approvals:

- VdS approved to EN54-3 (CPD 89/106/EEC).
- UKOOA/PFEER compliant alarm tones.

- Marine Equipment Directive (MED) Certificate: 19 702 - 11 HH



• Automatic synchronisation on multi-sounder system.

- UL approved version available.
- GOST-R approved. Cert: POCC GB.JB05.H00144.





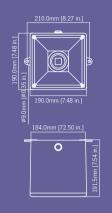






A121 Alarm Sounder

The A121 is a very high output, 126dB(A) alarm sounder. High SPL in a robust, fire retardant IP66 housing ensure the A121 is suitable for all general signalling applications including fire, security and process control.



Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 |
|---------|---|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Fone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Fone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Fone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Fone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Fone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Fone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Fone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Fone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |
| Tone 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 |
| Tone 35 | 420Hz @ 0.625 sec Australian Alert | Tone 36 | Tone 5 |
| Tone 36 | 500-1200Hz 3.75sec /0.25sec. Australian Evac. | Tone 35 | Tone 5 |
| Tone 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 |
| Fone 38 | 2000Hz Continuous | Tone 34 | Tone 45 |
| Fone 39 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 |
| Fone 40 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 31 | Tone 27 |
| Fone 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 |
| Fone 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 |
| Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 |
| | | | |
| Tone 44 | Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 |

Part codes:

| Version: | Part code: |
|-----------------------|-----------------|
| 24V dc | A121DC24[x] |
| 48V dc | A121DC48[x] |
| 24V ac | A121AC24[x] |
| 115V ac | A121AC115[x] |
| 230V ac | A121AC230[x] |
| [x] = Housing colour: | R: Red, G: Grey |

Suffix part number with '-UL' for UL approved version.

Alarm sounder:

| 5 | | | | |
|----|----------|---------|-----------|----------|
| 27 | Version: | | Voltage: | Current: |
| 5 | 24V dc | | 10-30V dc | 950mA* |
| 5 | | | | |
| 5 | 48V dc | | 35-60V dc | 600mA* |
| 5 | | | | |
| 5 | 24V ac | 50/60Hz | +/-10% | 1000mA |
| 5 | 115V ac | 50/60Hz | +/-10% | 240mA |
| 5 | | | / | |
| 5 | 230V ac | 50/60Hz | +/-10% | 120mA |
| 15 | | | | |

* current at nominal voltage on Tone 2

Specification: Features: 126dB(A) @ 1 metre Maximum output: 121dB(A) @ 1m +/- 3dB - Tone 2 Nominal output: 45 (UKOOA / PFEER compliant) No. of tones: No. of stages: 3 Max. 121dB(A); Volume control: Min. 112dB(A) - Tone 2 Effective range: 300m @ 1KHz Voltages DC: 24V dc (10-30V dc); 48V dc (35-60V dc) [DC units can use 24V ac for single stage applications.] Voltages AC: 24V ac; 115V ac; 230V ac Stage switching: Negative or optional positive Ingress protection: IP66 Housing material: High impact UL94 V0 & 5VA FR ABS **Approvals:** Red (RAL3000) & grey (RAL7038) Colour: Cable entries: 2 x M20 clearance gland entries in side & back Terminals: 0.5 to 4.0mm² cables. Operating temp: -25 to +55°C -40 to +70°C Storage temp: 90% at 20°C. Relative humidity:

DC: 2.10kg AC:2.70kg

*SPL data +/-3dB(A). Measured at optimum voltage

Weight :

- Continuously rated.
- Stainless steel fixings. • Unit can be mounted using external lugs or internal
- BESA compatible fixing positions. • Duplicate cable terminations (in & out for daisy-chain installations).
- Tropicalisation available on request.
- Available with custom tone configurations and frequencies.
- 'Programmable' version available:
- 45 alarm tones
- 4 remotely selectable stages
- Any tone can be assigned to any stage

- UKOOA/PFEER compliant alarm tones.
- UL approved version available.
- GOST-R approved. Cert: POCC GB.JB05.H00144.

Country specific or custom tone configurations and alarm frequencies are available upon request.



• Automatic synchronisation on multi-sounder system.

- User configurable continuous frequency tone

• VdS approved to EN54-3 (CPD 89/106/EEC).



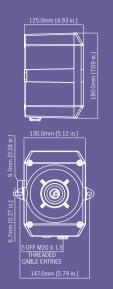






D105 Alarm Sounder

The D105 is a high output, 112dB(A) alarm sounder. Low current consumption and high SPL in a robust IP66 housing ensure the D105 is suitable for all general signalling applications including fire, security and process control. The corrosion proof, marine grade aluminium die cast enclosure is phosphated and powder coated providing resilience in the harshest of industrial environments.



Tone table:

| Stage 1 | Frequency Description. | (Stage 2) | (Stage 3) |
|---------|---|-----------|-----------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Part codes:

| ge 3) | Version: | Part code: |
|-------|-------------------------------------|---------------------------------------|
| 5 | 24V dc | D105DC024[x] |
| 5 | | |
| 5 | 48V dc | D105DC048[x] |
| 5 | 24V ac | D105AC024[x] |
| 20 | 24V ac | D103AC024[X] |
| 5 | 115V ac | D105AC115[x] |
| 5 | 0001/ | D1054000053 |
| 5 | 230V ac | D105AC230[x] |
| 2 | [x] = Housing colour: | G: Grey R: Red |
| 5 | | |
| 5 | Suffix part number with ' P' for pr | ogrammable, 4 stage, 45 tone version. |
| 5 | | |

Suffix part number with '-UL' for UL approved version.

Alarm sounder:

| 27 | Version: | | Voltage: | Current: |
|--------|----------|---------|-----------|----------|
| 5 5 | 24V dc | | 10-30V dc | 25mA* |
| 5 | 48V dc | | 35-60V dc | 50mA* |
| 5 5 | 24V ac | 50/60Hz | +/-10% | 40mA |
| 5 5 | 115V ac | 50/60Hz | +/-10% | 20mA |
| 5 | 230V ac | 50/60Hz | +/-10% | 15mA |
| 15 | | | | |

* current at nominal voltage on Tone 2

Specification:

| Maximum output: | 112dB(A) @ 1 metre | High outp |
|---------------------|---|---|
| Nominal output: | 105dB(A) @ 1m +/- 3dB - Tone 2 | • 3 remotel |
| No. of tones: | 32 (UKOOA / PFEER compliant) | Choice of |
| No. of stages: | 3 | • Automatio |
| Volume control: | Max. 105dB(A); Min. 96dB(A) - Tone 2 | ContinuorStainless |
| Effective range: | 60m @ 1KHz | Duplicate |
| Voltages DC: | 24V dc (10-30V dc); 48V dc (35-60V dc); [24V dc units can use 24V ac for single stage apps.] | (in & out • Tropicalis • Available |
| Voltages AC: | 24V ac; 115V ac; 230V ac | • 'Program |
| Stage switching: | Negative Positive switching option available Reverse polarity stage switching on DC units. | - 45 alarn - 4 remote - Any tone |
| Ingress protection: | IP66, Type 4 / 4X / 3R | - User cor |
| Housing material: | Marine grade aluminium A1 Si12 Cu | Approvals: |
| Colour: | Red (RAL3000), grey (RAL7038) | • UKOOA/F |
| Cable entries: | 2 x M20 x 1.5mm threaded gland entries. Supplied with one stopping plug | • UL appro |
| Terminals: | 0.5 to 1.5mm ² cables. | - |
| Operating temp: | -25 to +55°C | • |
| Storage temp: | -40 to +70°C | |
| Relative humidity: | 90% at 20°C. | • |
| Weight : | DC: 1.6kg AC:1.85kg | - |



- h output, up to 112dB(A) SPL
- emotely selectable alarm stages
- pice of 32 alarm tone frequencies
- omatic synchronisation on multi-sounder system.
- ntinuously rated.

Features:

- inless steel fixings.
- plicate cable terminations
- & out for daisy-chain installations).
- picalisation available on request.
- ilable with custom tone configurations and frequencies.
- ogrammable' version available:
- alarm tones
- remotely selectable stages
- ny tone can be assigned to any stage
- ser configurable continuous frequency tone

DOA/PFEER compliant alarm tones.

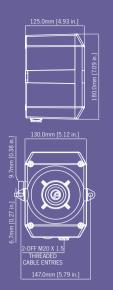
approved version available.





D112 Alarm Sounder

The D112 is a high output, 119dB(A) alarm sounder. Low current consumption and high SPL in a robust IP66 housing ensure the D112 is suitable for all general signalling applications including fire, security and process control. The corrosion proof, marine grade aluminium die cast enclosure is phosphated and powder coated providing resilience in the harshest of industrial environments.



Weight :

Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 |
|---------|--|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Fone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Fone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Fone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Fone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Fone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Fone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |
| Tone 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Fone 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 |
| Fone 35 | 420Hz @ 0.625 sec Australian Alert | Tone 36 | Tone 5 |
| Tone 36 | 500-1200Hz 3.75sec / 0.25sec. Australian Evac. | Tone 35 | Tone 5 |
| Tone 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 |
| Tone 38 | 2000Hz Continuous | Tone 34 | Tone 45 |
| Tone 39 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 |
| one 40 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 31 | Tone 27 |
| Tone 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 |
| Fone 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 |
| Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 |
| Tone 44 | Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 |
| Fone 45 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm | Tone 38 | Tone 34 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Part codes:

| Version: | Part code: |
|-----------------------|----------------|
| 24V dc | D112DC024[x] |
| 48V dc | D112DC048[x] |
| 24V ac | D112AC024[x] |
| 115V ac | D112AC115[x] |
| 230V ac | D112AC230[x] |
| [x] = Housing colour: | R: Red G: Grey |

Suffix part number with '-P' for programmable, 4 stage, 45 tone version. Suffix part number with '-UL' for UL approved version.

Alarm sounder:

| e 27 | | | | <u> </u> |
|----------|----------|-----------|-----------|----------|
| e 5 | Version: | | Voltage: | Current: |
| e 5 | 24V dc | | 10-30V dc | 200mA* |
| e 5 | | | | |
| e 5 | 48V dc | | 35-60V dc | 120mA* |
| e 5 | 24V ac | 50/60Hz | +/-10% | 500mA |
| e 5 | E 11 40 | 00/ 00112 | / 10/0 | 00011111 |
| e 5 | 115V ac | 50/60Hz | +/-10% | 100mA |
| e 5 | 230V ac | 50/60Hz | +/-10% | 60mA |
| e 15 | 2301 ac | 50/ 0011Z | 1/-10/0 | UUIIIA |
| F | | | | |

* current at nominal voltage on Tone 2

Specification: Features: 119dB(A) @ 1 metre Maximum output: Nominal output: 112dB(A) @ 1m +/- 3dB - Tone 2 No. of tones: 45 (UKOOA / PFEER compliant) 3 No. of stages: Max. 112dB(A); Volume control: Min. 100dB(A) - Tone 2 Effective range: 125m @ 1KHz Voltages DC: 24V dc (10-30V dc); 48V dc (35-60V dc): [24V dc units can use 24V ac for single stage apps.] Voltages AC: 24V ac; 115V ac; 230V ac Stage switching: Negative Positive switching option available Reverse polarity stage switching on DC units. Ingress protection: IP66, Type 4 / 4X / 3R Housing material: Marine grade aluminium A1 Si12 Cu **Approvals:** Colour: Red (RAL3000), grey (RAL7038) Cable entries: 2 x M20 x 1.5mm threaded gland entries. Supplied with one stopping plug Terminals: 0.5 to 1.5mm² cables. Operating temp: -40 to +55°C -40 to +70°C Storage temp: 90% at 20°C. Relative humidity:

DC: 1.6kg AC:1.85kg



- High output, up to 119dB(A) SPL
- 3 remotely selectable alarm stages
- Choice of 45 alarm tone frequencies
- Automatic synchronisation on multi-sounder system.
- Continuously rated.
- Stainless steel fixings.
- Duplicate cable terminations
- (in & out for daisy-chain installations).
- Tropicalisation available on request.
- Available with custom tone configurations and frequencies.
- 'Programmable' version available:
- 45 alarm tones
- 4 remotely selectable stages
- Any tone can be assigned to any stage
- User configurable continuous frequency tone

• UKOOA/PFEER compliant alarm tones.

• UL approved version available.

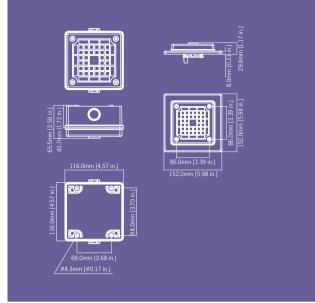




GPH1 & GPH2 Alarm Horn - Buzzer

The GPH series are low profile, high output, 105dB(A) alarm horns designed as a maintenance free, reliable alternative to solenoid type buzzers. Low current consumption and high SPL in a robust, fire retardant housing, ensures the GPH is suitable for all general signalling applications.

The GPH1 is a surface mount version with back box, the GPH2 is a flush mount variant for use in panel mount applications or for use with standard 4" back boxes.



Part codes:

| Version | Part code: |
|----------------------|-------------|
| GPH1S surface mount: | |
| 24V dc/ac | GPH1SDC24G |
| 115V ac | GPH1SAC115G |
| 230V ac | GPH1SAC230G |
| | |

GPH2F flush mount:

| 24V dc/ac | GPH2FDC24G |
|-----------|-------------|
| 115V ac | GPH2FAC115G |
| 230V ac | GPH2FAC230G |

Alarm sounder:

| Version: | | Voltage: | Current: |
|----------|---------|-----------|----------|
| 24V dc | | 10-30V dc | 62mA |
| 24V ac | 50/60Hz | +/-10% | 126mA |
| 115V ac | 50/60Hz | +/-10% | 40mA |
| 230V ac | 50/60Hz | +/-10% | 50mA |

Tone table:

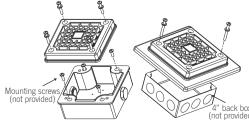
| Stage 1 | Frequency Description. |
|---------|---|
| Tone 1 | 800/1000Hz @ 7Hz Sweeping |
| Tone 2 | Simulated buzzer sound |
| Tone 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Specification:

| Nominal output: | 105dB(A) @ 1m +/- 3dB |
|---------------------|--|
| No. of tones: | 3 |
| Volume control: | On board potentiometer |
| Voltages DC: | 24V dc (10-30V dc) |
| | Reverse polarity diode protection on DC units. |
| Voltages AC: | 115V ac; 230V ac |
| Ingress protection: | GPH1: IP66 (UL Type 4/4X/13) GPH2: IP54 (UL Type 13/3R) |
| Housing material: | High impact UL94 V0 & 5VA FR ABS |
| Colour: | Grey (RAL7038) |
| Cable entries: | 2 x M20 clearance |
| Terminals: | 22 - 12AWG (0.5-3mm²) |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | 0.35kg |

pprovals: UL approved.



GPH1S (surface mount version) GPH2F (flush mount version)



- Automatic synchronisation on multi-sounder system.
- Continuously rated.
- Stainless steel fixings.
- Duplicate cable terminations
- (in & out for daisy-chain installations).
- Tropicalisation available on request.

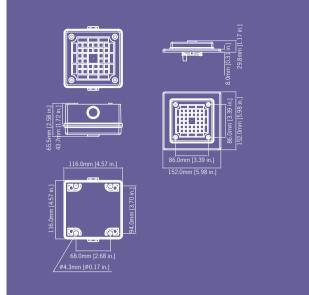




GPH3 & GPH4 Alarm Horn - Buzzer

The GPH series are low profile, high output, 110dB(A) alarm horns designed as a maintenance free, reliable alternative to solenoid type devices. Featuring a realistic simulated buzzer sound the GPH, with its low current consumption and high SPL in a robust, fire retardant housing, is suitable for all general signalling applications.

The GPH3 is a surface mount version with back box, the GPH4 is a flush mount variant for use in panel mount applications or for use with standard 4" back boxes.



Tone table:

| Stage 1 | Frequency Description. | Stage 2 |
|---------|---|---------|
| Tone 1 | Electro-mechanical diaphragm horn sound | Tone 2 |
| Tone 2 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 1 |
| Tone 3 | 800/1000Hz @ 7Hz Sweeping | Tone 2 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Part codes:

| Version | Part code: | |
|----------------------|--------------|--|
| GPH3S surface mount: | | |
| 10-30V dc/ac | GPH3SEDC024G | |
| 40-260V dc/ac | GPH3SEAC230G | |
| | | |

GPH4F flush mount:

| 10-30V dc/ac | GPH4FEDC024G |
|---------------|--------------|
| 40-260V dc/ac | GPH4FEAC230G |

Current consumption:

| Version: | Voltage: | Current : |
|---------------|-----------------|-----------|
| 10-30V dc/ac | 12V dc | 52mA |
| 10-30V dc/ac | 24V dc | 105mA |
| 40-260V dc/ac | 48V dc | 42mA |
| 10-30V dc/ac | 12V ac 50/60Hz | 115mA |
| 10-30V dc/ac | 24V ac 50Hz | 215mA |
| 40-260V dc/ac | 48V ac 50/60Hz | 68mA |
| 40-260V dc/ac | 115V dc | 16mA |
| 40-260V dc/ac | 230V dc | 8mA |
| 40-260V dc/ac | 115V ac 50/60Hz | 36mA |
| 40-260V dc/ac | 230V ac 50/60Hz | 18mA |

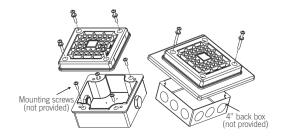
Specification: Nominal output: 110dB(A) @ 1m +/- 3dB No. of tones: 3 Volume control: On board potentiometer Voltages DC: 10-30V dc/ac Voltages AC: 40-260V dc/ac GPH3: IP66 (UL Type 4/4X/13) Ingress protection: GPH4: IP54 (UL Type 13/3R) High impact UL94 VO (f1) PC Housing material: Colour: Grey (RAL7038) Cable entries: 2 x M20 clearance 22 - 12AWG (0.5-3mm²) Terminals: -25 to +55°C Operating temp: Storage temp: -40 to +70°C Relative humidity: 90% at 20°C. Weight : 0.40kg

*SPL data +/-3dB(A). Measured at optimum voltage

Features:

- Continuously rated.

- Approvals:
- UL approved.





- Automatic synchronisation on multi-sounder system.
- Stainless steel fixings.
- Duplicate cable terminations
- (in & out for daisy-chain installations).
- Tropicalisation available on request.





B300SND Signalling Horn

The B300SND is a compact signalling horn suitable for mounting on machinery or in general signalling applications. The B300SND reproduces the alert sound of traditional electro-mechanical equivalents but without any of the reliability issues. In addition to the 'buzzer' type sound the unit features a further two alarm sounds.

The B300SND is a component of the Spectra range and can be configured with the B350 or B450 traffic light beacons for complete audio-visual signalling.





Specification



Part codes:

| Version: | Part code: |
|---------------|-------------|
| 12-30V ac/dc | B300SND030G |
| 40-260V ac/dc | B300SND230G |

Mounting brackets:

| MB-B350T-S | Mounting bracket kit for a single B300SND/B350 type unit. |
|------------|---|
| MB-B350T-M | Mounting bracket kit for linked multiple B300SND/B350 units. |

Current consumption:

| Version: | Voltage: | Current: |
|---------------|-----------------|----------|
| 12-30V dc/ac | 12V dc | 10mA |
| 12-30V dc/ac | 24V dc | 24mA |
| 40-260V dc/ac | 48V dc | 15mA |
| 12-30V dc/ac | 12V ac 50/60Hz | 30mA |
| 12-30V dc/ac | 24V ac 50Hz | 62mA |
| 40-260V dc/ac | 48V ac 50/60Hz | 25mA |
| 40-260V dc/ac | 115V dc | 6mA |
| 40-260V dc/ac | 230V dc | 3mA |
| 40-260V dc/ac | 115V ac 50/60Hz | 19mA |
| 40-260V dc/ac | 230V ac 50/60Hz | 10mA |

| Specification. | | reatur |
|---------------------|---|-----------------|
| No. of tones: | 3 | • Bay |
| Output: | 98 dB(A) @ 1m | • Anti |
| Mounting: | Surface mount (wall bracket available) | • Stai • Con |
| Entries: | 1 x 5-7mm push through grommet 1 x M20 cable entry | _ |
| Dimensions: | ø100 x 103mm | _ |
| Ingress protection: | IP65 | _ |
| Housing material: | High impact UL94 V0 (f1) PC | _ |
| Terminals: | 0.5 to 1.5mm ² | _ |
| Operating temp: | -25 to +50°C | _ |
| Storage temp: | -40 to +70°C | - |
| Relative humidity: | 90% at 20°C. | - |

*SPL data +/-3dB(A). Measured at optimum voltage

Features:

Tone table:

| Stage 1 | Frequency Description. | |
|---------|---------------------------|--|
| Tone 1 | 800/1000Hz @ 7Hz Sweeping | |
| Tone 2 | Simulated buzzer sound | |

| Tone 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. |
|--------|---|
| | |

Country specific or custom tone configurations and alarm frequencies are available upon request.

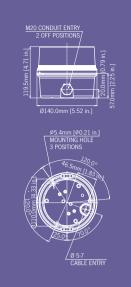


onet fixing body. i-tamper locking screw. inless steel fixings. mpatible with B350 and B450 traffic light series

B400SND Signalling Horn

The B400SND is a 110 dB(A) high output signalling horn suitable for a variety of general signalling applications. The B400SND reproduces the alert sound of traditional electro-mechanical equivalents but without any of the reliability issues. In addition to the 'buzzer' type sound the unit features a further two alarm sounds. All first stage sounds have a remotely selectable second stage.

The B400SND is a component of the Spectra range and can be configured with the B350 or B450 traffic light beacons for complete audio-visual signalling.





Part codes:

| Version: | Part code: |
|---------------|-------------|
| 10-30V ac/dc | B400SND030G |
| 40-260V ac/dc | B400SND230G |

Mounting brackets:

| MB-B450T-S | Mounting bracket kit for a single B400SND/B450 type unit. |
|------------|---|
| MB-B450T-M | Mounting bracket kit for linked multiple B400SND/B450 units. |

Current consumption:

| Version: | Voltage: | Current: |
|---------------|-----------------|----------|
| 10-30V dc/ac | 12V dc | 52mA |
| 10-30V dc/ac | 24V dc | 105mA |
| 40-260V dc/ac | 48V dc | 42mA |
| 10-30V dc/ac | 12V ac 50/60Hz | 115mA |
| 10-30V dc/ac | 24V ac 50Hz | 215mA |
| 40-260V dc/ac | 48V ac 50/60Hz | 68mA |
| 40-260V dc/ac | 115V dc | 16mA |
| 40-260V dc/ac | 230V dc | 8mA |
| 40-260V dc/ac | 115V ac 50/60Hz | 36mA |
| 40-260V dc/ac | 230V ac 50/60Hz | 18mA |

| Specification: | | F |
|---------------------|---|---|
| No. of tones: | 3 | • |
| Output: | 110 dB(A) @ 1m | - |
| Stages: | Remotely selectable second stage | - |
| Mounting: | Surface mount (wall bracket available) | - |
| Entries: | 1 x 5-7mm push through grommet 2 x M20 cable entry | - |
| Dimensions: | ø140 x 120mm | _ |
| Ingress protection: | IP65 | _ |
| Housing material: | High impact UL94 VO (f1) PC | _ |
| Terminals: | 0.5 to 1.5mm ² | - |
| Operating temp: | -25 to +50°C | _ |
| Storage temp: | -40 to +70°C | _ |
| | | |

Relative humidity: 90% at 20°C.

*SPL data +/-3dB(A). Measured at optimum voltage

Features:

Tone table:

| Stage 1 | Frequency Description. | Stage 2 |
|---------|---|---------|
| Tone 1 | Electro-mechanical diaphragm horn sound | Tone 2 |
| Tone 2 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 1 |
| Tone 3 | 800/1000Hz @ 7Hz Sweeping | Tone 2 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

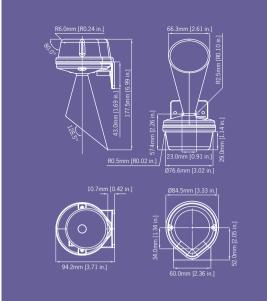


yonet fixing body. ti-tamper locking screw. ainless steel fixings. ultiple cable entries mpatible with B350 and B450 traffic light series

H100T Signalling Horn with Trumpet

The H100 series contains two variants of signalling horn, the H100T with trumpet horn and the compact H100B without trumpet horn. Both electronic signals authentically reproduce the alert sound of traditional electro-mechanical units but without any of the reliability issues.

Rated for continuous use the H100 series is a compact, high output signal suitable for a variety of installations. In addition to the 'buzzer' type sound the unit features a further two alarm sounds.



Part codes:

| Version: | Part code: |
|---------------|------------|
| 12-30V ac/dc | H100T030G |
| 40-260V ac/dc | H100T230G |

Current consumption:

| Version: | Voltage: | Current: |
|---------------|-----------------|----------|
| 12-30V dc/ac | 12V dc | 10mA |
| 12-30V dc/ac | 24V dc | 24mA |
| 40-260V dc/ac | 48V dc | 15mA |
| 12-30V dc/ac | 12V ac 50/60Hz | 30mA |
| 12-30V dc/ac | 24V ac 50Hz | 62mA |
| 40-260V dc/ac | 48V ac 50/60Hz | 25mA |
| 40-260V dc/ac | 115V dc | 6mA |
| 40-260V dc/ac | 230V dc | 3mA |
| 40-260V dc/ac | 115V ac 50/60Hz | 19mA |
| 40-260V dc/ac | 230V ac 50/60Hz | 10mA |
| | | |

Tone table:

| Stage 1 | Frequency Description. | |
|---------|---------------------------|--|
| Tone 1 | 800/1000Hz @ 7Hz Sweeping | |
| Tone 2 | Simulated buzzer sound | |

| 1011 | 0 2 | onnalated ballet board |
|------|-----|---|
| Ton | e 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. |
| | | |

Country specific or custom tone configurations and alarm frequencies are available upon request.

| Specification: | | Features: |
|---------------------|--------------------------------|--|
| No. of tones: | 3 | Volume |
| Output: | 100 dB(A) @ 1m | Stainless |
| Mounting: | Surface mount | - |
| Entries: | 1 x 5-7mm push through grommet | Approvals: GOST-R |
| Dimensions: | 177.5 x 94.2mm | |
| Ingress protection: | IP65 | - Cert: PC |
| Housing material: | High impact ABS (UL94V0 & 5VA) | _ |
| Terminals: | 0.5 to 1.5mm ² | _ |
| Operating temp: | -25 to +50°C | _ |
| Storage temp: | -40 to +70°C | _ |
| Relative humidity: | 90% at 20°C. | _ |
| Weight: | 148g | _ |

*SPL data +/-3dB(A). Measured at optimum voltage



provals:

GOST-R approved.



Volume control Stainless steel fixings.

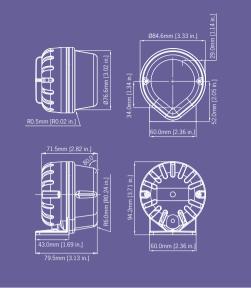
Cert: POCC GB.JB05.H00144.



H100B Signalling Horn

The H100 series contains two variants of signalling horn, the H100T with trumpet horn and the compact H100B without trumpet horn. Both electronic signals authentically reproduce the alert sound of traditional electro-mechanical units but without any of the reliability issues.

Rated for continuous use the H100 series is a compact, high output signal suitable for a variety of installation types. In addition to the 'buzzer' type sound the unit features a further two alarm sounds.



Part codes:

| Version: | Part code: |
|---------------|------------|
| 12-30V ac/dc | H100B030G |
| 40-260V ac/dc | H100B230G |

Current consumption:

| Version: | Voltage: | Current: |
|---------------|-----------------|----------|
| 12-30V dc/ac | 12V dc | 10mA |
| 12-30V dc/ac | 24V dc | 24mA |
| 40-260V dc/ac | 48V dc | 15mA |
| 12-30V dc/ac | 12V ac 50/60Hz | 30mA |
| 12-30V dc/ac | 24V ac 50Hz | 62mA |
| 40-260V dc/ac | 48V ac 50/60Hz | 25mA |
| 40-260V dc/ac | 115V dc | 6mA |
| 40-260V dc/ac | 230V dc | 3mA |
| 40-260V dc/ac | 115V ac 50/60Hz | 19mA |
| 40-260V dc/ac | 230V ac 50/60Hz | 10mA |

Tone table:

| Stage 1 | Frequency Description. | |
|---------|---|--|
| Tone 1 | 800/1000Hz @ 7Hz Sweeping | |
| Tone 2 | Simulated buzzer sound | |
| Tone 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | |

Country specific or custom tone configurations and alarm frequencies are available upon request.

| Specification: | | Features: |
|---------------------|--------------------------------|--------------|
| No. of tones: | 3 | Volume c |
| Output: | 100 dB(A) @ 1m | • Stainless |
| Mounting: | Surface mount | - A |
| Entries: | 1 x 5-7mm push through grommet | - Approvals: |
| Dimensions: | 79.5 x 94.2mm | - • GOST-R a |
| Ingress protection: | IP65 | - Cert: POC |
| Housing material: | High impact ABS (UL94V0 & 5VA) | _ |
| Terminals: | 0.5 to 1.5mm ² | _ |
| Operating temp: | -25 to +50°C | _ |
| Storage temp: | -40 to +70°C | _ |
| Relative humidity: | 90% at 20°C. | _ |
| Weight: | 118g | _ |

*SPL data +/-3dB(A). Measured at optimum voltage





ume control ainless steel fixings.

)ST-R approved. rt: POCC GB.JB05.H00144.

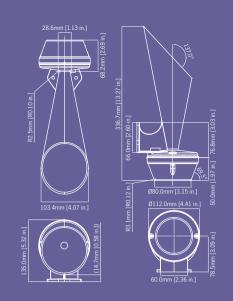


H110T Signalling Horn with Trumpet

The H110T is a very high output electronic signal horn capable of generating a traditional 'buzzer' warning tone traditionally associated with electro-mechanical signals.

With an output of 110dB(A) the H110T is ideal for all general signalling applications and the ingress protection rating of IP65 means it is suitable for indoor and outdoor installations.

In addition to the 'buzzer' type sound the unit features a further two alarm tones. The first stage sounds also have a remotely selectable second stage.



Part codes:

| Version: | Part code: |
|---------------|------------|
| 10-30V ac/dc | H110T030G |
| 40-260V ac/dc | H110T230G |

Current consumption:

| Voltage: | Current: |
|-----------------|---|
| 12V dc | 52mA |
| 24V dc | 105mA |
| 48V dc | 42mA |
| 12V ac 50/60Hz | 115mA |
| 24V ac 50Hz | 215mA |
| 48V ac 50/60Hz | 68mA |
| 115V dc | 16mA |
| 230V dc | 8mA |
| 115V ac 50/60Hz | 36mA |
| 230V ac 50/60Hz | 18mA |
| | 12V dc 24V dc 48V dc 12V ac 50/60Hz 24V ac 50/60Hz 48V ac 50/60Hz 115V dc 230V dc 115V ac 50/60Hz |

Tone table:

| Stage 1 | Frequency Description. | Stage 2 |
|---------|---|---------|
| Tone 1 | Electro-mechanical diaphragm horn sound | Tone 2 |
| Tone 2 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 1 |
| Tone 3 | 800/1000Hz @ 7Hz Sweeping | Tone 2 |

Country specific or custom tone configurations and alarm frequencies are available upon request..

| Specification: | |
|---------------------|----------------------------------|
| No. of tones: | 3 |
| Output: | 110 dB(A) @ 1m |
| Stages: | Remotely selectable second stage |
| Mounting: | Surface mount |
| Entries: | 1 x 5-7mm push through grommet |
| Dimensions: | 336.7 x 135 mm |
| Ingress protection: | IP65 |
| Housing material: | High impact ABS (UL94V0 & 5VA) |
| Terminals: | 0.5 to 1.5mm ² |
| Operating temp: | -25 to +50°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight: | 341g |

*SPL data +/-3dB(A). Measured at optimum voltage

Features:

- Volume control
- provals: GOST-R approved.

Stainless steel fixings.

Cert: POCC GB.JB05.H00144.



MA112 Alarm Sounder

The MA112 is a high output, 119dB(A) alarm sounder. With a robust, fire retardant, IP66 & IP67 housing, the MA112 is particularly suitable for harsh environments with high ambient noise levels.

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Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 |
|---------|---|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |
| Tone 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 |
| Tone 35 | 420Hz @ 0.625 sec Australian Alert | Tone 36 | Tone 5 |
| Tone 36 | 500-1200Hz 3.75sec /0.25sec. Australian Evac. | Tone 35 | Tone 5 |
| Tone 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 |
| Tone 38 | 2000Hz Continuous | Tone 34 | Tone 45 |
| Tone 39 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 |
| Tone 40 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 31 | Tone 27 |
| Tone 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 |
| Tone 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 |
| Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 |
| Tone 44 | Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 |
| | | | |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Part codes:

| ge 3 | Version: | Part code: |
|-------------|------------------------------|--|
| e 5 e 5 | 24V dc | MA112DC24G |
| e 5 | 48V dc | MA112DC48G |
| e 5 e 20 | 24V ac | MA112AC24G |
| e 5 | 115V ac | MA112AC115G |
| e 5 e 5 | 230V ac | MA112AC230G |
| e 2 | Cofficient succession with (| |
| 5 5 | Suttix part number with '- | P' for programmable, 4 stage, 45 tone version. |

Alarm sounder: ō

| Version: | | Voltage: | Current: | |
|----------|---------|-----------|----------|--|
| 24V dc | | 10-30V dc | 200mA* | |
| 48V dc | | 35-60V dc | 120mA* | |
| 24V ac | 50/60Hz | +/-10% | 500mA | |
| 115V ac | 50/60Hz | +/-10% | 100mA | |
| 230V ac | 50/60Hz | +/-10% | 60mA | |
| | | | | |

* current at nominal voltage on Tone 2

| Specification: | | Featur |
|---------------------|--|---|
| Maximum output: | 119dB(A) @ 1 metre | • Auto |
| Nominal output: | 112dB(A) @ 1m +/- 3dB - Tone 2 | Cont |
| No. of tones: | 45 (UKOOA / PFEER compliant) | • Larg |
| No. of stages: | 3 | • Stair |
| Volume control: | Max. 112dB(A); Min. 100dB(A) - Tone 2 | Ratc for 3 |
| Effective range: | 125m @ 1KHz | • Dup |
| Voltages DC: | 24V dc (10-30V dc); 48V dc (35-60V dc) [DC units can use 24V ac for single stage applications.] | (in & • Trop • Avai |
| Voltages AC: | 24V ac; 115V ac; 230V ac | • 'Prog |
| Stage switching: | Negative or positive Reverse polarity stage switching on DC units. | - 45 - 4 re - Any |
| Ingress protection: | IP66 & IP67 (Third party tested) | - Use |
| Housing material: | High impact UL94 V0 & 5VA FR ABS | 030 |
| Colour: | Grey (RAL7038) | Approv |
| Cable entries: | 2 x M20 supplied with 1 blanking plug | • UKC |
| Terminals: | 0.5 to 4.0mm ² cables. | • GOS |
| Operating temp: | -25 to +55°C | |
| Storage temp: | -40 to +70°C | |
| Relative humidity: | 90% at 20°C. | |
| Weight : | DC: 2.50kg AC:3.00kg | |

*SPL data +/-3dB(A). Measured at optimum voltage

Featu ires:

- 360° positioning.
- plicate cable terminations
- & out for daisy-chain installations).
- picalisation available on request.
- ogrammable' version available:

- vals:

0

omatic synchronisation on multi-sounder system.

- ntinuously rated.
- rge termination area.

228

- inless steel fixings.
- tchet adjustable stainless steel 'U' bracket
- ilable with custom tone configurations and frequencies.
- alarm tones
- remotely selectable stages
- ny tone can be assigned to any stage
- ser configurable continuous frequency tone

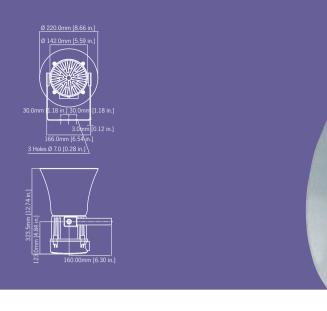
OOA/PFEER compliant alarm tones.

ST-R approved. Cert: POCC GB.JB05.H00144.



MA121 Alarm Sounder

The MA121 is a very high output, 126dB(A) alarm sounder. With a high SPL in a robust, fire retardant IP66 & IP67 housing, the MA121 is particularly suitable for harsh environments with high ambient noise levels.



Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 |
|---------|--|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Fone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| one 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| one 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| one 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| one 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| one 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| one 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| one 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| one 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| one 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| one 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| one 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| one 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| one 26 | Bell | Tone 2 | Tone 15 |
| one 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| one 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| one 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| one 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| one 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| one 32 | Two tone chime. | Tone 26 | Tone 15 |
| one 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| one 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 |
| one 35 | 420Hz @ 0.625 sec Australian Alert | Tone 36 | Tone 5 |
| one 36 | 500-1200Hz 3.75sec /0.25sec. Australian Evac. | Tone 35 | Tone 5 |
| one 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 |
| one 38 | 2000Hz Continuous | Tone 34 | Tone 45 |
| one 39 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 |
| one 40 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 31 | Tone 27 |
| one 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 |
| one 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 |
| Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 |
| Tone 44 | Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 |
| Tone 45 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm | Tone 38 | Tone 34 |

Version

Part codes:

| Version: | Part code: |
|------------------------------|---|
| 24V dc | MA121DC24G |
| 48V dc | MA121DC48G |
| 24V ac | MA121AC24G |
| 115V ac | MA121AC115G |
| 230V ac | MA121AC230G |
| Suffix part number with '-P' | for programmable, 4 stage, 45 tone version. |

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Alarm sounder:

| Version: | | Voltage: | Current : |
|----------|---------|-----------|-----------|
| 24V dc | | 10-30V dc | 950mA* |
| 48V dc | | 35-60V dc | 600mA* |
| 24V ac | 50/60Hz | +/-10% | 1000mA |
| 115V ac | 50/60Hz | +/-10% | 240mA |
| 230V ac | 50/60Hz | +/-10% | 120mA |

* current at nominal voltage on Tone 2

| Specification: | | Features: |
|---------------------|--|--|
| Maximum output: | 126dB(A) @ 1 metre | • Automati |
| Nominal output: | 121dB(A) @ 1m +/- 3dB - Tone 2 | Continuo |
| No. of tones: | 45 (UKOOA / PFEER compliant) | • Large ter |
| No. of stages: | 3 | • Stainless |
| Volume control: | Max. 121dB(A); Min. 112dB(A) - Tone 2 | Ratchet a for 360° |
| Effective range: | 300m @ 1KHz | Duplicate |
| Voltages DC: | 24V dc (10-30V dc); 48V dc (35-60V dc) [DC units can use 24V ac for single stage applications.] | (in & out • Tropicalis • Available |
| Voltages AC: | 24V ac; 115V ac; 230V ac | • 'Program |
| Stage switching: | Negative or positive Reverse polarity stage switching on DC units. | - 45 alarr - 4 remot - Any tone |
| Ingress protection: | IP66 & IP67 (Third party tested) | - User co |
| Housing material: | High impact UL94 V0 & 5VA FR ABS | |
| Colour: | Grey (RAL7038) | Approvals: |
| Cable entries: | 2 x M20 supplied with 1 blanking plug | • UKOOA/I |
| Terminals: | 0.5 to 4.0mm ² cables. | • GOST-R a |
| Operating temp: | -25 to +55°C | |
| Storage temp: | -40 to +70°C | - |
| Relative humidity: | 90% at 20°C. | |
| Weight : | DC: 2.50kg AC:3.00kg | - |

Country specific or custom tone configurations and alarm frequencies are available upon request.



- tomatic synchronisation on multi-sounder system.
- ntinuously rated.
- rge termination area.
- ainless steel fixings.
- tchet adjustable stainless steel 'U' bracket
- 360° positioning.
- plicate cable terminations
- & out for daisy-chain installations).
- picalisation available on request.
- ilable with custom tone configurations and frequencies.
- ogrammable' version available:
- alarm tones
- remotely selectable stages
- ny tone can be assigned to any stage
- ser configurable continuous frequency tone
- OOA/PFEER compliant alarm tones.
- ST-R approved. Cert: POCC GB.JB05.H00144.



E2S22D ø22mm Buzzers & Pilot Lights

The E2S-22D range includes buzzers, combination units and pilot lights featuring super bright multichip L.E.Ds. Ingress protection to IP65, low current consumption and unsurpassed reliability under extreme conditions are all standard features of the E2S-22D range.

The range utilises screw terminals with wire guards for ease of installation and the ability to daisy chain the lights into an array.

Buzzer:

E2S22DBZ 80 db at 10cm; Current : 15-30mA;

Flashing pilot light: E2S22DFS Flash Rate: 2Hz; Current : 15-30mA;

Combination: E2S22DBF 80 db at 10 cm; Current : 18-80mA;

Pilot lights: E2S22D Low voltage DC/AC: Current : 20-80mA; High voltage DC/AC: Current : 18-25mA;

| Buzzer: | 80dB @ 10cm Current: 15-30mA | |
|--------------|------------------------------|---------------|
| E2S22DBZ24V | 24V dc/ac Buzzer | - 11 |
| E2S22DBZ48V | 48V dc/ac Buzzer | |
| E2S22DBZ130V | 110-130V ac/dc Buzzer | (Contraction |
| E2S22DBZ230V | 230V ac Buzzer | |
| | | |

| Flashing Pilot Light: | Flash rate: 2Hz Current: 15-30mA |
|-----------------------|----------------------------------|
| E2S22DFS24V | 24V ac/dc 2x LED Red |
| E2S22DFS48V | 48V ac/dc 2x LED Red |
| E2S22DFS130V | 110-130V ac/dc 2x LED Red |
| E2S22DFS230V | 230V ac 2x LED Red |
| | |

| Combination: | 80dB @ 10cm With Red L.E.D. | |
|--------------|--|---|
| E2S22DBF24V | 24V ac/dc Buzzer & 2x LED Red Io: 20-80mA | 111 |
| E2S22DBF48V | 48V ac/dc Buzzer & 2x LED Red Io: 20-80mA | (A A A A A A A A A A A A A A A A A A A |
| E2S22DBF130V | 110-130V ac/dc Buzzer & 2x LED Red Io: 18-30mA | |
| E2S22DBF230V | 230V ac Buzzer & 2x LED Red Io: 18-30mA | |
| | | |

| E2S22DMT | Mounting Tool for E2S-22D L.E.D. Pilot Lights |
|-----------------|---|
| E2S22DLBHF25X18 | E2S-22D Label holder 25x18mm |
| E2S22DLBHF25X10 | E2S-22D Label holder 25x10mm |





| Pilot Light: | Red | |
|--------------|-------------------------|-----------------------|
| E2S22D12VR | 12V ac/dc <80mA | 12-chips Super-Bright |
| E2S22D24VR | 24V ac/dc <80mA | 12-chips Super-Bright |
| E2S22D48VR | 48V ac/dc <20mA | 12-chips Super-Bright |
| E2S22D130VR | 110-130V ac/dc 25mA Max | 12-chips Super-Bright |
| E2S22D230VR | 230V ac 25mA Max | 12-chips Super-Bright |

| Pilot Light: | Amber | |
|--------------|-------------------------|-----------------------|
| E2S22D12VA | 12V ac/dc <80mA | 12-chips Super-Bright |
| E2S22D24VA | 24V ac/dc <80mA | 12-chips Super-Bright |
| E2S22D48VA | 48V ac/dc <20mA | 12-chips Super-Bright |
| E2S22D130VA | 110-130V ac/dc 25mA Max | 12-chips Super-Bright |
| E2S22D230VA | 230V ac 25mA Max | 12-chips Super-Bright |

| Pilot Light: | Green | |
|--------------|-------------------------|---------------------------------|
| E2S22D12VG | 12V ac/dc <20mA | 1-chip InGAN Ultra Super-Bright |
| E2S22D24VG | 24V ac/dc <20mA | 1-chip InGAN Ultra Super-Bright |
| E2S22D48VG | 48V ac/dc <20mA | 1-chip InGAN Ultra Super-Bright |
| E2S22D130VG | 110-130V ac/dc 25mA Max | 1-chip InGAN Ultra Super-Bright |
| E2S22D230VG | 230V ac 25mA Max | 1-chip InGAN Ultra Super-Bright |

| Pilot Light: | Blue | |
|--------------|-------------------------|---------------------------------|
| E2S22D12VB | 12V ac/dc <20mA | 2-chip InGAN Ultra Super-Bright |
| E2S22D24VB | 24V ac/dc <20mA | 2-chip InGAN Ultra Super-Bright |
| E2S22D48VB | 48V ac/dc <20mA | 2-chip InGAN Ultra Super-Bright |
| E2S22D130VB | 110-130V ac/dc 25mA Max | 2-chip InGAN Ultra Super-Bright |
| E2S22D230VB | 230V ac 25mA Max | 2-chip InGAN Ultra Super-Bright |

| Pilot Light: | White | |
|--------------|-------------------------|-------------------|
| E2S22D12VW | 12V ac/dc <20mA | 1-chip InGAN Ulti |
| E2S22D24VW | 24V ac/dc <20mA | 1-chip InGAN Ult |
| E2S22D48VW | 48V ac/dc <20mA | 1-chip InGAN Ult |
| E2S22D130VW | 110-130V ac/dc 25mA Max | 1-chip InGAN Ulti |
| E2S22D230VW | 230V ac 25mA Max | 1-chip InGAN Ult |
| | | |









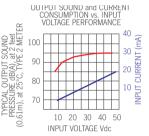
Itra Super-Bright Itra Super-Bright Itra Super-Bright tra Super-Bright ltra Super-Bright



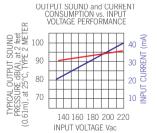
E2S28D ø28mm Buzzers - Panel Mount Indicators

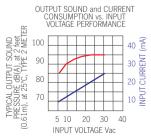
The E2S-28D range consists of the highest quality FloydBell continuous tone and dual tone panel mounted piezo buzzers.

The built-in volume control provides variable attenuation up to 20dB(A). The terminals are standard 6.35mm/0.25" guick-connect blades for push-on or direct solder attachment.



OUTPUT SOUND and CURRENT CONSUMPTION vs. INPUT VOLTAGE PERFORMANCE SOUND at 2 feet PE 2 MET 40 60 80 100 120 INPUT VOLTAGE Vac





E2S28DMC948:

| 0 - | Operating Mode: | Continuous Tone |
|----------|----------------------------|---|
| 0 II (m/ | Operating Voltage: | 9-48 V dc |
| JRREN 0 | Nom. Operating Voltage: | 48 V dc |
| 0 0 0 0 | Operating Frequency: | 2900±250 Hz. |
| INP | Typical Operating Current: | 5 mA at 9 V dc, 20 mA at 48 V dc |
| | Output: | 95±5 dB(A) at 48 Vdc at 24 inches (61 cm), at 25°C $$ |

E2S28DMC201:

| Operating Mode: | Continuous Tone | |
|----------------------------|---|------|
| Operating Voltage: | 30-120 V ac | |
| Nom. Operating Voltage: | 110 V ac | etal |
| Operating Frequency: | 2900±250 Hz. | |
| Typical Operating Current: | 7 mA at 30 V ac, 40 mA at 120 V ac | |
| Output: | 95±5 dB(A) at 130 Vac at 24 inches (61 cm), at 25°C | |

E2S28DMC301:

| Operating Mode: | Continuous Tone | |
|----------------------------|---|---|
| Operating Voltage: | 130-220 V ac | 6 |
| Nom. Operating Voltage: | 220 V ac | |
| Operating Frequency: | 2900±250 Hz. | |
| Typical Operating Current: | 20 mA at 130 V ac, 40 mA at 220 V ac | |
| Output: | 95±5 dB(A) at 220 Vac at 24 inches (61 cm), at 25°C | |

E2S28DMB530:

| Operating Mode: | Dual Function Beep/Continuous Tone | |
|----------------------------|---|---------|
| Operating Voltage: | 5-30 V dc | |
| Nom. Operating Voltage: | 30 V dc | |
| Operating Frequency: | 2900±250 Hz. | CANNA A |
| Typical Operating Current: | 2 mA at 5 V dc, 20 mA at 30 V dc | |
| Output: | 95±5 dB(A), at 30 Vdc at 24 inches (61 cm), at 25°C | |



Specification:

| Tones: | Continuous or Beep tone |
|-----------------------|---|
| Frequency: | 2900±250 Hz. |
| Termination: | Quick Connect Blades, 0.25 (6.3) Width, 0.032 (0.8) |
| Termination Strength: | Pull test with a maximum of 22 pounds (10 kg) load |
| Surge Voltage | 20% over maximum rated voltage < 5 minutes. |
| Materials: | Case- Plastic "NORYL® N-190", Flame Retardant, UL 94-VO, Black |
| Internal Circuit: | Audio-oscillator and piezoelectric driver |
| Potting: | 2 parts epoxy resin or silicone, blac |
| Diaphragm: | Stainless Steel 304 |
| Durability: | Withstand exposure to salt spray per ASTM B117 |
| Operating temp: | -20°C to +65°C. |
| Storage temp: | -40°C to +85°C. |
| Relative humidity: | 95% relative humidity +40°C continuously for 100 hrs. |
| Vibration: | Withstands vibration between 0 and 55 Hz. on all axes. |



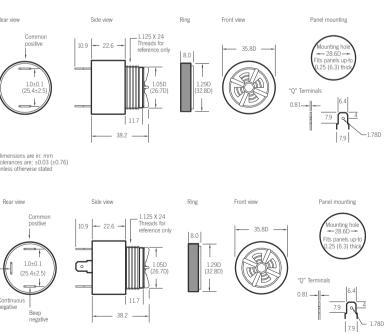
1.0±0. (25.4±2

Features:

Dimensions are in: mm Tolerances are: ±0.03 (±0.76) unless otherwise stated



• UL recognised part. • Volume control. • Stainless steel diaphragm.



BEDHEAD Alarm Sounder

The BEDHEAD flush mount alarm sounder is a low current consumption device suitable for close proximity signalling in fire and security applications.

Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 |
|---------|---|---------|---------|
| Tone 1 | 800/1000Hz @ 0.25 sec Alternating | Tone 8 | Tone 5 |
| Tone 2 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 1 | Tone 8 |
| Tone 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 1 | Tone 8 |
| Tone 4 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | 554Hz | Tone 2 |
| Tone 5 | 1000Hz Continuous - PFEER Toxic Gas | Tone 1 | Tone 6 |
| Tone 6 | Bell | Tone 1 | Tone 8 |
| Tone 7 | 800/1000Hz @ 7Hz Sweeping | Tone 5 | Tone 1 |
| Tone 8 | 2400/2900Hz @ 50Hz Sweeping | Tone 5 | Tone 1 |
| Tone 9 | 420Hz @ 0.625 sec Australian Alert | Tone 10 | Tone 5 |
| Tone 10 | 500-1200Hz 3.75sec /0.25sec. Australian Evac. | Tone 6 | Tone 5 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Part codes:

| Version: | Part code: |
|--|-----------------|
| 24V dc | BEDHEAD[x] |
| [x] = Housing colour: | R: Red W: White |
| To order compatible back boxes quote part ref: PLMBBHCTW | |

Alarm sounder:

| Version: | Voltage: | Current: | |
|----------|-----------|----------|--|
| 24V dc | 10-30V dc | 20-80mA | |

Specification:

| Maximum output: | 90dB(A) @ 1 metre |
|----------------------|-----------------------------------|
| Nominal output: | 85dB(A) @ 1m +/- 3dB - Tone 1 |
| No. of tones: | 10 |
| No. of stages: | 3 |
| Volume control: | On board potentiometer |
| Effective range: | 10m @ 1KHz |
| Voltages DC: | 24V dc (10-30V dc) |
| Current consumption: | 8mA @ 24V dc |
| Housing material: | High impact UL94 VO & 5VA FR ABS |
| Colour: | Red (RAL3000) & white. |
| Back box: | Compatible with standard back box |
| Terminals: | 0.5 to 1.5mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | 0.06kg |

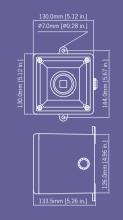






A105NAX Appello X User recordable alarm siren

The A105NAX Appello X is the next generation of user recordable alarm sounder capable of storing up to 2 minutes of content. The A105NAX records, stores and plays back with unsurpassed clarity, user defined voice messages, music or sounds stored directly to non-volatile memory. Low current consumption and CD quality reproduction in a robust fire retardant Type 4/4X/3R/13, IP66 housing ensure the A105NAX Appello X is suitable for all general signalling applications including fire, security and process control.



Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 | Stage 4 |
|---------|---|---------|-----------|----------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating - BS5839 Alarm tone | Tone 17 | Tone 5 | Tone 29 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop - | Tone 2 | Tone 5 | Tone 29 |
| | NEN 2575:2000 | | | |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 | Tone 29 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 | Tone 29 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 | Tone 29 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 | Tone 29 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 | Tone 29 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 | Tone 29 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 | Tone 29 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 | Tone 29 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 | Tone 29 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 | Tone 29 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 | Tone 29 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - AFNOR NF S 32-001 | Tone 2 | Tone 27 | Tone 29 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s - | Tone 2 | Tone 5 | Tone 29 |
| | AFNOR NFC48-265 | | | |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 | Tone 29 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 | Tone 29 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 | Tone 29 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 | Tone 29 |
| Tone 26 | Bell Tone 2 Tone 15 Tone 29 | | | |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 | Tone 29 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 | Tone 29 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 | Tone 29 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 | Tone 29 |
| Tone | 33 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone | 34 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 | Tone 29 |
| Tone | 35 420Hz @ 0.625 sec Australian Alert - AS2220 | Tone 36 | Tone 5 | Tone 29 |
| Tone | 36 500-1200Hz 3.75sec /0.25sec. Australian Evac AS2220 | Tone 35 | Tone 5 | Tone 29 |
| Tone | 37 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 | Tone 29 |
| Tone | 38 2000Hz Continuous | Tone 34 | Tone 45 | Tone 29 |
| Tone | 39 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 | Tone 29 |
| Tone | 40 544Hz (100mS)/440Hz (400mS) - AFNOR NF S 32-001 | Tone 31 | Tone 27 | Tone 29 |
| Tone | 41 Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 | Tone 29 |
| Tone | 42 Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 | Tone 29 |
| Tone | 43 1200 Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone | 44 Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 | Tone 29 |
| Tone | 45 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm | Tone 38 | Tone 34 | Tone 29 |
| .5110 | to the 15 on, 15 on monitant of FEER don. Aldin | | 10110 0 1 | .0110 25 |

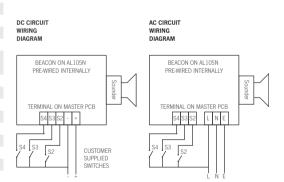
Part codes:

| Version: | Part code: |
|-----------------------|-------------------------|
| 10-30V dc | A105NAXDC024[x]-UL |
| 90-260V ac | A105NAXAC230[x]-UL |
| [x] = Housing colour: | G: Grey R: Red W: White |
| | |

Current consumption:

| Version: | Voltage: | Current: |
|----------|--------------------|----------|
| 24V dc | 10-30V dc | 256mA* |
| 230V ac | 90-260V ac 50/60Hz | 124mA* |

* current at nominal voltage on Tone 1



Specification:

| Voice content output: | 101dB(A) @ 1 metre |
|-----------------------|---|
| Music content output: | 102dB(A) @ 1 metre |
| Alarm tone output: | 110dB(A) @ 1 metre |
| No. of alarm tones: | 45 (UKOOA/PFEER compliant) |
| No. of messages: | 4 (30 seconds each) |
| Volume controls: | Independent controls for user recorded content and built-in alarm tones. |
| Effective range: | 60m @ 1KHz |
| Voltages DC: | 24vdc (10-30vdc) |
| Voltages AC: | 90-260vac 50/60Hz |
| Ingress protection: | Type 4 / 4X / 3R / 13, IP66 |
| Rating: | Continuous |
| Housing material: | UL94V0 & 5VA FR ABS |
| Housing colour: | RAL3000 Red, RAL7038 Grey and White |
| Fixings: | Stainless Steel |
| Cable entries: | 2 x M20 clearance gland entries. Custom configurations also available. |
| Terminals: | 0.5 to 2.5mm ² |
| Operating temp: | -25° to +55°C |
| Storage temp: | -40° to +70°C |
| Relative humidity: | 90% at 20°C |
| Weight : | DC: 0.80kg AC: 1.00kg |
| | |

'Synch' cable.

Features:

- Easy message creation with built in microphone or line-in audio input.
- Volume controls for user content and alarm tones.
- Available with custom tone configurations and frequencies.
- Factory programming of user supplied content also available.
- UL approved for general signalling use.

Country specific or custom tone configurations and alarm frequencies are available upon request.



The A105NAX Appello user recordable unit enables the recording of any type of content such as voice or music that can be played back at CD quality output at SPL's of up to 102dB(A) at 1 metre. This content can be reproduced repeatedly, alternating with or without one of the built-in 45 alarm tones. The alarm tone notification has an output of up to 110dB(A) at 1 metre.

For multiple unit installations the recording process is only required once to create a master unit which can then be used to program all other A105NAX units on the system, guaranteeing synchronisation during playback, using the supplied

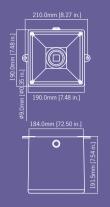
- Direct content storage on non-volatile memory.
- CD quality reproduction.
- Message length: 4 x 30 seconds





A121AX Appello X User recordable alarm horn

The A121AX Appello X is the next generation of user recordable alarm sounder capable of storing up to 2 minutes of content. The A121AX records, stores and plays back with unsurpassed clarity, user defined voice messages, music or sounds stored directly to non-volatile memory. Low current consumption and CD quality reproduction in a robust fire retardant Type 4/4X/3R/13, IP66 housing ensure the A121AX Appello X is suitable for all general signalling applications including fire, security and process control.



Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 | Stage 4 |
|---------|--|---------|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 | Tone 29 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 | Tone 29 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 | Tone 29 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 | Tone 29 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 | Tone 29 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 | Tone 29 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 | Tone 29 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 | Tone 29 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 | Tone 29 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 | Tone 29 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 | Tone 29 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 | Tone 29 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 | Tone 29 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 | Tone 29 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 | Tone 29 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 | Tone 29 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 | Tone 29 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 | Tone 29 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 | Tone 29 |
| Tone 26 | Bell | Tone 2 | Tone 15 | Tone 29 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 | Tone 29 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 | Tone 29 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 | Tone 29 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 | Tone 29 |
| Tone 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 | Tone 29 |
| Tone 35 | 420Hz @ 0.625 sec Australian Alert | Tone 36 | Tone 5 | Tone 29 |
| Tone 36 | 500-1200Hz 3.75sec /0.25sec. Australian Evac. | Tone 35 | Tone 5 | Tone 29 |
| Tone 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 | Tone 29 |
| Tone 38 | 2000Hz Continuous | Tone 34 | Tone 45 | Tone 29 |
| Tone 39 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 | Tone 29 |
| Tone 40 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 31 | Tone 27 | Tone 29 |
| Tone 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 | Tone 29 |
| Tone 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 | Tone 29 |
| Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 44 | Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 | Tone 29 |
| Tone 45 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm | Tone 38 | Tone 34 | Tone 29 |

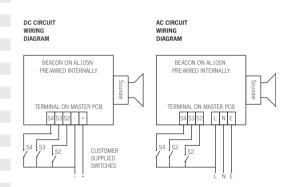
Part codes:

| Version: | Part code: |
|-----------------------|-------------------|
| 14-30V dc | A121AXDC024[x]-UL |
| 90-260V ac | A121AXAC230[x]-UL |
| [x] = Housing colour: | G: Grey R: Red |

Current consumption:

| Version: | Voltage: | Current : |
|----------|--------------------|-----------|
| 24V dc | 14-30V dc | 1.51A* |
| 230V ac | 90-260V ac 50/60Hz | 517mA* |

* current at nominal voltage on Tone 1



Specification:

| 111dB(A) @ 1 metre |
|---|
| : 112dB(A) @ 1 metre |
| 126dB(A) @ 1 metre |
| 45 (UKOOA/PFEER compliant) |
| 4 (30 seconds each) |
| Independent controls for user recorded content and built-in alarm tones. |
| 300m @ 1KHz |
| 24vdc (14-30vdc) |
| 90-260vac 50/60Hz |
| Type 4 / 4X / 3R / 13, IP66 |
| Continuous |
| UL94V0 & 5VA FR ABS |
| RAL3000 Red or RAL7038 Grey |
| Stainless Steel |
| 2 x M20 clearance gland entries. Custom configurations also available. |
| 0.5 to 2.5mm ² |
| -25° to +55°C |
| -40° to +70°C |
| 90% at 20°C |
| DC: 2.10kg AC: 2.70kg |
| |

Features:

The A121AX Appello user recordable unit enables the recording of any type of content such as voice or music that can be played back at CD quality output at SPL's of up to 112dB(A) at 1 metre. This content can be reproduced repeatedly, alternating with or without one of the built-in 45 alarm tones. The alarm tone notification has an output of up to 126dB(A) at 1 metre.

For multiple unit installations the recording process is only required once to create a master unit which can then be used to program all other A121AX units on the system, guaranteeing synchronisation during playback, using the supplied 'Synch' cable.

- Direct content storage on non-volatile memory.
- Easy message creation with built in microphone or line-in audio input.
- Volume controls for user content and alarm tones.
- Available with custom tone configurations and frequencies.
- Factory programming of user supplied content also available.
- UL approved for general signalling use.

Country specific or custom tone configurations and alarm frequencies are available upon request.



- CD quality reproduction.
- Message length: 4 x 30 seconds





D105AX Appello X User recordable alarm horn

The D105AX Appello X is the next generation of user recordable alarm sounder capable of storing up to 2 minutes of content. The D105AX records, stores and plays back with unsurpassed clarity, user defined voice messages, music or sounds stored directly to non-volatile memory. Low current consumption and CD quality reproduction in a robust die cast aluminium Type 4/4X/3R/13, IP66 housing ensures the D105AX Appello X is suitable for all general signalling applications including fire, security and process control.

Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 | Stage 4 |
|---------|--|---------|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 | Tone 29 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 | Tone 29 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 | Tone 29 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 | Tone 29 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 | Tone 29 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 | Tone 29 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 | Tone 29 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 | Tone 29 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 | Tone 29 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 | Tone 29 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 | Tone 29 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 | Tone 29 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 | Tone 29 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 | Tone 29 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 | Tone 29 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 | Tone 29 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 | Tone 29 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 | Tone 29 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 | Tone 29 |
| Tone 26 | Bell | Tone 2 | Tone 15 | Tone 29 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 | Tone 29 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 | Tone 29 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 | Tone 29 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 | Tone 29 |
| Tone 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 | Tone 29 |
| Tone 35 | 420Hz @ 0.625 sec Australian Alert | Tone 36 | Tone 5 | Tone 29 |
| Tone 36 | 500-1200Hz 3.75sec / 0.25sec. Australian Evac. | Tone 35 | Tone 5 | Tone 29 |
| Tone 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 | Tone 29 |
| Tone 38 | 2000Hz Continuous | Tone 34 | Tone 45 | Tone 29 |
| Tone 39 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 | Tone 29 |
| Tone 40 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 31 | Tone 27 | Tone 29 |
| Tone 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 | Tone 29 |
| Tone 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 | Tone 29 |
| Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 44 | Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 | Tone 29 |
| Tone 45 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm | Tone 38 | Tone 34 | Tone 29 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Part codes:

| Version: | Part code: |
|-----------------------|-------------------|
| 10-30V dc | D105AXDC024[x]-UL |
| [x] = Housing colour: | G: Grey R: Red |
| | |

Current consumption:

| Version: | Voltage: | Current : |
|--|-----------|-----------|
| 24V dc | 10-30V dc | 256mA* |
| * current at nominal voltage on Tone 1 | | |
| | | |
| | | |
| | | |

Specification:

| Voice content output: | 101dB(A) @ 1 metre |
|-----------------------|--|
| Music content output: | 102dB(A) @ 1 metre |
| Alarm tone output: | 110dB(A) @ 1 metre |
| No. of alarm tones: | 45 (UKOOA/PFEER compliant) |
| No. of messages: | 4 (30 seconds each) |
| Volume controls: | Independent controls for user recorded content and built-in alarm tones. |
| Effective range: | 60m @ 1KHz |
| Voltages DC: | 24vdc (10-30vdc) |
| Ingress protection: | Type 4 / 4X / 3R / 13, IP66 |
| Rating: | Continuous |
| Housing material: | Marine grade aluminium A1 Si12 Cu |
| Housing colour: | RAL3000 Red, RAL7038 Grey and White |
| Fixings: | Stainless Steel |
| Cable entries: | 2 x M20 x 1.5mm threaded gland entries. Supplied with one stopping plug. |
| Terminals: | 0.5 to 2.5mm ² |
| Operating temp: | -25° to +55°C |
| Storage temp: | -40° to +70°C |
| Relative humidity: | 90% at 20°C |
| Weight : | 1.60kg |

Features:

The D105AX Appello user recordable unit enables the recording of any type of content such as voice or music that can be played back at CD quality output at SPL's of up to 102dB(A) at 1 metre. This content can be reproduced repeatedly, alternating with or without one of the built-in ed 45 alarm tones. The alarm tone notification has an output of up to 110dB(A) at 1 metre.

For multiple unit installations the recording process is only required once to create a master unit which can then be used to program all other D105AX units on the system, guaranteeing synchronisation during playback, using the supplied 'Synch' cable.

- Message length: 4 x 30 seconds
- Easy message creation with built in microphone or line-in audio input.

- Volume controls for user content and alarm tones.
- Available with custom tone configurations and frequencies.
- Factory programming of user supplied content also available.
- UL approved for general signalling use.



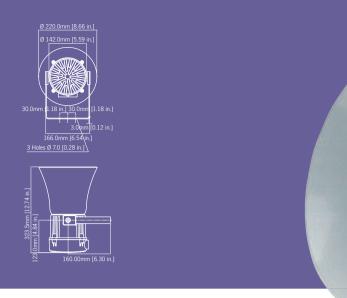
- Direct content storage on non-volatile memory. CD quality reproduction.





MV121 Appello X User recordable alarm horn

The MV121 Appello X is the next generation of user recordable alarm sounder capable of storing up to 2 minutes of content. The MV121 records, stores and plays back with unsurpassed clarity, user defined voice messages, music or sounds stored directly to non-volatile memory. Low current consumption and CD quality reproduction in a robust fire retardant Type 4/4X/3R/13, IP66/67 housing ensure the MV121 Appello X is suitable for all general signalling applications including fire, security and process control.



Tone table:

| Stage 1 | Frequency Description | Stg 2 | Stg 3 | Stg 4 |
|---------|---|---------|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating - BS5839 Alarm tone | Tone 17 | Tone 5 | Tone 29 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec | Tone 2 | Tone 5 | Tone 29 |
| | Slow Whoop - NEN 2575:2000 | | | |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 | Tone 29 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 | Tone 29 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 | Tone 29 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 | Tone 29 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 | Tone 29 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 | Tone 29 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 | Tone 29 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 | Tone 29 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 | Tone 29 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 | Tone 29 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 | Tone 29 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - AFNOR NF S 32-001 | Tone 2 | Tone 27 | Tone 29 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s - AFNOR NFC48-265 | Tone 2 | Tone 5 | Tone 29 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 | Tone 29 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 | Tone 29 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 | Tone 29 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 | Tone 29 |
| Tone 26 | Bell | Tone 2 | Tone 15 | Tone 29 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 | Tone 29 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 | Tone 29 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 | Tone 29 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 | Tone 29 |
| Tone 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 | Tone 29 |
| Tone 35 | 420Hz @ 0.625 sec Australian Alert - AS2220 | Tone 36 | Tone 5 | Tone 29 |
| Tone 36 | 500-1200Hz 3.75sec /0.25sec. Australian Evac AS2220 | Tone 35 | Tone 5 | Tone 29 |
| Tone 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 | Tone 29 |
| Tone 38 | 2000Hz Continuous | Tone 34 | Tone 45 | Tone 29 |
| Tone 39 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 | Tone 29 |
| Tone 40 | 544Hz (100mS)/440Hz (400mS) - AFNOR NF S 32-001 | Tone 31 | Tone 27 | Tone 29 |
| Tone 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 | Tone 29 |
| Tone 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 | Tone 29 |
| Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 44 | Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 | Tone 29 |
| Tone 45 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm | Tone 38 | Tone 34 | Tone 29 |

Part codes:

| ersion: | Part code: |
|-----------|----------------|
| 4-30V dc | MV121DC024G-UL |
| 0-260V ac | MV121AC230G-UL |
| | |

Current consumption:

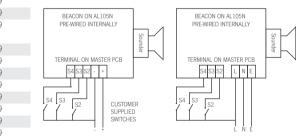
| Version: | Voltage: | Current : |
|----------|--------------------|-----------|
| 24V dc | 14-30V dc | 1.51A* |
| 230V ac | 90-260V ac 50/60Hz | 517mA* |
| | | |

AC CIRCUIT

WIRING DIAGRAM

* current at nominal voltage on Tone 1

DC CIRCUIT WIRING DIAGRAM



Specification:

| Voice content output: | 111dB(A) @ 1 metre |
|-----------------------|--|
| Music content output: | 112dB(A) @ 1 metre |
| Alarm tone output: | 126dB(A) @ 1 metre |
| No. of alarm tones: | 45 (UKOOA/PFEER compliant) |
| No. of messages: | 4 (30 seconds each) |
| Volume controls: | Independent controls for user recorded content and built-in alarm tones. |
| Effective range: | 300m @ 1KHz |
| Voltages DC: | 24vdc (14-30vdc) |
| Voltages AC: | 90-260vac 50/60Hz |
| Ingress protection: | Type 4 / 4X / 3R / 13, IP66/67 |
| Rating: | Continuous |
| Housing material: | UL94V0 & 5VA FR ABS |
| Housing colour: | RAL7038 Grey |
| Fixings: | Stainless Steel |
| Cable entries: | 2 x M20 threaded gland entries. |
| Terminals: | 0.5 to 2.5mm ² |
| Operating temp: | -25° to +55°C |
| Storage temp: | -40° to +70°C |
| Relative humidity: | 90% at 20°C |
| Weight : | DC: 2.10kg AC: 2.70kg |
| | |

Features:

The MV121 Appello user recordable unit enables the recording of any type of content such as voice or music that can be played back at CD quality output at SPL's of up to 112dB(A) at 1 metre. This content can be reproduced repeatedly, alternating with or without one of the built-in 45 alarm tones. The alarm tone notification has an output of up to 126dB(A) at 1 metre.

For multiple unit installations the recording process is only required once to create a master unit which can then be used to program all other MV121 units on the system, guaranteeing synchronisation during playback, using the supplied 'Synch' cable.

- Direct content storage on non-volatile memory. CD guality reproduction.
- Message length: 4 x 30 seconds
- Easy message creation with built in microphone or line-in audio input.
- Volume controls for user content and alarm tones.
- Available with custom tone configurations
 - and frequencies.
- Factory programming of user supplied content also available.
 - UL approved for general signalling use.

Country specific or custom tone configurations and alarm frequencies are available upon request.







HA105N Electronic Siren, Buzzer, Claxon & Bell

Applications and users that have traditionally demanded conventional electromechanical claxons, sirens, buzzers and bells can now choose the next generation alternative.

The technology employed in the Hootronic range features the latest in amplifier and digital to analogue conversion technology. The E2S Hootronic series of products faithfully reproduce the sounds made by legacy electro-mechanical signalling devices but in a modern, reliable and cost effective way.

With output levels of up to 112dB(A) at 1 metre the HA105N surpasses legacy electro-mechanical devices in performance and effectiveness, it is also continuously rated, requires zero maintenance and the signal quality will not degrade with age.

\bigcirc

Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 |
|---------|-----------------------------------|---------|---------|
| Tone 1 | Industrial Claxon | Tone 3 | Tone 5 |
| Tone 2 | High Frequency Mechanical Siren | Tone 1 | Tone 5 |
| Tone 3 | Medium Frequency Mechanical Siren | Tone 1 | Tone 5 |
| Tone 4 | Electro Mechanical Buzzer | Tone 2 | Tone 5 |
| Tone 5 | Mechanical Bell | Tone 1 | Tone 2 |

Country specific or custom tone configurations and alarm frequencies are available upon request

Part codes:

| Version | Part code: | |
|-----------------------|-----------------|--|
| 24V dc | HA105NDC24[x] | |
| 115V ac | HA105NAC115[x] | |
| 230V ac | HA105NAC230[x] | |
| [x] = Housing colour: | G: Grey, R: Red | |
| | | |

Alarm sounder:

| Version: | | Voltage: | Current : |
|----------|---------|-----------|-----------|
| 24V dc | | 10-30V dc | 185mA* |
| 115V ac | 50/60Hz | +/-10% | 50mA |
| 230V ac | 50/60Hz | +/-10% | 25mA |

* current at nominal voltage

Specification: 112dB(A) @ 1m +/- 3dB - Tone 2 Nominal output: 5 No. of tones: No. of stages: 3 Volume control: Max. 112dB(A); Min. 103dB(A) approx. 60m @ 1KHz Effective range: Voltages DC: 24V dc (10-30V dc); Voltages AC: 115V ac; 230V ac Ingress protection: IP66 Housing material: High impact UL94 V0 & 5VA FR ABS Colour: Red (RAL3000) & grey (RAL7038) Cable entries: 2 x M20 clearance gland knockouts in side & back Terminals: 0.5 to 4.0mm² cables. -25 to +55°C Operating temp: Storage temp: -40 to +70°C Relative humidity: 90% at 20°C. Weight : DC: 0.75kg AC:1.00kg

*SPL data +/-3dB(A). Measured at optimum voltage

Features:

The products in the Hootronic range have 5 user selectable 'traditional' sounds including:

- Tone 1 : Industrial Claxon

- Tone 5 : Mechanical Bell

Each of these sounds have two additional, remotely selectable, alarm stages.

Remote switch generates genuine 'tail off' to sound when alarm is terminated.

- Stainless steel fixings.
- Unit can be mounted using external lugs or internal BESA compatible fixing positions. • Duplicate cable terminations
- (in & out for daisy-chain installations).
- Tropicalisation available on request.
- GOST-R certificate: POCC GB.JB05.H00144



- Tone 2 : High Frequency Mechanical Siren
- Tone 3 : Medium Frequency Mechanical Siren
- Tone 4 : Electro Mechanical Buzzer

• Automatic synchronisation on multi-sounder system. • Continuously rated.

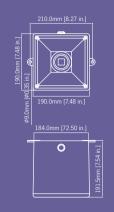


HA121 Electronic Siren, Buzzer, Claxon & Bell

Applications and users that have traditionally demanded conventional electromechanical claxons, sirens, buzzers and bells can now choose the next generation alternative.

The technology employed in the Hootronic range features the latest in amplifier and digital to analogue conversion technology. The E2S Hootronic series of products faithfully reproduce the sounds made by legacy electro-mechanical signalling devices but in a modern, reliable and cost effective way.

With output levels of up to 121dB(A) at 1 metre the HA121 surpasses legacy electro-mechanical devices in performance and effectiveness, it is also continuously rated, requires zero maintenance and the signal quality will not degrade with age.



Tone table:

| Stage 1 | Frequency Description | Stg 2 | Stg 3 |
|---------|-----------------------------------|--------|--------|
| Tone 1 | Industrial Claxon | Tone 3 | Tone 5 |
| Tone 2 | High Frequency Mechanical Siren | Tone 1 | Tone 5 |
| Tone 3 | Medium Frequency Mechanical Siren | Tone 1 | Tone 5 |
| Tone 4 | Electro Mechanical Buzzer | Tone 2 | Tone 5 |
| Tone 5 | Mechanical Bell | Tone 1 | Tone 2 |

Part codes:

| Part code: | |
|-----------------|--|
| HA121DC24[x] | |
| HA121AC115[x] | |
| HA121AC230[x] | |
| G: Grey, R: Red | |
| | |

Alarm sounder:

| Version: | | Voltage: | Current : |
|----------|---------|-----------|-----------|
| 24V dc | | 10-30V dc | 375mA* |
| 115V ac | 50/60Hz | +/-10% | 160mA |
| 230V ac | 50/60Hz | +/-10% | 75mA |

* current at nominal voltage

Specification: Nominal output: 121dB(A) @ 1m +/- 3dB - Tone 2 5 No. of tones: No. of stages: 3 Volume control: Max. 121dB(A); Min. 112dB(A) approx. 300m @ 1KHz Effective range: 24V dc (10-30V dc); Voltages DC: Voltages AC: 115V ac; 230V ac Ingress protection: IP66 High impact UL94 V0 & 5VA FR ABS Housing material: Colour: Red (RAL3000) & grey (RAL7038) 2 x M20 clearance gland knockouts Cable entries: in side & back 0.5 to 4.0mm² cables. Terminals: Operating temp: -25 to +55°C -40 to +70°C Storage temp: Relative humidity: 90% at 20°C. DC: 2.10kg AC:2.70kg Weight :

Features:

The products in the Hootronic range have 5 user selectable 'traditional' sounds including:

- Tone 1 : Industrial Claxon
- Tone 2 : High Frequency Mechanical Siren
- Tone 3 : Medium Frequency Mechanical Siren
- Tone 4 : Electro Mechanical Buzzer
- Tone 5 : Mechanical Bell

Each of these sounds have two additional, remotely selectable, alarm stages.

Remote switch generates genuine 'tail off' to sound when alarm is terminated.

- Automatic system.
- Continuously rated.
- Stainless steel fixings.
- Unit can be mounted using external lugs or internal BESA compatible fixing positions.
- Duplicate cable terminations (in & out for daisy-chain installations).
- Tropicalisation available on request.
- GOST-R certificate: POCC GB.JB05. H00144



• Automatic synchronisation on multi-sounder

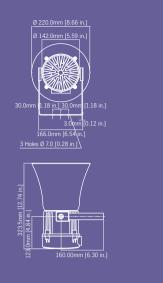


HMA121 Electronic Siren, Buzzer, Claxon & Bell

Applications and users that have traditionally demanded conventional electromechanical claxons, sirens, buzzers and bells can now choose the next generation alternative.

The technology employed in the Hootronic range features the latest in amplifier and digital to analogue conversion technology. The E2S Hootronic series of products faithfully reproduce the sounds made by legacy electro-mechanical signalling devices but in a modern, reliable and cost effective way.

With output levels of up to 124dB(A) at 1 metre the HMA121 surpasses legacy electro-mechanical devices in performance and effectiveness, it is also continuously rated, requires zero maintenance and the signal quality will not degrade with age.



Tone table:

| Stage 1 | Frequency Description | Stg 2 | Stg 3 |
|---------|-----------------------------------|--------|--------|
| Tone 1 | Industrial Claxon | Tone 3 | Tone 5 |
| Tone 2 | High Frequency Mechanical Siren | Tone 1 | Tone 5 |
| Tone 3 | Medium Frequency Mechanical Siren | Tone 1 | Tone 5 |
| Tone 4 | Electro Mechanical Buzzer | Tone 2 | Tone 5 |
| Tone 5 | Mechanical Bell | Tone 1 | Tone 2 |

Part codes:

| Version | Part code: |
|---------|--------------|
| 24V dc | HMA121DC24G |
| 115V ac | HMA121AC115G |
| 230V ac | HMA121AC230G |
| | |

Alarm sounder:

| Version: | | Voltage: | Current : |
|----------|---------|-----------|-----------|
| 24V dc | | 10-30V dc | 375mA* |
| 115V ac | 50/60Hz | +/-10% | 160mA |
| 230V ac | 50/60Hz | +/-10% | 75mA |

* current at nominal voltage

| Specification: | |
|---------------------|---------------------------------------|
| Nominal output: | 124dB(A) @ 1m +/- 3dB |
| No. of tones: | 5 |
| No. of stages: | 3 |
| Volume control: | Max. 124dB(A); Min. 115dB(A) approx. |
| Effective range: | 300m @ 1KHz |
| Voltages DC: | 24V dc (10-30V dc); |
| Voltages AC: | 115V ac; 230V ac |
| Ingress protection: | IP66 & IP67 (Third party tested) |
| Housing material: | High impact UL94 V0 & 5VA FR ABS |
| Colour: | Grey (RAL7038) |
| Cable entries: | 2 x M20 supplied with 1 blanking plug |
| Terminals: | 0.5 to 4.0mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | DC: 2.50kg AC:3.00kg |
| | |

Features:

The products in the Hootronic range have 5 user selectable 'traditional' sounds including:

- Tone 1 : Industrial Claxon
- Tone 2 : High Frequency Mechanical Siren
- Tone 3 : Medium Frequency Mechanical Siren
- Tone 4 : Electro Mechanical Buzzer
- Tone 5 : Mechanical Bell

Each of these sounds have two additional, remotely selectable, alarm stages. Remote switch generates genuine 'tail off' to sound when alarm is terminated.

- Automatic synchronisation on multi-sounder system. • Continuously rated.
- - Stainless steel fixings.
 - Ratchet adjustable stainless steel 'U' bracket
 - for 360° positioning. • Duplicate cable terminations
 - (in & out for daisy-chain installations).
 - Tropicalisation available on request.
- GOST-R certificate: POCC GB.JB05.H00144

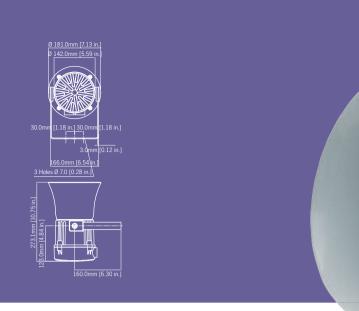


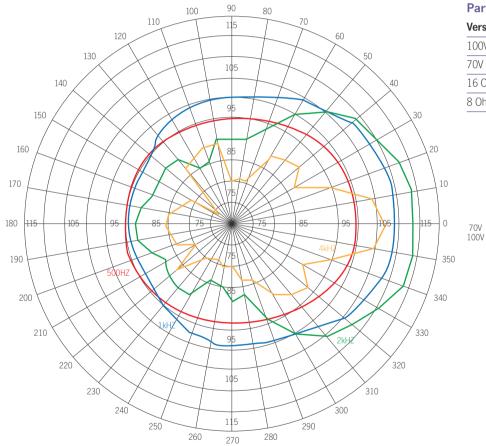
• Large termination area.



ML15 PA Horn Loudspeaker

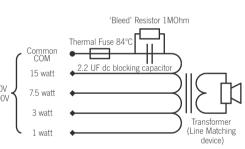
The ML15 15W PA loudspeaker features a robust, fire retardant, IP66 & IP67 housing; suitable for harsh environments with high ambient noise levels.





Part codes:

| Version: | Part code: |
|-----------|------------|
| 100V Line | ML15W100V |
| 70V Line | ML15W70V |
| 16 Ohm | ML15W16R |
| 8 Ohm | ML15W8R |
| | |



| Specification: | | Fe |
|---------------------|--|----|
| SPL: | 108dB +/-3dB @ 1w @ 1m - Pink | • |
| | 118dB +/-3dB @ 15w (rated) @ 1m | • |
| Rated power: | 15 Watts RMS | ٠ |
| 70v line tappings: | 15w / 7.5w / 3w / 1w (z=336.67 Ohms / 653.33 Ohms / 1.6kOhms / 4.9kOhms) | • |
| 100v line tappings: | 15w / 7.5w / 3w / 1w (z=666.87 Ohms / 1.34kOhms / 3.34kOhms / 10kOhms) | • |
| Low impedence: | 8 Ohm or 16 Ohm | ۸. |
| Dispersion: | 120° @ 1kHz & 32° @ 4kHz | A |
| Frequency range: | 400Hz to 8000 Hz | Ū |
| DC Line monitoring: | 2.2uF Capacitor (Transformer) 470uF Capacitor (Low impedance) | |
| Ingress protection: | IP66 & IP67 (Third party tested) | |
| Housing material: | High impact UL94 V0 & 5VA FR ABS | |
| Colour: | Grey (RAL7038) | |
| Cable entries: | 2 x M20 supplied with 1 blanking plug | |
| Terminals: | 0.5 to 4.0mm ² cables. | |
| Operating temp: | -25 to +55°C | |
| Storage tempe: | -40 to +70°C | |
| Relative humidity: | 90% at 20°C. | |
| Weight : | 70/100V line: 2.60kg | |
| | Low impedance: 2.20kg | |

*SPL data +/-3dB(A). Measured at optimum voltage.

Features:

- tainless steel fixings.
- r 360° positioning.

 - ropicalisation available on request.

rovals:

.

ontinuously rated.

arge termination area.

228

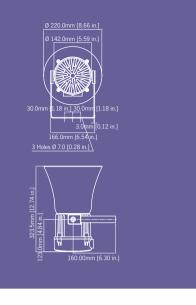
- atchet adjustable stainless steel 'U' bracket
- uplicate cable terminations
- n & out for daisy-chain installations).

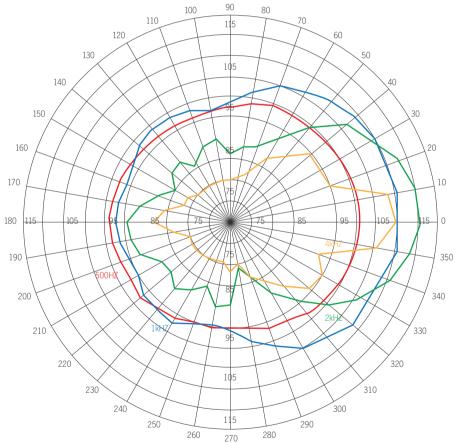
OST-R approved. Cert: POCC GB-JB05-H00144



ML25 PA Horn Loudspeaker

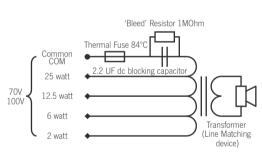
The ML25 25W PA loudspeaker features a robust, fire retardant, IP66 & IP67 housing; suitable for harsh environments with high ambient noise levels.





Part codes:

| Version: | Part code: |
|-----------|------------|
| 100V Line | ML25W100V |
| 70V Line | ML25W70V |
| 16 Ohm | ML25W16R |
| 8 Ohm | ML25W8R |
| | |



| Specification: | |
|---------------------|---|
| SPL: | 111dB +/-3dB @ 1w @ 1m - Pink |
| | 121dB +/-3dB @ 25w (rated) @ 1m |
| Rated power: | 25 Watts RMS |
| 70v line tappings: | 25w / 12.5w / 6w / 2w tappings (z=196 Ohms/392 Ohms/816.67 Ohms/2.45kOhms) |
| 100v line tappings: | 25w / 12.5w / 6w / 2w tappings (z=400 Ohms / 800 Ohms / 1.67kOhms / 5kOhms) |
| Low impedence: | 8 Ohm or 16 Ohm |
| Dispersion: | 130° @ 1kHz & 32° @ 4kHz |
| Frequency range: | 300Hz to 8000 Hz |
| DC Line monitoring: | 2.2uF Capacitor (Transformer) |
| | 470uF Capacitor (Low impedance) |
| Ingress protection: | IP66 & IP67 (Third party tested) |
| Housing material: | High impact UL94 VO & 5VA FR ABS |
| Colour: | Grey (RAL7038) |
| Cable entries: | 2 x M20 supplied with 1 blanking plug |
| Terminals: | 0.5 to 4.0mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | 70/100V line: 3.00kg Low impedance: 2.50kg |

*SPL data +/-3dB(A). Measured at optimum voltage.

tures:

- 60° positioning.
- ropicalisation available on request.

rovals:



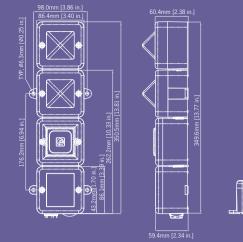
- ontinuously rated.
- arge termination area.
- tainless steel fixings.
- atchet adjustable stainless steel 'U' bracket for
- uplicate cable terminations
- a & out for daisy-chain installations).

OST-R approved. Cert: POCC GB-JB05-H00144



STA2 Alarm Sounder, Xenon & L.E.D. Tower with Junction Box

The STA2 is a customisable audio-visual signal featuring a tower of 2 AlertAlight L101 type beacon combined with a SONF1 alarm sounder. Each beacon position can contain either a Xenon or high output L.E.D. light source. The STA2 assembly features a pre-wired junction box and cable loom enabling the end user to determine beacon type and position during installation.





Tone table:

| Stage 1 | Frequency Description. | Stage 2 |
|---------|---|---------|
| Tone 1 | 800/1000Hz @ 0.25 sec Alternating | Tone 8 |
| Tone 2 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 1 |
| Tone 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 8 |
| Tone 4 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 9 |
| Tone 5 | Bell | Tone 1 |
| Tone 6 | 800/1000Hz @ 7Hz Sweeping | Tone 8 |
| Tone 7 | 500-1200Hz 3.75sec /0.25sec. Australian Evac. | Tone 10 |
| Tone 8 | 1000Hz Continuous - PFEER Toxic Gas | |
| Tone 9 | Continuous 554Hz | |
| Tone 10 | 420Hz @ 0.625 sec Australian Alert | |

Where applicable following tones are available on AC voltage versions:

| Stage 1 | Frequency Description. |
|---------|--|
| Tone 1 | 800/1000Hz @ 0.25 sec Alternating |
| Tone 2 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop |
| Tone 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. |
| Tone 4 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 |
| Tone 5 | 1000Hz Continuous - PFEER Toxic Gas |
| Tone 6 | Bell |
| Tone 7 | 800/1000Hz @ 7Hz Sweeping |
| Tone 8 | 2400/2900Hz @ 50Hz Sweeping |
| Tone 9 | 420Hz @ 0.625 sec Australian Alert |
| Tone 10 | 500-1200Hz 3.75sec / 0.25sec. Australian Evac. |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Part codes:

| STA2 Junction box assembly for 2 x L101 beacons | |
|---|--|
| 4[x] | |
| 5[x] | |
| 0[x] | |
| / 115Vac / 230Vac | |
| White | |
| / | |

| [x]: | G=Grey, | R=Red, | W=White |
|------|---------|--------|---------|
| | | | |

| ST-L101X Xenon Beacon 5J | | |
|--------------------------|--|--|
| Part Code: | ST-L101XDC012[x] | |
| | ST-L101XDC024[x] | |
| | ST-L101XAC115[x] | |
| | ST-L101XAC230[x] | |
| Voltage: | 12Vdc / 24Vdc / 115Vac / 230Vac | |
| Lens Colour: | Amber, Blue, Clear, Green, Red, Yellow | |
| ST-L101H L.E.D | . Beacon | |
| Part Code: | ST-L101HDC030[x] | |
| | ST-L101HAC230[x] | |
| Voltage: | 10-30Vdc / 90-260Vac | |
| L.E.D. Colour: | Amber, Blue, Clear, Green, Red | |
| | | |

[x]: A=Amber, B=Blue, C=Clear, G=Green, R=Red

Example: For a tower of A SONF1 alarm sounder plus two beacons using one Xenon beacon in red plus one L.E.D. beacon in green using a 24Vdc supply in a red housing, order the following part codes: STA2DC024R ST-L101XDC024R ST-L101HDC024G

Specification:

| Maximum output: | 100dB(A) @ 1 metre |
|--------------------|--|
| Nominal output: | 99dB(A) @ 1m +/- 3dB - Tone 1 |
| No. of tones: | 10 (UKOOA / PFEER compliant) |
| No. of stages: | 2 (AC units are single stage) |
| Volume control: | On board potentiometer |
| Effective range: | 30m @ 1KHz |
| Monitoring: | Reverse polarity diode protection on DC units. |
| Terminals: | 0.5 to 1.5mm ² cables. |
| ST-L101X - Xenon: | |
| Energy: | 5 Joules (5Ws) |
| Flash rate: | 1Hz (60 fpm) |
| Peak Candela: | 500,000 cd - calc. from energy (J) |
| Effective candela: | 250 cd - calc. from energy (J) |
| Peak Candela: | 86,935 cd* - measured ref. to I.E.S. |
| Effective candela: | 200 cd* - measured ref. to I.E.S. |
| Terminals: | 0.5 to 4.0mm ² cables. |
| Lens colours: | Amber, Blue, Clear, Green, Opal, Red, Yellow |
| Tube life : | Emissions are reduced to 70% after 8 million flashes |
| ST-L101H - L.E.D: | |
| Light source: | High intensity L.E.D. array. 24 x Superflux type high ouput L.E.D's |
| Options: | Steady or 2Hz flash mode (on board selection) |
| Effective candela: | 176 cd (Green L.E.D.) |
| Terminals: | 0.5 to 4.0mm ² cables |
| L.E.D. colours: | Amber Blue, Green, Red and White |

Lens colour: All L.E.D. colours use a Clear lens to maximise output and to ensure the signal is most effective in high ambient light levels.

*Candela measurements representative of performance with clear lens at optimum voltage.

Features:

- SONF1 alarm sounder synchronises automatically on multi-unit systems.
- Multiple configurations of Xenon and L.E.D. beacons.
- Internal cable loom and termination PCB simplifies installation.
- minimises cabling.

- Sealed to IP66.
- Tropicalisation available on request.
- Also available without SONF1 audible signal.

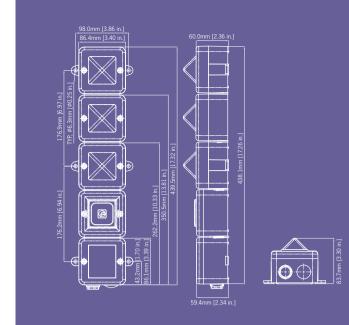
- Common negative/neutral supply
- High output L.E.D. unit can be set to steady or flashing.
- Available with red, white or grey housing.





STA3 Alarm Sounder, Xenon & L.E.D. Tower with Junction Box

The STA3 is a customisable audio-visual signal featuring a tower of 3 AlertAlight L101 type beacon combined with a SONF1 alarm sounder. Each beacon position can contain either a Xenon or high output L.E.D. light source. The STA3 assembly features a pre-wired junction box and cable loom enabling the end user to determine beacon type and position during installation.



Tone table:

| Stage 1 | Frequency Description. | Stage 2 |
|---------|---|---------|
| Tone 1 | 800/1000Hz @ 0.25 sec Alternating | Tone 8 |
| Tone 2 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 1 |
| Tone 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 8 |
| Tone 4 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 9 |
| Tone 5 | Bell | Tone 1 |
| Tone 6 | 800/1000Hz @ 7Hz Sweeping | Tone 8 |
| Tone 7 | 500-1200Hz 3.75sec /0.25sec. Australian Evac. | Tone 10 |
| Tone 8 | 1000Hz Continuous - PFEER Toxic Gas | |
| Tone 9 | Continuous 554Hz | |
| Tone 10 | 420Hz @ 0.625 sec Australian Alert | |

Where applicable following tones are available on AC voltage versions:

| Stage 1 | Frequency Description. |
|---------|--|
| Tone 1 | 800/1000Hz @ 0.25 sec Alternating |
| Tone 2 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop |
| Tone 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. |
| Tone 4 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 |
| Tone 5 | 1000Hz Continuous - PFEER Toxic Gas |
| Tone 6 | Bell |
| Tone 7 | 800/1000Hz @ 7Hz Sweeping |
| Tone 8 | 2400/2900Hz @ 50Hz Sweeping |
| Tone 9 | 420Hz @ 0.625 sec Australian Alert |
| Tone 10 | 500-1200Hz 3.75sec / 0.25sec. Australian Evac. |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Part codes:

| STA3 Junction bo | ox assembly for 2 x L101 beacons |
|------------------|----------------------------------|
| Part Code: | STA3DC024[x] |
| | STA3AC115[x] |
| | STA3AC230[x] |
| Voltage: | 12/24Vdc / 115Vac / 230Vac |
| Housing Colour: | Grey/Red/White |
| | |

| [x]: G=Grey, | R=Red, | W=White | |
|--------------|--------|---------|--|
| | | | |

| ST-L101X Xenon Beacon 5J | | |
|--------------------------|--|--|
| Part Code: | ST-L101XDC012[x] | |
| | ST-L101XDC024[x] | |
| | ST-L101XAC115[x] | |
| | ST-L101XAC230[x] | |
| Voltage: | 12Vdc / 24Vdc / 115Vac / 230Vac | |
| Lens Colour: | Amber, Blue, Clear, Green, Red, Yellow | |
| ST-L101H L.E.D. | Beacon | |
| Part Code: | ST-L101HDC030[x] | |
| | ST-L101HAC230[x] | |
| Voltage: | 10-30Vdc / 90-260Vac | |
| L.E.D. Colour: | Amber, Blue, Clear, Green, Red | |

[x]: A=Amber, B=Blue, C=Clear, G=Green, R=Red

Example: For a tower of A SONF1 alarm sounder plus three beacons using two Xenon beacons, one red, one amber plus one L.E.D. beacon in green using a 24Vdc supply in a red housing, order the following part codes: STA3DC024R ST-L101XDC024R ST-L101XDC024A ST-L101HDC024G

Specification:

| Maximum output: | 100dB(A) @ 1 metre |
|--------------------|--|
| Nominal output: | 99dB(A) @ 1m +/- 3dB - Tone 1 |
| No. of tones: | 10 (UKOOA / PFEER compliant) |
| No. of stages: | 2 (AC units are single stage) |
| Volume control: | On board potentiometer |
| Effective range: | 30m @ 1KHz |
| Monitoring: | Reverse polarity diode protection on DC units. |
| Terminals: | 0.5 to 1.5mm ² cables. |
| ST-L101X - Xenon: | |
| Energy: | 5 Joules (5Ws) |
| Flash rate: | 1Hz (60 fpm) |
| Peak Candela: | 500,000 cd - calc. from energy (J) |
| Effective candela: | 250 cd - calc. from energy (J) |
| Peak Candela: | 86,935 cd* - measured ref. to I.E.S. |
| Effective candela: | 200 cd* - measured ref. to I.E.S. |
| Terminals: | 0.5 to 4.0mm ² cables. |
| Lens colours: | Amber, Blue, Clear, Green, Opal, Red, Yellow |
| Tube life : | Emissions are reduced to 70% after 8 million flashes |
| ST-L101H - L.E.D: | |
| Light source: | High intensity L.E.D. array. 24 x Superflux type high ouput L.E.D's |
| Options: | Steady or 2Hz flash mode (on board selection) |
| Effective candela: | 176 cd (Green L.E.D.) |
| Terminals: | 0.5 to 4.0mm ² cables |
| L.E.D. colours: | Amber Blue, Green, Red and White |

Lens colour: All L.E.D. colours use a Clear lens to maximise output and to ensure the signal is most effective in high ambient light levels.

*Candela measurements representative of performance with clear lens at optimum voltage.

Features:

- SONF1 alarm sounder synchronises automatically on multi-unit systems.
- Multiple configurations of Xenon and L.E.D. beacons.
- Internal cable loom and termination PCB simplifies installation.
- Common negative/neutral supply minimises cabling.
- steady or flashing.
- Sealed to IP66.
- Also available without SONF1 audible signal.

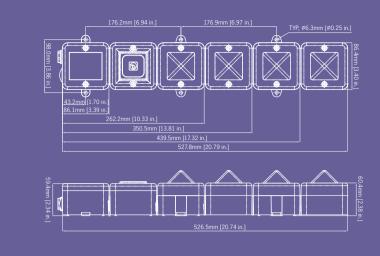
- High output L.E.D. unit can be set to
- Available with red, white or grey housing.
- Tropicalisation available on request.





STA4 Alarm Sounder, Xenon & L.E.D. Tower with Junction Box

The STA4 is a customisable audio-visual signal featuring a tower of 4 AlertAlight L101 type beacon combined with a SONF1 alarm sounder. Each beacon position can contain either a Xenon or high output L.E.D. light source. The STA4 assembly features a pre-wired junction box and cable loom enabling the end user to determine beacon type and position during installation.



Tone table:

| Stage 1 | Frequency Description. | Stage 2 |
|---------|--|---------|
| Tone 1 | 800/1000Hz @ 0.25 sec Alternating | Tone 8 |
| Tone 2 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 1 |
| Tone 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 8 |
| Tone 4 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 9 |
| Tone 5 | Bell | Tone 1 |
| Tone 6 | 800/1000Hz @ 7Hz Sweeping | Tone 8 |
| Tone 7 | 500-1200Hz 3.75sec / 0.25sec. Australian Evac. | Tone 10 |
| Tone 8 | 1000Hz Continuous - PFEER Toxic Gas | |
| Tone 9 | Continuous 554Hz | |
| Tone 10 | 420Hz @ 0.625 sec Australian Alert | |

Where applicable following tones are available on AC voltage versions:

| Stage 1 | Frequency Description. |
|---------|--|
| Tone 1 | 800/1000Hz @ 0.25 sec Alternating |
| Tone 2 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop |
| Tone 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. |
| Tone 4 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 |
| Tone 5 | 1000Hz Continuous - PFEER Toxic Gas |
| Tone 6 | Bell |
| Tone 7 | 800/1000Hz @ 7Hz Sweeping |
| Tone 8 | 2400/2900Hz @ 50Hz Sweeping |
| Tone 9 | 420Hz @ 0.625 sec Australian Alert |
| Tone 10 | 500-1200Hz 3.75sec / 0.25sec. Australian Evac. |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Part codes:

| STA4 Junction bo | ox assembly for 4 x L101 beacons |
|------------------|----------------------------------|
| Part Code: | STA4DC024[x] |
| | STA4AC115[x] |
| | STA4AC230[x] |
| Voltage: | 12/24Vdc / 115Vac / 230Vac |
| Housing Colour: | Grey/Red/White |
| | |

| [x]: G=Grey, R=Re | ed, vv=vvnite |
|-------------------|---------------|
| ST-L101X Xeno | n Beacon 5J |
| Part Coda: | |

| Part Code: | SI-LIUIXDOUIZ[X] |
|----------------|--|
| | ST-L101XDC024[x] |
| | ST-L101XAC115[x] |
| | ST-L101XAC230[x] |
| Voltage: | 12Vdc / 24Vdc / 115Vac / 230Vac |
| Lens Colour: | Amber, Blue, Clear, Green, Red, Yellow |
| ST-L101H L.E.D | . Beacon |
| Part Code: | ST-L101HDC030[x] |
| | ST-L101HAC230[x] |
| Voltage: | 10-30Vdc / 90-260Vac |
| L.E.D. Colour: | Amber, Blue, Clear, Green, Red |

[x]: A=Amber, B=Blue, C=Clear, G=Green, R=Red

Example: For a tower of A SONF1 alarm sounder plus four beacons using two Xenon beacons, one red, one amber plus one clear L.E.D. beacon in one in green using a 24Vdc supply in a red housing, order the following part codes: STA3DC024R ST-L101XDC024R ST-L101XDC024A ST-L101HDC024C ST-L101HDC024G

Specification:

SONF1 - Alarm Sounder:

| | indon |
|--------------------|--|
| Maximum output: | 100dB(A) @ 1 metre |
| Nominal output: | 99dB(A) @ 1m +/- 3dB - Tone 1 |
| No. of tones: | 10 (UKOOA / PFEER compliant) |
| No. of stages: | 2 (AC units are single stage) |
| Volume control: | On board potentiometer |
| Effective range: | 30m @ 1KHz |
| Monitoring: | Reverse polarity diode protection on DC units. |
| Terminals: | 0.5 to 1.5mm ² cables. |
| ST-L101X - Xenon: | |
| Energy: | 5 Joules (5Ws) |
| Flash rate: | 1Hz (60 fpm) |
| Peak Candela: | 500,000 cd - calc. from energy (J) |
| Effective candela: | 250 cd - calc. from energy (J) |
| Peak Candela: | 86,935 cd* - measured ref. to I.E.S. |
| Effective candela: | 200 cd* - measured ref. to I.E.S. |
| Terminals: | 0.5 to 4.0mm ² cables. |
| Lens colours: | Amber, Blue, Clear, Green, Opal, Red, Yellow |
| Tube life : | Emissions are reduced to 70% after 8 million flashes |
| ST-L101H - L.E.D: | |
| Light source: | High intensity L.E.D. array. 24 x Superflux type high ouput L.E.D's |
| Options: | Steady or 2Hz flash mode (on board selection) |
| Effective candela: | 176 cd (Green L.E.D.) |
| Terminals: | 0.5 to 4.0mm ² cables |
| L.E.D. colours: | Amber Blue, Green, Red and White |

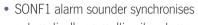
Lens colour: All L.E.D. colours use a Clear lens to maximise output and to ensure the signal is most effective in high ambient light levels.

*Candela measurements representative of performance with clear lens at optimum voltage.

Features:

- Multiple configurations of Xenon and L.E.D. beacons.
- Internal cable loom and termination PCB simplifies installation.
- Common negative/neutral supply minimises cabling.
- High output L.E.D. unit can be set to steady or flashing.
- Sealed to IP66.
- Tropicalisation available on request.
- Also available without SONF1 audible signal.





automatically on multi-unit systems.

• Available with red, white or grey housing.



22S

STA



SON4B Alarm Sounder & Filament Lamp Beacon

The SON4B is a compact, high output, 100dB(A) alarm sounder with integral filament lamp beacon. The robust fire retardant housing ensures the SON4B is suitable for all general signalling applications including fire, security and process control.



Alarm sounder & bulb beacon:

| Version: | | Voltage: | Current: |
|----------|---------|----------|----------|
| 24V dc | | +/-25% | 150mA |
| 24V ac | 50/60Hz | +/-10% | 180mA |
| 115V ac | 50/60Hz | +/-10% | 50mA |
| 230V ac | 50/60Hz | +/-10% | 30mA |

Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 |
|---------|--|---------|---------|
| Tone 1 | 800/1000Hz @ 0.25 sec Alternating | Tone 8 | Tone 5 |
| Tone 2 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 1 | Tone 8 |
| Tone 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 1 | Tone 8 |
| Tone 4 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | 554Hz | Tone 2 |
| Tone 5 | 1000Hz Continuous - PFEER Toxic Gas | Tone 1 | Tone 6 |
| Tone 6 | Bell | Tone 1 | Tone 8 |
| Tone 7 | 800/1000Hz @ 7Hz Sweeping | Tone 5 | Tone 1 |
| Tone 8 | 2400/2900Hz @ 50Hz Sweeping | Tone 5 | Tone 1 |
| Tone 9 | 420Hz @ 0.625 sec Australian Alert | Tone 10 | Tone 5 |
| Tone 10 | 500-1200Hz 3 75sec /0 25sec. Australian Evac | Tone 6 | Tone 5 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Specification:

| Sounder: | |
|-----------------------|---|
| Maximum output: | 100dB(A) @ 1 metre |
| Nominal output: | 99dB(A) @ 1m +/- 3dB - Tone 1 |
| No. of tones: | 10 (UKOOA / PFEER compliant) |
| No. of stages: | 3 |
| Volume control: | On board potentiometer |
| Effective range: | 30m @ 1KHz |
| Stage switching: | Negative |
| Beacon: | |
| Light source: | 1.3W Filament bulb/lamp |
| Flash rate: | 1 Hz |
| Effective candela: | 6cd* - measured ref. to I.E.S. |
| Lens / L.E.D.: | Amber, Blue & Red |
| General: | |
| Voltages DC: | 24V dc |
| Reverse polarity diod | e protection on DC units. |
| Voltages AC: | 24V ac; 115V ac; 230V ac |
| Ingress protection: | IP66 |
| Housing material: | High impact UL94 VO & 5VA FR ABS |
| Colour: | Red (RAL3000), grey (RAL7038) & white. |
| Lens material: | PC |
| Cable entries: | 4 x M20 clearance gland knockouts in side & back |
| Terminals: | 0.5 to 1.5mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight: | DC: 0.30kg AC:0.40kg |
| | |

*SPL data +/-3dB(A). Measured at optimum voltage. *Candela measurements representative of performance with amber lens at optimum voltage.

| Part codes: | |
|-----------------------|---------------------------|
| Version: | Part code: |
| 24V dc | SON4BDC24[x]/[y] |
| 24V ac | SON4BAC24[x]/[y] |
| 115V ac | SON4BAC115[x]/[y] |
| 230V ac | SON4BAC230[x]/[y] |
| [x] = Housing colour: | G: Grey R: Red W: White |
| [y] = Lens colour: | A: Amber, B: Blue, R: Red |

Features:

- Continuously rated.
- fixing positions.
- Duplicate cable terminations (in & out for daisy-chain installations).
- Tropicalisation available on request.
- Available with custom tone configurations
- and frequencies.

Approvals:

- GOST-R approved. Cert: POCC GB-JB05-H00144



• Automatic synchronisation on multi-sounder system.

- Stainless steel fixings.
- Unit can be mounted using external lugs
- (on AC versions) or internal BESA compatible

• VdS approved to EN54-3 (CPD 89/106/EEC).

• UKOOA/PFEER compliant alarm tones.







SON4L Alarm Sounder & L.E.D. Beacon

The SON4L is a compact, high output, 100dB(A) alarm sounder with integral L.E.D. array beacon. The robust fire retardant housing ensures the SON4L is suitable for all general signalling applications including fire, security and process control.



Alarm sounder & L.E.D. beacon:

| Version: | | Voltage: | Current: |
|----------|---------|----------|----------|
| 12V dc | | +/-25% | 50mA |
| 24V dc | | +/-25% | 50mA |
| 48V dc | | +/-25% | 40mA |
| 24V ac | 50/60Hz | +/-10% | 60mA |
| 115V ac | 50/60Hz | +/-10% | 25mA |
| 230V ac | 50/60Hz | +/-10% | 20mA |

Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 |
|---------|---|---------|---------|
| Tone 1 | 800/1000Hz @ 0.25 sec Alternating | Tone 8 | Tone 5 |
| Tone 2 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 1 | Tone 8 |
| Tone 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 1 | Tone 8 |
| Tone 4 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | 554Hz | Tone 2 |
| Tone 5 | 1000Hz Continuous - PFEER Toxic Gas | Tone 1 | Tone 6 |
| Tone 6 | Bell | Tone 1 | Tone 8 |
| Tone 7 | 800/1000Hz @ 7Hz Sweeping | Tone 5 | Tone 1 |
| Tone 8 | 2400/2900Hz @ 50Hz Sweeping | Tone 5 | Tone 1 |
| Tone 9 | 420Hz @ 0.625 sec Australian Alert | Tone 10 | Tone 5 |
| Tone 10 | 500-1200Hz 3.75sec /0.25sec. Australian Evac. | Tone 6 | Tone 5 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Specification:

| Maximum output: | 100dB(A) @ 1 metre |
|---------------------|---|
| Nominal output: | 99dB(A) @ 1m +/- 3dB - Tone 1 |
| No. of tones: | 10 (UKOOA / PFEER compliant) |
| No. of stages: | 3 |
| Volume control: | On board potentiometer |
| Effective range: | 30m @ 1KHz |
| Stage switching: | Negative |
| Beacon: | |
| Light source: | 5 x high intensity L.E.D. array |
| Flash rate: | 2 Hz |
| Peak Candela: | 23.56 cd |
| Effective candela: | 3 cd* - measured ref. to I.E.S. |
| Lens / L.E.D.: | Amber & Red |
| General: | |
| Voltages DC: | 12V dc; 24V dc; 48V dc Reverse polarity diode protection on DC units. |
| Voltages AC: | 24V ac; 115V ac; 230V ac |
| Ingress protection: | IP66 |
| Housing material: | High impact UL94 VO & 5VA FR ABS |
| Colour: | Red (RAL3000), grey (RAL7038) & white. |
| Lens material: | PC |
| Cable entries: | 4 x M20 clearance gland knockouts in side & back |
| Terminals: | 0.5 to 1.5mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight: | DC: 0.30kg AC:0.40kg |

*SPL data +/-3dB(A). Measured at optimum voltage. *Candela measurements representative of performance with amber lens at optimum voltage.

| Part codes: | | |
|-----------------------|-------------------------|--|
| Version: | Part code: | |
| 12V dc | SON4LDC12[x]/[y] | |
| 24V dc | SON4LDC24[x]/[y] | |
| 48V dc | SON4LDC48[x]/[y] | |
| 24V ac | SON4LAC24[x]/[y] | |
| 115V ac | SON4LAC115[x]/[y] | |
| 230V ac | SON4LAC230[x]/[y] | |
| [x] = Housing colour: | G: Grey R: Red W: White | |
| [y] = Lens colour: | A: Amber, R: Red | |

Features:

- Continuously rated.
- Stainless steel fixings. • Unit can be mounted using external lugs
- fixing positions.
- Duplicate cable terminations (in & out for daisy-chain installations).
- Available with custom tone configurations and frequencies.

Approvals:

- GOST-R approved. Cert: POCC GB-JB05-H00144



• Automatic synchronisation on multi-sounder system.

- (on AC versions) or internal BESA compatible
- Tropicalisation available on request.

• VdS approved to EN54-3 (CPD 89/106/EEC).

• UKOOA/PFEER compliant alarm tones.

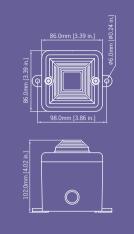






SON4 Alarm Sounder & Xenon Beacon

The SON4 is a compact, high output, 104dB(A) alarm sounder with integral Xenon strobe beacon. The robust fire retardant housing ensures the SON4 is suitable for all general signalling applications including fire, security and process control.



Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 |
|---------|---|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 26 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 420Hz @ 0.625 sec Australian Alert | Tone 32 | Tone 26 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | 500-1200Hz 3.75sec /0.25sec. Australian Evac. | Tone 30 | Tone 26 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Specification:

| 3 | Sounder: | |
|---|-----------------------|---|
| | Maximum output: | 104dB(A) @ 1 metre |
| | Nominal output: | 100dB(A) @ 1m +/- 3dB - Tone 2 |
| 6 | No. of tones: | 32 (UKOOA / PFEER compliant) |
| 0 | No. of stages: | 3 |
| | Volume control: | 3 levels via on board switch |
| | Effective range: | 32m @ 1KHz |
| | Stage switching: | Reverse polarity stage switching |
| | Stage Switching. | on DC units. |
| | Beacon: | |
| | Energy: | 0.5 Joules |
| , | Flash rate: | 1 Hz (60fpm) |
| | Peak Candela: | 50,000 cd - calc. from energy (J) |
| | Effective candela: | 25 cd - calc. from energy (J) |
| | Peak Candela: | 0, () |
| | | 5,038 cd* - measured ref. to I.E.S. |
| | Effective candela: | 11 cd* - measured ref. to I.E.S. |
| | Lens colours: | Amber, Blue & Red |
| | General: | |
| | Voltages DC: | 24V dc (18-30V dc) |
| | Reverse polarity diod | le protection on DC units. |
| | Voltages AC: | 24V ac; 115V ac; 230V ac |
| | Ingress protection: | IP66 |
| | Housing material: | High impact UL94 V0 & 5VA FR ABS |
| | Colour: | Red (RAL3000), grey (RAL7038) & white. |
| | Lens material: | PC |
| | Terminals: | 0.5 to 1.5mm ² cables. |
| | Operating temp: | -25 to +55°C |
| | Storage temp: | -40 to +70°C |
| | Weight : | DC: 0.30kg AC:0.40kg |

*SPL data +/-3dB(A). Measured at optimum voltage. *Candela measurements representative of performance with amber lens at optimum voltage.

Part codes:

| Version: | Part code: |
|-----------------------|---|
| 24V dc | SON4DC24[x]/[y] |
| 24V ac | SON4AC24[x]/[y] |
| 115V ac | SON4AC115[x]/[y] |
| 230V ac | SON4AC230[x]/[y] |
| [x] = Housing colour: | G: Grey R: Red W: White |
| [y] = Lens colour: | A: Amber, B: Blue. G: Green, R: Red, Y: Yellow |
| | |

Alarm sounder & Xenon beacon: Voltage: Version: Current: 24V dc 18-30V dc 80-110mA 24V ac 50/60Hz +/-10% 90-135mA 115V ac 50/60Hz +/-10% 35mA 230V ac 50/60Hz +/-10% 20mA

Features:

- Continuously rated.

- or internal BESA compatible fixing positions.
- Duplicate cable terminations
- (in & out for daisy-chain installations).
- Wire to base installation
- Tropicalisation available on request.
- Available with custom tone configurations

Approvals:



• Automatic synchronisation on multi-sounder system.

- Stainless steel fixings.
- Unit can be mounted using external lugs

and frequencies.

• VdS approved to EN54-3 (CPD 89/106/EEC).

• UKOOA/PFEER compliant alarm tones.

• GOST-R approved. Cert: POCC GB-JB05-H00144



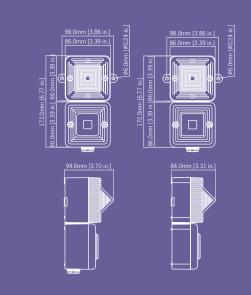




SONFL1X Alarm Sounder & Xenon Beacon

The SONFL1X features the 100dB(A) SONF1 alarm sounder combined with the L101X Xenon beacon. The compact, robust housing is ideal for all general signalling applications including fire, security and process control.

The 5 Joule Xenon strobe generates over 200 candela of light output. DC versions have multile flash rates selectable udring installation. Sounder & beacon may be connected from a single supply for simultaneous operation or from separate supplies for independent operation.



Alarm sounder:

| Version: | | Voltage: | Current : |
|------------------|-------------------------|-----------|-----------|
| 12V dc | | 10-30V dc | 25mA* |
| 24V dc | | 10-30V dc | 25mA* |
| 24V ac | 50/60Hz | +/-10% | 40mA |
| 115V ac | 50/60Hz | +/-10% | 13mA |
| 230V ac | 50/60Hz | +/-10% | 13mA |
| * current at nor | minal voltage on Tone 2 | | |

Xenon Beacon:

| Version: | | Voltage: | Current: |
|----------|---------|-----------|----------|
| 12V dc | | 10-14V dc | 500mA |
| 24V dc | | 20-28V dc | 250mA |
| 24V ac | 50/60Hz | +/-10% | 300mA |
| 115V ac | 50/60Hz | +/-10% | 70mA |
| 230V ac | 50/60Hz | +/-10% | 35mA |

Tone table:

| Stage 1 | Frequency Description. | Stage 2 |
|---------|--|---------|
| Tone 1 | 800/1000Hz @ 0.25 sec Alternating | Tone 8 |
| Tone 2 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 1 |
| Tone 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 8 |
| Tone 4 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 9 |
| Tone 5 | Bell | Tone 1 |
| Tone 6 | 800/1000Hz @ 7Hz Sweeping | Tone 8 |
| Tone 7 | 500-1200Hz 3.75sec / 0.25sec. Australian Evac. | Tone 10 |
| Tone 8 | 1000Hz Continuous - PFEER Toxic Gas | |
| Tone 9 | Continuous 554Hz | |
| Tone 10 | 420Hz @ 0.625 sec Australian Alert | |

Where applicable following tones are available on AC voltage versions:

| Stage 1 | Frequency Description. | |
|---------|---|--|
| Tone 1 | 800/1000Hz @ 0.25 sec Alternating | |
| Tone 2 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | |
| Tone 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | |
| Tone 4 | 544Hz (100mS)/440Hz (400mS) - NF S 32-00 | |
| Tone 5 | 1000Hz Continuous - PFEER Toxic Gas | |
| Tone 6 | Bell | |
| Tone 7 | 800/1000Hz @ 7Hz Sweeping | |
| Tone 8 | 2400/2900Hz @ 50Hz Sweeping | |
| Tone 9 | 420Hz @ 0.625 sec Australian Alert | |
| Tone 10 | 500-1200Hz 3 75sec /0 25sec Australian Ev | |

Specification:

| opeemeation. | |
|---------------------|---|
| Sounder: | |
| Maximum output: | 100dB(A) @ 1 metre |
| Nominal output: | 99dB(A) @ 1m +/- 3dB - Tone 1 |
| No. of tones: | 10 (UKOOA / PFEER compliant) |
| No. of stages: | 2 |
| Volume control: | On board potentiometer |
| Effective range: | 30m @ 1KHz |
| Beacon: | |
| Energy: | 5 Joules (5Ws) |
| Flash rate: | 1Hz (60 fpm) |
| Peak Candela: | 500,000 cd - calc. from energy (J) |
| Effective candela: | 250 cd - calc. from energy (J) |
| Peak Candela: | 86,935 cd* - measured ref. to I.E.S. |
| Effective candela: | 200 cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Clear, Green, Magenta, Red & Yellow |
| Tube life: | Emissions are reduced to 70% after 8 million flashe |
| General: | |
| Voltages DC: | 12Vdc; 24V dc |
| Voltages AC: | 24V ac; 115V ac; 230V ac |
| Ingress protection: | IP66 |
| Housing material: | High impact UL94 VO & 5VA FR ABS |
| Colour: | Red (RAL3000), grey (RAL7038) & white. |
| Lens material: | PC |
| Cable entries: | 4 x M20 clearance gland knockouts in side & back |
| Terminals: | 0.5 to 1.5mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | 0.50kg |

*SPL data +/-3dB(A). Measured at optimum voltage. *Candela measurements representative of performance with clear lens at optimum voltage.

Part codes:

| Version: | Part code: |
|-----------------------|--|
| 12V dc | SONFL1XDC012[x]/[y] |
| 24V dc | SONFL1XDC024[x]/[y] |
| 24V ac | SONFL1XAC024[x]/[y] |
| 115V ac | SONFL1XAC115[x]/[y] |
| 230V ac | SONFL1XAC230[x]/[y] |
| [x] = Housing colour: | G: Grey, R: Red, W: White |
| [y] = Lens colour: | A: Amber, B: Blue. C: Clear, G: Green M: Magenta, R: Red, Y: Yellow |
| | |

Features:

- Automatic synchronisation on multi-sounder system.
- High output Xenon beacon
- DC voltage units feature multiple flash rates.
- Continuously rated.
- Stainless steel fixings. • Mounting via internal BESA compatible fixing positions or via external mounting lugs.
- Duplicate cable terminations (in & out for daisy-chain installations).

Suffix part number with '-UL' for UL approved version.

Approvals:

- L101X xenon beacon is VdS approved to EN54-23:2010 (CPD 89/106/EEC).

- GOST-R approved. Cert: POCC GB-JB05-H00144

Country specific or custom tone configurations and alarm frequencies are available upon request.



- Tropicalisation available on request.
- Available with custom tone configurations and frequencies.
 - SONF1 alarm sounder is VdS approved to EN54-3 (CPD 89/106/EEC).
 - UKOOA/PFEER compliant alarm tones.
 - UL approved version available.



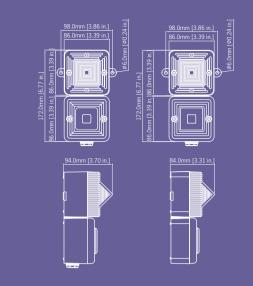




SONFL1H Alarm Sounder & L.E.D. Beacon

The SONFL1H features the 100dB(A) SONF1 alarm sounder combined with the L101H high output L.E.D. beacon. The compact, robust housing is ideal for all general signalling applications including fire, security and process control.

The array of 24 Superflux type high output L.E.D's generates over 120 candela of light output and can be user set to either steady of flashing mode. Sounder & beacon may be connected from a single supply for simultaneous operation or from separate supplies for independent operation.



Alarm sounder:

| Version: | | Voltage: | Current: |
|--|---------|-----------|----------|
| 24V dc | | 10-30V dc | 25mA* |
| 115V ac | 50/60Hz | +/-10% | 13mA |
| 230V ac | 50/60Hz | +/-10% | 13mA |
| * current at nominal voltage on Tone 2 | | | |

L.E.D. Beacon:

| Version: | Voltage: | Current: |
|---------------------|---------------|------------------|
| 24V dc | 10-30V dc | 155mA (@ 24V dc) |
| 115/230V ac 50/60Hz | 90-260V ac/dc | 35mA (@230V ac) |

Tone table:

| Stage 1 | Frequency Description. | Stage 2 |
|---------|--|---------|
| Tone 1 | 800/1000Hz @ 0.25 sec Alternating | Tone 8 |
| Tone 2 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 1 |
| Tone 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 8 |
| Tone 4 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 9 |
| Tone 5 | Bell | Tone 1 |
| Tone 6 | 800/1000Hz @ 7Hz Sweeping | Tone 8 |
| Tone 7 | 500-1200Hz 3.75sec / 0.25sec. Australian Evac. | Tone 10 |
| Tone 8 | 1000Hz Continuous - PFEER Toxic Gas | |
| Tone 9 | Continuous 554Hz | |
| Tone 10 | 420Hz @ 0.625 sec Australian Alert | |

Where applicable following tones are available on AC voltage versions:

| Stage 1 | Frequency Description. |
|---------|---|
| Tone 1 | 800/1000Hz @ 0.25 sec Alternating |
| Tone 2 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop |
| Tone 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. |
| Tone 4 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 |
| Tone 5 | 1000Hz Continuous - PFEER Toxic Gas |
| Tone 6 | Bell |
| Tone 7 | 800/1000Hz @ 7Hz Sweeping |
| Tone 8 | 2400/2900Hz @ 50Hz Sweeping |
| Tone 9 | 420Hz @ 0.625 sec Australian Alert |
| Tone 10 | 500-1200Hz 3 75sec /0 25sec Australian Evac |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Specification:

| opecification. | |
|---------------------|--|
| Sounder: | |
| Maximum output: | 100dB(A) @ 1 metre |
| Nominal output: | 99dB(A) @ 1m +/- 3dB - Tone 1 |
| No. of tones: | 10 (UKOOA / PFEER compliant) |
| No. of stages: | 2 |
| Volume control: | On board potentiometer |
| Effective range: | 30m @ 1KHz |
| Beacon: | |
| Light source: | High intensity L.E.D. array. 24 x Superflux type high ouput L.E.D's |
| Options: | Steady or 2Hz flash mode (on board selection) |
| Effective candela: | 176 cd (Green L.E.D.) |
| Terminals: | 0.5 to 4.0mm ² cables |
| L.E.D. colours: | Amber Blue, Green, Red and White |
| Lens colour: | All L.E.D. colours use a Clear lens to maximise output and to ensure the signal is most effective in high ambient light. |
| General: | |
| Voltages DC: | 12Vdc; 24V dc |
| Voltages AC: | 115V ac; 230V ac |
| Ingress protection: | IP66 |
| Housing material: | High impact UL94 V0 & 5VA FR ABS |
| Colour: | Red (RAL3000), grey (RAL7038) & white. |
| Lens material: | PC |
| Cable entries: | 4 x M20 clearance gland knockouts in side & back |
| Terminals: | 0.5 to 1.5mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | 0.50kg |
| | |

*SPL data +/-3dB(A). Measured at optimum voltage. *Candela measurements representative of performance with clear lens at optimum voltage.

Part codes: Version: Part code: 24V dc SONFL1HDC024[x]/[y] 115V ac SONFL1HAC115[x]/[y] 230V ac SONFL1HAC230[x]/[y] [x] = Housing colour: G: Grey, R: Red, W: White A: Amber, B: Blue, W: Clear (White) [y] = Lens colour:

G: Green, R: Red

Features:

• Available with custom tone configurations and frequencies.

Approvals:



• High output L.E.D array

- Automatic synchronisation on multi-sounder system.
- Continuously rated.
- Stainless steel fixings.
- Mounting via internal BESA compatible fixing
- positions or via external mounting lugs.
- Duplicate cable terminations
- (in & out for daisy-chain installations).
- Tropicalisation available on request.

• SONF1 sounder is VdS approved to EN54-3 (CPD 89/106/EEC).

• UKOOA/PFEER compliant alarm tones.

• GOST-R approved. Cert: POCC GB-JB05-H00144



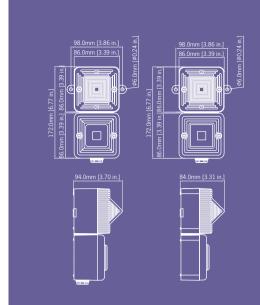




SONFL1X-HO Alarm Sounder & Xenon Beacon

The SONFL1X-HO features the 105dB(A) SONF1-HO alarm sounder combined with the L101X Xenon beacon. The compact, robust housing is ideal for all general signalling applications including fire, security and process control.

The 5 Joule Xenon strobe generates over 200 candela of light output. DC versions have multile flash rates selectable udring installation. Sounder & beacon may be connected from a single supply for simultaneous operation or from separate supplies for independent operation.



Tone table:

| Stage 1 | Frequency Description. | Stage 2 |
|---------|--|---------|
| Tone 1 | 800/1000Hz @ 0.25 sec Alternating | Tone 8 |
| Tone 2 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 1 |
| Tone 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 8 |
| Tone 4 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 9 |
| Tone 5 | Bell | Tone 1 |
| Tone 6 | 800/1000Hz @ 7Hz Sweeping | Tone 8 |
| Tone 7 | 500-1200Hz 3.75sec / 0.25sec. Australian Evac. | Tone 10 |
| Tone 8 | 1000Hz Continuous - PFEER Toxic Gas | |
| Tone 9 | Continuous 554Hz | |
| Tone 10 | 420Hz @ 0.625 sec Australian Alert | |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Specification:

| Sounder: | |
|---------------------|--|
| Maximum output: | 105dB(A) @ 1 metre |
| Nominal output: | 103dB(A) @ 1m +/- 3dB - Tone 1 |
| No. of tones: | 10 (UKOOA / PFEER compliant) |
| No. of stages: | 2 |
| Effective range: | 32m @ 1KHz |
| Beacon: | |
| Energy: | 5 Joules (5Ws) |
| Flash rate: | 1Hz (60 fpm) |
| Peak Candela: | 500,000 cd - calc. from energy (J) |
| Effective candela: | 250 cd - calc. from energy (J) |
| Peak Candela: | 86,935 cd* - measured ref. to I.E.S. |
| Effective candela: | 200 cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Clear, Green, Magenta, Red & Yellow |
| Tube life: | Emissions are reduced to 70% after 8 million flashes |
| General: | |
| Voltages DC: | 12Vdc; 24V dc |
| Ingress protection: | IP66 |
| Housing material: | High impact UL94 V0 & 5VA FR ABS |
| Colour: | Red (RAL3000), grey (RAL7038) & white. |
| Lens material: | PC |
| Cable entries: | 4 x M20 clearance gland knockouts in side & back |
| Terminals: | 0.5 to 1.5mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | 0.50kg |
| | |

| Part codes: | |
|-----------------------|------------------------------|
| Version: | Part code: |
| 12V dc | SONFL1XDC012[x]/[y]-H |
| 24V dc | SONFL1XDC024[x]/[y]-H |
| [x] = Housing colour: | G: Grey, R: Red, W: White |
| [y] = Lens colour: | A: Amber, B: Blue. C: Clear, |

Alarm sounder:

Xenon Beacon:

Version:

12V dc

24V dc

Version:

12V dc

24V dc

)C024[x]/[y]-H Red, W: White A: Amber, B: Blue. C: Clear, G: Green M: Magenta, R: Red, Y: Yellow

Voltage:

10-18V dc

18-30V dc

Voltage:

Current :

Current :

50mA

80mA

- (in & out for daisy-chain installations).
- Tropicalisation available on request.
- Available with custom tone configurations and frequencies.

Approvals:

Features:

- SONF1-HO alarm sounder is VdS approved to EN54-3 (CPD 89/106/EEC).
- L101X xenon beacon is VdS approved to EN54-23:2010 (CPD 89/106/EEC).

*SPL data +/-3dB(A). Measured at optimum voltage.

*Candela measurements representative of performance with clear lens at optimum voltage.

10-14V dc 500mA 20-28V dc 250mA

- UKOOA/PFEER compliant alarm tones.
 - GOST-R approved. Cert: POCC GB-JB05-H00144



- Automatic synchronisation on multi-sounder system.
- High output Xenon beacon
- DC voltage units feature multiple flash rates.
- Continuously rated.
- Stainless steel fixings.
- Mounting via internal BESA compatible fixing
- positions or via external mounting lugs.
- Duplicate cable terminations

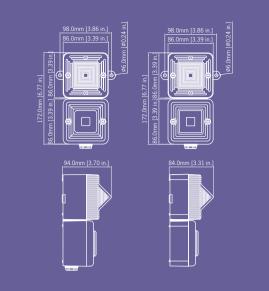




SONFL1H-HO Alarm Sounder & L.E.D. Beacon

The SONFL1H-HO features the 105dB(A) SONF1-HO alarm sounder combined with the L101H high output L.E.D. beacon. The compact, robust housing is ideal for all general signalling applications including fire, security and process control.

The array of 24 Superflux type high output L.E.D's generates over 120 candela of light output and can be user set to either steady of flashing mode. Sounder & beacon may be connected from a single supply for simultaneous operation or from separate supplies for independent operation.



Tone table:

| Stage 1 | Frequency Description. | Stage 2 |
|---------|--|---------|
| Tone 1 | 800/1000Hz @ 0.25 sec Alternating | Tone 8 |
| Tone 2 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 1 |
| Tone 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 8 |
| Tone 4 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 9 |
| Tone 5 | Bell | Tone 1 |
| Tone 6 | 800/1000Hz @ 7Hz Sweeping | Tone 8 |
| Tone 7 | 500-1200Hz 3.75sec / 0.25sec. Australian Evac. | Tone 10 |
| Tone 8 | 1000Hz Continuous - PFEER Toxic Gas | |
| Tone 9 | Continuous 554Hz | |
| Tone 10 | 420Hz @ 0.625 sec Australian Alert | |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Specification:

| Sounder: | |
|---------------------|--|
| Maximum output: | 105dB(A) @ 1 metre |
| Nominal output: | 103dB(A) @ 1m +/- 3dB - Tone 1 |
| No. of tones: | 10 (UKOOA / PFEER compliant) |
| No. of stages: | 2 |
| Effective range: | 32m @ 1KHz |
| Beacon: | |
| Light source: | High intensity L.E.D. array. |
| | 24 x Superflux type high ouput L.E.D's |
| Options: | Steady or 2Hz flash mode (on board selection) |
| Effective candela: | 176 cd (Green L.E.D.) |
| Terminals: | 0.5 to 4.0mm ² cables |
| L.E.D. colours: | Amber Blue, Green, Red and White |
| Lens colour: | All L.E.D. colours use a Clear lens to maximise output and to ensure the signal is most effective in high ambient light. |
| General: | |
| Voltages DC: | 12Vdc; 24V dc |
| Ingress protection: | IP66 |
| Housing material: | High impact UL94 V0 & 5VA FR ABS |
| Colour: | Red (RAL3000), grey (RAL7038) & white. |
| Lens material: | PC |
| Cable entries: | 4 x M20 clearance gland knockouts in side & back |
| Terminals: | 0.5 to 1.5mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | 0.50kg |

*SPL data +/-3dB(A). Measured at optimum voltage.

*Candela measurements representative of performance with clear lens at optimum voltage.

Part codes:

| Version: | Part code: |
|-----------------------|---|
| 12V dc | SONFL1HDC012[x]/[y]-H |
| 24V dc | SONFL1HDC024[x]/[y]-H |
| [x] = Housing colour: | G: Grey, R: Red, W: White |
| [y] = L.E.D. colour: | A: Amber, B: Blue, W: Clear (White) G: Green, R: Red |

Alarm sounder:

| / | indor. | | |
|------------|-----------|------------|-----------|
| Version: | | Voltage: | Current : |
| 12V dc | | 10-18V dc | 50mA |
| 24V dc | | 18-30V dc | 80mA |
| L.E.D. bea | acon: | | |
| Version: | Voltage: | Current: | |
| 24V dc | 10-30V dc | 155mA (@ 2 | 4V dc) |
| | | | |

Features:

- Mounting via internal BESA compatible fixing
- Duplicate cable terminations
- (in & out for daisy-chain installations).
- Tropicalisation available on request.
- Available with custom tone configurations and frequencies.

Approvals:

- UKOOA/PFEER compliant alarm tones.



• High output L.E.D array

- Automatic synchronisation on multi-sounder system.
- Continuously rated.
- Stainless steel fixings.
- positions or via external mounting lugs.

SONF1-HO sounder is VdS approved to EN54-3 (CPD 89/106/EEC).

GOST-R approved. Cert: POCC GB-JB05-H00144





AL100X Alarm Sounder & Xenon Beacon

The AL100X eatures the 104dB(A) A100 alarm sounder combined with the L101X Xenon beacon. The compact, robust housing is ideal for all general signalling applications including fire, security and process control.

The 5 Joule Xenon strobe generates over 200 candela of light output. DC versions have multile flash rates selectable udring installation. Sounder & beacon may be connected from a single supply for simultaneous operation or from separate supplies for independent operation.

Tone table:

| Stage 1 | Frequency Description. | (Stage 2) | (Stage 3) |
|---------|---|-----------|-----------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Specification:

| Specificatio | UII. |
|-----------------|---|
| Sounder: | |
| Maximum out | put: 104dB(A) @ 1 metre |
| Nominal outpu | ut: 100dB(A) @ 1m +/- 3dB - Tone 2 |
| No. of tones: | 32 (UKOOA / PFEER compliant) |
| No. of stages: | 3 |
| Volume contro | ol: Max. 100dB(A); Min. 90dB(A) - Tone 2 |
| Effective range | e: 32m @ 1KHz |
| Stage switchin | ng: Negative |
| | Reverse polarity stage switching on DC units. |
| Beacon: | |
| Energy: | 5 Joules (5Ws) |
| Flash rate: | 1Hz (60 fpm) |
| Peak Candela: | : 500,000 cd - calc. from energy (J) |
| Effective cand | lela: 250 cd - calc. from energy (J) |
| Peak Candela: | : 86,935 cd* - measured ref. to I.E.S. |
| Effective cand | ela: 200 cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Clear, Green, Magenta, Red & Yellow |
| Tube life: | Emissions are reduced to 70% after 8 million flashes |
| General: | |
| Voltages DC: | 24V dc (10-30V dc); 48V dc (35-60V dc) |
| [DC units can | use 24V ac for single stage applications.] |
| Voltages AC: | 24V ac; 115V ac; 230V ac |
| Ingress protec | tion: IP66 |
| Housing mate | rial: High impact UL94 V0 & 5VA FR ABS |
| Colour: | Red (RAL3000), grey (RAL7038) & white. |
| Cable entries: | 4 x M20 clearance gland entries in side & back |
| Terminals: | 0.5 to 1.5mm ² cables. |
| Operating tem | p: -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humic | dity: 90% at 20°C. |
| Weight : | DC: 0.46kg AC:0.57kg |
| | |

*Candela measurements representative of performance with clear lens at optimum voltage. *SPL data +/-3dB(A). Measured at optimum voltage.

| 1720mm [6/7 h] 66.0mm [3.39 n] (6.07 h] 1998 [muto 99] 1998 [muto 99] 1998 [muto 99] 1998 [muto 99] 1998 [muto 90] 1998 [muto 90] | 122 0mm [339 ir] (100 mm [139 ir]) (100 mm [139 ir] (100 mm [139 ir]) (100 mm [139 ir]) (1 |
|--|--|
| 94.0mm [3.70 in] | 84.0mm (3.31 in.) |

Part codes:

| Version: | Part code: |
|-----------------------|---|
| 24V dc | AL100XDC024[x]/[y] |
| 48V dc | AL100XDC048[x]/[y] |
| 24V ac | AL100XAC024[x]/[y] |
| 115V ac | AL100XAC115[x]/[y] |
| 230V ac | AL100XAC230[x]/[y] |
| [x] = Housing colour: | G: Grey, R: Red, W: White |
| [y] = Lens colour: | A: Amber, B: Blue. C: Clear, G: Green M: Magenta R: Red, Y: Yellow |

Suffix part number with '-UL' for UL approved version.

Alarm sounder:

| Version: | | Voltage: | Current: |
|----------|---------|-----------|----------|
| 24V dc | | 10-30V dc | 25mA* |
| 48V dc | | 35-60V dc | 50mA* |
| 24V ac | 50/60Hz | +/-10% | 40mA |
| 115V ac | 50/60Hz | +/-10% | 20mA |
| 230V ac | 50/60Hz | +/-10% | 15mA |

* current at nominal voltage on Tone 2

Xenon beacon:

| Version: | | Voltage: | Current: |
|----------|---------|-----------|----------|
| 12V dc | | 10-14V dc | 500mA |
| 24V dc | | 20-28V dc | 250mA |
| 48V dc | | 42-54V dc | 175mA |
| 24V ac | 50/60Hz | +/-10% | 300mA |
| 115V ac | 50/60Hz | +/-10% | 70mA |
| 230V ac | 50/60Hz | +/-10% | 35mA |

Approvals:

- GOST-R approved. Cert: POCC GB-JB05-H00144



- Automatic synchronisation on multi-sounder system.
- High output Xenon beacon
- DC voltage units feature multiple flash rates.
- Continuously rated.
- Stainless steel fixings.

Features:

- Unit can be mounted using external lugs or internal
- BESA compatible fixing positions.
- Duplicate cable terminations
- (in & out for daisy-chain installations).
- Tropicalisation available on request.
- Available with custom tone configurations
- and frequencies.
- 'Programmable' version available:
- 45 alarm tones
- 4 remotely selectable stages
- Any tone can be assigned to any stage
- User configurable continuous frequency tone

• Alarm sounder (A100) VdS approved to EN54-3 (CPD 89/106/EEC).

- Xenon beacon (L101X) VdS approved to EN54-23:2010
 - (CPD 89/106/EEC).
 - UKOOA/PFEER compliant alarm tones.
 - UL approved version available.



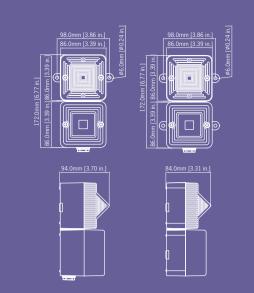




AL100H Alarm Sounder & L.E.D. Beacon

The AL100H eatures the 104dB(A) A100 alarm sounder combined with the L101H high output L.E.D. beacon. The compact, robust housing is ideal for all general signalling applications including fire, security and process control.

The array of 24 Superflux type high output L.E.D's generates over 120 candela of light output and can be user set to either steady of flashing mode. Sounder & beacon may be connected from a single supply for simultaneous operation or from separate supplies for independent operation.



Tone table:

| Stage 1 | Frequency Description. | (Stage 2) | (Stage 3) |
|---------|---|-----------|-----------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Specification:

| opcomoution. | |
|---------------------|--|
| Sounder: | |
| Maximum output: | 104dB(A) @ 1 metre |
| Nominal output: | 100dB(A) @ 1m +/- 3dB - Tone 2 |
| No. of tones: | 32 (UKOOA / PFEER compliant) |
| No. of stages: | 3 |
| Volume control: | Max. 100dB(A); Min. 90dB(A) - Tone 2 |
| Effective range: | 32m @ 1KHz |
| Stage switching: | Negative Reverse polarity stage switching on DC units. |
| Beacon: | |
| Light source: | High intensity L.E.D. array. 24 x Superflux type high ouput L.E.D's |
| Options: | Steady or 2Hz flash mode (on board selection) |
| Effective candela: | 176 cd (Green L.E.D.) |
| Terminals: | 0.5 to 4.0mm ² cables |
| L.E.D. colours: | Amber Blue, Green, Red and White |
| Lens colour: | All L.E.D. colours use a Clear lens to maximise output and to ensure the signal is most effective in high ambient light. |
| General: | |
| Voltages DC: | 24V dc (10-30V dc); 48V dc (35-60V dc) |
| Voltages AC: | 115V ac; 230V ac |
| Ingress protection: | IP66 |
| Housing material: | High impact UL94 V0 & 5VA FR ABS |
| Colour: | Red (RAL3000), grey (RAL7038) & white. |
| Cable entries: | 4 x M20 clearance gland entries in side & back |
| Terminals: | 0.5 to 1.5mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | DC: 0.46kg AC:0.57kg |

*Candela measurements representative of performance with clear lens at optimum voltage. *SPL data +/-3dB(A). Measured at optimum voltage.

| Part codes: | |
|-----------------------|-----------------------------|
| Version: | Part code: |
| 24V dc | AL100HDC024[x]/[y] |
| 48V dc | AL100HDC048[x]/[y] |
| 115V ac | AL100HAC115[x]/[y] |
| 230V ac | AL100HAC230[x]/[y] |
| [x] = Housing colour: | G: Grey, R: Red, W: White |
| [y] = Lens colour: | A: Amber, B: Blue. W: White |

Note: To maximise output in high ambient light environments the AL100H uses clear lenses for all L.E.D colours.

(Clear), G: Green, R: Red,

Suffix part number with '-P' for programmable, 4 stage, 45 tone version. Suffix part number with '-UL' for UL approved version.

Alarm sounder:

| Version: | | Voltage: | Current: |
|----------|---------|-----------|----------|
| 24V dc | | 10-30V dc | 25mA* |
| 115V ac | 50/60Hz | +/-10% | 20mA |
| 230V ac | 50/60Hz | +/-10% | 15mA |

• GOST-R approved. Cert: POCC GB-JB05-H00144

L.E.D. beacon:

| Version: | Voltage: | Current: |
|------------------------|------------------|------------------|
| 24V dc | 10-30V dc | 155mA (@ 24V dc) |
| 115/230V ac 50/60Hz | 90-260V ac/dc | 35mA (@230V ac) |

Features:

- Duplicate cable terminations
- (in & out for daisy-chain installations).
- Available with custom tone configurations
- and frequencies.
- 'Programmable' version available:
- 45 alarm tones
- 4 remotely selectable stages
- Any tone can be assigned to any stage
- User configurable continuous frequency tone

Approvals:



- High output L.E.D array
- Automatic synchronisation on multi-sounder system.
- Continuously rated.
- Stainless steel fixings.
- Unit can be mounted using external lugs or internal
- BESA compatible fixing positions.
- Tropicalisation available on request.

• UKOOA/PFEER compliant alarm tones.





AL100SONTELFLASH

Telephone Initiated Alarm Sounder & Xenon Beacon

The AL100SONTELFLASH is a compact, high output, 100dB(A) telephone initiated alarm sounder and 5 Joule Xenon beacon.



Tone 3

Specification:

| Sounder: | |
|---------------------|--|
| Nominal output: | 100dB(A) @ 1m +/- 3dB |
| No. of tones: | 3 |
| Volume control: | Max. 100dB(A); Min. 90dB(A) |
| Effective range: | 32m @ 1KHz |
| Beacon: | |
| Energy: | 5 Joules (5Ws) |
| Flash rate: | 1Hz (60 fpm) |
| Peak Candela: | 500,000 cd - calc. from energy (J) |
| Effective candela: | 250 cd - calc. from energy (J) |
| Peak Candela: | 86,935 cd* - measured ref. to I.E.S. |
| Effective candela: | 200 cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Clear, Green, Opal, Red & Yellow |
| Tube life: | Emissions are reduced to 70% after 8 million flashes |
| General: | |
| Sounder Supply: | Direct power from telephone line (REN 1) |
| Beacon Supply: | 230V ac (telephone initiated) |
| Ingress protection: | IP66 |
| Housing material: | High impact UL94 V0 & 5VA FR ABS |
| Colour: | Red (RAL3000), grey (RAL7038) & white. |
| Cable entries: | 3 x M20 clearance gland knockouts in side & back |
| Terminals: | 0.5 to 2.5mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | 0.46kg |
| | |

| Part codes: | | Feature |
|-------------------------|---|-----------------|
| Part code: | | • Con |
| AL100SONTELFLASH[x]/[y] | | • Stair |
| [x] = Housing colour: | G: Grey R: Red W: White | • Unit |
| [y] = Lens colour: | A: Amber B: Blue C: Clear G: Green, M: Magenta, R: Red, Y: Yellow | BES. • Trop |
| Tones: | | Approv • GOS |
| Tone 1 | Siren Tone | |
| Tone 2 | Alternating tone | |
| | | |

Sweeping tone

res:

vals:

*Candela measurements representative of performance with clear lens at optimum voltage. *SPL data +/-3dB(A). Measured at optimum voltage



ntinuously rated.

inless steel fixings.

t can be mounted using external lugs or internal

SA compatible fixing positions.

picalisation available on request.

OST-R approved. Cert: POCC GB-JB05-H00144



AL105NX Alarm Sounder & Beacon

The AL105NX features the 112dB(A) A105N alarm sounder combined with the L101X Xenon beacon. The compact, robust housing is ideal for all general signalling applications including fire, security and process control.

The 5 Joule Xenon strobe generates over 200 candela of light output. DC versions have multile flash rates selectable udring installation. Sounder & beacon may be connected from a single supply for simultaneous operation or from separate supplies for independent operation.

Tone table:

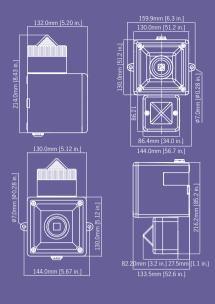
| Stage 1 | Frequency Description. | (Stage 2) | (Stage 3) |
|---------|---|-----------|-----------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Specification:

| opcomeation. | |
|---------------------|---|
| Sounder: | |
| Maximum output: | 112dB(A) @ 1 metre |
| Nominal output: | 105dB(A) @ 1m +/- 3dB - Tone 2 |
| No. of tones: | 32 (UKOOA / PFEER compliant) |
| No. of stages: | 3 |
| Volume control: | Max. 105dB(A); Min. 96dB(A) - Tone 2 |
| Effective range: | 60m @ 1KHz |
| Stage switching: | Negative Reverse polarity stage switching on DC units. |
| Beacon: | |
| Energy: | 5 Joules (5Ws) |
| Flash rate: | 1Hz (60 fpm) |
| Peak Candela: | 500,000 cd - calc. from energy (J) |
| Effective candela: | 250 cd - calc. from energy (J) |
| Peak Candela: | 86,935 cd* - measured ref. to I.E.S. |
| Effective candela: | 200 cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Clear, Green, Magenta, Red & Yellow |
| Tube life: | Emissions are reduced to 70% after 8 million flashes |
| General: | |
| Voltages DC: | 24V dc (10-30V dc); 48V dc (35-60V dc) |
| [DC units can use 2 | 4V ac for single stage applications.] |
| Voltages AC: | 24V ac; 115V ac; 230V ac |
| Ingress protection: | IP66 |
| Housing material: | High impact UL94 V0 & 5VA FR ABS |
| Colour: | Red (RAL3000), grey (RAL7038) & white. |
| Cable entries: | 2 x M20 clearance gland entries in side & back |
| Terminals: | 0.5 to 1.5mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | DC: 0.95kg AC:1.20kg |
| | |

*Candela measurements representative of performance with clear lens at optimum voltage. *SPL data +/-3dB(A). Measured at optimum voltage.



Part codes:

| Version: | Part code: |
|-----------------------|--|
| 24V dc | AL105NXDC024[x]/[y] |
| 48V dc | AL105NXDC048[x]/[y] |
| 24V ac | AL105NXAC024[x]/[y] |
| 115V ac | AL105NXAC115[x]/[y] |
| 230V ac | AL105NXAC230[x]/[y] |
| [x] = Housing colour: | G: Grey, R: Red, W: White |
| [y] = Lens colour: | A: Amber, B: Blue, C: Clear, G: Green, M: Magenta, R: Red, Y: Yellow |

Suffix part number with '-P' for programmable, 4 stage, 45 tone version. Suffix part number with '-F' for forward facing Xenon beacon. Suffix part number with '-UL' for UL approved version.

Alarm sounder:

| Version: | | Voltage: | Current : |
|----------|---------|-----------|-----------|
| 24V dc | | 10-30V dc | 25mA* |
| 48V dc | | 35-60V dc | 50mA* |
| 24V ac | 50/60Hz | +/-10% | 40mA |
| 115V ac | 50/60Hz | +/-10% | 20mA |
| 230V ac | 50/60Hz | +/-10% | 15mA |

Xenon beacon:

| Version: | | Voltage: | Current : | Approvals: |
|----------|---------|-----------|-----------|------------------------------|
| 12V dc | | 10-14V dc | 500mA | A105N al |
| 24V dc | | 20-28V dc | 250mA | - (CPD 89/ |
| 48V dc | | 42-54V dc | 175mA | Xenon be |
| 24V ac | 50/60Hz | +/-10% | 300mA | - (CPD 89/ |
| 115V ac | 50/60Hz | +/-10% | 70mA | • UKOOA/F |
| 230V ac | 50/60Hz | +/-10% | 35mA | • UL appro |
| | | | | |





- Automatic synchronisation on multi-sounder system.
- High output Xenon beacon
- DC voltage units feature multiple flash rates.
- Continuously rated.

Features:

- Stainless steel fixings.
- Unit can be mounted using external lugs or internal
- BESA compatible fixing positions.
- Duplicate cable terminations
- (in & out for daisy-chain installations).
- Tropicalisation available on request.
- Available with custom tone configurations
- and frequencies.
- 'Programmable' version available:
- 45 alarm tones
- 4 remotely selectable stages
- Any tone can be assigned to any stage
- User configurable continuous frequency tone

5N alarm sounderis VdS approved to EN54-3 D 89/106/EEC).

- on beacon (L101X) VdS approved to EN54-23:2010 D 89/106/EEC).
- DOA/PFEER compliant alarm tones.
- approved version available.
- GOST-R approved. Cert: POCC GB-JB05-H00144







AL105NH Alarm Sounder & L.E.D. Beacon

The AL105NH features the 112dB(A) A105N alarm sounder combined with the L101H high output L.E.D. beacon.

The array of 24 Superflux type high output L.E.D's generates over 120 candela of light output and can be user set to either steady of flashing mode. Sounder & beacon may be connected from a single supply for simultaneous operation or from separate supplies for independent operation. The robust, fire retardant IP66 housing ensures the AL105NH is suitable for all general signalling applications.

Tone table:

| Stage 1 | Frequency Description. | (Stage 2) | (Stage 3) |
|---------|---|-----------|-----------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Specification:

| Specification: | |
|---------------------|---|
| Sounder: | |
| Maximum output: | 112dB(A) @ 1 metre |
| Nominal output: | 105dB(A) @ 1m +/- 3dB - Tone 2* |
| No. of tones: | 32 (UKOOA / PFEER compliant) |
| No. of stages: | 3 |
| Volume control: | Max. 105dB(A); Min. 96dB(A) - Tone 2 |
| Effective range: | 60m @ 1KHz |
| Stage switching: | Negative Reverse polarity stage switching on DC units. |
| Beacon: | |
| Light source: | High intensity L.E.D. array. 24 x Superflux type high ouput L.E.D's |
| Options: | Steady or 2Hz flash mode (on board selection) |
| Effective candela: | 176 cd (Green L.E.D.) |
| Terminals: | 0.5 to 4.0mm ² cables |
| L.E.D. colours: | Amber Blue, Green, Red and White |
| Lens colour: | All L.E.D. colours use a Clear lens to maximise output and to ensure the signal is most effective in high ambient light |
| General: | |
| Voltages DC: | 24V dc (10-30V dc) |
| Voltages AC: | 115V ac; 230V ac |
| Ingress protection: | IP66 |
| Housing material: | High impact UL94 V0 & 5VA FR ABS |
| Colour: | Red (RAL3000), grey (RAL7038) & white. |
| Cable entries: | 2 x M20 clearance gland entries in side & back |
| Terminals: | 0.5 to 1.5mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | DC: 0.95kg AC:1.20kg |

*Candela measurements representative of performance with clear lens at optimum voltage. *SPL data +/-3dB(A). Measured at optimum voltage.

| 159.9mm [6.3 in.] 130.0mm [51.2 in] 130.0mm [51.2 in] 130.0mm [51.2 in] 130.0mm [51.2 in] 140.0mm [54.0 in] | ø7.0mm [ø0.28 in.] |
|--|-----------------------|
| 82.20mm [3.2 m] 27.5mm 133.5mm [52.6 in.] | [] 216.2mm [85.2 in.] |

| /ersion: | Part code: |
|----------------------|--|
| 24V dc | AL105NHDC024[x]/[y] |
| 15V ac | AL105NAHC115[x]/[y] |
| 230V ac | AL105NHAC230[x]/[y] |
| x] = Housing colour: | G: Grey, R: Red, W: White |
| y] = L.E.D colour: | A: Amber, B: Blue. W: Clear (White) G: Green, R: Red, |

uses clear lenses for all L.E.D colours.

Suffix part number with '-P' for programmable, 4 stage, 45 tone version. Suffix part number with '-UL' for UL approved version.

Alarm sounder:

| Version: | | Voltage: | Current : |
|----------|---------|-----------|-----------|
| 24V dc | | 10-30V dc | 25mA* |
| 115V ac | 50/60Hz | +/-10% | 20mA |
| 230V ac | 50/60Hz | +/-10% | 15mA |

L.E.D. beacon: Version: Voltage: Current: 24V dc 10-30V dc 155mA (@ 24V dc) 115/230V ac 90-260V 35mA (@230V ac) 50/60Hz ac/dc

tures:

- Stainless steel fixings.
- Jnit can be mounted using external lugs or internal
- Duplicate cable terminations

- Available with custom tone configurations
- and frequencies.
- 'Programmable' version available:
- 45 alarm tones
- 4 remotely selectable stages

Approvals:

- UKOOA/PFEER compliant alarm tones.
- UL approved version available.
- GOST-R approved. Cert: POCC GB-JB05-B02228





- High output L.E.D array
- Automatic synchronisation on multi-sounder system.
- Continuously rated.
- BESA compatible fixing positions.
- in & out for daisy-chain installations).
- Tropicalisation available on request.
- Any tone can be assigned to any stage
- User configurable continuous frequency tone

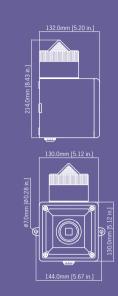




AL105NSONTELFLASH

Telephone Initiated Alarm Sounder & Xenon Beacon

The AL105NSONTELFLASH is a compact, high output, 105dB(A) telephone initiated alarm sounder and 5 Joule Xenon beacon.



Specification:

| Sounder: | |
|---------------------|--|
| Nominal output: | 105dB(A) @ 1m +/- 3dB |
| No. of tones: | 3 |
| Volume control: | Max. 105dB(A); Min. 90dB(A) |
| Effective range: | 60m @ 1KHz |
| Beacon: | |
| Energy: | 5 Joules (5Ws) |
| Flash rate: | 1Hz (60 fpm) |
| Peak Candela: | 500,000 cd - calc. from energy (J) |
| Effective candela: | 250 cd - calc. from energy (J) |
| Peak Candela: | 86,935 cd* - measured ref. to I.E.S. |
| Effective candela: | 200 cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Clear, Green, Opal, Red & Yellow |
| Tube life: | Emissions are reduced to 70% after 8 million flashes |
| General: | |
| Sounder Supply: | Direct power from telephone line (REN 1) |
| Beacon Supply: | 230V ac (telephone initiated) |
| Ingress protection: | IP56 |
| Housing material: | High impact UL94 V0 & 5VA FR ABS |
| Colour: | Red (RAL3000), grey (RAL7038) & white. |
| Cable entries: | 2 x M20 clearance gland knockouts in side & back |
| Terminals: | 0.5 to 2.5mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | 0.95kg |
| +0 | |

*Candela measurements representative of performance with clear lens at optimum voltage.

| Part codes: | | Features |
|-----------------------|---------------------------|-----------------------------|
| Part code: | | Contin |
| AL105NSONTELFLASH[x] | /[y] | • Stainle |
| [x] = Housing colour: | G: Grey R: Red W: White | • Unit ca |
| [y] = Lens colour: | A: Amber B: Blue C: Clear | BESA |
| | G: Green, M: Magenta, | Tropica |
| | R: Red, Y: Yellow | nopiot |
| | | Approval |

| Tones: | |
|--------|------------------|
| Tone 1 | Siren Tone |
| Tone 2 | Alternating tone |
| Tone 3 | Sweeping tone |

es:

als: Арр



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inuously rated.

less steel fixings.

can be mounted using external lugs or internal

A compatible fixing positions.

calisation available on request.

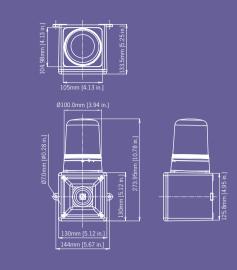
• GOST-R approved. Cert: POCC GB-JB05-H00144



AB105RTH Alarm Sounder & Rotating Beacon

The AB105RTH combines a compact high output 112dB(A) alarm sounder with a powerful 25W halogen rotating beacon.

The beacon and sounder can be operated from the same power source or controlled individually.



Tone table:

| Stage 1 | Frequency Description. | (Stage 2) | (Stage 3) |
|---------|---|-----------|-----------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Specification:

| Maximum output: | 112dB(A) @ 1 metre |
|---------------------|---|
| Nominal output: | 105dB(A) @ 1m +/- 3dB - Tone 2 |
| No. of tones: | 32 (UKOOA / PFEER compliant) |
| No. of stages: | 3 |
| Volume control: | Max. 105dB(A); Min. 96dB(A) - Tone 2 |
| Effective range: | 60m @ 1KHz |
| Stage switching: | Negative Reverse polarity stage switching on DC units. |
| Beacon: | |
| Light source: | Halogen Bulb G6,35 / GY6,35. |
| Light output: | max 25W |
| Rotation: | 180 RPM (+/-30RPM). |
| Peak Candela: | 821 cd |
| Candela: | 125 cd* (effective intensity) |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow |
| Drive life: | > 5,000 hrs |
| General: | |
| Voltages DC: | 12V dc; 24V dc |
| Voltages AC: | 115V ac; 230V ac |
| Ingress protection: | IP65 |
| Housing material: | High impact UL94 V0 & 5VA FR ABS |
| Lens material: | UV stable PC UL94 V0 FR Bayonet lens fixing , Anti-tamper locking screw. |
| Colour: | Red (RAL3000) and grey (RAL7038) |
| Cable entries: | 2 x M20 clearance gland entries in side & back |
| Terminals: | 0.5 to 1.5mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | DC: 1.00kg AC:1.25kg |

*Candela measurements representative of performance with clear lens at optimum voltage. *SPL data +/-3dB(A). Measured at optimum voltage.

| Version: | Part code: | | Wattage: |
|-----------------|----------------------------|------------------|----------------------------------|
| 12V dc | AB105RTHDC12 | [x]/[y] | 20W |
| 24V dc | AB105RTHDC24 | [x]/[y] | 20W |
| 115V ac | AB105RTHAC11 | 5[x]/[y] | 25W |
| 230V ac | AB105RTHAC23 | 0[x]/[y] | 25W |
| [x] = Housin | g colour: (| G: Grey R: | Red |
| [y] = Lens c | | | : Blue C: Clear Red Y: Yellow |
| Suffix part num | per with '-P' for programm | able, 4 stage, 4 | 45 tone version. |

| Version: | | Voltage: | Current |
|-----------|---------|-----------|---------|
| 12/24V dc | | 10-30V dc | 25mA* |
| 115V ac | 50/60Hz | +/-10% | 20mA |
| 230V ac | 50/60Hz | +/-10% | 15mA |

| Rotating beacon: | | | | |
|------------------|---------|----------|------------|--|
| Version: | | Wattage: | Current m: | |
| 12V dc | | 20W | 1.72A | |
| 24V dc | | 20W | 910mA | |
| 115V ac | 50/60Hz | 25W | 216mA | |
| 230V ac | 50/60Hz | 25W | 117mA | |

atures:

- multi-sounder system.

- (in & out for daisy-chain installations).
- Available with custom tone configurations
- and frequencies.
- 'Programmable' version available:
- 45 alarm tones
- Any tone can be assigned to any stage
- **Approvals:**





- Automatic synchronisation on
- Continuously rated.
- Stainless steel fixings.
- Unit can be mounted using external lugs
- or internal BESA compatible fixing positions.
- Duplicate cable terminations
- Tropicalisation available on request.
- 4 remotely selectable stages
- User configurable continuous frequency tone





AB105STR Alarm Sounder & Xenon Strobe

The AB105STR combines a compact high output 112dB(A) alarm sounder with a powerful 5J Xenon strobe warning beacon.

The beacon and sounder can be operated from the same power source or controlled individually.

Tone table:

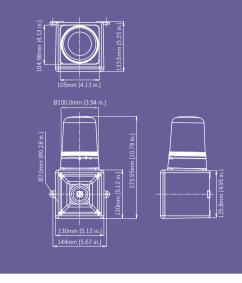
| Stage 1 | Frequency Description. | (Stage 2) | (Stage 3) |
|---------|---|-----------|-----------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Specification:

| | Sounder: | |
|--|----------------------------------|---|
| | Maximum output: | 112dB(A) @ 1 metre |
| | Nominal output: | 105dB(A) @ 1m +/- 3dB - Tone 2 |
| | No. of tones: | 32 (UKOOA / PFEER compliant) |
| | No. of stages: | 3 |
| | Volume control: | Max. 105dB(A); Min. 96dB(A) - Tone 2 |
| | Effective range: | 60m @ 1KHz |
| | Stage switching: | Negative Reverse polarity stage switching on DC units. |
| | Beacon: | |
| | Energy: | 5 Joules (5Ws) |
| | Flash rate: | 1Hz (60 fpm) |
| | Peak Candela: | 500,000 cd - calc. from energy (J) |
| | Effective candela: | 250 cd - calc. from energy (J) |
| | Peak Candela: | 49,788 cd* - measured ref. to I.E.S. |
| | Effective candela: | 125 cd* - measured ref. to I.E.S. |
| | Lens colours: | Amber, Blue, Clear, Green, Red & Yellow |
| | Tube life: | Emissions are reduced to 70% after 8 million flashe |
| | General: | |
| | Voltages DC: | 24V dc (10-30V dc); 48V dc (35-60V dc) |
| | Voltages AC: | 24V ac; 115V ac; 230V ac |
| | Ingress protection: | IP65 |
| | Housing material: | High impact UL94 VO & 5VA FR ABS |
| | Lens material: | UV stable PC UL94 V0 FR Bayonet lens fixing , Anti-tamper locking screw. |
| | Colour: | Red (RAL3000) and grey (RAL7038) |
| | Cable entries: | 2 x M20 clearance gland entries in side & back |
| | Terminals: | 0.5 to 1.5mm ² cables. |
| | | |
| | Operating temp: | -25 to +55°C |
| | Operating temp: Storage temp: | -25 to +55°C -40 to +70°C |
| | | |

*Candela measurements representative of performance with clear lens at optimum voltage. *SPL data +/-3dB(A). Measured at optimum voltage.



| Version: | | | Part code: | |
|---|--------------------------|--|--|--|
| 12V dc | | AB105STRD0 | C12[x]/[y] | |
| 24V dc | | AB105STRD0 | C24[x]/[y] | |
| 48V dc | | AB105STRD0 | C48[x]/[y] | |
| 24V ac | | AB105STRAC | C24[x]/[y] | |
| 115V ac | | AB105STRAC | C115[x]/[y] | |
| 230V ac | | AB105STRAC | 230[x]/[y] | |
| [x] = Housin | ig colour: | G: Grey R: R | ed | |
| [y] = Lens colour: | | A: Amber B: G: Green M: | Blue C: Clear Magenta | |
| | ber with '-P' for progr. | R: Red Y: Ye | | |
| Alarm sou | | | | |
| Alarm sou Version: | | ammable, 4 stage, 45 | 5 tone version. | |
| Alarm sou Version: 12V dc | | ammable, 4 stage, 45 Voltage: | 5 tone version. | |
| Alarm sou Version: 12V dc 24V dc | | woltage: | 5 tone version. Current: 25mA* | |
| Alarm sou Version: 12V dc 24V dc 48V dc | | Voltage: 10-14V dc 20-28V dc | 5 tone version. Current: 25mA* 25mA* | |
| Alarm sou Version: 12V dc 24V dc 48V dc 115V ac | under: | Voltage: 10-14V dc 20-28V dc 42-54V dc | 5 tone version. Current: 25mA* 25mA* 50mA* | |
| Alarm sou Version: 12V dc 24V dc 48V dc 115V ac 230V ac | under: 50/60Hz | Voltage: 10-14V dc 20-28V dc 42-54V dc +/-10% | 5 tone version. Current: 25mA* 25mA* 50mA* 20mA | |
| Alarm sou Version: 12V dc 24V dc 48V dc 115V ac 230V ac 24V ac | 50/60Hz 50/60Hz | Voltage: 10-14V dc 20-28V dc 42-54V dc +/-10% +/-10% | 5 tone version. Current: 25mA* 25mA* 50mA* 20mA 15mA | |

| Version: Voltage: Current: 12V dc 10-14V dc 500mA 24V dc 20-28V dc 250mA 48V dc 42-54V dc 175mA 115V ac 50/60Hz +/-10% 70mA 230V ac 50/60Hz +/-10% 35mA 24V ac 50/60Hz +/-10% 300mA | //0//0// 000 | acconn | | |
|---|--------------|---------|-----------|----------|
| 24V dc 20-28V dc 250mA 48V dc 42-54V dc 175mA 115V ac 50/60Hz +/-10% 70mA 230V ac 50/60Hz +/-10% 35mA | Version: | | Voltage: | Current: |
| 48V dc 42-54V dc 175mA 115V ac 50/60Hz +/-10% 70mA 230V ac 50/60Hz +/-10% 35mA | 12V dc | | 10-14V dc | 500mA |
| 115V ac 50/60Hz +/-10% 70mA 230V ac 50/60Hz +/-10% 35mA | 24V dc | | 20-28V dc | 250mA |
| 230V ac 50/60Hz +/-10% 35mA | 48V dc | | 42-54V dc | 175mA |
| | 115V ac | 50/60Hz | +/-10% | 70mA |
| 24V ac 50/60Hz +/-10% 300mA | 230V ac | 50/60Hz | +/-10% | 35mA |
| | 24V ac | 50/60Hz | +/-10% | 300mA |

Features:

- (in & out for daisy-chain installations).
- Available with synchronised flash.
- Available with multi-frequency function.
- Tropicalisation available on request.
- Available with custom tone configurations and frequencies.
- 45 alarm tones

Approvals:





- Automatic synchronisation on
- multi-sounder system.
- Continuously rated.
- Stainless steel fixings.
- Unit can be mounted using external lugs
- or internal BESA compatible fixing positions.
- Duplicate cable terminations

- 'Programmable' version available:
- 4 remotely selectable stages
- Any tone can be assigned to any stage
- User configurable continuous frequency tone

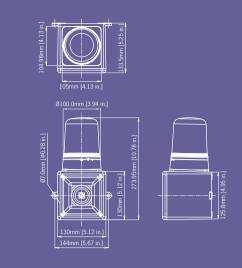




AB105LDA Alarm Sounder & L.E.D. Beacon

The AB105LDA combines a compact high output 112dB(A) alarm sounder with a powerful multi-function L.E.D. beacon.

The beacon and sounder can be operated from the same power source or controlled individually.



Tone table:

| Stage 1 | Frequency Description. | (Stage 2) | (Stage 3) |
|---------|---|-----------|-----------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Flash patterns:

| Stage 1 | Stage2 [DC only] |
|--------------------------|--------------------------|
| All L.E.D's on | Alternate Side Flash 2Hz |
| Rotating: Slow1 | Alternate Side Flash 2Hz |
| Single Strike Flash 2Hz | Rotating: Fast 2 |
| Rotating: Fast 1 | Single Strike Flash 2Hz |
| Rotating: Slow 2 | Double Strike Flash 1Hz |
| Double Strike Flash 2Hz | Rotating: Fast 2 |
| Rotating: Fast 2 | Double Strike Flash 2Hz |
| Double Strike Flash 1Hz | Alternate Side Flash 2Hz |
| Alternate Side Flash 2Hz | Rotating: Fast 2 |

Specification:

| Sounder: | |
|-----------------------|---|
| Maximum output: | 112dB(A) @ 1 metre |
| Nominal output: | 105dB(A) @ 1m +/- 3dB - Tone 2 |
| No. of tones: | 32 (UKOOA / PFEER compliant) |
| No. of stages: | 3 |
| Volume control: | Max. 105dB(A); Min. 96dB(A) - Tone 2 |
| Effective range: | 60m @ 1KHz |
| Stage switching: | Negative (reverse polarity stage switching on DC units |
| Beacon: | |
| Light source: | Array of 16 multi-function high power L.E.D's |
| Operating modes: | 4 rotating configurations 4 flashing configurations Steady mode for indicator / status applications |
| Peak candela: | 19 cd* - measured ref. to I.E.S. |
| Effective candela: | 19 cd* - measured ref. to I.E.S. |
| No. of stages: | DC unit also features a remotely selectable 2nd stage flash pattern. |
| L.E.D /I ens colours: | Amber, Blue, Clear (white L.E.D.s), Green, Red & Yellow |
| General: | |
| Voltages DC: | 24V dc (10-30V dc); 48V dc (35-60V dc) |
| Voltages AC: | 115V ac; 230V ac |
| Ingress protection: | IP65 |
| Housing material: | High impact UL94 VO & 5VA FR ABS |
| Lens material: | UV stable PC UL94 V0 FR Bayonet lens fixing , Anti-tamper locking screw. |
| Colour: | Red (RAL3000) and grey (RAL7038) |
| Cable entries: | 2 x M20 clearance gland entries in side & back |
| Terminals: | 0.5 to 1.5mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage tempe: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | DC: 1.00kg AC:1.25kg |

*Candela measurements representative of performance with clear lens at optimum voltage

Part codes: Version: Part code: AB105LDADC24[x]/[y] 24V dc 48V dc AB105LDADC48[x]/[y] 115V ac AB105LDAAC115[x]/[y] 230V ac AB105LDAAC230[x]/[y] [x] = Housing colour: G: Grey R: Red A: Amber B: Blue C:Clear [y] = Lens colour: G: Green R: Red Y: Yellow Suffix part number with '-P' for programmable, 4 stage, 45 tone version. Alarm sounder:

| | Voltage: | Current: |
|---------|-----------|--|
| | 10-30V dc | 25mA* |
| | 35-60V dc | 50mA* |
| 50/60Hz | +/-10% | 20mA |
| 50/60Hz | +/-10% | 15mA |
| | 1 | 35-60V dc 50/60Hz +/-10% |

L.E.D. beacon: Version: Voltage:

* current at nominal voltage on Tone 2

| 24V dc | | 10-50V dc | 130mA* |
|---------|---------|-----------|--------|
| 18V dc | | 10-50V dc | 130mA* |
| 115V ac | 50/60Hz | +/-10% | 90mA |
| 230V ac | 50/60Hz | +/-10% | 50mA |
| | | | |

* current at 24V dc

Features:

- Continuously rated.
- Stainless steel fixings.
- Duplicate cable terminations (in & out for daisy-chain installations).
- Tropicalisation available on request.
- Available with custom tone configurations
- and frequencies. 'Programmable' version available:
- 45 alarm tones
- 4 remotely selectable stages

Approvals:

Current :



- Automatic synchronisation on
- multi-sounder system.
- Unit can be mounted using external lugs
- or internal BESA compatible fixing positions.

0

0

- Any tone can be assigned to any stage
- User configurable continuous frequency tone





AL112NX Alarm Sounder & Xenon Beacon

The AL112NX features the 119dB(A) A112N alarm sounder combined with the L101X Xenon beacon. The compact, robust housing is ideal for all general signalling applications including fire, security and process control.

The 5 Joule Xenon strobe generates over 200 candela of light output. DC versions have multile flash rates selectable udring installation. Sounder & beacon may be connected from a single supply for simultaneous operation or from separate supplies for independent operation.

Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 |
|---------|--|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |
| Tone 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 |
| Tone 35 | 420Hz @ 0.625 sec Australian Alert | Tone 36 | Tone 5 |
| Tone 36 | 500-1200Hz 3.75sec / 0.25sec. Australian Evac. | Tone 35 | Tone 5 |
| Tone 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 |
| Tone 38 | 2000Hz Continuous | Tone 34 | Tone 45 |
| Tone 39 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 |
| Tone 40 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 31 | Tone 27 |
| Tone 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 |
| Tone 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 |
| Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 |
| Tone 44 | Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 |
| Tone 45 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm | Tone 38 | Tone 34 |
| | | | |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Specification:

| Sounder: | |
|---------------------|---|
| Maximum output: | 119dB(A) @ 1 metre |
| Nominal output: | 112dB(A) @ 1m +/- 3dB - Tone 2 |
| No. of tones: | 45 (UKOOA / PFEER compliant) |
| No. of stages: | 3 |
| Volume control: | Max. 112dB(A); Min. 100dB(A) - Tone 2 |
| Effective range: | 125m @ 1KHz |
| Voltages DC: | 24V dc (10-30V dc); 48V dc (35-60V dc) |
| [DC units can use 2 | 4V ac for single stage applications.] |
| Voltages AC: | 24V ac; 115V ac; 230V ac |
| Stage switching: | Negative Reverse polarity stage switching on DC units. |
| Beacon: | |
| Energy: | 5 Joules (5Ws) |
| Flash rate: | 1Hz (60 fpm) |
| Peak Candela: | 500,000 cd - calc. from energy (J) |
| Effective candela: | 250 cd - calc. from energy (J) |
| Peak candela: | 86,935 cd* - measured ref. to I.E.S. |
| Effective candela: | 200 cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Clear, Green, Magenta, Red & Yellow |
| Tube life: | Emissions are reduced to 70% after 8 million flashes |
| General: | |
| Ingress protection: | IP66 |
| Housing material: | High impact UL94 V0 & 5VA FR ABS |
| Colour: | Red (RAL3000) |
| Cable entries: | 2 x M20 clearance gland entries in side & back |
| Terminals: | 0.5 to 4.0mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | DC: 2.00kg AC:2.30kg |

*Candela measurements representative of performance with clear lens at optimum voltage. *SPL data +/-3dB(A). Measured at optimum voltage.

| 155.0mm [6.10 in.] 148.00mm [6.62 in.] 168.0mm [6.62 in.] | 207.3mm [8.2 in.] 188.9mm [7.4 in.] (ui gr) (ui gr) |
|---|---|
| Turge root 1000000 | 82.2mm [3.2 in.] 156.5mm [6.2 in.] |

Part codes:

| Version: | Part code: |
|---|---|
| 12V dc | AL112NXDC012[x]/[y] |
| 24V dc | AL112NXDC024[x]/[y] |
| 48V dc | AL112NXDC048[x]/[y] |
| 24V ac | AL112NXAC024[x]/[y] |
| 115V ac | AL112NXAC115[x]/[y] |
| 230V ac | AL112NXAC230[x]/[y] |
| [x] = Housing colour: | R: Red, G: Grey |
| [y] = Lens colour: | A: Amber, B: Blue. C: Clear, G: Green, M: Magenta R: Red, Y: Yellow |
| Suffix part number with '-P' for pro Suffix part number with '-F' for forv Suffix part number with '-UL' for UI | grammable, 4 stage, 45 tone versio ward facing Xenon beacon. |

Alarm sounder:

| Version: | | Voltage: | Current: |
|-----------|---------|-----------|----------|
| 12/24V dc | | 10-30V dc | 200mA* |
| 48V dc | | 35-60V dc | 120mA* |
| 24V ac | 50/60Hz | +/-10% | 500mA |
| 115V ac | 50/60Hz | +/-10% | 100mA |
| 230V ac | 50/60Hz | +/-10% | 60mA |

Xenon beacon: Version: Voltage: Current: 12V dc 10-14V dc 500mA 24V dc 20-28V dc 250mA 48V dc 42-54V dc 175mA 24V ac 50/60Hz +/-10% 300mA 115V ac +/-10% 50/60Hz 70mA 230V ac 50/60Hz +/-10% 35mA

Features:

- High output Xenon beacon

- Tropicalisation available on request. Available with custom tone configurations
- and frequencies.
- 'Programmable' version available:

- User configurable continuous frequency tone

Approvals:

- A112N alarm sounder is VdS approved to EN54-3 (CPD 89/106/EEC). • Xenon beacon (L101X) VdS approved to EN54-23:2010 (CPD 89/106/EEC). • UKOOA/PFEER compliant alarm tones.
 - UL approved version available.
 - GOST-R approved. Cert: POCC GB-JB05-H0014





- Automatic synchronisation on multi-sounder system.
- DC voltage units feature multiple flash rates.
- Continuously rated.
- Stainless steel fixings.
- Unit can be mounted using external lugs or internal
- BESA compatible fixing positions.
- Duplicate cable terminations
- (in & out for daisy-chain installations).
- 45 alarm tones
- 4 remotely selectable stages
- Any tone can be assigned to any stage





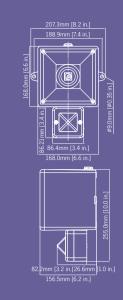




AL112NH Alarm Sounder & L.E.D. Beacon

The AL112NH features the 119dB(A) A112N alarm sounder combined with the L101H high output L.E.D. beacon.

The array of 24 Superflux type high output L.E.D's generates over 120 candela of light output and can be user set to either steady of flashing mode. Sounder & beacon may be connected from a single supply for simultaneous operation or from separate suppli es for independent operation. The robust, fire retardant IP66 housing ensures the AL112NH is suitable for all general signalling applications.



Tone table:

| Tone 1 340 Hz Continuous Tone 2 Tone 5 Tone 2 800/1000Hz @ 0.3Hz 0.5 sec Slow Whoop Tone 17 Tone 5 Tone 4 800/1000Hz @ 0.3Hz 0.5 sec Slow Whoop Tone 6 Tone 5 Tone 5 2400Hz Continuous Tone 7 Tone 5 Tone 6 2400/2900Hz @ 7Hz Sweeping Tone 7 Tone 5 Tone 7 2400/2900Hz @ 1Hz Sweeping Tone 7 Tone 5 Tone 8 500/1200/500Hz @ 1Hz Sweeping Tone 10 Tone 5 Tone 9 1200/500Hz @ 1Hz Sweeping Tone 10 Tone 5 Tone 10 2400/2900Hz @ 1Hz Intermittent Tone 15 Tone 5 Tone 11 1000Hz @ 1Hz Intermittent Tone 15 Tone 5 Tone 12 800/1000Hz @ 0.875Hz Atternating Tone 4 Tone 5 Tone 13 2400Hz @ 1Hz Intermittent Tone 15 Tone 5 Tone 14 800Hz @ 2.5sec on, 1 sec off Intermittent Tone 16 Tone 5 Tone 15 600Hz @ 1.5sec MCMS265 Tone 2 Tone 5 Tone 16 600Hz & 1.8sec onf Intermittent Tone 12 | Stage 1 | Frequency Description. | Stage 2 | Stage 3 |
|---|---------|--|---------|---------|
| Tone 3 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop Tone 2 Tone 5 Tone 4 800/1000Hz @ 1Hz Sweeping Tone 6 Tone 5 Tone 5 2400Hz Continuous Tone 7 Tone 6 Tone 7 Tone 6 2400/2900Hz @ 7Hz Sweeping Tone 10 Tone 5 Tone 7 2400/2900Hz @ 1Hz Sweeping Tone 10 Tone 5 Tone 8 500/1200/500Hz @ 1Hz D.10/ PFEER PTA.P. Tone 15 Tone 5 Tone 9 1200/500Hz @ 1Hz D.10/ PFEER PTA.P. Tone 15 Tone 5 Tone 11 1000Hz @ 1Hz Intermittent Tone 5 Tone 5 Tone 12 800/1000Hz @ 0.875Hz Alternating Tone 4 Tone 5 Tone 14 800Hz @ 0.875Hz Alternating Tone 2 Tone 5 Tone 15 800Hz @ 0.875Hz Alternating Tone 2 Tone 5 Tone 14 800Hz @ 0.180NS/440Hz (400mS) - NF S 32:001 Tone 2 Tone 5 Tone 15 600Hz Continuous Tone 2 Tone 5 Tone 2 Tone 5 Tone 20 60Hz L3sec on, 1.8sec off Intermittent Tone 2 Tone 5 Tone 2 | Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 4 800/1000Hz @ 1Hz Sweeping Tone 6 Tone 5 Tone 5 2400Hz Continuous Tone 7 Tone 5 Tone 6 2400/2900Hz @ 7Hz Sweeping Tone 7 Tone 5 Tone 7 2400/2900Hz @ 1Hz Sweeping Tone 10 Tone 5 Tone 8 500/1200/500Hz @ 1Hz Sweeping Tone 10 Tone 5 Tone 9 1200/500Hz @ 1Hz - IDN / FFEER PTA.P. Tone 15 Tone 5 Tone 10 2400/2900Hz @ 1Hz - IDN / FFEER PTA.P. Tone 15 Tone 5 Tone 11 1000Hz @ 1Hz - Intermittent Tone 5 Tone 5 Tone 12 800/1000Hz @ 0.875Hz Alternating Tone 4 Tone 5 Tone 13 2400Hz @ 1Hz Intermittent Tone 15 Tone 5 Tone 14 800Hz Continuous Tone 2 Tone 5 Tone 15 800Hz Continuous Tone 2 Tone 5 Tone 16 660Hz 150mS off Intermittent Tone 2 Tone 5 Tone 16 660Hz 138ec on, 1.8sec off Intermittent Tone 2 Tone 5 Tone 20 60Hz Continuous Tone 2 Tone 5 < | Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 5 2400Hz Continuous Tone 3 Tone 20 Tone 6 2400/2900Hz @ 7Hz Sweeping Tone 7 Tone 5 Tone 7 2400/2900Hz @ 1Hz Sweeping Tone 10 Tone 5 Tone 8 500/1200/500Hz @ 0.3Hz Sweeping Tone 10 Tone 5 Tone 9 1200/500Hz @ 1Hz - DIN / PFEER P.TA.P. Tone 15 Tone 2 Tone 10 2400/2900Hz @ 2Hz Alternating Tone 7 Tone 5 Tone 11 1000Hz @ 0.375Hz Alternating Tone 4 Tone 5 Tone 13 2400Hz @ 375Hz Alternating Tone 4 Tone 5 Tone 14 800/1000Hz @ 0.875Hz Alternating Tone 4 Tone 5 Tone 13 2400Hz @ 3Hz Intermittent Tone 4 Tone 5 Tone 14 800Hz Continuous Tone 2 Tone 5 Tone 15 60Hz LSsec on, 1.8sec off Intermittent Tone 2 Tone 5 Tone 16 60Hz LSter on, 1.8sec off Intermittent Tone 2 Tone 5 Tone 20 60Hz Continuous Tone 2 Tone 5 Tone 21 554Hz (40Hz) G1KHz 15.16KHz 1.4KHz 0.5 NFC48-265 Tone 2 </td <td>Tone 3</td> <td>500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop</td> <td>Tone 2</td> <td>Tone 5</td> | Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 6 2400/2900Hz @ 7Hz Sweeping Tone 7 Tone 5 Tone 7 2400/2900Hz @ 1Hz Sweeping Tone 10 Tone 5 Tone 8 500/1200/500Hz @ 0.3Hz Sweeping Tone 2 Tone 2 Tone 10 2400/2900Hz @ 1Hz Neeping Tone 7 Tone 5 Tone 10 2400/2900Hz @ 1Hz Intermittent Tone 7 Tone 5 Tone 11 1000Hz @ 1Hz Intermittent Tone 4 Tone 5 Tone 12 800/1000Hz @ 0.875Hz Alternating Tone 4 Tone 5 Tone 13 2400Hz @ 1Hz Intermittent Tone 4 Tone 5 Tone 14 800Hz 0.25sec on, 1 sec off Intermittent Tone 16 Tone 5 Tone 15 800Hz 0.25sec on, 1 Sec off Intermittent Tone 17 Tone 5 Tone 16 60Hz 150mS on, 150mS off Intermittent Tone 18 Tone 5 Tone 16 60Hz 14/40Hz (400mS) - NF 5 32-001 Tone 2 Tone 5 Tone 17 54Hz (100mS)/440Hz (400mS) Tone 2 Tone 5 Tone 20 66Hz 150mS on, 150mS off Intermittent Tone 2 Tone 5 Tone 17 54Hz (100mS)/440Hz (400 | Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 7 2400/2900Hz @ 1Hz Sweeping Tone 10 Tone 5 Tone 8 500/1200/500Hz @ 0.3Hz Sweeping Tone 12 Tone 5 Tone 9 1200/500Hz @ 1Hz - DIN / PFEER PT.A.P. Tone 15 Tone 5 Tone 10 2400/2900Hz @ 2Hz Alternating Tone 7 Tone 5 Tone 11 1000Hz @ 1Hz Intermittent Tone 15 Tone 5 Tone 12 800/1000Hz @ 1Az Intermittent Tone 14 Tone 5 Tone 13 2400Hz @ 1Hz Intermittent Tone 15 Tone 5 Tone 14 800Hz O.5Sec on, 1 sec off Intermittent Tone 16 GoHz 150mS on, 150mS off Intermittent Tone 2 Tone 5 Tone 16 GoHz 150mS on, 150mS off Intermittent Tone 2 Tone 5 Tone 18 Tone 5 Tone 17 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 2 Tone 5 Tone 2 Tone 5 Tone 18 60Hz 1.8sec on, 1.8sec off Intermittent Tone 2 Tone 5 Tone 2 Tone 5 Tone 20 60Hz 1.8sec on, 1.8sec off Intermittent Tone 2 Tone 5 Tone 2 Tone 5 Tone 21 54Hz | Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Data Data <thdata< th=""> Data Data <thd< td=""><td>Tone 6</td><td>2400/2900Hz @ 7Hz Sweeping</td><td>Tone 7</td><td>Tone 5</td></thd<></thdata<> | Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 9 1200/500Hz @ 1Hz - DIN / PFER PT.A.P. Tone 15 Tone 2 Tone 10 2400/2900Hz @ 2Hz Alternating Tone 7 Tone 5 Tone 11 1000Hz @ 1Hz Intermittent Tone 2 Tone 5 Tone 12 800/1000Hz @ 0.875Hz Alternating Tone 15 Tone 5 Tone 14 800Hz 0.25sec on, 1 sec off Intermittent Tone 15 Tone 5 Tone 15 800Hz 0.25sec on, 1 sec off Intermittent Tone 2 Tone 5 Tone 16 660Hz 150mS off Intermittent Tone 2 Tone 5 Tone 16 660Hz 1.8sec off Intermittent Tone 2 Tone 5 Tone 18 660Hz 1.8sec off Intermittent Tone 2 Tone 5 Tone 19 1.4KHz 1 S, 1.6KHz 1.4KHz 0.5s -NFC48-265 Tone 2 Tone 5 Tone 20 660Hz Continuous Tone 2 Tone 5 Tone 21 554Hz/440Hz @ 1Hz Alternating Tone 2 Tone 5 Tone 22 544Hz @ 0.87 sec. Intermittent Tone 2 Tone 5 Tone 23 800Hz @ 5Hz Sweeping Tone 2 Tone 5 Tone 24 800/1000Hz @ 5Hz Sweeping | Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 10 2400/2900Hz @ 2Hz Alternating Tone 7 Tone 5 Tone 11 1000Hz @ 1Hz Intermittent Tone 2 Tone 5 Tone 12 800/1000Hz @ 0.875Hz Alternating Tone 4 Tone 5 Tone 13 2400Hz @ 1Hz Intermittent Tone 4 Tone 5 Tone 14 800Hz 0.25sec on, 1 sec off Intermittent Tone 4 Tone 5 Tone 16 660Hz 150mS on, 150mS off Intermittent Tone 7 Tone 5 Tone 16 660Hz 158mS on, 150mS off Intermittent Tone 2 Tone 5 Tone 18 660Hz 158mS on, 158ec off Intermittent Tone 2 Tone 5 Tone 18 660Hz 188ec on, 1.8sec off Intermittent Tone 2 Tone 5 Tone 20 660Hz 188ec on, 1.8sec off Intermittent Tone 2 Tone 5 Tone 21 554Hz/40Hz @ 1Hz Alternating Tone 2 Tone 5 Tone 23 800Hz @ 2Hz Intermittent Tone 2 Tone 5 Tone 24 800/1000Hz @ 50Hz Sweeping Tone 2 Tone 5 Tone 25 2400/2900Hz @ 50Hz Sweeping Tone 2 Tone 5 Tone 28 440Hz Cont | Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 11 1000Hz @ 1Hz Intermittent Tone 2 Tone 5 Tone 12 800/1000Hz @ 0.875Hz Alternating Tone 4 Tone 5 Tone 13 2400Hz @ 1Hz Intermittent Tone 15 Tone 5 Tone 14 800Hz O.25sec on, 1 sec off Intermittent Tone 2 Tone 5 Tone 16 660Hz 150mS on, 150mS off Intermittent Tone 2 Tone 2 Tone 17 544Hz (100mS)/440Hz (400mS) - NF S 32:001 Tone 2 Tone 5 Tone 18 660Hz 1.8sec on, 1.8sec off Intermittent Tone 2 Tone 5 Tone 19 1.4KHz 1.5, 1.6KHz 1.4.4KHz 0.5s -NFC48:265 Tone 2 Tone 5 Tone 20 660Hz Continuous Tone 2 Tone 5 Tone 21 554Hz/440Hz @ 1Hz Intermittent Tone 2 Tone 5 Tone 23 800Hz @ 2Hz Intermittent Tone 2 Tone 5 Tone 24 800/1000Hz @ 50Hz Sweeping Tone 2 Tone 5 Tone 25 2400/2900Hz @ 50Hz Sweeping Tone 2 Tone 5 Tone 24 800/1000Hz @ 50Hz Sweeping Tone 2 Tone 5 Tone 25 2400/2900Hz @ 7Hz Sweepi | Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 12 800/1000Hz @ 0.875Hz Alternating Tone 4 Tone 5 Tone 13 2400Hz @ 1Hz Intermittent Tone 15 Tone 5 Tone 14 800Hz 0.25sec on, 1 sec off Intermittent Tone 2 Tone 5 Tone 15 800Hz Continuous Tone 16 660Hz 150ms on, 150ms off Intermittent Tone 18 Tone 5 Tone 16 660Hz 150ms on, 180ms off Intermittent Tone 2 Tone 27 Tone 18 660Hz 1.8sec on, 1.8sec off Intermittent Tone 2 Tone 5 Tone 19 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 Tone 2 Tone 5 Tone 20 660Hz 0.875 Sec. Intermittent Tone 2 Tone 5 Tone 21 554Hz/440Hz @ 1Hz Alternating Tone 2 Tone 5 Tone 23 800Hz @ 2Hz Intermittent Tone 6 Tone 5 Tone 24 800/1000Hz @ 50Hz Sweeping Tone 20 Tone 5 Tone 25 2400/2900Hz @ 50Hz Sweeping Tone 2 Tone 5 Tone 26 Bell Tone 2 Tone 5 Tone 2 Tone 5 Tone 28 440Hz Continuous Tone 2 Tone 5 | Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 13 2400Hz @ 1Hz Intermittent Tone 15 Tone 5 Tone 14 800Hz 0.25sec on, 1 sec off Intermittent Tone 4 Tone 5 Tone 15 800Hz Continuous Tone 2 Tone 5 Tone 16 660Hz 150mS on, 150mS off Intermittent Tone 12 Tone 5 Tone 17 544Hz (100mS)/440Hz (400mS) - NF S 32:001 Tone 2 Tone 5 Tone 18 660Hz 1.8sec on, 1.8sec off Intermittent Tone 2 Tone 5 Tone 19 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 Tone 2 Tone 5 Tone 20 660Hz Continuous Tone 2 Tone 5 Tone 21 554Hz/440Hz @ 1Hz Alternating Tone 2 Tone 5 Tone 23 800Hz @ 2Hz Intermittent Tone 6 Tone 5 Tone 24 800/1000Hz @ 50Hz Sweeping Tone 29 Tone 5 Tone 25 2400/2900Hz @ 7Hz Sweeping Tone 2 Tone 5 Tone 28 800Hz Continuous Tone 2 Tone 5 Tone 28 400Hz Continuous Tone 2 Tone 5 Tone 29 800/1000Hz @ 7Hz Sweeping Tone 2 | Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 14 800Hz 0.25sec on, 1 sec off Intermittent Tone 4 Tone 5 Tone 15 800Hz Continuous Tone 2 Tone 5 Tone 16 660Hz 150mS off Intermittent Tone 18 Tone 5 Tone 17 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 2 Tone 5 Tone 18 660Hz 1.8sec on, 1.8sec off Intermittent Tone 2 Tone 5 Tone 20 660Hz Continuous Tone 2 Tone 5 Tone 21 554Hz/440Hz @ 1Hz Alternating Tone 2 Tone 5 Tone 23 800Hz @ 2875 sec. Intermittent Tone 2 Tone 5 Tone 24 800/1000Hz @ 50Hz Sweeping Tone 29 Tone 5 Tone 24 800/1000Hz @ 50Hz Sweeping Tone 20 Tone 5 Tone 24 800/1000Hz @ 50Hz Sweeping Tone 2 Tone 5 Tone 25 2400/2900Hz @ 50Hz Sweeping Tone 2 Tone 5 Tone 26 Bell Tone 2 Tone 5 Tone 5 Tone 27 554Hz Continuous Tone 2 Tone 5 Tone 5 Tone 28 800/100Hz @ 7Hz Sweeping | Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 15 800Hz Continuous Tone 2 Tone 5 Tone 16 660Hz 150mS on, 150mS off Intermittent Tone 18 Tone 27 Tone 18 660Hz 1.8sec on, 1.8sec off Intermittent Tone 2 Tone 5 Tone 19 1.4KHz 1.6KHz 1.4, 1.6KHz 1.4KHz 0.5s -NFC48-265 Tone 2 Tone 5 Tone 20 660Hz Continuous Tone 2 Tone 5 Tone 21 554Hz/440Hz @ 1Hz Alternating Tone 2 Tone 5 Tone 23 800Hz @ 0.875 sec. Intermittent Tone 6 Tone 5 Tone 24 800/1000Hz @ 50Hz Sweeping Tone 29 Tone 5 Tone 25 2400/290Hz @ 50Hz Sweeping Tone 2 Tone 5 Tone 24 800/1000Hz @ 50Hz Sweeping Tone 2 Tone 5 Tone 25 2400/290Hz @ 50Hz Sweeping Tone 2 Tone 5 Tone 26 Bell Tone 2 Tone 5 Tone 2 Tone 5 Tone 28 440Hz Continuous Tone 2 Tone 5 Tone 5 Tone 2 Tone 5 Tone 5 Tone 28 600/1000Hz @ 7Hz Sweeping Tone 7 Tone 5 | Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| InternationalInternationalInternationalTone 16660Hz 150mS on, 150mS off IntermittentTone 17Tone 2Tone 27Tone 18660Hz 1.8sec on, 1.8sec off IntermittentTone 2Tone 5Tone 191.4KHz-1.6KHz 1s, 1.6KHz 1.4KHz 0.5s -NFC48-265Tone 2Tone 5Tone 20660Hz ContinuousTone 2Tone 5Tone 21554Hz/440Hz @ 1Hz AlternatingTone 2Tone 5Tone 22544Hz @ 0.875 sec. IntermittentTone 6Tone 5Tone 23800Hz @ 2Hz IntermittentTone 6Tone 5Tone 24800/1000Hz @ 50Hz SweepingTone 29Tone 5Tone 252400/2900Hz @ 50Hz SweepingTone 20Tone 5Tone 26BellTone 26Tone 5Tone 27554Hz ContinuousTone 2Tone 5Tone 28440Hz ContinuousTone 2Tone 5Tone 29800/1000Hz @ 7Hz SweepingTone 2Tone 5Tone 30300Hz ContinuousTone 2Tone 5Tone 31660/1200Hz @ 1Hz SweepingTone 26Tone 5Tone 33745Hz @ 1Hz IntermittentTone 26Tone 5Tone 33745Hz @ 0.65 sec Alternating - SingaporeTone 38Tone 45Tone 341000 & 2000Hz @ 0.5 sec Alternating - SingaporeTone 38Tone 45Tone 371000Hz ContinuousTone 34Tone 45Tone 53Tone 382000Hz Continuous - PFEER Toxic GasTone 91Tone 45Tone 39800Hz O.25sec on, 1 sec off IntermittentTone 23Tone | Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 17 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 2 Tone 27 Tone 18 660Hz 1.8sec on, 1.8sec off Intermittent Tone 2 Tone 5 Tone 19 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s - NFC48-265 Tone 2 Tone 5 Tone 20 660Hz Continuous Tone 2 Tone 5 Tone 21 554Hz/440Hz @ 1Hz Alternating Tone 2 Tone 5 Tone 22 544Hz @ 0.875 sec. Intermittent Tone 2 Tone 5 Tone 23 800Hz @ 2Hz Intermittent Tone 6 Tone 5 Tone 24 800/1000Hz @ 50Hz Sweeping Tone 29 Tone 5 Tone 25 2400/2900Hz @ 50Hz Sweeping Tone 20 Tone 5 Tone 26 Bell Tone 2 Tone 5 Tone 27 554Hz Continuous Tone 2 Tone 5 Tone 28 440Hz Continuous Tone 2 Tone 5 Tone 29 800/1000Hz @ 7Hz Sweeping Tone 2 Tone 5 Tone 30 300Hz Continuous Tone 2 Tone 5 Tone 3 Tone 31 660/1200Hz @ 1Hz Sweeping Tone 2 Tone | Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 18 660Hz 1.8sec on, 1.8sec off Intermittent Tone 2 Tone 5 Tone 19 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 Tone 2 Tone 5 Tone 20 660Hz Continuous Tone 2 Tone 5 Tone 21 554Hz/440Hz @ 1Hz Alternating Tone 2 Tone 5 Tone 22 544Hz @ 0.875 sec. Intermittent Tone 6 Tone 5 Tone 23 800Hz @ 2Hz Intermittent Tone 6 Tone 5 Tone 24 800/1000Hz @ 50Hz Sweeping Tone 29 Tone 5 Tone 25 2400/2900Hz @ 50Hz Sweeping Tone 20 Tone 5 Tone 26 Bell Tone 2 Tone 5 Tone 27 554Hz Continuous Tone 2 Tone 5 Tone 28 440Hz Continuous Tone 2 Tone 5 Tone 30 300Hz Continuous Tone 7 Tone 5 Tone 31 660/1200Hz @ 1Hz Sweeping Tone 26 Tone 5 Tone 33 745Hz @ 1Hz Intermittent Tone 2 Tone 5 Tone 34 1000 & 2000Hz @ 0.5 sec Alternating - Singapore Tone 35 Tone 5 | Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 191.4Hz-1.6KHz 1s, 1.6KHz1.4KHz 0.5s -NFC48-265Tone 2Tone 5Tone 20660Hz ContinuousTone 2Tone 5Tone 21554Hz/440Hz @ 1Hz AlternatingTone 2Tone 5Tone 22544Hz @ 0.875 sec. IntermittentTone 6Tone 5Tone 23800Hz @ 2Hz IntermittentTone 6Tone 5Tone 24800/1000Hz @ 50Hz SweepingTone 29Tone 5Tone 252400/2900Hz @ 50Hz SweepingTone 29Tone 5Tone 26BellTone 2Tone 5Tone 27554Hz ContinuousTone 26Tone 5Tone 28440Hz ContinuousTone 2Tone 5Tone 29800/1000Hz @ 7Hz SweepingTone 7Tone 5Tone 30300Hz ContinuousTone 2Tone 5Tone 31660/1200Hz @ 1Hz SweepingTone 26Tone 15Tone 33745Hz @ 1Hz IntermittentTone 2Tone 5Tone 341000 & 2000Hz @ 0.5 sec Alternating - SingaporeTone 38Tone 45Tone 35420Hz @ 0.625 sec Australian AlertTone 35Tone 5Tone 341000 & 2000Hz @ 0.75sec / 0.25sec. Australian Evac.Tone 34Tone 45Tone 371000Hz ContinuousPFEER Toxic GasTone 9Tone 45Tone 382000Hz ContinuousFore 32Tone 17Tone 34Tone 39800Hz 0.25sec n, 1 sec off IntermittentTone 23Tone 17Tone 40544Hz (100mS)/ 440Hz (400mS) - NF S 32-001Tone 31Tone 27Tone 41Motor Siren - slow rise to 1200 Hz <td< td=""><td>Tone 17</td><td>544Hz (100mS)/440Hz (400mS) - NF S 32-001</td><td>Tone 2</td><td>Tone 27</td></td<> | Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Tone 20660Hz ContinuousTone 2Tone 5Tone 21554Hz/440Hz @ 1Hz AlternatingTone 2Tone 5Tone 22544Hz @ 0.875 sec. IntermittentTone 2Tone 5Tone 23800Hz @ 2Hz IntermittentTone 6Tone 5Tone 24800/1000Hz @ 50Hz SweepingTone 29Tone 5Tone 252400/2900Hz @ 50Hz SweepingTone 29Tone 5Tone 26BellTone 2Tone 5Tone 27554Hz ContinuousTone 2Tone 5Tone 28440Hz ContinuousTone 2Tone 5Tone 29800/1000Hz @ 7Hz SweepingTone 7Tone 5Tone 30300Hz ContinuousTone 2Tone 5Tone 31660/1200Hz @ 1Hz SweepingTone 26Tone 5Tone 31660/1200Hz @ 1Hz SweepingTone 26Tone 5Tone 33745Hz @ 1Hz IntermittentTone 2Tone 5Tone 341000 & 2000Hz @ 0.5 sec Alternating - SingaporeTone 38Tone 45Tone 35420Hz @ 0.625 sec Australian AlertTone 35Tone 5Tone 341000 & 2000Hz @ 0.5 sec Alternating - SingaporeTone 34Tone 45Tone 35000Hz ContinuousPFEER Toxic GasTone 9Tone 45Tone 38000Hz ContinuousPFEER Toxic GasTone 31Tone 45Tone 39800Hz 0.25sec on, 1 sec off IntermittentTone 23Tone 17Tone 40544Hz (100mS)/440Hz (400mS) - NF S 32-001Tone 31Tone 27Tone 41Motor Siren - slow rise to 1200 HzTone 2Ton | Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 21554Hz/440Hz @ 1Hz AlternatingTone 2Tone 5Tone 22544Hz @ 0.875 sec. IntermittentTone 6Tone 5Tone 23800Hz @ 2Hz IntermittentTone 6Tone 5Tone 24800/1000Hz @ 50Hz SweepingTone 29Tone 5Tone 252400/2900Hz @ 50Hz SweepingTone 29Tone 5Tone 26BellTone 2Tone 5Tone 27554Hz ContinuousTone 2Tone 5Tone 28440Hz ContinuousTone 2Tone 5Tone 29800/1000Hz @ 7Hz SweepingTone 7Tone 5Tone 30300Hz ContinuousTone 2Tone 5Tone 31660/1200Hz @ 1Hz SweepingTone 26Tone 5Tone 32Two tone chime.Tone 26Tone 5Tone 33745Hz @ 1Hz IntermittentTone 2Tone 5Tone 341000 & 2000Hz @ 0.5 sec Alternating - SingaporeTone 36Tone 5Tone 35420Hz @ 0.625 sec Australian AlertTone 36Tone 5Tone 371000Hz ContinuousPEEER Toxic GasTone 91Tone 45Tone 382000Hz Continuous - PFEER Toxic GasTone 31Tone 37Tone 45Tone 39800Hz 0.25sec on, 1 sec off IntermittentTone 23Tone 17Tone 44Motor Siren - slow rise to 1200 HzTone 2Tone 5Tone 2Tone 431200 Hz ContinuousTone 2Tone 5Tone 2Tone 5Tone 34100Hz ContinuousTone 31Tone 45Tone 45Tone 33Tone 45 <trr>Tone 39800</trr> | Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Tone 22544Hz @ 0.875 sec. IntermittentTone 2Tone 5Tone 23800Hz @ 2Hz IntermittentTone 6Tone 5Tone 24800/1000Hz @ 50Hz SweepingTone 29Tone 5Tone 252400/2900Hz @ 50Hz SweepingTone 29Tone 5Tone 26BellTone 2Tone 15Tone 27554Hz ContinuousTone 2Tone 5Tone 28440Hz ContinuousTone 2Tone 5Tone 29800/1000Hz @ 7Hz SweepingTone 7Tone 5Tone 30300Hz ContinuousTone 2Tone 5Tone 31660/1200Hz @ 1Hz SweepingTone 26Tone 5Tone 32Two tone chime.Tone 26Tone 5Tone 33745Hz @ 1Hz IntermittentTone 26Tone 5Tone 341000 & 2000Hz @ 0.5 sec Alternating - SingaporeTone 38Tone 45Tone 35420Hz @ 0.625 sec Australian AlertTone 35Tone 5Tone 36500-1200Hz 3.75sec /0.25sec. Australian Evac.Tone 35Tone 5Tone 371000Hz ContinuousTone 34Tone 45Tone 33Tone 382000Hz 0.25sec on, 1 sec off IntermittentTone 23Tone 17Tone 40544Hz (100mS)/440Hz (400mS) - NF S 32-001Tone 31Tone 27Tone 41Motor Siren - slow rise to 1200 HzTone 2Tone 5Tone 431200 Hz ContinuousTone 2Tone 5Tone 44Motor Siren - slow rise to 2400 HzTone 2Tone 5 | Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
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| Tone 24BOO/1000Hz @ 50Hz SweepingTone 29Tone 5Tone 252400/2900Hz @ 50Hz SweepingTone 29Tone 5Tone 26BellTone 2Tone 15Tone 27554Hz ContinuousTone 2Tone 5Tone 28440Hz ContinuousTone 7Tone 5Tone 29800/1000Hz @ 7Hz SweepingTone 7Tone 5Tone 30300Hz ContinuousTone 2Tone 5Tone 31660/1200Hz @ 1Hz SweepingTone 26Tone 5Tone 33745Hz @ 1Hz IntermittentTone 26Tone 5Tone 341000 & 2000Hz @ 0.5 sec Alternating - SingaporeTone 38Tone 5Tone 35420Hz @ 0.625 sec Australian AlertTone 35Tone 5Tone 36500-1200Hz 3.75sec / 0.25sec. Australian Evac.Tone 35Tone 45Tone 382000Hz ContinuousTone 9Tone 45Tone 39800Hz 0.25sec on, 1 sec off IntermittentTone 23Tone 17Tone 4054Hz (100mS)/ 440Hz (400mS) - NF S 32-001Tone 31Tone 27Tone 41Motor Siren - slow rise to 1200 HzTone 2Tone 5Tone 44Motor Siren - slow rise to 2400 HzTone 2Tone 5 | Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 252400/2900Hz @ 50Hz SweepingTone 29Tone 5Tone 26BellTone 2Tone 15Tone 27554Hz ContinuousTone 26Tone 5Tone 28440Hz ContinuousTone 2Tone 5Tone 29800/1000Hz @ 7Hz SweepingTone 7Tone 5Tone 30300Hz ContinuousTone 2Tone 5Tone 31660/1200Hz @ 1Hz SweepingTone 26Tone 5Tone 32Two tone chime.Tone 26Tone 5Tone 33745Hz @ 1Hz IntermittentTone 26Tone 5Tone 341000 & 2000Hz @ 0.5 sec Alternating - SingaporeTone 38Tone 5Tone 35420Hz @ 0.625 sec Australian AlertTone 35Tone 5Tone 36500-1200Hz 3.75sec / 0.25sec. Australian Evac.Tone 35Tone 5Tone 371000Hz ContinuousPEEER Toxic GasTone 9Tone 45Tone 382000Hz C.0tinuousPFEER Toxic GasTone 31Tone 27Tone 4054Hz (100mS)/ 440Hz (400mS) - NF S 32-001Tone 31Tone 27Tone 41Motor Siren - slow rise to 1200 HzTone 2Tone 5Tone 431200 Hz ContinuousTone 2Tone 5Tone 44Motor Siren - slow rise to 2400 HzTone 2Tone 5 | Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 26BellTone 2Tone 15Tone 27554Hz ContinuousTone 26Tone 5Tone 28440Hz ContinuousTone 2Tone 5Tone 29800/1000Hz @ 7Hz SweepingTone 7Tone 5Tone 30300Hz ContinuousTone 2Tone 5Tone 31660/1200Hz @ 1Hz SweepingTone 26Tone 5Tone 32Two tone chime.Tone 26Tone 15Tone 33745Hz @ 1Hz IntermittentTone 2Tone 5Tone 341000 & 2000Hz @ 0.5 sec Alternating - SingaporeTone 38Tone 45Tone 35420Hz @ 0.625 sec Australian AlertTone 35Tone 5Tone 36500-1200Hz 3.75sec / 0.25sec. Australian Evac.Tone 35Tone 45Tone 371000Hz Continuous - PFEER Toxic GasTone 34Tone 45Tone 382000Hz Continuous - NF SER Toxic GasTone 34Tone 45Tone 40544Hz (100mS)/ 440Hz (400mS) - NF S 32-001Tone 31Tone 27Tone 41Motor Siren - slow rise to 1200 HzTone 2Tone 5Tone 431200 Hz ContinuousTone 2Tone 5Tone 44Motor Siren - slow rise to 2400 HzTone 2Tone 5 | Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 27554Hz ContinuousTone 26Tone 5Tone 28440Hz ContinuousTone 2Tone 5Tone 29800/1000Hz @ 7Hz SweepingTone 7Tone 5Tone 30300Hz ContinuousTone 2Tone 5Tone 31660/1200Hz @ 1Hz SweepingTone 26Tone 5Tone 32Two tone chime.Tone 26Tone 5Tone 33745Hz @ 1Hz IntermittentTone 2Tone 5Tone 341000 & 2000Hz @ 0.5 sec Alternating - SingaporeTone 38Tone 5Tone 35420Hz @ 0.625 sec Australian AlertTone 36Tone 5Tone 36500-1200Hz 3.75sec / 0.25sec. Australian Evac.Tone 35Tone 45Tone 371000Hz Continuous - PFEER Toxic GasTone 34Tone 45Tone 382000Hz Continuous - PFEER Toxic GasTone 31Tone 27Tone 40544Hz (100mS)/ 440Hz (400mS) - NF S 32-001Tone 31Tone 27Tone 41Motor Siren - slow rise to 1200 HzTone 2Tone 5Tone 431200 Hz ContinuousTone 2Tone 5Tone 44Motor Siren - slow rise to 2400 HzTone 2Tone 5 | Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 28440Hz ContinuousTone 2Tone 5Tone 29800/1000Hz @ 7Hz SweepingTone 7Tone 5Tone 30300Hz ContinuousTone 2Tone 5Tone 31660/1200Hz @ 1Hz SweepingTone 26Tone 5Tone 32Two tone chime.Tone 26Tone 5Tone 33745Hz @ 1Hz IntermittentTone 2Tone 5Tone 341000 & 2000Hz @ 0.5 sec Alternating - SingaporeTone 38Tone 45Tone 35420Hz @ 0.625 sec Australian AlertTone 35Tone 5Tone 36500-1200Hz 3.75sec /0.25sec. Australian Evac.Tone 35Tone 45Tone 371000Hz Continuous - PFEER Toxic GasTone 9Tone 45Tone 382000Hz ContinuousFore 34Tone 45Tone 39800Hz 0.25sec on, 1 sec off IntermittentTone 23Tone 17Tone 40544Hz (100mS)/440Hz (400mS) - NF S 32-001Tone 31Tone 27Tone 41Motor Siren - slow rise to 1200 HzTone 2Tone 5Tone 431200 Hz ContinuousTone 2Tone 5Tone 44Motor Siren - slow rise to 2400 HzTone 2Tone 5 | Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 29 800/1000Hz @ 7Hz Sweeping Tone 7 Tone 5 Tone 30 300Hz Continuous Tone 2 Tone 5 Tone 31 660/1200Hz @ 1Hz Sweeping Tone 26 Tone 5 Tone 32 Two tone chime. Tone 26 Tone 5 Tone 33 745Hz @ 1Hz Intermittent Tone 2 Tone 5 Tone 34 1000 & 2000Hz @ 0.5 sec Alternating - Singapore Tone 38 Tone 5 Tone 35 420Hz @ 0.625 sec Australian Alert Tone 36 Tone 5 Tone 36 500-1200Hz 3.75sec / 0.25sec. Australian Evac. Tone 35 Tone 45 Tone 37 1000Hz Continuous - PFEER Toxic Gas Tone 9 Tone 45 Tone 38 2000Hz Continuous Tone 31 Tone 27 Tone 39 800Hz 0.25sec on, 1 sec off Intermittent Tone 23 Tone 17 Tone 41 Motor Siren - slow rise to 1200 Hz Tone 21 Tone 5 Tone 42 Motor Siren - slow rise to 1200 Hz Tone 2 Tone 5 Tone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 43 1200 Hz Continuous | Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 30 300Hz Continuous Tone 2 Tone 5 Tone 31 660/1200Hz @ 1Hz Sweeping Tone 26 Tone 5 Tone 32 Two tone chime. Tone 26 Tone 15 Tone 33 745Hz @ 1Hz Intermittent Tone 2 Tone 5 Tone 34 1000 & 2000Hz @ 0.5 sec Alternating - Singapore Tone 38 Tone 45 Tone 35 420Hz @ 0.625 sec Australian Alert Tone 36 Tone 5 Tone 36 500-1200Hz 3.75sec / 0.25sec. Australian Evac. Tone 35 Tone 45 Tone 37 1000Hz Continuous - PFEER Toxic Gas Tone 9 Tone 45 Tone 38 2000Hz Continuous Tone 31 Tone 45 Tone 39 800Hz 0.25sec on, 1 sec off Intermittent Tone 23 Tone 17 Tone 40 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 31 Tone 27 Tone 41 Motor Siren - slow rise to 1200 Hz Tone 2 Tone 5 Tone 42 Motor Siren - slow rise to 800 Hz Tone 2 Tone 5 Tone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 44 Motor Siren - slow | Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 660/1200Hz @ 1Hz Sweeping Tone 26 Tone 5 Tone 32 Two tone chime. Tone 26 Tone 15 Tone 33 745Hz @ 1Hz Intermittent Tone 2 Tone 5 Tone 34 1000 & 2000Hz @ 0.5 sec Alternating - Singapore Tone 38 Tone 45 Tone 35 420Hz @ 0.625 sec Australian Alert Tone 36 Tone 5 Tone 36 500-1200Hz 3.75sec / 0.25sec. Australian Evac. Tone 35 Tone 45 Tone 37 1000Hz Continuous - PFEER Toxic Gas Tone 34 Tone 45 Tone 38 2000Hz Continuous Tone 34 Tone 45 Tone 39 800Hz 0.25sec on, 1 sec off Intermittent Tone 23 Tone 17 Tone 40 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 31 Tone 27 Tone 41 Motor Siren - slow rise to 1200 Hz Tone 2 Tone 5 Tone 42 Motor Siren - slow rise to 800 Hz Tone 2 Tone 5 Tone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 44 Motor Siren - slow rise to 2400 Hz Tone 2 Tone 5 | | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 32 Two tone chime. Tone 26 Tone 15 Tone 33 745Hz @ 1Hz Intermittent Tone 2 Tone 5 Tone 34 1000 & 2000Hz @ 0.5 sec Alternating - Singapore Tone 38 Tone 45 Tone 35 420Hz @ 0.625 sec Australian Alert Tone 36 Tone 5 Tone 36 500-1200Hz 3.75sec / 0.25sec. Australian Evac. Tone 35 Tone 5 Tone 37 1000Hz Continuous - PFEER Toxic Gas Tone 34 Tone 45 Tone 38 2000Hz Continuous Tone 34 Tone 45 Tone 39 800Hz 0.25sec on, 1 sec off Intermittent Tone 23 Tone 17 Tone 40 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 2 Tone 5 Tone 41 Motor Siren - slow rise to 1200 Hz Tone 2 Tone 5 Tone 42 Motor Siren - slow rise to 800 Hz Tone 2 Tone 5 Tone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 44 Motor Siren - slow rise to 2400 Hz Tone 2 Tone 5 | | 300Hz Continuous | | |
| Tone 33 745Hz @ 1Hz Intermittent Tone 2 Tone 5 Tone 34 1000 & 2000Hz @ 0.5 sec Alternating - Singapore Tone 38 Tone 45 Tone 35 420Hz @ 0.625 sec Australian Alert Tone 36 Tone 5 Tone 36 500-1200Hz 3.75sec /0.25sec. Australian Evac. Tone 35 Tone 5 Tone 37 1000Hz Continuous - PFEER Toxic Gas Tone 9 Tone 45 Tone 38 2000Hz Continuous Tone 34 Tone 45 Tone 39 800Hz 0.25sec on, 1 sec off Intermittent Tone 23 Tone 17 Tone 40 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 31 Tone 27 Tone 41 Motor Siren - slow rise to 1200 Hz Tone 2 Tone 5 Tone 42 Motor Siren - slow rise to 800 Hz Tone 2 Tone 5 Tone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 44 Motor Siren - slow rise to 2400 Hz Tone 2 Tone 5 | Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 341000 & 2000Hz @ 0.5 sec Alternating - SingaporeTone 38Tone 45Tone 35420Hz @ 0.625 sec Australian AlertTone 36Tone 5Tone 36500-1200Hz 3.75sec / 0.25sec. Australian Evac.Tone 35Tone 5Tone 371000Hz Continuous - PFEER Toxic GasTone 9Tone 45Tone 382000Hz ContinuousTone 34Tone 45Tone 39800Hz 0.25sec on, 1 sec off IntermittentTone 23Tone 17Tone 40544Hz (100mS)/440Hz (400mS) - NF S 32-001Tone 31Tone 27Tone 41Motor Siren - slow rise to 1200 HzTone 2Tone 5Tone 431200 Hz ContinuousTone 2Tone 5Tone 44Motor Siren - slow rise to 2400 HzTone 2Tone 5 | Tone 32 | Two tone chime. | Tone 26 | Tone 15 |
| Tone 35 420Hz @ 0.625 sec Australian Alert Tone 36 Tone 35 Tone 5 Tone 36 500-1200Hz 3.75sec / 0.25sec. Australian Evac. Tone 35 Tone 5 Tone 37 1000Hz Continuous - PFEER Toxic Gas Tone 9 Tone 45 Tone 38 2000Hz Continuous Tone 34 Tone 45 Tone 39 800Hz 0.25sec on, 1 sec off Intermittent Tone 23 Tone 17 Tone 40 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 31 Tone 27 Tone 41 Motor Siren - slow rise to 1200 Hz Tone 2 Tone 5 Tone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 43 1200 Hz continuous Tone 2 Tone 5 Tone 44 Motor Siren - slow rise to 2400 Hz Tone 2 Tone 5 | | | | |
| Tone 36 500-1200Hz 3.75sec / 0.25sec. Australian Evac. Tone 35 Tone 35 Tone 37 1000Hz Continuous - PFEER Toxic Gas Tone 9 Tone 45 Tone 38 2000Hz Continuous Tone 34 Tone 45 Tone 39 800Hz 0.25sec on, 1 sec off Intermittent Tone 23 Tone 17 Tone 40 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 31 Tone 27 Tone 41 Motor Siren - slow rise to 1200 Hz Tone 2 Tone 5 Tone 42 Motor Siren - slow rise to 800 Hz Tone 2 Tone 5 Tone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 44 Motor Siren - slow rise to 2400 Hz Tone 2 Tone 5 | Tone 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 |
| Tone 37 1000Hz Continuous - PFEER Toxic Gas Tone 9 Tone 45 Tone 38 2000Hz Continuous Tone 45 Tone 34 Tone 45 Tone 39 800Hz 0.25sec on, 1 sec off Intermittent Tone 23 Tone 17 Tone 40 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 31 Tone 27 Tone 41 Motor Siren - slow rise to 1200 Hz Tone 2 Tone 5 Tone 42 Motor Siren - slow rise to 800 Hz Tone 2 Tone 5 Tone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 44 Motor Siren - slow rise to 2400 Hz Tone 2 Tone 5 | | | | |
| Tone 38 2000Hz Continuous Tone 34 Tone 45 Tone 39 800Hz 0.25sec on, 1 sec off Intermittent Tone 23 Tone 17 Tone 40 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 31 Tone 27 Tone 41 Motor Siren - slow rise to 1200 Hz Tone 2 Tone 5 Tone 42 Motor Siren - slow rise to 800 Hz Tone 2 Tone 5 Tone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 44 Motor Siren - slow rise to 2400 Hz Tone 2 Tone 5 | | | | |
| Tone 39 800Hz 0.25sec on, 1 sec off Intermittent Tone 23 Tone 17 Tone 40 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 31 Tone 27 Tone 41 Motor Siren - slow rise to 1200 Hz Tone 2 Tone 5 Tone 42 Motor Siren - slow rise to 800 Hz Tone 2 Tone 5 Tone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 44 Motor Siren - slow rise to 2400 Hz Tone 2 Tone 5 | | | | |
| Tone 40 544Hz (100mS)/40Hz (400mS) - NF S 32-001 Tone 31 Tone 27 Tone 41 Motor Siren - slow rise to 1200 Hz Tone 2 Tone 5 Tone 42 Motor Siren - slow rise to 800 Hz Tone 2 Tone 5 Tone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 44 Motor Siren - slow rise to 2400 Hz Tone 2 Tone 5 | | | | |
| Tone 41 Motor Siren - slow rise to 1200 Hz Tone 2 Tone 5 Tone 42 Motor Siren - slow rise to 800 Hz Tone 2 Tone 5 Tone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 44 Motor Siren - slow rise to 2400 Hz Tone 2 Tone 5 | | · · · · · · · · · · · · · · · · · · · | | |
| Tone 42 Motor Siren - slow rise to 800 Hz Tone 2 Tone 5 Tone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 44 Motor Siren - slow rise to 2400 Hz Tone 2 Tone 5 | | | | |
| Tone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 44 Motor Siren - slow rise to 2400 Hz Tone 2 Tone 5 | | | | |
| Tone 44 Motor Siren - slow rise to 2400 Hz Tone 2 Tone 5 | | | | |
| | | | | |
| Tone 45 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm Tone 38 Tone 34 | | | | |
| | Tone 45 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm | Tone 38 | Tone 34 |

Specification:

| tage 3 | Sounder: | |
|------------------|---------------------|--|
| ine 5 ine 5 | Maximum output: | 119dB(A) @ 1 metre |
| ine 5 | Nominal output: | 112dB(A) @ 1m +/- 3dB - Tone 2 |
| ine 5 | No. of tones: | 45 (UKOOA / PFEER compliant) |
| ine 20 ine 5 | No. of stages: | 3 |
| ine 5 | | |
| ine 5 ine 2 | Volume control: | Max. 112dB(A); Min. 100dB(A) - Tone 2 |
| ne 5 | Effective range: | 125m @ 1KHz |
| ne 5 | Voltages DC: | 24V dc (10-30Vdc) |
| ne 5 | Voltages AC: | 115V ac; 230V ac |
| ne 5 ne 5 | Stage switching: | Negative |
| ne 5 | | Reverse polarity stage switching on DC units. |
| ne 5 ne 27 | Beacon: | |
| ine 27 ine 5 | Light source: | High intensity L.E.D. array. |
| ine 5 | Light Source. | 24 x Superflux type high ouput L.E.D's |
| ne 5 | Outiener | |
| ine 5 ine 5 | Options: | Steady or 2Hz flash mode (on board selection) |
| ine 5 | Effective candela: | 176 cd (Green L.E.D.) |
| ne 5 ne 5 | Terminals: | 0.5 to 4.0mm ² cables |
| ne 5 ne 15 | L.E.D. colours: | Amber Blue, Green, Red and White |
| ne 5 | Lens colour: | All L.E.D. colours use a Clear lens to maximise |
| ne 5 | | output and to ensure the signal is most effective in |
| ne 5 ne 5 | | high ambient light |
| ne 5 | General: | |
| ne 15 ne 5 | Ingress protection: | IP66 |
| ne 45 | Housing material: | High impact UL94 VO & 5VA FR ABS |
| ne 5 ne 5 | Colour: | Red (RAL3000) |
| ne 45 | | |
| one 45 | Cable entries: | 2 x M20 clearance gland entries in side & back |
| one 17 one 27 | Terminals: | 0.5 to 4.0mm ² cables. |
| ne 27 ne 5 | Operating temp: | -25 to +55°C |
| one 5 | Storage temp: | -40 to +70°C |
| one 5 one 5 | Relative humidity: | 90% at 20°C. |
| one 34 | Weight : | DC: 2.00kg AC:2.30kg |

*SPL data +/-3dB(A). Measured at optimum voltage.

| Part code | | Part code: | |
|--|--|---|-----------------------------------|
| 24V dc | | AL112NHDC | 024[x]/[y] |
| 115V ac | | AL112NHAC | 115[x]/[y] |
| 230V ac | | AL112NHAC | 230[x]/[y] |
| [x] = Housin | g colour: | R: Red G: Gr | еу |
| [y] = Lens c | olour: | A: Amber, B: (White), G: G | Blue. W: Clea reen, R: Red |
| | iise output in high an s for all L.E.D colours | - | ents the AL112NH |
| | ber with '-P' for progr ber with '-UL' fO r UL | | |
| Suffix part num | ber with '-UL' fOr UL | . approved versio | n. |
| Suffix part num Alarm sou Version: | ber with '-UL' fOr UL | | |
| Suffix part num | ber with '-UL' fOr UL | . approved versio Voltage: | n. Current: |
| Suffix part num Alarm sou Version: 24V dc | ber with '-UL' for UL Inder: | Voltage: 10-30V dc | n. Current: 200mA* |
| Alarm sou Version: 24V dc 115V ac 230V ac | ber with '-UL' for UL Inder: 50/60Hz | Voltage: 10-30V dc +/-10% +/-10% | n. Current: 200mA* 100mA |
| Alarm sou Version: 24V dc 115V ac 230V ac | ber with '-UL' for UL Inder: 50/60Hz 50/60Hz hinal voltage on Tone | Voltage: 10-30V dc +/-10% +/-10% | n. Current: 200mA* 100mA |
| Suffix part num Alarm sou Version: 24V dc 115V ac 230V ac * current at non | ber with '-UL' for UL Inder: 50/60Hz 50/60Hz hinal voltage on Tone | Voltage: 10-30V dc +/-10% +/-10% | n. Current: 200mA* 100mA |

35mA (@230V ac)

115/230V ac 90-260V

ac/dc

50/60Hz

res:

- omatic synchronisation on multi-sounder system.

- & out for daisy-chain installations).
- picalisation available on request.
- ilable with custom tone configurations
- frequencies.
- grammable' version available:
- alarm tones
- remotely selectable stages
- y tone can be assigned to any stage

vals:

- OOA/PFEER compliant alarm tones.
- approved version available.
- ST-R approved. Cert: POCC GB-JB05-B02228

Country specific or custom tone configurations and alarm frequencies are available upon request.





- h output L.E.D array
- ntinuously rated.
- inless steel fixings.
- can be mounted using external lugs or internal
- SA compatible fixing positions.
- plicate cable terminations

ser configurable continuous frequency tone



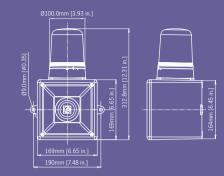


AB112RTH Alarm Sounder & Rotating Beacon

The AB112RTH combines a high output 119dB(A) alarm sounder with a powerful 25W halogen rotating beacon.

The beacon and sounder can be operated from the same power source or controlled individually.





Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 |
|---------|--|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |
| Tone 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 |
| Tone 35 | 420Hz @ 0.625 sec Australian Alert | Tone 36 | Tone 5 |
| Tone 36 | 500-1200Hz 3.75sec /0.25sec. Australian Evac. | Tone 35 | Tone 5 |
| Tone 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 |
| Tone 38 | 2000Hz Continuous | Tone 34 | Tone 45 |
| Tone 39 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 |
| Tone 40 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 31 | Tone 27 |
| Tone 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 |
| Tone 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 |
| Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 |
| Tone 44 | Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 |
| Tone 45 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm | Tone 38 | Tone 34 |
| | | | |

Specification: .

| Stage 3 | Sounder: | |
|--------------------|---------------------|--|
| Tone 5 Tone 5 | Maximum output: | 119dB(A) @ 1 metre |
| Tone 5 | Nominal output: | 112dB(A) @ 1m +/- 3dB - Tone 2 |
| Tone 5 Tone 20 | No. of tones: | 45 (UKOOA / PFEER compliant) |
| Tone 5 | No. of stages: | 3 |
| Tone 5 | | - |
| Tone 5 | Volume control: | Max. 112dB(A); Min.103dB(A) - Tone 2 |
| Tone 2 | Effective range: | 125m @ 1KHz |
| Tone 5 Tone 5 | Beacon: | |
| Tone 5 | Light source: | Halogen Bulb G6,35 / GY6,35. |
| Tone 5 | | |
| Tone 5 | Light output: | max 25W |
| Tone 5 Tone 5 | Rotation: | 180 RPM (+/-30RPM). |
| Tone 27 | Peak candela: | 821 cd* - measured ref. to I.E.S. |
| Tone 5 Tone 5 | Effective candela: | 125 cd* - measured ref. to I.E.S. |
| Tone 5 | Lens colours: | Amber, Blue, Clear, Green, Red & Yellow |
| Tone 5 | Drive life: | > 5.000 hrs |
| Tone 5 | | > 5,000 THS |
| Tone 5 Tone 5 | General: | |
| Tone 5 | Voltages DC: | 12V dc; 24V dc |
| Tone 15 | Voltages AC: | 115V ac; 230V ac |
| Tone 5 Tone 5 | Ingress protection: | IP65 |
| Tone 5 | Housing material: | High impact UL94 VO & 5VA FR ABS |
| Tone 5 | | 5 |
| Tone 5 Tone 15 | Lens material: | UV stable PC UL94 V0 FR |
| Tone 5 | | Bayonet lens fixing , |
| Tone 45 | | Anti-tamper locking screw. |
| Tone 5 | Colour: | Red (RAL3000) |
| Tone 5 Tone 45 | Cable entries: | 2 x M20 clearance gland entries in side & back |
| Tone 45 | Terminals: | 0.5 to 4.0mm ² cables. |
| Tone 17 Tone 27 | Operating temp: | -25 to +55°C |
| Tone 5 | Storage temp: | -40 to +70°C |
| Tone 5 | | |
| Tone 5 | Relative humidity: | 90% at 20°C. |
| Tone 5 Tone 34 | Weight : | DC: 2.00kg AC:2.30kg |

| P | а | r | t | С | 0 | d | e | s | i |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

| Version: | Part code: | | Wattage: |
|---------------|------------|----------|------------------|
| 12V dc | AB112RTHDC | 212R/[y] | 20W |
| 24V dc | AB112RTHDC | 24R/[y] | 20W |
| 115V ac | AB112RTHAC | 115R/[y] | 25W |
| 230V ac | AB112RTHAC | 230R/[y] | 25W |
| [y] = Lens co | olour: | A: Amber | B: Blue C:Clear |
| | | G: Green | R: Red Y: Yellow |
| | | | |

Suffix part number with '-P' for programmable, 4 stage, 45 tone version.

Alarm sounder:

| Version: | | Voltage: | Current: |
|----------|---------|-----------|----------|
| 24V dc | | 10-30V dc | 200mA* |
| 115V ac | 50/60Hz | +/-10% | 100mA |
| 230V ac | 50/60Hz | +/-10% | 60mA |

| Rotating beacon: | | | | | | |
|------------------|---------|----------|----------|--|--|--|
| Version: | | Wattage: | Current: | | | |
| 12V dc | | 20W | 1.72A | | | |
| 24V dc | | 20W | 910mA | | | |
| 115V ac | 50/60Hz | 25W | 216mA | | | |
| 230V ac | 50/60Hz | 25W | 117mA | | | |

Features:

- Continuously rated.
- Stainless steel fixings.

- (in & out for daisy-chain installations).
- Tropicalisation available on request.
- Available with custom tone configurations
- and frequencies. • 'Programmable' version available:
- 45 alarm tones
- 4 remotely selectable stages

Approvals:

Country specific or custom tone configurations and alarm frequencies are available upon request.

*Candela measurements representative of performance with clear lens at optimum voltage. *SPL data +/-3dB(A). Measured at optimum voltage.





- Automatic synchronisation on
- multi-sounder system.
- Unit can be mounted using external lugs
- or internal BESA compatible fixing positions.
- Duplicate cable terminations

- Any tone can be assigned to any stage
- User configurable continuous frequency tone





AB112STR Alarm Sounder & Xenon Strobe

The AB112STR combines a high output 119dB(A) alarm sounder with a powerful 5J Xenon strobe beacon.

The beacon and sounder can be operated from the same power source or controlled individually.

Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 |
|---------|---|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |
| Tone 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 |
| Tone 35 | 420Hz @ 0.625 sec Australian Alert | Tone 36 | Tone 5 |
| Tone 36 | 500-1200Hz 3.75sec /0.25sec. Australian Evac. | Tone 35 | Tone 5 |
| Tone 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 |
| Tone 38 | 2000Hz Continuous | Tone 34 | Tone 45 |
| Tone 39 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 |
| Tone 40 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 31 | Tone 27 |
| Tone 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 |
| Tone 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 |
| Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 |
| | M L 0: L : L 0400 U | Tone 2 | T C |
| Tone 44 | Motor Siren - slow rise to 2400 Hz | Torie Z | Tone 5 |

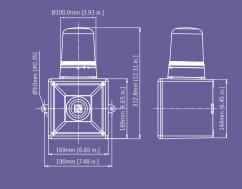
Country specific or custom tone configurations and alarm frequencies are available upon request.

Specification:

| Sounder: | |
|---------------------|--|
| Maximum output: | 119dB(A) @ 1 metre |
| Nominal output: | 112dB(A) @ 1m +/- 3dB - Tone 2 |
| No. of tones: | 45 (UKOOA / PFEER compliant) |
| No. of stages: | 3 |
| Volume control: | Max. 112dB(A); Min.103dB(A) - Tone 2 |
| Effective range: | 125m @ 1KHz |
| Beacon: | |
| Energy: | 5 Joules (5Ws) |
| Flash rate: | 1Hz (60 fpm) |
| Peak candela: | 500,000 cd - calc. from energy (J) |
| Effective candela: | 250 cd - calc. from energy (J) |
| Peak candela: | 49,788 cd* - measured ref. to I.E.S. |
| Effective candela: | 125 cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow |
| Tube life: | Emissions are reduced to 70% after 8 million flashes |
| General: | |
| Voltages DC: | 24V dc (10-30V dc); 48V dc (35-60V dc) |
| Voltages AC: | 115V ac; 230V ac |
| Ingress protection: | IP65 |
| Housing material: | High impact UL94 V0 & 5VA FR ABS |
| Lens material: | UV stable PC UL94 VO FR |
| | Bayonet lens fixing , |
| | Anti-tamper locking screw. |
| Colour: | Red (RAL3000) |
| Cable entries: | 2 x M20 clearance gland entries in side & back |
| Terminals: | 0.5 to 4.0mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | DC: 2.00kg AC:2.30kg |

*Candela measurements representative of performance with clear lens at optimum voltage. *SPL data +/-3dB(A). Measured at optimum voltage.

| 47- | C | \mathbb{D} | 105mm [4. 13 in.] | 156 5mm 16 16 in 1 |
|----------------|---|--------------|-----------------------|--------------------|
| | | 2) | 105m | 1565 |



Part codes:

| Version: | Part code: |
|--------------------|--|
| 12V dc | AB112STRDC12R/[y] |
| 24V dc | AB112STRDC24R/[y] |
| 48V dc | AB112STRDC48R/[y] |
| 115V ac | AB112STRAC115R/[y] |
| 230V ac | AB112STRAC230R/[y] |
| 24V ac | AB112STRAC24R/[y] |
| [y] = Lens colour: | A: Amber B: Blue C: Clear G: Green M: Magenta R: Red Y: Yellow |

Alarm sounder:

| Version: | | Voltage: | Current |
|----------|---------|-----------|---------|
| 24V dc | | 10-30V dc | 200mA* |
| 48V dc | | 35-60V dc | 120mA* |
| 115V ac | 50/60Hz | +/-10% | 100mA |
| 230V ac | 50/60Hz | +/-10% | 60mA |
| 24V ac | 50/60Hz | +/-10% | 500mA |

Xenon beacon:

| Version: | | Voltage: | Current: |
|----------|---------|-----------|----------|
| 12V dc | | 10-14V dc | 500mA |
| 24V dc | | 20-28V dc | 250mA |
| 48V dc | | 42-54V dc | 175mA |
| 115V ac | 50/60Hz | +/-10% | 70mA |
| 230V ac | 50/60Hz | +/-10% | 35mA |
| 24V ac | 50/60Hz | +/-10% | 300mA |

Features:

- Continuously rated.
- Stainless steel fixings.
- (in & out for daisy-chain installations). • Available with synchronised flash.
- Available with multi-frequency function.
- Tropicalisation available on request.
- Available with custom tone configurations and frequencies.
- 'Programmable' version available:
- 45 alarm tones
- 4 remotely selectable stages
- Any tone can be assigned to any stage

Approvals:





- Automatic synchronisation on
- multi-sounder system.
- Unit can be mounted using external lugs
- or internal BESA compatible fixing positions.
- Duplicate cable terminations

- User configurable continuous frequency tone





AB112LDA Alarm Sounder & L.E.D. Beacon

The AB121LDA combines a heavy duty 126dB(A) alarm sounder with a powerful multi-function L.E.D beacon.

The beacon and sounder can be operated from the same power source or controlled individually.

Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 |
|---------|--|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |
| Tone 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 |
| Tone 35 | 420Hz @ 0.625 sec Australian Alert | Tone 36 | Tone 5 |
| Tone 36 | 500-1200Hz 3.75sec /0.25sec. Australian Evac. | Tone 35 | Tone 5 |
| Tone 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 |
| Tone 38 | 2000Hz Continuous | Tone 34 | Tone 45 |
| Tone 39 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 |
| Tone 40 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 31 | Tone 27 |
| Tone 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 |
| Tone 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 |
| Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 |
| Tone 44 | Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 |
| Tone 45 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm | Tone 38 | Tone 34 |
| | . , | | |

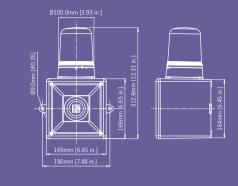
Country specific or custom tone configurations and alarm frequencies are available upon request.

Specification:

| | Specification: | |
|--------------|----------------------|---|
| ge 3 | Sounder: | |
| ne 5 | Maximum output: | 126dB(A) @ 1 metre |
| ne 5 ne 5 | Nominal output: | 121dB(A) @ 1m +/- 3dB - Tone 2 |
| ne 5 | | |
| ne 20 | No. of tones: | 45 (UKOOA / PFEER compliant) |
| ne 5 | No. of stages: | 3 |
| ne 5 ne 5 | Volume control: | Max. 121dB(A); Min.112dB(A) - Tone 2 |
| ne 2 | | |
| e 5 | Effective range: | 300m @ 1KHz |
| e 5 | Beacon: | |
| ne 5 | Light source: | Array of 32 multi-function high power L.E.D's |
| ie 5 | | |
| e 5 | Operating modes: | 4 rotating configurations |
| ie 5 ie 5 | | 4 flashing configurations |
| ne 27 | | Steady mode for indicator / status applications |
| ie 5 | | , |
| ne 5 | Peak candela: | 19 cd* - measured ref. to I.E.S. |
| ne 5 | Effective candela: | 19 cd* - measured ref. to I.E.S. |
| ie 5 ie 5 | No. of stages: | DC unit also features a remotely selectable |
| e5 e5 | | , |
| e 5 | | 2nd and 3rd stage flash pattern. |
| e 5 | L.E.D /lens colours: | Amber, Blue, Clear (white L.E.D.s), |
| e 15 | | Green, Red & Yellow |
| 5 | General: | |
| e 5 | | |
| e 5 e 5 | Voltages DC: | 24V dc (10-30V dc); 48V dc (35-60V dc) |
| e 5 | Voltages AC: | 115V ac; 230V ac |
| e 15 | Ingress protection: | IP65 |
| e 5 | | |
| e 45 | Housing material: | High impact UL94 V0 & 5VA FR ABS |
| e 5 | Lens material: | UV stable PC UL94 V0 FR |
| e 5 e 45 | | Bayonet lensfixing , |
| ie 45 | | Anti-tamper locking screw. |
| ie 17 | Colour: | Red (RAL3000) & Grey (RAL7038) |
| e 27 | | |
| e 5 | Cable entries: | 2 x M20 clearance gland entries in side & back |
| 5 | Terminals: | 0.5 to 4.0mm ² cables. |
| e 5 | Operating temp: | -25 to +55°C |
| ie 34 | | |
| | Storage temp: | -40 to +70°C |
| | Relative humidity: | 90% at 20°C. |
| | Weight : | DC: 2.10kg AC:2.70kg |
| | | |

*Candela measurements representative of performance with amber lens at optimum voltage. *SPL data +/-3dB(A). Measured at optimum voltage.





Part codes:

| Version: | Part code: |
|----------------|-----------------------------|
| 24V dc | AB121LDADC24[x]/[y] |
| 48V dc | AB121LDADC48[x]/[y] |
| 115V ac | AB121LDAAC115[x]/[y] |
| 230V ac | AB121LDAAC230[x]/[y] |
| [x] = Housing: | G: Grey, R: Red |
| [y] = Lens: | A: Amber, B: Blue, C: Clear |
| | G: Green, R: Red, Y: Yellow |

Alarm sounder:

| Version: | | Voltage: | Current: |
|----------|---------|-----------|----------|
| 24V dc | | 10-30V dc | 950mA* |
| 48V dc | | 35-60V dc | 600mA* |
| 115V ac | 50/60Hz | +/-10% | 240mA |
| 230V ac | 50/60Hz | +/-10% | 120mA |

L.E.D. beacon:

| Version: | | Voltage: | Current: |
|----------|---------|-----------|----------|
| 24V dc | | 10-50V dc | 400mA* |
| 48V dc | | 10-50V dc | 400mA* |
| 115V ac | 50/60Hz | +/-10% | 140mA |
| 230V ac | 50/60Hz | +/-10% | 70mA |

Flash patterns

| stage 1 | Stg2 [DC only] | Stg3 [DC only] |
|-------------------|------------------------------------|----------------|
| II L.E.D's on | Alt Side Flash 2Hz | 2x Flash 2Hz |
| Rotating: Slow1 | Alt Side Flash 2Hz | All L.E.D's on |
| x Flash 2Hz | Rotating: Fast 2 | All L.E.D's on |
| Rotating: Fast 1 | 1x Flash 2Hz | All L.E.D's on |
| Rotating: Slow 2 | 2x Flash 1Hz | All L.E.D's on |
| x Flash 2Hz | Rotating: Fast 2 | All L.E.D's on |
| Rotating: Fast 2 | 2x Flash 2Hz | All L.E.D's on |
| 'x Flash 1Hz | Alt Side Flash 2Hz | All L.E.D's on |
| lt Side Flash 2Hz | Rotating: Fast 2 | All L.E.D's on |
| x Flash 1Hz | 2x Flash 2Hz Alt Side Flash 2Hz | All L.E.D's on |

Features:

- Continuously rated.

 - Tropicalisation available on request.
 - Available with custom tone configurations and frequencies.

 - 45 alarm tones
 - 4 remotely selectable stages
 - Any tone can be assigned to any stage
 - User configurable continuous frequency tone

Approvals:





- Automatic synchronisation on
- multi-sounder system.
- Stainless steel fixings.
- Unit can be mounted using external lugs
- or internal BESA compatible fixing positions.
- Duplicate cable terminations
- (in & out for daisy-chain installations).
- 'Programmable' version available:





AL121X Alarm Sounder & Xenon Beacon

The AL121X features the 126dB(A) A121 alarm sounder combined with the L101X Xenon beacon. The compact, robust housing is ideal for all general signalling applications including fire, security and process control.

The 5 Joule Xenon strobe generates over 200 candela of light output. DC versions have multile flash rates selectable udring installation. Sounder & beacon may be connected from a single supply for simultaneous operation or from separate supplies for independent operation.

Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 |
|---------|--|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |
| Tone 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 |
| Tone 35 | 420Hz @ 0.625 sec Australian Alert | Tone 36 | Tone 5 |
| Tone 36 | 500-1200Hz 3.75sec /0.25sec. Australian Evac. | Tone 35 | Tone 5 |
| Tone 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 |
| Tone 38 | 2000Hz Continuous | Tone 34 | Tone 45 |
| Tone 39 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 |
| Tone 40 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 31 | Tone 27 |
| Tone 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 |
| Tone 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 |
| Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 |
| Tone 44 | Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 |
| Tone 45 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm | Tone 38 | Tone 34 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Specification:

| | Specification. | |
|--------------------|---------------------|--|
| Stage 3 | Sounder: | |
| Tone 5 | Maximum output: | 126dB(A) @ 1 metre |
| Tone 5 Tone 5 | Nominal output: | 121dB(A) @ 1m +/- 3dB - Tone 2 |
| Tone 5 | | |
| Tone 20 | No. of tones: | 45 (UKOOA / PFEER compliant) |
| Tone 5 | No. of stages: | 3 |
| Tone 5 Tone 5 | Volume control: | Max. 121dB(A); Min. 112dB(A) - Tone 2 |
| Tone 2 | Effective range: | 300m @ 1KHz |
| Tone 5 | | |
| Tone 5 | Voltages DC: | 24V dc (10-30V dc); 48V dc (35-60V dc) |
| Tone 5 | | [DC units can use 24V ac for single |
| Tone 5 | | stage applications.] |
| Tone 5 Tone 5 | Voltages AC: | 24V ac; 115V ac; 230V ac |
| Tone 5 | | , , |
| Tone 27 | Stage switching: | Negative |
| Tone 5 | | Reverse polarity stage switching on DC units. |
| Tone 5 | Beacon: | |
| Tone 5 | | |
| Tone 5 | Energy: | 5 Joules (5Ws) |
| Tone 5 Tone 5 | Flash rate: | 1Hz (60 fpm) |
| Tone 5 | Peak Candela: | 500,000 cd - calc. from energy (J) |
| Tone 5 | Effective candela: | 250 cd - calc. from energy (J) |
| Tone 15 | Peak Candela: | 86,935 cd* - measured ref. to I.E.S. |
| Tone 5 Tone 5 | | |
| Tone 5 | Effective candela: | 200 cd* - measured ref. to I.E.S. |
| Tone 5 | Lens colours: | Amber, Blue, Clear, Green, Magenta, Red & Yellow |
| Tone 5 Tone 15 | Tube life: | Emissions are reduced to 70% after 8 million flashes |
| Tone 5 | General: | |
| Tone 45 Tone 5 | Ingress protection: | IP66 |
| Tone 5 | Housing material: | High impact UL94 V0 & 5VA FR ABS |
| Tone 45 Tone 45 | Colour: | Red (RAL3000) and grey (RAL7038) |
| Tone 17 | | , , , , |
| Tone 27 | Cable entries: | 2 x M20 clearance gland entries in side & back |
| Tone 5 | Terminals: | 0.5 to 4.0mm ² cables. |
| Tone 5 Tone 5 | Operating temp: | -25 to +55°C |
| Tone 5 | Storage temp: | -40 to +70°C |
| Tone 34 | Relative humidity: | 90% at 20°C. |
| | Weight : | DC: 2.30kg AC:2.90kg |
| | | |

*Candela measurements representative of performance with clear lens at optimum voltage. *SPL data +/-3dB(A). Measured at optimum voltage.

| ['In.] | 190.0mm [7.48 in.] | |
|------------------------|--------------------|--------------------|
| 274.0mm [107.97 in.] | | |
| ø9.0mm [ø0.35 m.] - | 210.0mm [8.27 in.] | |
| ø9.0mm | | 190.0mm [7.48 in.] |

Part codes:

| Version: | Part code: |
|-----------------------|--|
| 24V dc | AL121XDC024[x]/[y] |
| 48V dc | AL121XDC048[x]/[y] |
| 24V ac | AL121XAC024[x]/[y] |
| 115V ac | AL121XAC115[x]/[y] |
| 230V ac | AL121XAC230[x]/[y] |
| [x] = Housing colour: | R: Red, G: Grey |
| [y] = Lens colour: | A: Amber, B: Blue. C: Clear, G: Green, M: Magenta, R: Red, Y: Yellow |

Suffix part number with '-F' for forward facing Xenon beacon. Suffix part number with '-UL' for UL approved version.

Alarm sounder: Version: Voltage: Current: 24V dc 10-30V dc 950mA* 48V dc 35-60V dc 600mA* 24V ac 50/60Hz +/-10% 1000mA 115V ac +/-10% 50/60Hz 240mA 230V ac 50/60Hz +/-10% 120mA

* current at nominal voltage on Tone 2

Xenon beacon:

| Version: | | Voltage: | Current: | Approva |
|----------|---------|-----------|----------|-------------|
| 12V dc | | 10-14V dc | 500mA | • A121 |
| 24V dc | | 20-28V dc | 250mA | - (CPD |
| 48V dc | | 42-54V dc | 175mA | • Xenon |
| 24V ac | 50/60Hz | +/-10% | 300mA | 23:20 |
| 115V ac | 50/60Hz | +/-10% | 70mA | - • UKOC |
| 230V ac | 50/60Hz | +/-10% | 35mA | • UL ap |
| | | | | |

Features:

- 45 alarm tones

als:



- Automatic synchronisation on multi-sounder system.
- High output Xenon beacon
- DC voltage units feature multiple flash rates.
- Continuously rated.
- Stainless steel fixings.
- Unit can be mounted using external lugs or internal
- BESA compatible fixing positions.
- Duplicate cable terminations
- (in & out for daisy-chain installations).
- Tropicalisation available on request.
- Available with custom tone configurations
- and frequencies.
- 'Programmable' version available:
- 4 remotely selectable stages
- Any tone can be assigned to any stage
- User configurable continuous frequency tone

alarm sounder is VdS approved to EN54-3 89/106/EEC).

- on beacon (L101X) VdS approved to EN54-2010 (CPD 89/106/EEC).
- OOA/PFEER compliant alarm tones.
- pproved version available.
- GOST-R approved. Cert: POCC GB-JB05-H00144







AL121H Alarm Sounder & L.E.D. Beacon

The AL121H features the 126dB(A) A121 alarm sounder combined with the L101H high output L.E.D. beacon.

The array of 24 Superflux type high output L.E.D's generates over 120 candela of light output and can be user set to either steady of flashing mode. Sounder & beacon may be connected from a single supply for simultaneous operation or from separate supplies for independent operation. The robust, fire retardant IP66 housing ensures the AL121H is suitable for all general signalling applications.

Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 |
|---------|--|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |
| Tone 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 |
| Tone 35 | 420Hz @ 0.625 sec Australian Alert | Tone 36 | Tone 5 |
| Tone 36 | 500-1200Hz 3.75sec / 0.25sec. Australian Evac. | Tone 35 | Tone 5 |
| Tone 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 |
| Tone 38 | 2000Hz Continuous | Tone 34 | Tone 45 |
| Tone 39 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 |
| Tone 40 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 31 | Tone 27 |
| Tone 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 |
| Tone 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 |
| Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 |
| Tone 44 | Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 |
| Tone 45 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm | Tone 38 | Tone 34 |
| | | | |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Specification:

| tage 3 | Sounder: | |
|------------------|---------------------|---|
| one 5 one 5 | Maximum output: | 126dB(A) @ 1 metre |
| one 5 | Nominal output: | 121dB(A) @ 1m +/- 3dB - Tone 2 |
| one 5 one 20 | No. of tones: | 45 (UKOOA / PFEER compliant) |
| one 20 one 5 | No. of stages: | 3 |
| one 5 | Volume control: | Max. 121dB(A); Min. 112dB(A) - Tone 2 |
| one 5 one 2 | | |
| one 5 | Effective range: | 300m @ 1KHz |
| one 5 | Voltages DC: | 24V dc (10-30V dc) |
| one 5 one 5 | Voltages AC: | 115V ac; 230V ac |
| one 5 | Stage switching: | Negative |
| one 5 | | Reverse polarity stage switching on DC units. |
| one 5 one 27 | Beacon: | |
| one 5 | Light source: | High intensity L.E.D. array. |
| one 5 | Light Source. | 24 x Superflux type high ouput L.E.D's |
| one 5 | 0.1 | |
| ne 5 ne 5 | Options: | Steady or 2Hz flash mode (on board selection) |
| ne 5 | Effective candela: | 176 cd (Green L.E.D.) |
| ne 5 | Terminals: | 0.5 to 4.0mm ² cables |
| ne 5 ne 15 | L.E.D. colours: | Amber Blue, Green, Red and White |
| ne 5 | Lens colour: | All L.E.D. colours use a Clear lens to maximise |
| ne 5 | Lens colour. | output and to ensure the signal is most effective |
| one 5 one 5 | | in high ambient light |
| ne 5 | General: | |
| one 15 one 5 | Ingress protection: | IP66 |
| one 45 | | |
| one 5 | Housing material: | High impact UL94 V0 & 5VA FR ABS |
| one 5 | Colour: | Red (RAL3000) and grey (RAL7038) |
| one 45 one 45 | Cable entries: | 2 x M20 clearance gland entries in side & back |
| one 17 | Terminals: | 0.5 to 4.0mm ² cables. |
| one 27 one 5 | Operating temp: | -25 to +55°C |
| one 5 | Storage temp: | -40 to +70°C |
| one 5 | | 90% at 20°C. |
| one 5 | Relative humidity: | |
| one 34 | Weight : | DC: 2.30kg AC:2.90kg |

*SPL data +/-3dB(A). Measured at optimum voltage.

| Version: | | Part code: | Part code: | | |
|---|--|---|---------------------------------|--|--|
| 24V dc | | AL121HDC0 | AL121HDC024[x]/[y] | | |
| 115V ac | | AL121HAC1 | 15[x]/[y] | | |
| 230V ac | | AL121HAC2 | 30[x]/[y] | | |
| [x] = Housing colour: | | R: Red, G: G | rey | | |
| [y] = Lens c | olour: | A: Amber, B: (White), G: G | Blue, W: Clear Green, R: Red | | |
| clear lenses for | ise output in high am all L.E.D colours. | | | | |
| clear lenses for Suffix part num Suffix part num | all L.E.D colours. ber with '-P' for progr ber with '-UL' for UL a | ammable, 4 stage, 45 | | | |
| clear lenses for Suffix part num | all L.E.D colours. ber with '-P' for progr ber with '-UL' for UL a | ammable, 4 stage, 45 | | | |
| clear lenses for Suffix part num Suffix part num Alarm sou | all L.E.D colours. ber with '-P' for progr ber with '-UL' for UL a | ammable, 4 stage, 45 approved version. | 5 tone version. | | |
| clear lenses for Suffix part num Suffix part num Alarm sou Version: | all L.E.D colours. ber with '-P' for progr ber with '-UL' for UL a | ammable, 4 stage, 45 approved version. Voltage: | 5 tone version. | | |
| clear lenses for Suffix part num Suffix part num Alarm sou Version: 24V dc | all L.E.D colours. ber with '-P' for progr ber with '-UL' for UL a | ammable, 4 stage, 45 approved version. Voltage: 10-30V dc | 5 tone version. Current: 950mA* | | |
| clear lenses for Suffix part num Suffix part num Alarm sou Version: 24V dc 48V dc | all L.E.D colours. ber with '-P' for progr ber with '-UL' for UL a under: | ammable, 4 stage, 45 approved version. Voltage: 10-30V dc 35-60V dc | 5 tone version. | | |

* current at nominal voltage on Tone 2

L.E.D. beacon:

| Version: | Voltage: | Current: |
|-------------|-----------|------------------|
| 24V dc | 10-30V dc | 155mA (@ 24V dc) |
| 115/230V ac | 90-260V | 35mA (@230V ac) |
| 50/60Hz | ac/dc | |

ures:

- 45 alarm tones

rovals:

- UL approved version available.



- igh output L.E.D array
- utomatic synchronisation on multi-sounder system.
- ontinuously rated.
- ainless steel fixings.
- nit can be mounted using external lugs or internal
- ESA compatible fixing positions.
- uplicate cable terminations
- & out for daisy-chain installations).
- opicalisation available on request.
- vailable with custom tone configurations
- nd frequencies.
- rogrammable' version available:
- remotely selectable stages
- Any tone can be assigned to any stage
- Jser configurable continuous frequency tone
- KOOA/PFEER compliant alarm tones.
- GOST-R approved. Cert: POCC GB-JB05-B02228





AB121RTH Alarm Sounder & Rotating Beacon

The AB121RTH combines a heavy duty 126dB(A) alarm sounder with a powerful 40W halogen rotating beacon.

The beacon and sounder can be operated from the same power source or controlled individually.

Tone table:

| Stage 1 | Frequency Description | Stage 2 | Stage 3 |
|---------|---|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating - BS5839 Alarm tone | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop - | Tone 2 | Tone 5 |
| | NEN 2575:2000 | | |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - AFNOR NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s - | Tone 2 | Tone 5 |
| | AFNOR NFC48-265 | | |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |
| Tone 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 |
| Tone 35 | 420Hz @ 0.625 sec Australian Alert - AS2220 | Tone 36 | Tone 5 |
| Tone 36 | 500-1200Hz 3.75sec /0.25sec. Australian Evac AS2220 | Tone 35 | Tone 5 |
| Tone 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 |
| Tone 38 | 2000Hz Continuous | Tone 34 | Tone 45 |
| Tone 39 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 |
| Tone 40 | 544Hz (100mS)/440Hz (400mS) - AFNOR NF S 32-001 | Tone 31 | Tone 27 |
| Tone 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 |
| Tone 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 |
| Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 |
| Tone 44 | Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 |
| Tone 45 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm | Tone 38 | Tone 34 |
| | | | |

Specification:

| Maximum output: | 126dB(A) @ 1 metre |
|---------------------|--|
| Nominal output: | 121dB(A) @ 1m +/- 3dB - Tone 2 |
| No. of tones: | 45 (UKOOA / PFEER compliant) |
| No. of stages: | 3 |
| Volume control: | Max. 121dB(A); Min.112dB(A) - Tone 2 |
| Effective range: | 300m @ 1KHz |
| Beacon: | |
| Light source: | Halogen Bulb G6,35 / GY6,35. |
| Light output: | max 40W |
| Rotation: | 180 RPM (+/-30RPM). |
| Peak candela: | 1,204 cd* - measured ref. to I.E.S. |
| Effective candela: | 325 cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow |
| Drive life: | > 5,000 hrs |
| General: | |
| Voltages DC: | 12V dc; 24V dc |
| Voltages AC: | 115V ac; 230V ac |
| Ingress protection: | IP65 |
| Housing material: | High impact UL94 V0 & 5VA FR ABS |
| Lens material: | UV stable PC UL94 V0 FR Bayonet lens fixing , Anti-tamper locking screw. |
| Colour: | Red (RAL3000) & Grey (RAL7038) |
| Cable entries: | 2 x M20 clearance gland entries in side & back |
| Terminals: | 0.5 to 4.0mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | DC: 2.10kg AC:2.70kg |

*Candela measurements representative of performance with clear lens at optimum voltage. *SPL data +/-3dB(A). Measured at optimum voltage.

| Par | t c | od | es: | |
|-----|-----|----|-----|--|
|-----|-----|----|-----|--|

| Part code: | | Wattage |
|--------------------|---|--|
| AB121RTHD | C12[x]/[y] | 35W |
| AB121RTHD | C24[x]/[y] | 35W |
| AB121RTHA | C115[x]/[y] | 40W |
| AB121RTHA | C230[x]/[y] | 40W |
| g colour: | G: Grey R: F | Red |
| [y] = Lens colour: | | : Blue C: Clear Red Y: Yellow |
| | AB121RTHD AB121RTHD AB121RTHA AB121RTHA AB121RTHA | AB121RTHDC12[x]/[y] AB121RTHDC24[x]/[y] AB121RTHAC115[x]/[y] AB121RTHAC230[x]/[y] g colour: G: Grey R: F lour: A: Amber B |

Alarm sounder:

Rotating beacon:

Version:

12V dc

24V dc

115V ac

230V ac

| Version: | | Voltage: | Current: |
|-----------|---------|-----------|----------|
| 12/24V dc | | 10-30V dc | 950mA* |
| 115V ac | 50/60Hz | +/-10% | 240mA |
| 230V ac | 50/60Hz | +/-10% | 120mA |

40W

50/60Hz

Features:

Wattage: Current: 35W 3.0A 35W 1.54A 50/60Hz 40W 338mA

186mA

ne 34

Country specific or custom tone configurations and alarm frequencies are available upon request.

- Available with custom tone configurations and frequencies. • 'Programmable' version available: - 45 alarm tones - 4 remotely selectable stages
- Any tone can be assigned to any stage
- User configurable continuous frequency tone
- Approvals:





- Automatic synchronisation on
- multi-sounder system.
- Continuously rated.
- Stainless steel fixings.
- Unit can be mounted using external lugs
- or internal BESA compatible fixing positions.
- Duplicate cable terminations
- (in & out for daisy-chain installations).
- Tropicalisation available on request.

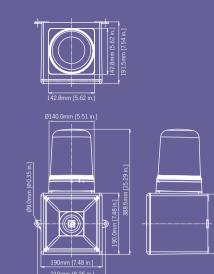




AB121STR Alarm Sounder & Xenon Strobe

The AB121STR combines a heavy duty 126dB(A) alarm sounder with a powerful 15J Xenon strobe warning beacon featuring a single, double and triple flash pattern.

The beacon and sounder can be operated from the same power source or controlled individually.



Tone table:

| Stage 1 | Frequency Description | Stage 2 | Stage 3 |
|---------|---|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating - BS5839 Alarm tone | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop - | Tone 2 | Tone 5 |
| | NEN 2575:2000 | | |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - AFNOR NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s - | Tone 2 | Tone 5 |
| | AFNOR NFC48-265 | | |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |
| Tone 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 |
| Tone 35 | 420Hz @ 0.625 sec Australian Alert - AS2220 | Tone 36 | Tone 5 |
| Tone 36 | 500-1200Hz 3.75sec /0.25sec. Australian Evac AS2220 | Tone 35 | Tone 5 |
| Tone 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 |
| Tone 38 | 2000Hz Continuous | Tone 34 | Tone 45 |
| Tone 39 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 |
| Tone 40 | 544Hz (100mS)/440Hz (400mS) - AFNOR NF S 32-001 | Tone 31 | Tone 27 |
| Tone 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 |
| Tone 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 |
| Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 |
| Tone 44 | Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 |
| Tone 45 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm | Tone 38 | Tone 34 |
| | | | |

Specification:

| Sounder: | |
|---------------------|---|
| Maximum output: | 126dB(A) @ 1 metre |
| Nominal output: | 121dB(A) @ 1m +/- 3dB - Tone 2 |
| No. of tones: | 45 (UKOOA / PFEER compliant) |
| No. of stages: | 3 |
| Volume control: | Max. 121dB(A); Min.112dB(A) - Tone 2 |
| Effective range: | 300m @ 1KHz |
| Beacon: | |
| Energy: | 15 Joules |
| Flash pattern 1: | 1x flash 15J @ 1Hz |
| Flash pattern 2: | 1x flash 15J @ 1.5Hz |
| Flash pattern 3: | 2 x flash 15J + 15J |
| Peak Candela: | 1,500,000 cd - calc. from energy (J) |
| Effective candela: | 750 cd - calc. from energy (J) |
| Peak Candela: | 94,790 cd* - measured ref. to I.E.S. |
| Effective candela: | 500 cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow |
| Tube life: | Emissions are reduced to 70% after 8 million flashes |
| General: | |
| Voltages DC: | 24V dc (10-30V dc); 48V dc (35-60V dc) |
| Voltages AC: | 115V ac; 230V ac |
| Ingress protection: | IP65 |
| Housing material: | High impact UL94 VO & 5VA FR ABS |
| Lens material: | UV stable PC UL94 V0 FR Bayonet lens fixing , Anti-tamper locking screw. |
| Colour: | Red (RAL3000) & Grey (RAL7038) |
| Cable entries: | 2 x M20 clearance gland knockouts in side & back |
| Terminals: | 0.5 to 4.0mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | DC: 2.10kg AC:2.70kg |
| | |

*Candela measurements representative of performance with clear lens at optimum voltage. *SPL data +/-3dB(A). Measured at optimum voltage.

| Version: | Part code: | |
|----------------------------------|--|-----|
| 24V dc | AB121STRDC24[x]/[y] | |
| 48V dc | AB121STRDC48[x]/[y] | |
| 115V ac | AB121STRAC115[x]/[y | /] |
| 230V ac | AB121STRAC230[x]/[y | /] |
| [x] = Housing: | G: Grey, R: Red | |
| [y] = Lens: | A: Amber, B: Blue, C:C G: Green R: Red, Y: Ye | |
| Suffix part number with '-P' for | programmable, 4 stage, 45 tone versior | 1. |
| Alarm sounder: | | |
| Version: | Voltage: Curre | nt: |

| Alarm Sol | muer. | | | |
|-----------|---------|-----------|----------|--|
| Version: | | Voltage: | Current: | |
| 24V dc | | 10-30V dc | 950mA* | |
| 48V dc | | 35-60V dc | 600mA* | |
| 115V ac | 50/60Hz | +/-10% | 240mA | |
| 230V ac | 50/60Hz | +/-10% | 120mA | |
| | | | | |

Xenon beacon: Version: Current: Voltage: 24V dc 20-28V dc 870mA 48V dc 42-54V dc 480mA 115V ac 50/60Hz +/-10% 400mA 230V ac 50/60Hz +/-10% 225mA

* current at 24V dc

* current at nominal voltage on Tone 2

atures:

- multi-sounder system.
- Continuously rated.
- Stainless steel fixings. Unit can be mounted using external lugs
- Duplicate cable terminations
- (in & out for daisy-chain installations). Tropicalisation available on request.
- Available with custom tone configurations
- and frequencies.
- 45 alarm tones
- 4 remotely selectable stages

Approvals:

Country specific or custom tone configurations and alarm frequencies are available upon request.





- or internal BESA compatible fixing positions.
- 'Programmable' version available:
- Any tone can be assigned to any stage
- User configurable continuous frequency tone





AB121LDA Alarm Sounder & L.E.D. Beacon

The AB121LDA combines a heavy duty 126dB(A) alarm sounder with a powerful multi-function L.E.D beacon.

The beacon and sounder can be operated from the same power source or controlled individually.

Tone table:

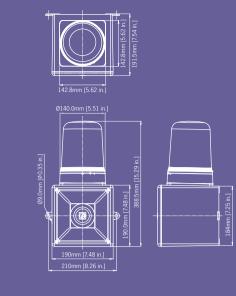
| Stage 1 | Frequency Description | Stage 2 | Stage 3 |
|----------|---|---------|-----------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating - BS5839 Alarm tone | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop - | Tone 2 | Tone 5 |
| | NEN 2575:2000 | | |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - AFNOR NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s - | Tone 2 | Tone 5 |
| | AFNOR NFC48-265 | | |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |
| Tone 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 |
| Tone 35 | 420Hz @ 0.625 sec Australian Alert - AS2220 | Tone 36 | Tone 5 |
| Tone 36 | 500-1200Hz 3.75sec /0.25sec. Australian Evac AS2220 | Tone 35 | Tone 5 |
| Tone 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 |
| Tone 38 | 2000Hz Continuous | Tone 34 | Tone 45 |
| Tone 39 | 800Hz 0.25sec on. 1 sec off Intermittent | Tone 23 | Tone 17 |
| Tone 40 | 544Hz (100mS)/440Hz (400mS) - AFNOR NF S 32-001 | Tone 31 | Tone 27 |
| Tone 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 |
| Tone 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 |
| Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 |
| Tone 44 | Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 |
| Tone 45 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm | Tone 38 | Tone 34 |
| 10110 10 | The room to on monimum relevant. Alam | | 10.10 0 1 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Specification:

| Specification. | |
|----------------------|---|
| Sounder: | |
| Maximum output: | 126dB(A) @ 1 metre |
| Nominal output: | 121dB(A) @ 1m +/- 3dB - Tone 2 |
| No. of tones: | 45 (UKOOA / PFEER compliant) |
| No. of stages: | 3 |
| Volume control: | Max. 121dB(A); Min.112dB(A) - Tone 2 |
| Effective range: | 300m @ 1KHz |
| Beacon: | |
| Light source: | Array of 32 multi-function high power L.E.D's |
| Operating modes: | 4 rotating configurations 4 flashing configurations Steady mode for indicator / status applications |
| Peak candela: | 30 cd* - measured ref. to I.E.S. |
| Effective candela: | 30 cd* - measured ref. to I.E.S. |
| No. of stages: | DC unit also features a remotely selectable 2nd and 3rd stage flash pattern. |
| L.E.D /lens colours: | Amber, Blue, Clear (white L.E.D.s), Green, Red & Yellow |
| General: | |
| Voltages DC: | 24V dc (10-30V dc); 48V dc (35-60V dc) |
| Voltages AC: | 115V ac; 230V ac |
| Ingress protection: | IP65 |
| Housing material: | High impact UL94 V0 & 5VA FR ABS |
| Lens material: | UV stable PC UL94 V0 FR Bayonet lensfixing , Anti-tamper locking screw. |
| Colour: | Red (RAL3000) & Grey (RAL7038) |
| Cable entries: | 2 x M20 clearance gland entries in side & back |
| Terminals: | 0.5 to 4.0mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| | DC: 2.10kg AC:2.70kg |

*Candela measurements representative of performance with amber lens at optimum voltage. *SPL data +/-3dB(A). Measured at optimum voltage.



Part codes:

| Part code: |
|--|
| AB121LDADC24[x]/[y] |
| AB121LDADC48[x]/[y] |
| AB121LDAAC115[x]/[y] |
| AB121LDAAC230[x]/[y] |
| G: Grey, R: Red |
| A: Amber, B: Blue, C: Clear G: Green, R: Red, Y: Yellow |
| |

Alarm sounder:

| Version: | | Voltage: | Current: | |
|----------|---------|-----------|----------|--|
| 24V dc | | 10-30V dc | 950mA* | |
| 48V dc | | 35-60V dc | 600mA* | |
| 115V ac | 50/60Hz | +/-10% | 240mA | |
| 230V ac | 50/60Hz | +/-10% | 120mA | |

L.E.D. beacon:

| Version: | | Voltage: | Current: |
|----------|---------|-----------|----------|
| 24V dc | | 10-50V dc | 400mA* |
| 48V dc | | 10-50V dc | 400mA* |
| 115V ac | 50/60Hz | +/-10% | 140mA |
| 230V ac | 50/60Hz | +/-10% | 70mA |

Flash patterns

| Stage 1 | Stg2 [DC only] | Stg3 [DC only] |
|--------------------|--------------------|----------------|
| All L.E.D's on | Alt Side Flash 2Hz | 2x Flash 2Hz |
| Rotating: Slow1 | Alt Side Flash 2Hz | All L.E.D's on |
| 1x Flash 2Hz | Rotating: Fast 2 | All L.E.D's on |
| Rotating: Fast 1 | 1x Flash 2Hz | All L.E.D's on |
| Rotating: Slow 2 | 2x Flash 1Hz | All L.E.D's on |
| 2x Flash 2Hz | Rotating: Fast 2 | All L.E.D's on |
| Rotating: Fast 2 | 2x Flash 2Hz | All L.E.D's on |
| 2x Flash 1Hz | Alt Side Flash 2Hz | All L.E.D's on |
| Alt Side Flash 2Hz | Rotating: Fast 2 | All L.E.D's on |
| | | |

- Features:
- Stainless steel fixings.

- Tropicalisation available on request.
- Available with custom tone configurations
- and frequencies.
- 'Programmable' version available:
- 45 alarm tones
- 4 remotely selectable stages
- Any tone can be assigned to any stage

Approvals:





- multi-sounder system.
- Continuously rated.
- Unit can be mounted using external lugs
- or internal BESA compatible fixing positions.
- Duplicate cable terminations
- (in & out for daisy-chain installations).
- User configurable continuous frequency tone

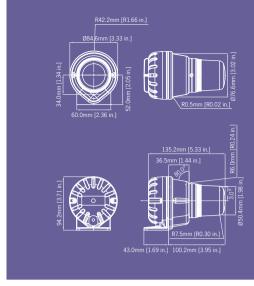




H100BX Signal Horn & Xenon Strobe Beacon

Rated for continuous use the H100 series is a compact, high output signal suitable for a variety of installations. In addition to the 'buzzer' type sound the unit features a further two alarm sounds.

The H100BX incorporates the H100B with a 1J Xenon strobe beacon. It is available in six lens colours and operatingvoltages from 12V dc to 230V ac.



Part codes:

| Version: | Part code: |
|------------------|---|
| 24V dc/ac | H100BX024G/* |
| 115V ac | H100BX115G/* |
| 230V ac | H100BX230G/* |
| * = Lens colour: | A: Amber, B: Blue, C: Clear, G: Green, R: Red, Y: Yellow |

Horn current consumption:

| Version: | Voltage: | Current: |
|-----------|-----------------|----------|
| 24V dc/ac | 24V dc | 10mA |
| 24V dc/ac | 24V ac 50/60Hz | 24mA |
| 115V ac | 115V ac 50/60Hz | 19mA |
| 230V ac | 230V ac 50/60Hz | 10mA |

Beacon current consumption:

| Version: | Voltage: | Current: |
|-----------|-----------------|----------|
| 24V dc/ac | 24V dc | 82mA |
| 24V dc/ac | 24V ac 50/60Hz | 145mA |
| 115V ac | 115V ac 50/60Hz | 30mA |
| 230V ac | 230V ac 50/60Hz | 20mA |

Tone table:

| Stage 1 | Frequency Description. |
|---------|---|
| Tone 1 | 800/1000Hz @ 7Hz Sweeping |
| Tone 2 | Simulated buzzer sound |
| Tone 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Specification:

| No. of tones: | 3 |
|---------------------|---|
| Output: | 100 dB(A) @ 1m |
| Beacon: | |
| Light source: | Xenon Strobe |
| Energy: | 1 Joule (1Ws) |
| Flash frequency: | 0.75 Hz |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow |
| Lens type: | Prismatic (default) or plain |
| Peak Candela: | 100,000 cd - calc. from energy (J) |
| Effective candela: | 50 cd - calc. from energy (J) |
| Peak Candela: | 59,155 cd* - measured ref. to I.E.S. |
| Effective candela: | 37 cd* - measured ref. to I.E.S. |
| General: | |
| Dimensions: | 135.2 x 94.2mm |
| Mounting: | Surface mount |
| Entries: | 1 x 5-7mm push through grommet |
| Ingress protection: | IP65 |
| Housing material: | High impact ABS (UL94V0 & 5VA) |
| Lens material: | High impact PC (UL94V0 f1) |
| Terminals: | 0.5 to 1.5mm ² |
| Operating temp: | -25 to +50°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight: | 188g |

*SPL data +/-3dB(A). Measured at optimum voltage. *Candela measurements representative of performance with clear lens at optimum voltage.



Features:

- Volume control.
- Bayonet fixing lens.
- screw.

Approvals:



• Stainless steel fixings. • Anti-tamper locking

• GOST-R approved. Cert: POCC GB-JB05-H00144

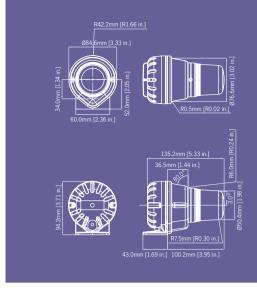




H100BL Signal Horn & L.E.D. Beacon

Rated for continuous use the H100 series is a compact, high output signal suitable for a variety of installations. In addition to the 'buzzer' type sound the unit features a further two alarm sounds.

The H100BL incorporates the H100B with a high output permanent L.E.D. array. It is available in five L.E.D colours and operating voltages from 10V dc to 230V ac.



| Version: | Part code: |
|------------------|--|
| 12-30V dc | H100BL030G/* |
| 90-260V ac/dc | H100BL230G/* |
| * = Lens colour: | A: Amber, B: Blue, C. Clear, G: Green, R: Red , Y: Yellow |

Horn current consumption:

Part codes:

| Version: | Voltage: | Current: |
|------------|-----------------|----------|
| 12-30V dc | 12V dc | 10mA |
| 12-30V dc | 24V dc | 24mA |
| 90-260V ac | 115V ac 50/60Hz | 19mA |
| 90-260V ac | 230V ac 50/60Hz | 10mA |

Beacon current consumption:

| Version: | Voltage: | Current: |
|------------|-----------------|----------|
| 12-30V dc | 12V dc | 74mA |
| 12-30V dc | 24V dc | 80mA |
| 90-260V ac | 115V ac 50/60Hz | 119mA |
| 90-260V ac | 230V ac 50/60Hz | 32mA |

Tone table:

| Stage 1 | Frequency Description. |
|---------|---|
| Tone 1 | 800/1000Hz @ 7Hz Sweeping |
| Tone 2 | Simulated buzzer sound |
| Tone 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. |

Country specific or custom tone configurations and alarm frequencies are available upon request.

| Sp | ecifio | catio | n: |
|----|--------|-------|----|

. .

| Horn: | |
|---------------------|--|
| No. of tones: | 3 |
| Output: | 100 dB(A) @ 1m |
| Beacon: | |
| Light source: | 9 x High power L.E.D's |
| Function: | Permanent |
| Peak candela: | 5.5 cd* - measured ref. to I.E.S. |
| Effective candela: | 5.5 cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Clear (White L.E.D), Green, Red & Yellow |
| Lens type: | Prismatic (default) or plain |
| General: | |
| Dimensions: | 135.2 x 94.2mm |
| Mounting: | Surface mount |
| Entries: | 1 x 5-7mm push through grommet |
| Ingress protection: | IP65 |
| Housing material: | High impact ABS (UL94V0 & 5VA) |
| Lens material: | High impact PC (UL94V0 f1) |
| Terminals: | 0.5 to 1.5mm ² |
| Operating temp: | -25 to +50°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight: | 184g |

*SPL data +/-3dB(A). Measured at optimum voltage. *Candela measurements representative of performance with amber lens at optimum voltage.



- Features:
- Bayonet fixing lens.

screw.

Approvals:



• Volume control. • Stainless steel fixings. • Anti-tamper locking

- • GOST-R approved. Cert: POCC GB-JB05-H00144

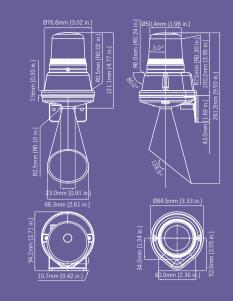




H100TX Trumpet Horn & Xenon Beacon

Rated for continuous use the H100 series is a compact, high output signal suitable for a variety of installation types. In addition to the 'buzzer' type sound the unit features a further two alarm sounds.

The H100TX incorporates the H100T with a 1J Xenon strobe beacon. It is available in six lens colours and operating voltages from 12V dc to 230V ac.



Specification:

| No. of tones: | 3 |
|---------------------|---|
| Output: | 100 dB(A) @ 1m |
| Beacon: | |
| Light source: | Xenon Strobe |
| Energy: | 1 Joule (1Ws) |
| Flash frequency: | 0.75 Hz |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow |
| Lens type: | Prismatic (default) or plain |
| Peak Candela: | 100,000 cd - calc. from energy (J) |
| Effective candela: | 50 cd - calc. from energy (J) |
| Peak Candela: | 59,155 cd* - measured ref. to I.E.S. |
| Effective candela: | 37 cd* - measured ref. to I.E.S. |
| General: | |
| Dimensions: | 241.2 x 94.2mm |
| Mounting: | Surface mount |
| Entries: | 1 x 5-7mm push through grommet |
| Ingress protection: | IP65 |
| Housing material: | High impact ABS (UL94V0 & 5VA) |
| Lens material: | High impact PC (UL94V0 f1) |
| Terminals: | 0.5 to 1.5mm ² |
| Operating temp: | -25 to +50°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight: | 219g |

*SPL data +/-3dB(A). Measured at optimum voltage. *Candela measurements representative of performance with clear lens at optimum voltage.

Part codes:

| Version: | Part code: |
|------------------|---|
| 24V dc/ac | H100TX024G/* |
| 115V ac | H100TX115G/* |
| 230V ac | H100TX230G/* |
| * = Lens colour: | A: Amber, B: Blue, C: Clear, G: Green, R: Red, Y: Yellow |

Horn current consumption:

| Version: | Voltage: | Current: |
|-----------|-----------------|----------|
| 24V dc/ac | 24V dc | 10mA |
| 24V dc/ac | 24V ac 50/60Hz | 24mA |
| 115V ac | 115V ac 50/60Hz | 19mA |
| 230V ac | 230V ac 50/60Hz | 10mA |

Beacon current consumption:

| Version: | Voltage: | Current: |
|-----------|-----------------|----------|
| 24V dc/ac | 24V dc | 82mA |
| 24V dc/ac | 24V ac 50/60Hz | 145mA |
| 115V ac | 115V ac 50/60Hz | 30mA |
| 230V ac | 230V ac 50/60Hz | 20mA |

Tone table:

| Stage 1 | Frequency Description. |
|---------|---|
| Tone 1 | 800/1000Hz @ 7Hz Sweeping |
| Tone 2 | Simulated buzzer sound |
| Tone 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. |

Country specific or custom tone configurations and alarm frequencies are available upon request.



Volume control.Stainless steel fixings.Bayonet fixing lens.Anti-tamper locking screw.

Features:

Approvals:

• GOST-R approved. Cert: POCC GB-JB05-H00144

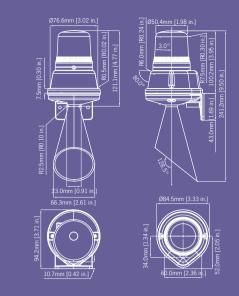




H100TL Signal Horn with Trumpet and L.E.D. Beacon

Rated for continuous use the H100 series is a compact, high output signal suitable for a variety of installations. In addition to the 'buzzer' type sound the unit features a further two alarm sounds.

The H100TL incorporates the H100T with a high output permanent L.E.D. array. It is available in five L.E.D. colours and operating voltages from 10V dc to 230V ac.



Specification:

| Horn: | |
|---------------------|--|
| No. of tones: | 3 |
| Output: | 100 dB(A) @ 1m |
| Beacon: | |
| Light source: | 9 x High power L.E.D's |
| Function: | Permanent |
| Peak candela: | 5.5 cd* - measured ref. to I.E.S. |
| Effective candela: | 5.5 cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Clear (White L.E.D), Green, Red & Yellow |
| Lens type: | Prismatic (default) or plain |
| General: | |
| Dimensions: | 241.2 x 94.2mm |
| Mounting: | Surface mount |
| Entries: | 1 x 5-7mm push through grommet |
| Ingress protection: | IP65 |
| Housing material: | High impact ABS (UL94V0 & 5VA) |
| Lens material: | High impact PC (UL94V0 f1) |
| Terminals: | 0.5 to 1.5mm ² |
| Operating temp: | -25 to +50°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight: | 215g |

Features:

- Volume control.

Approvals:

| • | G | 0 | ST- | R |
|---|---|---|-----|---|

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|---|-------|----|
| | Cert: | PC |



Beacon current consumption:

Horn current consumption:

| Version: | Voltage: | Current: |
|------------|-----------------|----------|
| 12-30V dc | 12V dc | 74mA |
| 12-30V dc | 24V dc | 80mA |
| 90-260V ac | 115V ac 50/60Hz | 119mA |
| 90-260V ac | 230V ac 50/60Hz | 32mA |

Part code:

Voltage:

12V dc

24V dc

115V ac 50/60Hz

230V ac 50/60Hz

H100TL030G/*

H100TL230G/*

A: Amber, B: Blue, C: Clear,

Current:

10mA

24mA

19mA

10mA

G: Green, R: Red, Y: Yellow

Tone table:

Part codes:

Version:

Version:

12-30V dc

12-30V dc

90-260V ac

90-260V ac

12-30V dc

90-260V ac

* = Lens colour:

| Stage 1 | Frequency Description. | |
|---------|---|--|
| Tone 1 | 800/1000Hz @ 7Hz Sweeping | |
| Tone 2 | Simulated buzzer sound | |
| Tone 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | |

Country specific or custom tone configurations and alarm frequencies are available upon request.)

*SPL data +/-3dB(A). Measured at optimum voltage. *Candela measurements representative of performance with clear lens at optimum voltage.



• Stainless steel fixings. • Bayonet fixing lens. • Anti-tamper locking screw.

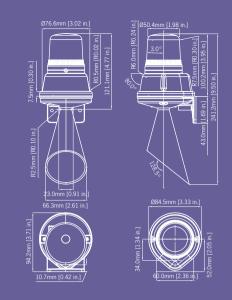
> approved. OCC GB-JB05-H00144



H100TF Trumpet Horn & Filament Lamp Beacon

Rated for continuous use the H100 series is a compact, high output signal suitable for a variety of installations. In addition to the 'buzzer' type sound the unit features a further two alarm sounds.

The H100TF incorporates the H100T with a 5W flashing filament lamp beacon. It is available in six lens colours and operating voltages from 12V dc to 230V ac.



Spare bulb/lamp part codes:

| Voltage: | Wattage: | Туре: | Part code: |
|----------|----------|-------|------------|
| 12V dc | 5W | BA9s | BR10125B |
| 24V dc | 5W | BA9s | BR10245B |
| 115V ac | 5W | BA9s | BR101305B |
| 230V ac | 5W | BA9s | BR102305B |

Tone table:

| Stage 1 | Frequency Description. |
|---------|---|
| Tone 1 | 800/1000Hz @ 7Hz Sweeping |
| Tone 2 | Simulated buzzer sound |
| Tone 3 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Part codes:

| /ersion: | Part code: |
|------------------|---|
| I 2V dc | H100TF012G/* |
| 24V dc | H100TF024G/* |
| 115V ac | H100TF115G/* |
| 230V ac | H100TF230G/* |
| f = Lens colour: | A: Amber, B: Blue, C: Clear, G: Green, R: Red, Y: Yellow |

Horn current consumption:

| Version: | Voltage: | Current: |
|-----------|-----------------|----------|
| 10-30V dc | 12V dc | 10mA |
| 10-30V dc | 24V dc | 24mA |
| 115V ac | 115V ac 50/60Hz | 19mA |
| 230V ac | 230V ac 50/60Hz | 10mA |

Beacon current consumption:

| Version: | Voltage: | Current: |
|----------|----------|----------|
| 12V dc | | 500mA |
| 24V dc | | 250mA |
| 115V ac | 50/60Hz | 35mA |
| 230V ac | 50/60Hz | 25mA |

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| | | |

Horn:

| nom. | |
|---------------------|--|
| No. of tones: | 3 |
| Output: | 100 dB(A) @ 1m |
| Beacon: | |
| Light source: | Filament lamp BA9s |
| Light output: | 5W |
| Flash frequency: | 1Hz |
| Effective candela: | 2cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow |
| Lens type: | Prismatic (default) or plain |
| General: | |
| Dimensions: | 241.2 x 94.2mm |
| Mounting: | Surface mount |
| Entries: | 1 x 5-7mm push through gromme |
| Ingress protection: | IP65 |
| Housing material: | High impact ABS (UL94V0 & 5VA) |
| Lens material: | High impact PC (UL94V0 f1) |
| Terminals: | 0.5 to 1.5mm ² |
| Operating temp: | -25 to +50°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight: | 219g |

*SPL data +/-3dB(A). Measured at optimum voltage. *Candela measurements representative of performance with clear lens at optimum voltage.





Volume control.Stainless steel fixings.Bayonet fixing lens.Anti-tamper locking screw.

Features:

Approvals:

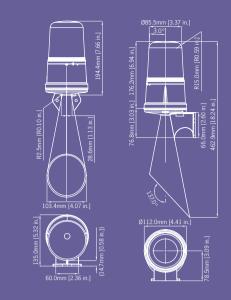
GOST-R approved.Cert: POCC GB-JB05-H00144



H110TR Trumpet Horn & Rotating Beacon

The H110T is a very high output electronic signal horn capable of generating a traditional 'buzzer' warning tone traditionally associated with electro-mechanical signals.

The H110TR incorporates the H110T with a halogen rotating beacon. It is available in six lens colours and operating voltages from 12V dc to 230V ac.



Spare bulb/lamp part codes:

| Version: | Wattage: | Туре: | Part code: |
|----------|----------|--------------|---------------|
| 12V dc | 20W | G6,35/GY6,35 | BJC20W12VCL |
| 24V dc | 20W | G6,35/GY6,35 | BJC20W24VCL |
| 115V ac | 25W | G6,35/GY6,35 | BJCD25W120VCL |
| 230V ac | 25W | G6,35/GY6,35 | BJCD25W230VCL |

Tone table:

| Stage 1 | Frequency Description. | Stage 2 |
|---------|---|---------|
| Tone 1 | Electro-mechanical diaphragm horn sound | Tone 2 |
| Tone 2 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 1 |
| Tone 3 | 800/1000Hz @ 7Hz Sweeping | Tone 2 |

Country specific or custom tone configurations and alarm frequencies are available upon request.



| Version: | Wattage: | Part code: |
|------------------|---|--------------|
| 12V dc | 20W | H110TR012G/* |
| 24V dc | 20W | H110TR024G/* |
| 115V ac | 25W | H110TR115G/* |
| 230V ac | 25W | H110TR230G/* |
| * = Lens colour: | A: Amber, B: Blue, C: Clear, G: Green, R: Red, Y: Yellow | |

Horn current consumption:

| Version: | Voltage: | Current: |
|----------|-----------------|----------|
| 12V dc | 12V dc | 52mA |
| 24V dc | 24V dc | 105mA |
| 115V ac | 115V ac 50/60Hz | 36mA |
| 230V ac | 230V ac 50/60Hz | 18mA |

Beacon current consumption:

| Version: | Voltage: | Current: |
|----------|-----------------|----------|
| 12V dc | 12V dc | 1.72A |
| 24V dc | 24V dc | 910mA |
| 115V ac | 115V ac 50/60Hz | 216mA |
| 230V ac | 230V ac 50/60Hz | 117mA |

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|---------------|--------|-------|----|
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| Horn: | |
|---------------------|---|
| No. of tones: | 3 |
| Output: | 110 dB(A) @ 1m |
| Stages: | Remotely selectable second stage |
| Beacon: | |
| Light source: | Halogen Lamp G6,35/GY6,35 |
| Light output: | 20/25W |
| Peak Candela: | 821 cd |
| Effective candela: | 125cd* - measured ref. to I.E.S. |
| Rotation speed: | 180RPM (+/-30RPM) |
| Drive life: | >5,000 hrs |
| Duty cycle: | 100% |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow |
| Lens type: | Plain |
| General: | |
| Dimensions: | 462.9 x 135mm |
| Mounting: | Surface mount |
| Entries: | 1 x 5-7mm push through grommet |
| Ingress protection: | IP65 |
| Housing material: | High impact ABS (UL94V0 & 5VA) |
| Lens material: | High impact PC (UL94V0 f1) |
| Terminals: | 0.5 to 1.5mm ² |
| Operating temp: | -25 to +50°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight: | 678g |

*SPL data +/-3dB(A). Measured at optimum voltage. *Candela measurements representative of performance with clear lens at optimum voltage.





Volume control.Stainless steel fixings.Bayonet fixing lens.Anti-tamper locking screw.

Features:

Approvals:

• GOST-R approved. Cert: POCC GB-JB05-H00144

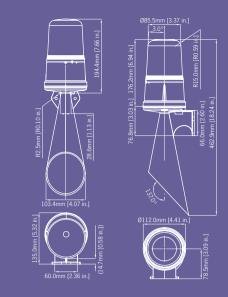




H110TX Trumpet Horn & Xenon Strobe Beacon

The H110T is a very high output electronic signal horn capable of generating a traditional 'buzzer' warning tone traditionally associated with electro-mechanical signals.

The H110TX incorporates the H110T with a 5 Joule Xenon strobe beacon. It is available in six lens colours and operating voltages from 12V dc to 230V ac.



Tone table:

| Stage 1 | Frequency Description. | Stage 2 |
|---------|---|---------|
| Tone 1 | Electro-mechanical diaphragm horn sound | Tone 2 |
| Tone 2 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 1 |
| Tone 3 | 800/1000Hz @ 7Hz Sweeping | Tone 2 |
| | | |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Part codes:

| Version: | Part code: |
|------------------|---|
| 12V dc/ac | H110TX012G/* |
| 24V dc/ac | H110TX024G/* |
| 48V dc/ac | H110TX048G/* |
| 115V ac | H110TX115G/* |
| 230V ac | H110TX230G/* |
| * = Lens colour: | A: Amber, B: Blue, C: Clear, G: Green, M: Magenta, R: Red, Y: Yellow |

Horn current consumption:

| Version: | Voltage: | Current: |
|-----------|-----------------|----------|
| 12V dc/ac | 12V dc | 52mA |
| 12V dc/ac | 12V ac 50Hz | 115mA |
| 24V dc/ac | 24V dc | 105mA |
| 24V dc/ac | 24V ac 50Hz | 215mA |
| 48V dc/ac | 48V dc | 42mA |
| 48V dc/ac | 48V ac 50Hz | 68mA |
| 115V ac | 115V ac 50/60Hz | 36mA |
| 230V ac | 230V ac 50/60Hz | 18mA |

Beacon current consumption:

| Version: | Voltage: | Current: |
|-----------|-----------------|----------|
| 12V dc/ac | 12V dc | 500mA |
| 12V dc/ac | 12V ac 50Hz | 600mA |
| 24V dc/ac | 24V dc | 250mA |
| 24V dc/ac | 24V ac 50Hz | 300mA |
| 48V dc/ac | 48V dc | 175mA |
| 48V dc/ac | 48V ac 50Hz | 250mA |
| 115V ac | 115V ac 50/60Hz | 70mA |
| 230V ac | 230V ac 50/60Hz | 35mA |

Specification:

| opecification. | |
|---------------------|--|
| Horn: | |
| No. of tones: | 3 |
| Output: | 110 dB(A) @ 1m |
| Stages: | Remotely selectable second stage |
| Beacon: | |
| Light source: | Xenon Strobe |
| Energy: | 5 Joules (5Ws) |
| Flash frequency: | 1Hz |
| Peak Candela: | 500,000 cd - calc. from energy (J) |
| Effective candela: | 250 cd - calc. from energy (J) |
| Peak Candela: | 49,788 cd* - measured ref. to I.E.S. |
| Effective candela: | 125 cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow |
| Lens type: | Prismatic (default) or plain |
| General: | |
| Dimensions: | 462.9 x 135mm |
| Mounting: | Surface mount |
| Entries: | 1 x 5-7mm push through grommet |
| Ingress protection: | IP65 |
| Housing material: | High impact ABS (UL94V0 & 5VA) |
| Lens material: | High impact PC (UL94V0 f1) |
| Terminals: | 0.5 to 2.5mm ² |
| Operating temp: | -25 to +50°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight: | 638g |
| | |

*SPL data +/-3dB(A). Measured at optimum voltage. *Candela measurements representative of performance with clear lens at optimum voltage.

Features:

- Approvals:

- • GOST-R approved.





• Volume control. • Stainless steel fixings. • Bayonet fixing lens. • Anti-tamper locking screw.

Cert: POCC GB-JB05-H00144



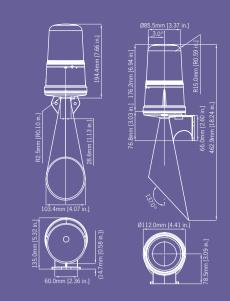


H110TL Trumpet Horn & L.E.D. Beacon

The H110T is a very high output electronic signal horn capable of generating a traditional 'buzzer' warning tone traditionally associated with electro-mechanical signals.

With an output of 110dB(A) the H110T is ideal for all general signalling applications and the ingress protection rating of IP65 means it is suitable for indoor and outdoor installations.

The H110TL incorporates the H110T with a multi-function L.E.D beacon. It is available in five L.E.D colours and operating voltages from 10V dc to 230V ac.



Tone table:

| Stage 1 | Frequency Description. | Stage 2 |
|---------|---|---------|
| Tone 1 | Electro-mechanical diaphragm horn sound | Tone 2 |
| Tone 2 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 1 |
| Tone 3 | 800/1000Hz @ 7Hz Sweeping | Tone 2 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Flash patterns:

| Stage2 [DC only] |
|--------------------------|
| Alternate Side Flash 2Hz |
| Alternate Side Flash 2Hz |
| Rotating: Fast 2 |
| Single Strike Flash 2Hz |
| Double Strike Flash 1Hz |
| Rotating: Fast 2 |
| Double Strike Flash 2Hz |
| Alternate Side Flash 2Hz |
| Rotating: Fast 2 |
| |

Part codes:

| Version: | Part code: | |
|------------------|---|--|
| 10-30V dc | H110TL030G/* | |
| 48V dc | H110TL048G/* | |
| 90-260V ac | H110TL230G/* | |
| * = Lens colour: | A: Amber, B: Blue, C: Clear, G: Green, R: Red, Y: Yellow | |

Horn current consumption:

| Version: | Voltage: | Current: |
|---------------|-----------------|----------|
| 10-30V dc | 12V dc | 52mA |
| 10-30V dc | 24V dc | 105mA |
| 48V dc | 48V dc | 42mA |
| 90-260V ac/dc | 115V dc | 16mA |
| 90-260V ac/dc | 230V dc | 8mA |
| 90-260V ac/dc | 115V ac 50/60Hz | 36mA |
| 90-260V ac/dc | 230V ac 50/60Hz | 18mA |

Beacon current consumption:

| Version: | Voltage: | Current: |
|---------------|-----------------|----------|
| 10-30V dc | 12V dc | 265mA |
| 10-30V dc | 24V dc | 130mA |
| 48V dc | 48V dc | 70mA |
| 90-260V ac/dc | 115V dc | 17mA |
| 90-260V ac/dc | 230V dc | 9mA |
| 90-260V ac/dc | 115V ac 50/60Hz | 90mA |
| 90-260V ac/dc | 230V ac 50/60Hz | 50mA |

Specification:

| Horn: | |
|---------------------|--|
| No. of tones: | 3 |
| Output: | 110 dB(A) @ 1m |
| Stages: | Remotely selectable second stage |
| Beacon: | |
| Light source: | 16 x High power L.E.D's |
| Peak candela: | 19 cd* - measured ref. to I.E.S. |
| Effective candela: | 19 cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Clear (White L.E.D), Green, Red & Yellow |
| Lens type: | Prismatic (default) or plain |
| General: | |
| Dimensions: | 462.9 x 135mm |
| Mounting: | Surface mount |
| Entries: | 1 x 5-7mm push through grommet |
| Ingress protection: | IP65 |
| Housing material: | High impact ABS (UL94V0 & 5VA) |
| Lens material: | High impact PC (UL94V0 f1) |
| Terminals: | 0.5 to 1.5mm ² |
| Operating temp: | -25 to +50°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight: | 606g |

*SPL data +/-3dB(A). Measured at optimum voltage. *Candela measurements representative of performance with clear lens at optimum voltage.

Features:

- Volume control.

- Bayonet fixing lens. • Anti-tamper locking screw.
- flash patterns.
- 4 rotating configurations
- 4 flashing configurations
- Steady mode for indicator / status applications

Approvals:





- Stainless steel fixings.
- Multi-functional: 9 user selectable
- The DC unit also features a remotely selectable
- 2nd stage flash pattern.

• GOST-R approved. Cert: POCC GB-JB05-H00144



DL105X Alarm Sounder & Xenon Beacon

The DL105X is a high output, 112dB(A) alarm sounder with integrated Xenon beacon. Low current consumption and high SPL in a robust IP66 housing ensure the DL105X is suitable for all general signalling applications including fire, security and process control. The corrosion proof, marine grade aluminium die cast enclosure is phosphated and powder coated providing resilience in the harshest of industrial environments.



Tone table:

| Stage 1 | Frequency Description. | (Stage 2) | (Stage 3) |
|---------|---|---------------|-----------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | ine 7 2400/2900Hz @ 1Hz Sweeping Tone 10 Tone | | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 Tone 5 | |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Specification:

| opeemeation. | |
|---------------------|--|
| Sounder: | |
| Maximum output: | 112dB(A) @ 1 metre |
| Nominal output: | 105dB(A) @ 1m +/- 3dB - Tone 2 |
| No. of tones: | 32 (UKOOA / PFEER compliant) |
| No. of stages: | 3 |
| Volume control: | Max. 105dB(A); Min. 96dB(A) - Tone 2 |
| Effective range: | 60m @ 1KHz |
| Stage switching: | Negative Reverse polarity stage switching on DC units. |
| Beacon: | |
| Energy: | 5 Joules (5Ws) |
| Flash rate: | 1Hz (60 fpm) |
| Peak Candela: | 500,000 cd - calc. from energy (J) |
| Effective candela: | 250 cd - calc. from energy (J) |
| Peak Candela: | 86,935 cd* - measured ref. to I.E.S. |
| Effective candela: | 200 cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow |
| Tube life: | Emissions are reduced to 70% after 8 million flashes |
| General: | |
| Voltages DC: | 12V dc; 24V dc; 48V dc |
| [DC units can use 2 | 4V ac for single stage applications.] |
| Voltages AC: | 24V ac; 115V ac; 230V ac |
| Ingress protection: | IP66, Type 4 / 4X / 3R |
| Housing material: | Marine grade aluminium A1 Si12 Cu |
| Colour: | Red (RAL3000), grey (RAL7038) |
| Cable entries: | 2 x M20 x 1.5mm threaded gland entries supplied with one stoppoing plug |
| Terminals: | 0.5 to 1.5mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | DC: 2.10kg AC:2.35kg |
| | · |

*Candela measurements representative of performance with clear lens at optimum voltage. *SPL data +/-3dB(A). Measured at optimum voltage.

Part codes:

| 105XD0C24[x]/[y] 105XDC024[x]/[y] 105XDC048[x]/[y] 105XAC024[x]/[y] |
|--|
| 105XDC048[x]/[y] 105XAC024[x]/[y] |
| 105XAC024[x]/[y] |
| 1, 01 |
| |
| 105XAC115[x]/[y] |
| 105XAC230[x]/[y] |
| Grey R: Red |
| Amber, B: Blue, C: Clear, Green, R: Red, Y: Yellow |
| |

Alarm sounder:

| Version: | | Voltage: | Current: |
|----------|---------|-----------|----------|
| 12V dc | | 10-30V dc | 25mA* |
| 24V dc | | 10-30V dc | 25mA* |
| 48V dc | | 35-60V dc | 50mA* |
| 24V ac | 50/60Hz | +/-10% | 40mA |
| 115V ac | 50/60Hz | +/-10% | 20mA |
| 230V ac | 50/60Hz | +/-10% | 15mA |

| Xenon beacon: | | | |
|---------------|---------|-----------|----------|
| Version: | | Voltage: | Current: |
| 12V dc | | 10-14V dc | 380mA |
| 24V dc | | 20-28V dc | 250mA |
| 48V dc | | 42-54V dc | 175mA |
| 24V ac | 50/60Hz | +/-10% | 300mA |
| 115V ac | 50/60Hz | +/-10% | 70mA |
| 230V ac | 50/60Hz | +/-10% | 35mA |

Features:

- Automatic synchronisation on multi-sounder system.

0

- Continuously rated.
- Stainless steel fixings.
- Duplicate cable terminations
- (in & out for daisy-chain installations).
- Tropicalisation available on request.
- Available with custom tone configurations
- and frequencies.

- User configurable continuous frequency tone

Approvals:

• High output, up to 112dB(A) SPL.

- 3 remotely selectable alarm stages.
- Choice of 32 alarm tone frequencies.
- 5 Joule, 200 candela Xenon beacon.

- 'Programmable' version available:
- 45 alarm tones
- 4 remotely selectable stages
- Any tone can be assigned to any stage

 UKOOA/PFEER compliant alarm tones. UL approved version available.





DL105H Alarm Sounder & L.E.D. Beacon

The DL105H is a high output, 112dB(A) alarm sounder with integrated L.E.D. beacon. Low current consumption and high SPL in a robust IP66 housing ensure the DL105H is suitable for all general signalling applications including fire, security and process control. The corrosion proof, marine grade aluminium die cast enclosure is phosphated and powder coated providing resilience in the harshest of industrial environments.



Tone table:

| Stage 1 | Frequency Description. | (Stage 2) | (Stage 3) | |
|---------|---|-----------|-----------|--|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 | |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 | |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 | |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 | |
| Tone 5 | | | Tone 20 | |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 | |
| Tone 7 | one 7 2400/2900Hz @ 1Hz Sweeping Tone 10 Tor | | Tone 5 | |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 | |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 | |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 | |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 | |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 | |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 | |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 | |
| Tone 15 | 800Hz Continuous Tone 2 Tone 5 | | Tone 5 | |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 | |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 | |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 | |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 | |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 | |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 | |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 | |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 | |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 | |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 | |
| Tone 26 | Bell | Tone 2 | Tone 15 | |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 | |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 | |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 | |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 | |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 | |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 | |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Specification:

| Specification: | |
|---------------------|--|
| Sounder: | |
| Maximum output: | 112dB(A) @ 1 metre |
| Nominal output: | 105dB(A) @ 1m +/- 3dB - Tone 2 |
| No. of tones: | 32 (UKOOA / PFEER compliant) |
| No. of stages: | 3 |
| Volume control: | Max. 105dB(A); Min. 96dB(A) - Tone 2 |
| Effective range: | 60m @ 1KHz |
| Stage switching: | Negative Reverse polarity stage switching on DC units. |
| Beacon: | |
| Light source: | High intensity L.E.D. array 24 x Superflux type high output L.E.D's |
| Flash options: | Steady or 2Hz flash mode (on board select) |
| Effective candela: | 176 cd (Green L.E.D.) |
| L.E.D. colours: | Amber, Blue, White, Green & Red |
| Lens colour: | All L.E.D. colours use a Clear lens to maximise output and to ensure the signal is most effective in high ambient light levels. |
| General: | |
| Voltages DC: | 24V dc (12-30V dc); 48V dc (35-60V dc) |
| [DC units can use 2 | 4V ac for single stage applications.] |
| Voltages AC: | 115V ac; 230V ac |
| Ingress protection: | IP66, Type 4 / 4X / 3R |
| Housing material: | Marine grade aluminium A1 Si12 Cu |
| Colour: | Red (RAL3000), grey (RAL7038) |
| Cable entries: | 2 x M20 x 1.5mm threaded gland entries |
| | supplied with one stoppoing plug |
| Terminals: | 0.5 to 1.5mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | DC: 2.10kg AC:2.35kg |
| | |

Part codes:

| Version: | Part code: |
|---|--|
| 24V dc | DL105HDC024[x]/[y] |
| 48V dc | DL105HDC048[x]/[y] |
| 115V ac | DL105HAC115[x]/[y] |
| 230V ac | DL105HAC230[x]/[y] |
| [x] = Housing colour: | G: Grey R: Red |
| [y] - L.E.D. colour: | A: Amber, B: Blue, W: White G: Green, R: Red |
| Suffix part number with '-P' for p Suffix part number with '-UL' for l | rogrammable, 4 stage, 45 tone version. JL approved version. |
| Note: All L. F. D. colours use a Cle | ar lens to maximise output and to ensure |

Voltage: Version: Current: 24V dc 12-30V dc 25mA* 48V dc 35-60V dc 50mA* 115V ac 50/60Hz +/-10% 20mA 230V ac 50/60Hz +/-10% 15mA * current at nominal voltage on Tone 2

L.E.D. beacon: Version: Voltage: Current: 24V dc 12-30V dc 157mA 48V dc 35-60V dc 55mA 115V ac 50/60Hz +/-10% 60mA 230V ac 50/60Hz +/-10% 35mA

Approvals:

Features:



- High output, up to 112dB(A) SPL.
- 3 remotely selectable alarm stages.
- Choice of 32 alarm tone frequencies.
- Automatic synchronisation on multi-sounder system.
- High intensity 120 candela L.E.D. array
- Continuously rated.
- Stainless steel fixings.
- Duplicate cable terminations
- (in & out for daisy-chain installations).
- Tropicalisation available on request.
- Available with custom tone configurations and frequencies.
- 'Programmable' version available:
- 45 alarm tones
- 4 remotely selectable stages
- Any tone can be assigned to any stage
- User configurable continuous frequency tone

• UKOOA/PFEER compliant alarm tones. • UL approved version available.





DL112X Alarm Sounder & Xenon Beacon

The DL112X is a high output, 119dB(A) alarm sounder with integrated Xenon beacon. Low current consumption and high SPL in a robust IP66 housing ensure the DL112X is suitable for all general signalling applications including fire, security and process control. The corrosion proof, marine grade aluminium die cast enclosure is phosphated and powder coated providing resilience in the harshest of industrial environments.



Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 |
|---------|--|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |
| Tone 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 |
| Tone 35 | 420Hz @ 0.625 sec Australian Alert | Tone 36 | Tone 5 |
| Tone 36 | 500-1200Hz 3.75sec /0.25sec. Australian Evac. | Tone 35 | Tone 5 |
| Tone 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 |
| Tone 38 | 2000Hz Continuous | Tone 34 | Tone 45 |
| Tone 39 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 |
| Tone 40 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 31 | Tone 27 |
| Tone 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 |
| Tone 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 |
| Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 |
| Tone 44 | Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 |
| Tone 45 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm | Tone 38 | Tone 34 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Specification:

| | Specification. | | |
|------------------|---------------------|--|--|
| Stage 3 | Sounder: | | |
| Tone 5 | Maximum output: | 119dB(A) @ 1 metre | |
| Tone 5 Tone 5 | · · · · · | | |
| Tone 5 | Nominal output: | 112dB(A) @ 1m +/- 3dB - Tone 2 | |
| Tone 20 | No. of tones: | 45 (UKOOA / PFEER compliant) | |
| Tone 5 | No. of stages: | 3 | |
| Tone 5 | | | |
| Tone 5 | Volume control: | Max. 112dB(A); Min. 100dB(A) - Tone 2 | |
| Tone 2 | Effective range: | 125m @ 1KHz | |
| Tone 5 Tone 5 | Stage switching: | Negative | |
| Tone 5 | Stage Switching. | 0 | |
| Tone 5 | | Reverse polarity stage switching on DC units. | |
| Tone 5 | Beacon: | | |
| Tone 5 | Energy: | 5 Joules (5Ws) | |
| Tone 5 | | | |
| Tone 27 | Flash rate: | 1Hz (60 fpm) | |
| Tone 5 | Peak Candela: | 500,000 cd - calc. from energy (J) | |
| Tone 5 Tone 5 | Effective candela: | 250 cd - calc. from energy (J) | |
| Tone 5 | | | |
| Tone 5 | Peak Candela: | 86,935 cd* - measured ref. to I.E.S. | |
| Tone 5 | Effective candela: | 200 cd* - measured ref. to I.E.S. | |
| Tone 5 | Lens colours: | Amber, Blue, Clear, Green, Red & Yellow | |
| Tone 5 | | | |
| Tone 15 | Tube life: | Emissions are reduced to 70% after 8 million flashes | |
| Tone 5 Tone 5 | General: | | |
| Tone 5 | Valtarea DC: | 12 / do: 24 / do: 42 / do | |
| Tone 5 | Voltages DC: | 12Vdc; 24V dc; 48V dc | |
| Tone 5 | | [24V dc units can use 24V ac for single | |
| Tone 15 | | stage applications]. | |
| Tone 5 | Voltages AC: | 24V ac; 115V ac; 230V ac | |
| Tone 45 | Ingress protection: | IP66, Type 4 / 4X / 3R | |
| Tone 5 Tone 5 | | | |
| Tone 45 | Housing material: | Marine grade aluminium A1 Si12 Cu | |
| Tone 45 | Colour: | Red (RAL3000), grey (RAL7038) | |
| Tone 17 | Cable entries: | 2 x M20 x 1.5mm threaded gland entries | |
| Tone 27 | Gable entities. | 0 | |
| Tone 5 | | supplied with one stoppoing plug | |
| Tone 5 | Terminals: | 0.5 to 4.0mm ² cables. | |
| Tone 5 Tone 5 | Operating temp: | -25 to +55°C | |
| Tone 34 | Storage temp: | -40 to +70°C | |
| | Relative humidity: | 90% at 20°C. | |
| | Weight : | DC: 2.80kg AC:3.10kg | |
| | VICISI IL . | DO. 2.00ng AO.J. 10ng | |

Part codes:

Xenon beacon:

50/60Hz

50/60Hz

50/60Hz

Version:

12V dc

24V dc

48V dc

24V ac

115V ac

230V ac

| Version: | Part code: |
|--|---|
| 12V dc | DL112XDC012[x]/[y] |
| 24V dc | DL112XDC024[x]/[y] |
| 48V dc | DL112XDC048[x]/[y] |
| 24V ac | DL112XAC024[x]/[y] |
| 115V ac | DL112XAC115[x]/[y] |
| 230V ac | DL112XAC230[x]/[y] |
| [x] = Housing colour: | G: Grey R: Red |
| [y] - Lens colour: | A: Amber, B: Blue, C: Clear G: Green, R: Red, Y: Yellow |
| Suffix part number with '-P' for pr Suffix part number with '-UL' for L | ogrammable, 4 stage, 45 tone version. IL approved version. |

Version: Voltage: Current: 12V dc 200mA* 10-30V dc 24V dc 10-30V dc 200mA* 48V dc 35-60V dc 120mA* 24V ac 50/60Hz +/-10% 500mA 115V ac 50/60Hz +/-10% 100mA 230V ac 50/60Hz +/-10% 60mA * current at nominal voltage on Tone 2

Voltage:

10-14V dc

20-28V dc

42-54V dc

+/-10%

+/-10%

+/-10%

Features:

- Approvals:

Current:

380mA

250mA

175mA

300mA

70mA

35mA

| *Candela measurements representative of performance with clear lens at optimum voltage. |
|---|
| *SPL data +/-3dB(A). Measured at optimum voltage. |

• High output, up to 119dB(A) SPL.

• 3 remotely selectable alarm stages.

• Choice of 45 alarm tone frequencies.

• Automatic synchronisation on multi-sounder system.

e

• 5 Joule, 200 candela Xenon beacon.

• Continuously rated.

Stainless steel fixings.

• Duplicate cable terminations

(in & out for daisy-chain installations).

• Tropicalisation available on request.

• Available with custom tone configurations and frequencies.

• 'Programmable' version available:

- 45 alarm tones

- 4 remotely selectable stages

- Any tone can be assigned to any stage

- User configurable continuous frequency tone

 UKOOA/PFEER compliant alarm tones. • UL approved version available.





DL112H Alarm Sounder & L.E.D. Beacon

The DL112H is a high output, 119dB(A) alarm sounder with integrated L.E.D. beacon. Low current consumption and high SPL in a robust IP66 housing ensure the DL112H is suitable for all general signalling applications including fire, security and process control. The corrosion proof, marine grade aluminium die cast enclosure is phosphated and powder coated providing resilience in the harshest of industrial environments.



Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 |
|---------|--|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |
| Tone 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 |
| Tone 35 | 420Hz @ 0.625 sec Australian Alert | Tone 36 | Tone 5 |
| Tone 36 | 500-1200Hz 3.75sec /0.25sec. Australian Evac. | Tone 35 | Tone 5 |
| Tone 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 |
| Tone 38 | 2000Hz Continuous | Tone 34 | Tone 45 |
| Tone 39 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 |
| Tone 40 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 31 | Tone 27 |
| Tone 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 |
| Tone 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 |
| Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 |
| Tone 44 | Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 |
| Tone 45 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm | Tone 38 | Tone 34 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Specification:

| | specification: | |
|--------------------|---------------------|---|
| Stage 3 | Sounder: | |
| Tone 5 | Maximum output: | 119dB(A) @ 1 metre |
| Tone 5 | | |
| Tone 5 Tone 5 | Nominal output: | 112dB(A) @ 1m +/- 3dB - Tone 2 |
| Tone 20 | No. of tones: | 45 (UKOOA / PFEER compliant) |
| Tone 5 | No. of stages: | 3 |
| Tone 5 | | - |
| Tone 5 | Volume control: | Max. 112dB(A); Min. 100dB(A) - Tone 2 |
| Tone 2 | Effective range: | 125m @ 1KHz |
| Tone 5 Tone 5 | Stage switching: | Negative |
| Tone 5 | Stage Switching. | |
| Tone 5 | | Reverse polarity stage switching on DC units. |
| Tone 5 | Beacon: | |
| Tone 5 | Light source: | High intensity L.E.D. array |
| Tone 5 | | |
| Tone 27 | | 24 x Superflux type high output L.E.D's |
| Tone 5 | Flash options: | Steady or 2Hz flash mode (on board select) |
| Tone 5 | Effective candela: | 176 od (Croop LED) |
| Tone 5 | Effective candela: | 176 cd (Green L.E.D.) |
| Tone 5 Tone 5 | L.E.D. colours: | Amber, Blue, White, Green & Red |
| Tone 5 | Lens colour: | All L.E.D. colours use a Clear lens to maximise |
| Tone 5 | Lonio conodin | output and to ensure the signal is most effective |
| Fone 5 | | |
| Fone 15 | | in high ambient light levels. |
| Tone 5 | General: | |
| Tone 5 | Voltages DC: | 24V dc (12-30V dc); 48V dc (35-60V dc) |
| Tone 5 | | |
| Tone 5 Tone 5 | | [24V dc units can use 24V ac for single |
| Tone 15 | | stage applications]. |
| Tone 5 | Voltages AC: | 115V ac; 230V ac |
| Tone 45 | | |
| Tone 5 | Ingress protection: | IP66, Type 4 / 4X / 3R |
| Tone 5 | Housing material: | Marine grade aluminium A1 Si12 Cu |
| Tone 45 | Colour: | Red (RAL3000), grey (RAL7038) |
| Tone 45 Tone 17 | | |
| Tone 27 | Cable entries: | 2 x M20 x 1.5mm threaded gland entries |
| Tone 5 | | supplied with one stopping plug |
| Tone 5 | Terminals: | 0.5 to 4.0mm ² cables. |
| Tone 5 | | |
| Tone 5 | Operating temp: | -25 to +55°C |
| Tone 34 | Storage temp: | -40 to +70°C |
| | | |
| | Relative humidity: | 90% at 20°C. |

Part codes:

| Version: | | Part code: | | | |
|---|-------------------------|--|-----------------------|--|--|
| 24V dc | | DL112HDC024[x]/[y] | | | |
| 48V dc | | DL112HDC048[x]/[y] | | | |
| 115V ac | | DL112HAC1 | DL112HAC115[x]/[y] | | |
| 230V ac | | DL112HAC2 | 30[x]/[y] | | |
| [x] = Housin | g colour: | G: Grey R: R | ed | | |
| [y] - L.E.D. c | olour: | A: Amber, B: G: Green, R: | Blue, W: White Red | | |
| | | | | | |
| | | Clear lens to maximis gh ambient light levels | | | |
| | s most effective in hig | | | | |
| sure the signal is | s most effective in hig | gh ambient light levels | | | |
| Alarm sou Version: 24V dc | s most effective in hig | sh ambient light levels Voltage: | Current: | | |
| sure the signal is Alarm sou Version: | s most effective in hig | Noltage: | Current: 200mA* | | |

* current at nominal voltage on Tone 2

L.E.D. beacon:

| Version: | | Voltage: | Current: |
|----------|---------|-----------|----------|
| 24V dc | | 12-30V dc | 157mA |
| 48V dc | | 35-60V dc | 55mA |
| 115V ac | 50/60Hz | +/-10% | 60mA |
| 230V ac | 50/60Hz | +/-10% | 35mA |
| | | | |

Features:

- Duplicate cable terminations
- (in & out for daisy-chain installations).
- Tropicalisation available on request.
- Available with custom tone configurations and frequencies.
- 'Programmable' version available:
- 4 remotely selectable stages
- Any tone can be assigned to any stage
- User configurable continuous frequency tone

Approvals:



- High output, up to 119dB(A) SPL.
- 3 remotely selectable alarm stages.
- Choice of 45 alarm tone frequencies.
- Automatic synchronisation on multi-sounder system.
- High intensity 120 candela L.E.D. array
- Continuously rated.
- Stainless steel fixings.

- 45 alarm tones

• UKOOA/PFEER compliant alarm tones. • UL approved version available.





MCA112-05 Alarm Sounder & Xenon Beacon

The MCA112-05 combines a high output, 119dB(A) alarm sounder with a 5 Joule Xenon beacon. With a robust, fire retardant, IP66 & IP67 housing, the MCA112-05 is particularly suitable for harsh environments with high ambient noise levels. The sounder & beacon can be operated individually or simultaneously.



Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 |
|---------|--|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |
| Tone 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 |
| Tone 35 | 420Hz @ 0.625 sec Australian Alert | Tone 36 | Tone 5 |
| Tone 36 | 500-1200Hz 3.75sec /0.25sec. Australian Evac. | Tone 35 | Tone 5 |
| Tone 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 |
| Tone 38 | 2000Hz Continuous | Tone 34 | Tone 45 |
| Tone 39 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 |
| Tone 40 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 31 | Tone 27 |
| Tone 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 |
| Tone 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 |
| Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 |
| Tone 44 | Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 |
| Tone 45 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm | Tone 38 | Tone 34 |

Specification:

| Sounder: | |
|---------------------|--|
| Maximum output: | 119dB(A) @ 1 metre |
| Nominal output: | 112dB(A) @ 1m +/- 3dB - Tone 2 |
| No. of tones: | 45 (UKOOA / PFEER compliant) |
| No. of stages: | 3 |
| Volume control: | Max. 112dB(A); Min. 100dB(A) - Tone 2 |
| Effective range: | 125m @ 1KHz |
| Voltages DC: | 24V dc (10-30V dc); 48V dc (35-60V dc) [DC units can use 24V ac for single stage applications.] |
| Voltages AC: | 24V ac; 115V ac; 230V ac |
| Stage switching: | Negative or positive Reverse polarity stage switching on DC units. |
| Beacon: | |
| Energy: | 5 Joules(5Ws) |
| Flash rate: | 1Hz (60 fpm) |
| Peak Candela: | 500,000 cd - calc. from energy (J) |
| Effective candela: | 250 cd - calc. from energy (J) |
| Peak Candela: | 16,428 cd* - measured ref. to I.E.S. |
| Effective candela: | 51 cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow |
| Tube life: | Emissions are reduced to 70% after 8 million flashes |
| General: | |
| Ingress protection: | IP66 & IP67 (Third party tested) |
| Housing material: | High impact UL94 V0 & 5VA FR ABS |
| Colour: | Grey (RAL7038) |
| Cable entries: | 2 x M20 supplied with 1 blanking plug |
| Lens material: | Borosilicate glass dome with PC prismatic lens cover. |
| Guard: | Stainless Steel dome guard as standard |
| Terminals: | 0.5 to 4.0mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Weight : | DC: 3.00kg AC:3.50kg |

| Dart | codes: | |
|------|--------|--|
| гαιι | coues. | |

230V ac

50/60Hz

+/-10%

55mA

| Part codes | : | | | |
|------------------------|-------------------------|---|---------------|---|
| Version: | | Part code: | | |
| 12V dc | | MCA11205D | C12G-xx | - |
| 24V dc | | MCA11205D | C24G-xx | - |
| 48V dc | | MCA11205D | C48G-xx | - |
| 24V ac | | MCA11205A | C24G-xx | - |
| 115V ac | | MCA11205A | C115G-xx | Feature |
| 230V ac | | MCA11205A | C230G-xx | Auton |
| [xx] = Lens co | olour: | AM: Amber, E CL: Clear, GN RD: Red, YW: | I: Green, | Auton altern Xenor |
| Suffix part numbe | er with '-P' for progra | ammable, 4 stage, 45 | tone version. | Conti |
| Alarm sour Version: | nder: | Voltage: | Current: | StainRatch |
| 24V dc | | 10-30V dc | 200mA* | 360° |
| 48V dc | | 35-60V dc | 120mA* | Duplie |
| 24V ac | 50/60Hz | +/-10% | 500mA | (in & |
| 115V ac | 50/60Hz | +/-10% | 100mA | • Tropic |
| 230V ac | 50/60Hz | +/-10% | 60mA | _ • Availa |
| * current at nomi | nal voltage on Tone | 2 | | and fi |
| Xenon bea | con: | | | • 'Progi - 45 a |
| Version: | | Voltage: | Current: | - 4 rei |
| 12V dc | | 10-14V dc | 550mA | - Any |
| 24V dc | | 20-28V dc | 300mA | - User |
| 48V dc | | 42-54V dc | 180mA | - - Approva |
| 24V ac | 50/60Hz | +/-10% | 350mA | - • UKOC |
| | | | | |

Country specific or custom tone configurations and alarm frequencies are available upon request.

*Candela measurements representative of performance with clear lens at optimum voltage *SPL data +/-3dB(A). Measured at optimum voltage.



- Automatic synchronisation on multi-sounder system.
- Automatic synchronised flash, or Flip-Flop
- alternating mode.
- Xenon tube mechanically secured against vibration. Continuously rated.
- Large termination area
- Stainless steel fixings.
- Ratchet adjustable stainless steel 'U' bracket for 360° positioning.
- Duplicate cable terminations.
- (in & out for daisy-chain installations).
- Tropicalisation available on request.
- Available with custom tone configurations and frequencies.
- 'Programmable' version available:
- 45 alarm tones
- 4 remotely selectable stages
- Any tone can be assigned to any stage
- User configurable continuous frequency tone

UKOOA/PFEER compliant alarm tones. • GOST-R approved. Cert: POCC GB-JB05-H00144



MCA112-L1 Alarm Sounder & L.E.D. Beacon

The MCA112-L1 combines a high output, 119dB(A) alarm sounder with a multi-function L.E.D. beacon. With a robust, fire retardant, IP66 & IP67 housing, the MCA112-L1 is particularly suitable for harsh environments with high ambient noise levels. The sounder & beacon can be operated individually or simultaneously.

Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 |
|---------|--|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 |
| Tone 26 | Bell | Tone 2 | Tone 15 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 |
| Tone 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 |
| Tone 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 |
| Tone 35 | 420Hz @ 0.625 sec Australian Alert | Tone 36 | Tone 5 |
| Tone 36 | 500-1200Hz 3.75sec /0.25sec. Australian Evac. | Tone 35 | Tone 5 |
| Tone 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 |
| Tone 38 | 2000Hz Continuous | Tone 34 | Tone 45 |
| Tone 39 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 |
| Tone 40 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 31 | Tone 27 |
| Tone 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 |
| Tone 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 |
| Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 |
| Tone 44 | Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 |
| Tone 45 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm | Tone 38 | Tone 34 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Specification:

| opeemeation. | |
|---------------------|---|
| Sounder: | |
| Maximum output: | 119dB(A) @ 1 metre |
| Nominal output: | 112dB(A) @ 1m +/- 3dB - Tone 2 |
| No. of tones: | 45 (UKOOA / PFEER compliant) |
| No. of stages: | 3 |
| Volume control: | Max. 112dB(A); Min. 100dB(A) - Tone 2 |
| Effective range: | 125m @ 1KHz |
| Voltages DC: | 24V dc (10-30V dc); 48V dc (35-60V dc) [DC units can use 24V ac for single stage applications.] |
| Voltages AC: | 24V ac; 115V ac; 230V ac |
| Stage switching: | Negative or positive Reverse polarity stage switching on DC units. |
| L.E.D. Beacon: | |
| Light source: | Array of 32 high output L.E.D.s |
| Peak candela: | 11 cd* - measured ref. to I.E.S. |
| Effective candela: | 11 cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Clear (white L.E.D.s) Green, Red & Yellov |
| Voltages DC: | 10-50V dc |
| Voltages AC: | 24V ac;115V ac; 230V ac |
| General: | |
| Ingress protection: | IP66 & IP67 (Third party tested) |
| Housing material: | High impact UL94 V0 & 5VA FR ABS |
| Colour: | Grey (RAL7038) |
| Cable entries: | 2 x M20 supplied with 1 blanking plug |
| Lens material: | Borosilicate glass dome with PC prismatic lens cover. |
| Guard: | Stainless Steel dome guard as standard |
| Terminals: | 0.5 to 4.0mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | DC: 3.00kg AC:3.50kg |

*Candela measurements representative of performance with red lens at optimum voltage. *SPL data +/-3dB(A). Measured at optimum voltage.

Part codes:

230V ac

L.E.D.:

Version:

12V dc

24V dc

48V dc

24V ac

115V ac

230V ac

50/60Hz

50/60Hz

50/60Hz

50/60Hz

* current at nominal voltage on Tone 2

+/-10%

Voltage:

10-50V dc

10-50V dc

10-50V dc

+/-10%

+/-10%

+/-10%

60mA

Current:

760mA

400mA

210mA

380mA

135mA

65mA

| Version: | | Part code: | | | |
|--|---------------------------|-------------------------------|---------------------------------|--|--|
| 12V dc | | MCA112L1DC12G-xx | | | |
| 24V dc | | MCA112L1D | MCA112L1DC24G-xx | | |
| 48V dc | | MCA112L1D | C48G-xx | | |
| 24V ac | | MCA112L1A | C24G-xx | | |
| 115V ac | | MCA112L1A | C115G-xx | | |
| 230V ac | | MCA112L1A | C230G-xx | | |
| [77] L.L.D. | . / Lens colour: | AM: Amber, E CL: Clear, GN | , | | |
| | iber with '-P' for progra | RD: Red, YW | | | |
| Suffix part num Alarm sou Version: | | , | | | |
| Alarm sou | | , mmable, 4 stage, 4 | o tone version. | | |
| Alarm sou Version: 24V dc | | mmable, 4 stage, 43 | 5 tone version. Current: | | |
| Alarm sou Version: | | Moltage: | 5 tone version. Current: 200mA* | | |

Features:

- Automatic synchronisation on multi-sounder system. • Continuously rated.
- Large termination area.
- Stainless steel fixings.
- 360° positioning. • Duplicate cable terminations. (in & out for daisy-chain installations).
- Tropicalisation available on request.
- Available with custom tone configurations
- and frequencies.
- 'Programmable' version available:
- 45 alarm tones
- 4 remotely selectable stages

Approvals:



• Ratchet adjustable stainless steel 'U' bracket for

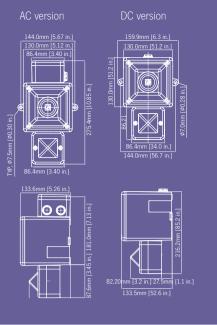
- Any tone can be assigned to any stage
- User configurable continuous frequency tone

• UKOOA/PFEER compliant alarm tones. • GOST-R approved. Cert: POCC GB-JB05-H00144



AL105NAXX User recordable Alarm Horn & Xenon Strobe

The AL105NAXX Appello X is the next generation of user recordable alarm sounder, capable of storing up to 2 minutes of content, combined with a Xenon strobe. The AL105NAXX records, stores and plays back with unsurpassed clarity, user defined voice messages, music or sounds stored directly to non-volatile memory.



Tone table:

| Tone 2 800/1000H2 @ 0.25 sec Alternating Tone 17 Tone 5 Tone 29 Tone 3 500/1200H2 @ 0.34z 0.5 sec Slow Whopp Tone 6 Tone 5 Tone 29 Tone 4 800/1000H2 @ 0.14z 0.5 sec Slow Whopp Tone 6 Tone 20 Tone 29 Tone 5 2400H2 Continuous Tone 7 Tone 5 Tone 29 Tone 6 2400/2900H2 @ 0.14z Sweeping Tone 10 Tone 5 Tone 29 Tone 7 200/2900H2 @ 0.14z Sweeping Tone 10 Tone 5 Tone 29 Tone 10 Tone 5 Tone 29 Tone 29 Tone 29 Tone 11 1000H2 @ 0.14z Nternating Tone 7 Tone 5 Tone 29 Tone 11 1000H2 @ 0.14z Intermittent Tone 6 Tone 29 Tone 29 Tone 13 200H2 @ 0.14z Intermittent Tone 15 Tone 29 Tone 29 Tone 14 800H2 0.25sec on, 1 sec off Intermittent Tone 10 Tone 5 Tone 29 Tone 14 800H2 0.25sec on, 1 sec off Intermittent Tone 10 Tone 5 Tone 29 Tone 14 800H2 0.25sec on, 1 sec off In | Stage 1 | Frequency Description. | Stage 2 | Stage 3 | Stage 4 |
|---|---------|--|---------|---------|---------|
| Tone 3 500/1200H2 @ 0.3H2 0.5 sec Slow Whoop Tone 2 Tone 5 Tone 29 Tone 4 800/1000H2 @ 1H2 Sweeping Tone 6 Tone 6 Tone 29 Tone 6 2400H2 continuous Tone 7 Tone 5 Tone 29 Tone 6 2400/2900H2 @ 1H2 Sweeping Tone 10 Tone 5 Tone 29 Tone 7 2400/2900H2 @ 1H2 Sweeping Tone 10 Tone 5 Tone 29 Tone 9 1200/500H2 @ 3H2 Sweeping Tone 15 Tone 2 Tone 29 Tone 10 1000H2 @ 1H2 - DIN / PFEER P.TA.P. Tone 15 Tone 5 Tone 29 Tone 11 1000H2 @ 1H2 Intermittent Tone 2 Tone 5 Tone 29 Tone 12 800/1000H2 @ 0.875H2 Alternating Tone 4 Tone 5 Tone 29 Tone 12 800/1000H2 @ 0.875H2 Alternating Tone 4 Tone 5 Tone 29 Tone 13 800H2 @ 0.55c con. 1, sec of Intermittent Tone 6 Tone 5 Tone 29 Tone 14 800H2 @ 0.5c con. 1, sec of Intermittent Tone 2 Tone 5 Tone 29 Tone 15 800H2 @ 0.H2 Alter A | Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 4 800/1000Hz @ 1Hz Sweeping Tone 6 Tone 5 Tone 29 Tone 5 2400Hz Continuous Tone 7 Tone 5 Tone 29 Tone 6 2400/2900Hz @ 1Hz Sweeping Tone 10 Tone 5 Tone 29 Tone 7 2400/2900Hz @ 1Hz Sweeping Tone 10 Tone 5 Tone 29 Tone 10 2200/200Hz @ 1Hz Intermittent Tone 15 Tone 29 Tone 20 Tone 11 1000Hz @ 1Hz Intermittent Tone 7 Tone 5 Tone 29 Tone 11 1000Hz @ 1Hz Intermittent Tone 4 Tone 5 Tone 29 Tone 12 800/100Hz @ 0.875Hz Alternating Tone 4 Tone 5 Tone 29 Tone 14 800Hz O.25sec on, 1 sec off Intermittent Tone 10 Tone 5 Tone 29 Tone 14 800Hz O.05mS off Intermittent Tone 18 Tone 5 Tone 29 Tone 15 60Hz 1.8sec onf Intermittent Tone 2 Tone 5 Tone 29 Tone 14 80Hz Continuous Tone 2 Tone 5 Tone 29 Tone 15 60Hz 1.8sec on, 1.8sec off Intermittent Ton | Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 | Tone 29 |
| Tone 5 2400Hz Continuous Tone 3 Tone 20 Tone 29 Tone 6 2400/2900Hz @ 7Hz Sweeping Tone 7 Tone 5 Tone 29 Tone 7 2400/2900Hz @ 1Hz Sweeping Tone 10 Tone 5 Tone 29 Tone 9 1200/500Hz @ 1Az Sweeping Tone 1 Tone 5 Tone 29 Tone 10 2400/2900Hz @ 1Az Alternating Tone 7 Tone 5 Tone 29 Tone 11 1000Hz @ 1Az Intermittent Tone 1 Tone 5 Tone 29 Tone 12 800/1000Hz @ 0.875Hz Alternating Tone 4 Tone 5 Tone 29 Tone 14 800Hz Continuous Tone 2 Tone 5 Tone 29 Tone 15 800Hz Continuous Tone 7 Tone 5 Tone 29 Tone 15 800Hz Continuous Tone 7 Tone 5 Tone 29 Tone 15 800Hz Continuous Tone 7 Tone 5 Tone 29 Tone 16 60Hz 150mS on, 150mS off Intermittent Tone 10 Tone 5 Tone 29 Tone 16 60Hz 18sec on, 18sec off Intermittent Tone 10 Tone 5 | Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 | Tone 29 |
| Tone 6 2400/2900Hz @ 7Hz Sweeping Tone 7 Tone 5 Tone 29 Tone 7 2400/2900Hz @ 1Hz Sweeping Tone 10 Tone 5 Tone 29 Tone 9 1200/500Hz @ 1Hz Sweeping Tone 15 Tone 2 Tone 29 Tone 10 2400/2900Hz @ 2Hz Alternating Tone 7 Tone 5 Tone 29 Tone 11 1000Hz @ 1Hz Intermittent Tone 2 Tone 5 Tone 29 Tone 11 1000Hz @ 0.875Hz Alternating Tone 4 Tone 5 Tone 29 Tone 14 800Hz 0.58cc on, 1 sec off Intermittent Tone 15 Tone 5 Tone 29 Tone 15 800Hz Continuous Tone 2 Tone 5 Tone 29 Tone 16 60Hz 150mS on, 150mS off Intermittent Tone 10 Tone 27 Tone 29 Tone 15 60Hz 160xS on, 158cc off Intermittent Tone 2 Tone 5 Tone 29 Tone 16 60Hz 150xS on, 150mS off Intermittent Tone 2 Tone 5 Tone 29 Tone 18 60Hz 160xS on, 150mS on, 150mS On, 150S Cone 20 Tone 5 Tone 29 Tone 19 1.4KHz 16KHz 18, 1.6KHz 18, | Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 | Tone 29 |
| Tone 7 2400/2900Hz @ 1Hz Sweeping Tone 10 Tone 5 Tone 29 Tone 8 500/1200/500Hz @ 0.3Hz Sweeping Tone 2 Tone 5 Tone 29 Tone 9 1200/500Hz @ 0.3Hz Sweeping Tone 15 Tone 5 Tone 29 Tone 11 1000Hz @ 1Hz Intermittent Tone 7 Tone 5 Tone 29 Tone 12 800/1000Hz @ 0.75Hz Alternating Tone 4 Tone 5 Tone 29 Tone 14 800Hz 0.25sec on, 1 sec off Intermittent Tone 1 Tone 5 Tone 29 Tone 15 800Hz 0.25sec on, 1 sec off Intermittent Tone 1 Tone 5 Tone 29 Tone 16 660Hz 1.150mS on, 150mS off Intermittent Tone 1 Tone 5 Tone 29 Tone 15 60Hz 1.8sec on, 1.8sec off Intermittent Tone 2 Tone 5 Tone 29 Tone 20 Tone 5 Tone 29 Tone 5 Tone 29 Tone 21 54Hz 1s, 1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 Tone 2 Tone 5 Tone 29 Tone 22 54Hz 20 ontinuous Tone 2 Tone 5 Tone 29 Tone 5 Tone 29 | Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 | Tone 29 |
| Tone 8 500/1200/500Hz @ 0.3Hz Sweeping Tone 2 Tone 5 Tone 29 Tone 9 1200/500Hz @ 1Hz - DIN / PFEER PTA.P. Tone 15 Tone 2 Tone 29 Tone 10 2400/2900Hz @ 2Hz Alternating Tone 7 Tone 5 Tone 29 Tone 11 1000Hz @ 0.875Hz Alternating Tone 4 Tone 5 Tone 29 Tone 13 2400Hz @ 1Hz Intermittent Tone 4 Tone 5 Tone 29 Tone 14 800Hz Continuous Tone 2 Tone 5 Tone 29 Tone 15 Southz 0.25sec on, 1 sec off Intermittent Tone 11 Tone 5 Tone 29 Tone 16 660Hz 1.50mS on, 150mS off Intermittent Tone 18 Tone 5 Tone 29 Tone 15 Gone 14 660Hz 1.8sec on, 1.8sec off Intermittent Tone 2 Tone 5 Tone 29 Tone 15 Gone 20 660Hz 1.8sec on, 1.8sec off Intermittent Tone 2 Tone 5 Tone 29 Tone 21 S54Hz (AMHz 40Hz 40DS + NF S 32-001 Tone 2 Tone 5 Tone 29 Tone 24 60Hz Continuous Tone 2 Tone 5 Tone 29 <td>Tone 6</td> <td>2400/2900Hz @ 7Hz Sweeping</td> <td>Tone 7</td> <td>Tone 5</td> <td>Tone 29</td> | Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 | Tone 29 |
| Tone 9 1200/500Hz @ 1Hz - DIN / PFEER T.A.P. Tone 15 Tone 2 Tone 2 Tone 5 Tone 29 Fore 10 2400/2900Hz @ 2Hz Alternating Tone 7 Tone 5 Tone 29 Fore 11 1000Hz @ 1Hz Intermittent Tone 12 Tone 5 Tone 29 Fore 13 2400Hz @ 1Hz Intermittent Tone 15 Tone 5 Tone 29 Fore 14 800Hz O.Stsec on, 1 sec off Intermittent Tone 4 Tone 5 Tone 29 Fore 15 800Hz Continuous Tone 2 Tone 5 Tone 29 Fore 16 660Hz 150mS on, 150mS off Intermittent Tone 18 Tone 5 Tone 29 Fore 17 544Hz (100mS)/440Hz (400mS) - NF S 32:001 Tone 2 Tone 5 Tone 29 Fore 14 660Hz Continuous Tone 2 Tone 5 Tone 29 Tone 5 Tone 29 Fore 20 660Hz Continuous Tone 2 Tone 5 Tone 29 Tone 5 Tone 29 Fore 23 800Hz @ Alternating Tone 2 Tone 5 Tone 29 Tone 25 Tone 29 Tone 5 Tone 29 Tone 25 | Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 | Tone 29 |
| Tone 10 2400/2900Hz @ 2Hz Alternating Tone 7 Tone 5 Tone 29 Torne 11 1000Hz @ 0.875Hz Alternating Tone 4 Tone 5 Tone 29 Tone 12 800/1000Hz @ 0.875Hz Alternating Tone 4 Tone 5 Tone 29 Tone 14 800Hz 0.25sec on, 1 sec off Intermittent Tone 14 Tone 5 Tone 29 Tone 15 800Hz Continuous Tone 12 Tone 5 Tone 29 Tone 16 660Hz 150mS on, 150mS off Intermittent Tone 18 Tone 5 Tone 29 Tone 15 800Hz Continuous Tone 2 Tone 5 Tone 29 Tone 16 660Hz 158sec on, 1.8sec off Intermittent Tone 2 Tone 5 Tone 29 Tone 20 660Hz 1.6KHz 1.4KHz 0.5s-NFC48-265 Tone 2 Tone 5 Tone 29 Tone 21 554Hz/ 40Hz @ 1Hz Alternating Tone 2 Tone 5 Tone 29 Tone 23 800Hz @ 0.875 sec. Intermittent Tone 6 Tone 29 Tone 5 Tone 29 Tone 24 800/1000Hz @ 50Hz Sweeping Tone 2 Tone 5 Tone 29 Tone 25 | Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 | Tone 29 |
| Tone 11 1000Hz @ 1Hz Intermittent Tone 2 Tone 5 Tone 29 Fone 12 800/1000Hz @ 0.875Hz Alternating Tone 4 Tone 5 Tone 29 Fone 13 2400Hz @ 1Hz Intermittent Tone 15 Tone 5 Tone 29 Fone 14 800Hz Continuous Tone 5 Tone 29 Tone 5 Tone 29 Fone 16 660Hz 150mS on, 150mS off Intermittent Tone 18 Tone 5 Tone 29 Fone 17 544Hz (100mS)/440Hz (400mS) - NF S 32:001 Tone 2 Tone 5 Tone 29 Fone 18 660Hz 1:0smS on, 150mS off Intermittent Tone 2 Tone 5 Tone 29 Fone 19 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0:5-NFC48:265 Tone 2 Tone 5 Tone 29 Fone 20 660Hz Continuous Tone 2 Tone 5 Tone 29 Fone 21 54Hz 40Hz @ 1Hz Intermittent Tone 2 Tone 5 Tone 29 Fone 23 800Hz @ 2Hz Intermittent Tone 2 Tone 5 Tone 29 Fone 24 800/1000Hz @ 50Hz Sweeping Tone 29 Tone 5 Tone 29 Fone 25 | Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 | Tone 29 |
| Tone 12 800/1000Hz @ 0.875Hz Alternating Tone 4 Tone 5 Tone 29 Tone 13 2400Hz @ 1Hz Intermittent Tone 15 Tone 5 Tone 29 Tone 14 800Hz 0.25sec on, 1 sec off Intermittent Tone 4 Tone 5 Tone 29 Tone 16 660Hz 150mS on, 150mS off Intermittent Tone 18 Tone 5 Tone 29 Tone 17 544Hz (100mS)/440Hz (400mS) - NF S 32:001 Tone 2 Tone 5 Tone 29 Tone 18 660Hz 1.8sec off Intermittent Tone 2 Tone 5 Tone 29 Tone 18 660Hz 1.8sec off Intermittent Tone 2 Tone 5 Tone 29 Tone 19 1.4KHz1.6KHz 1s, 1.6KHz 0.5s-NFC48:265 Tone 2 Tone 5 Tone 29 Tone 20 660Hz Continuous Tone 2 Tone 5 Tone 29 Tone 21 554Hz/40Hz @ 1Hz Alternating Tone 2 Tone 5 Tone 29 Tone 23 800Hz @ 2Hz Intermittent Tone 2 Tone 5 Tone 29 Tone 24 800/1000Hz @ 50Hz Sweeping Tone 2 Tone 5 Tone 29 Tone 25 2400/2900H | Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 | Tone 29 |
| fone 13 2400Hz @ 1Hz Intermittent Tone 15 Tone 5 Tone 29 fone 14 800Hz 0.25sec on, 1 sec off Intermittent Tone 4 Tone 5 Tone 29 fone 15 800Hz Continuous Tone 2 Tone 5 Tone 29 fone 16 660Hz 150mS on, 150mS off Intermittent Tone 12 Tone 27 Tone 29 fone 17 544Hz (100mS)/440Hz (400mS) - NF S 32:001 Tone 2 Tone 5 Tone 29 fone 19 1.4KHz:1.6KHz 15, 1.6KHz:1.4KHz 0.5s -NFC48:265 Tone 2 Tone 5 Tone 29 fone 21 554Hz/440Hz @ 1Hz Alternating Tone 2 Tone 5 Tone 29 fone 21 554Hz/440Hz @ 1Hz Alternating Tone 2 Tone 5 Tone 29 fone 23 800Hz @ 2Hz Intermittent Tone 6 Tone 5 Tone 29 fone 24 800/1000Hz @ 50Hz Sweeping Tone 29 Tone 5 Tone 29 fone 25 2400/2900Hz @ 50Hz Sweeping Tone 20 Tone 5 Tone 29 fone 26 Bell Tone 2 Tone 5 Tone 29 Tone 5 Tone 29 fon | Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 14800Hz 0.25sec on, 1 sec off IntermittentTone 4Tone 5Tone 29Tone 15800Hz ContinuousTone 2Tone 5Tone 29Tone 16660Hz 150mS on, 150mS off IntermittentTone 18Tone 27Tone 29Tone 17544Hz (100mS)/440Hz (400mS) - NF S 32:001Tone 2Tone 5Tone 29Tone 18660Hz 1.8sec on, 1.8sec off IntermittentTone 2Tone 5Tone 29Tone 191.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265Tone 2Tone 5Tone 29Tone 20660Hz ContinuousTone 2Tone 5Tone 29Tone 21554Hz/40Hz @ 1Hz AlternatingTone 2Tone 5Tone 29Tone 23800Hz @ 2Hz IntermittentTone 6Tone 5Tone 29Tone 24800/1000Hz @ 50Hz SweepingTone 29Tone 5Tone 29Tone 252400/290Hz @ 50Hz SweepingTone 29Tone 5Tone 29Tone 26BellTone 2Tone 15Tone 29Tone 27554Hz ContinuousTone 2Tone 5Tone 29Tone 28440Hz ContinuousTone 2Tone 5Tone 29Tone 29800/1000Hz @ 7Hz SweepingTone 2Tone 5Tone 29Tone 30300Hz ContinuousTone 2Tone 5Tone 29Tone 31660/1200Hz @ 0.5 sec Alternating - SingaporeTone 38Tone 45Tone 29Tone 341000 & 2000Hz @ 0.5 sec Alternating - SingaporeTone 33Tone 45Tone 29Tone 3500.1200Hz @ 0.5 sec Alternating - SingaporeTon | Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 | Tone 29 |
| Tone 15800Hz ContinuousTone 2Tone 5Tone 29Tone 16660Hz 150mS on, 150mS off IntermittentTone 18Tone 5Tone 29Tone 17544Hz (100mS)/440Hz (400mS) - NF S 32:001Tone 2Tone 5Tone 29Tone 18660Hz 1.8sec on, 1.8sec off IntermittentTone 2Tone 5Tone 29Tone 191.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s - NFC48-265Tone 2Tone 5Tone 29Tone 20660Hz ContinuousTone 2Tone 5Tone 29Tone 21554Hz/440Hz @ 1Hz AlternatingTone 2Tone 5Tone 29Tone 23800Hz @ 2Hz IntermittentTone 6Tone 5Tone 29Tone 24800/1000Hz @ 50Hz SweepingTone 29Tone 5Tone 29Tone 252400/2900Hz @ 50Hz SweepingTone 29Tone 5Tone 29Tone 26BellTone 2Tone 5Tone 29Tone 27554Hz ContinuousTone 2Tone 5Tone 29Tone 28800/1000Hz @ 50Hz SweepingTone 2Tone 5Tone 29Tone 29800/1000Hz @ 7Hz SweepingTone 7Tone 5Tone 29Tone 29800/1000Hz @ 1Hz SweepingTone 7Tone 5Tone 29Tone 30300Hz ContinuousTone 2Tone 5Tone 29Tone 31660/1200Hz @ 1Hz SweepingTone 26Tone 5Tone 29Tone 33745Hz @ 1Hz IntermittentTone 24Tone 45Tone 29Tone 341000 & 2000Hz @ 0.5 sec Alternating - SingaporeTone 38Tone 45Tone 29 </td <td>Tone 13</td> <td>2400Hz @ 1Hz Intermittent</td> <td>Tone 15</td> <td>Tone 5</td> <td>Tone 29</td> | Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 | Tone 29 |
| Fone 16660Hz 150mS on, 150mS off IntermittentTone 18Tone 5Tone 29fone 17544Hz (100mS)/440Hz (400mS) - NF S 32-001Tone 2Tone 27Tone 29fone 18660Hz 1.8sec on, 1.8sec off IntermittentTone 2Tone 5Tone 29fone 191.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265Tone 2Tone 5Tone 29fone 20660Hz ContinuousTone 2Tone 5Tone 29fone 21554Hz/440Hz @ 1Hz AlternatingTone 2Tone 5Tone 29fone 22544Hz @ 0.875 sec. IntermittentTone 6Tone 5Tone 29fone 23800Hz @ 2Hz IntermittentTone 6Tone 5Tone 29fone 24800/1000Hz @ 50Hz SweepingTone 29Tone 5Tone 29fone 252400/290Hz @ 50Hz SweepingTone 20Tone 5Tone 29fone 26BellTone 2Tone 5Tone 29fone 27554Hz ContinuousTone 2Tone 5Tone 29fone 28440Hz ContinuousTone 2Tone 5Tone 29fone 29800/1000Hz @ 7Hz SweepingTone 7Tone 5Tone 29fone 30300Hz ContinuousTone 26Tone 5Tone 29fone 31660/1200Hz @ 1Hz SweepingTone 26Tone 15Tone 29fone 33745Hz @ 1Hz IntermittentTone 26Tone 5Tone 29fone 341000 & 2000Hz @ 0.5 sec Alternating - SingaporeTone 38Tone 45Tone 29fone 35420Hz @ 0.625 sec Australian Evac.Tone 36Tone 5 <td< td=""><td>Tone 14</td><td>800Hz 0.25sec on, 1 sec off Intermittent</td><td>Tone 4</td><td>Tone 5</td><td>Tone 29</td></td<> | Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 | Tone 29 |
| Tone 17 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 2 Tone 27 Tone 29 Tone 18 660Hz 1.8sec on, 1.8sec off Intermittent Tone 2 Tone 5 Tone 29 Tone 19 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s - NFC48-265 Tone 2 Tone 5 Tone 29 Tone 20 660Hz Continuous Tone 2 Tone 5 Tone 29 Tone 21 554Hz/440Hz @ 1Hz Alternating Tone 2 Tone 5 Tone 29 Tone 23 800Hz @ 2Hz Intermittent Tone 6 Tone 5 Tone 29 Tone 24 800/1000Hz @ 50Hz Sweeping Tone 29 Tone 5 Tone 29 Tone 25 2400/2900Hz @ 50Hz Sweeping Tone 29 Tone 5 Tone 29 Tone 25 44002/000Hz @ 50Hz Sweeping Tone 20 Tone 5 Tone 29 Tone 24 800/1000Hz @ 7Hz Sweeping Tone 20 Tone 5 Tone 29 Tone 25 2400/2900Hz @ 7Hz Sweeping Tone 2 Tone 5 Tone 29 Tone 28 440Hz Continuous Tone 2 Tone 5 Tone 29 Tone 30 300Hz Continuous | Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Fone 18 660Hz 1.8sec off Intermittent Tone 2 Tone 5 Tone 29 fone 19 1.4KHz-1.6KHz 1s, 1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 Tone 2 Tone 5 Tone 29 fone 20 660Hz Continuous Tone 2 Tone 5 Tone 29 fone 21 554Hz/440Hz @ 1Hz Alternating Tone 2 Tone 5 Tone 29 fone 22 544Hz @ 0.875 sec. Intermittent Tone 6 Tone 5 Tone 29 fone 23 800Hz @ 2Hz Intermittent Tone 6 Tone 5 Tone 29 fone 24 800/1000Hz @ 50Hz Sweeping Tone 29 Tone 5 Tone 29 fone 25 2400/2900Hz @ 50Hz Sweeping Tone 29 Tone 5 Tone 29 fone 26 Bell Tone 2 Tone 5 Tone 29 fone 28 440Hz Continuous Tone 2 Tone 5 Tone 29 fone 30 300Hz Continuous Tone 2 Tone 5 Tone 29 fone 31 660/1200Hz @ 1Hz Sweeping Tone 26 Tone 5 Tone 29 fone 32 Two tone chime. Tone 26 Tone 5 | Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 | Tone 29 |
| Tone 191.4KHz1.6KHz 1, 1.6KHz1.4KHz 0.5s -NFC48-265Tone 2Tone 2Tone 5Tone 29Tone 20660Hz ContinuousTone 2Tone 5Tone 29Tone 2Tone 5Tone 29Tone 21554Hz/440Hz @ 1Hz AlternatingTone 2Tone 5Tone 29Tone 2Tone 5Tone 29Tone 23800Hz @ 2Hz IntermittentTone 2Tone 5Tone 29Tone 5Tone 29Tone 24800/1000Hz @ 50Hz SweepingTone 29Tone 5Tone 29Tone 5Tone 29Tone 252400/2900Hz @ 50Hz SweepingTone 20Tone 5Tone 29Tone 5Tone 29Tone 26BellTone 2Tone 5Tone 29Tone 5Tone 29Tone 27554Hz ContinuousTone 2Tone 5Tone 29Tone 5Tone 29Tone 28440Hz ContinuousTone 2Tone 5Tone 29Tone 5Tone 29Tone 30300Hz ContinuousTone 2Tone 5Tone 29Tone 5Tone 29Tone 31660/1200Hz @ 1Hz SweepingTone 26Tone 5Tone 29Tone 29Tone 33745Hz @ 1Hz IntermittentTone 2Tone 5Tone 29Tone 33745Hz @ 0.652 sec Alternating - SingaporeTone 38Tone 45Tone 29Tone 35420Hz @ 0.652 sec Alternating - SingaporeTone 36Tone 5Tone 29Tone 35420Hz @ 0.652 sec Alternating - SingaporeTone 38Tone 45Tone 29Tone 36500-1200Hz 3.75sec / 0.25sec. Alternatina Evac.Tone 31Tone | Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 | Tone 29 |
| Tone 20660Hz ContinuousTone 2Tone 5Tone 29Tone 21554Hz/440Hz @ 1Hz AlternatingTone 2Tone 5Tone 29Tone 22544Hz @ 0.875 sec. IntermittentTone 6Tone 5Tone 29Tone 23800Hz @ 2Hz IntermittentTone 6Tone 5Tone 29Tone 24800/1000Hz @ 50Hz SweepingTone 29Tone 5Tone 29Tone 252400/2900Hz @ 50Hz SweepingTone 29Tone 5Tone 29Tone 26BellTone 26Tone 5Tone 29Tone 27554Hz ContinuousTone 2Tone 5Tone 29Tone 28440Hz ContinuousTone 2Tone 5Tone 29Tone 29800/1000Hz @ 7Hz SweepingTone 7Tone 5Tone 29Tone 30300Hz ContinuousTone 2Tone 5Tone 29Tone 31660/1200Hz @ 1Hz SweepingTone 26Tone 5Tone 29Tone 31660/1200Hz @ 1Hz SweepingTone 26Tone 5Tone 29Tone 33745Hz @ 1Hz IntermittentTone 2Tone 5Tone 29Tone 33745Hz @ 1Hz IntermittentTone 26Tone 5Tone 29Tone 341000 & 2000Hz @ 0.5 sec Alternating - SingaporeTone 38Tone 45Tone 29Tone 35420Hz @ 0.625 sec Australian AlertTone 36Tone 5Tone 29Tone 36500-1200Hz 3.75sec /0.25sec. Australian Evac.Tone 31Tone 45Tone 29Tone 371000Hz Continuous - PFEER Toxic GasTone 31Tone 45Tone 29Tone 38< | Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 | Tone 29 |
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| Fone 22544Hz @ 0.875 sec. IntermittentTone 2Tone 5Tone 29Fone 23800Hz @ 2Hz IntermittentTone 6Tone 5Tone 29Fone 24800/1000Hz @ 50Hz SweepingTone 29Tone 5Tone 29Fone 252400/2900Hz @ 50Hz SweepingTone 29Tone 5Tone 29Fone 26BellTone 2Tone 5Tone 29Fone 27554Hz ContinuousTone 2Tone 5Tone 29Fone 28440Hz ContinuousTone 2Tone 5Tone 29Fone 29800/1000Hz @ 7Hz SweepingTone 7Tone 5Tone 29Fone 30300Hz ContinuousTone 2Tone 5Tone 29Fone 31660/1200Hz @ 7Hz SweepingTone 26Tone 5Tone 29Fone 31660/1200Hz @ 1Hz SweepingTone 26Tone 15Tone 29Fone 32Two tone chime.Tone 26Tone 15Tone 29Fone 33745Hz @ 1Hz IntermittentTone 2Tone 5Tone 29Fone 341000 & 2000Hz @ 0.5 sec Alternating - SingaporeTone 38Tone 5Tone 29Fone 35500-1200Hz 3.75sec /0.25sec. Australian Evac.Tone 35Tone 5Tone 29Fone 371000Hz ContinuousFone 34Tone 45Tone 29Fone 382000Hz ContinuousTone 34Tone 45Tone 29Fone 39800Hz 0.25sec on, 1 sec off IntermittentTone 23Tone 17Tone 29Fone 39800Hz 0.25sec on, 1 sec off IntermittentTone 21Tone 25Tone 29Fone 40< | Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
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| Tone 24800/1000Hz @ 50Hz SweepingTone 29Tone 5Tone 29Tone 252400/2900Hz @ 50Hz SweepingTone 29Tone 5Tone 29Tone 26BellTone 2Tone 5Tone 29Tone 27554Hz ContinuousTone 26Tone 5Tone 29Tone 28440Hz ContinuousTone 7Tone 5Tone 29Tone 29800/1000Hz @ 7Hz SweepingTone 7Tone 5Tone 29Tone 30300Hz ContinuousTone 2Tone 5Tone 29Tone 31660/1200Hz @ 1Hz SweepingTone 26Tone 5Tone 29Tone 32Two tone chime.Tone 26Tone 15Tone 29Tone 33745Hz @ 1Hz IntermittentTone 26Tone 5Tone 29Tone 341000 & 2000Hz @ 0.5 sec Alternating - SingaporeTone 38Tone 45Tone 29Tone 35420Hz @ 0.625 sec Australian AlertTone 35Tone 5Tone 29Tone 36500-1200Hz 3.75sec /0.25sec. Australian Evac.Tone 35Tone 45Tone 29Tone 371000Hz ContinuousPFEER Toxic GasTone 9Tone 45Tone 29Tone 382000Hz ContinuousTone 5Tone 29Tone 45Tone 29Tone 39800Hz 0.25sec on, 1 sec off IntermittentTone 23Tone 17Tone 29Tone 41Motor Siren - slow rise to 1200 HzTone 2Tone 5Tone 29Tone 42Motor Siren - slow rise to 800 HzTone 2Tone 5Tone 29Tone 44Motor Siren - slow rise to 2400 HzTone 2 <td< td=""><td>Tone 22</td><td>544Hz @ 0.875 sec. Intermittent</td><td>Tone 2</td><td>Tone 5</td><td>Tone 29</td></td<> | Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 252400/2900Hz @ 50Hz SweepingTone 29Tone 29Tone 5Tone 29Tone 26BellTone 2Tone 15Tone 29Tone 27554Hz ContinuousTone 26Tone 5Tone 29Tone 28440Hz ContinuousTone 2Tone 5Tone 29Tone 29800/1000Hz @ 7Hz SweepingTone 7Tone 5Tone 29Tone 30300Hz ContinuousTone 2Tone 5Tone 29Tone 31660/1200Hz @ 1Hz SweepingTone 26Tone 5Tone 29Tone 32Two tone chime.Tone 26Tone 5Tone 29Tone 33745Hz @ 1Hz IntermittentTone 26Tone 5Tone 29Tone 341000 & 2000Hz @ 0.5 sec Alternating - SingaporeTone 38Tone 5Tone 29Tone 35420Hz @ 0.625 sec Australian AlertTone 35Tone 5Tone 29Tone 36500-1200Hz 3.75sec /0.25sec. Australian Evac.Tone 35Tone 5Tone 29Tone 371000Hz ContinuousPFEER Toxic GasTone 9Tone 45Tone 29Tone 382000Hz ContinuousTone 31Tone 27Tone 29Tone 40544Hz (100mS) - NF S 32-001Tone 31Tone 27Tone 29Tone 41Motor Siren - slow rise to 1200 HzTone 2Tone 5Tone 29Tone 431200 Hz ContinuousTone 2Tone 5Tone 29Tone 44Motor Siren - slow rise to 2400 HzTone 2Tone 5Tone 29 | Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 | Tone 29 |
| Tone 26BellTone 2Tone 15Tone 29Tone 27554Hz ContinuousTone 26Tone 5Tone 29Tone 28440Hz ContinuousTone 2Tone 5Tone 29Tone 29800/1000Hz @ 7Hz SweepingTone 7Tone 5Tone 29Tone 30300Hz ContinuousTone 2Tone 5Tone 29Tone 31660/1200Hz @ 1Hz SweepingTone 26Tone 5Tone 29Tone 32Two tone chime.Tone 26Tone 5Tone 29Tone 33745Hz @ 1Hz IntermittentTone 2Tone 5Tone 29Tone 341000 & 2000Hz @ 0.5 sec Alternating - SingaporeTone 38Tone 45Tone 29Tone 35420Hz @ 0.625 sec Australian AlertTone 36Tone 5Tone 29Tone 36500-1200Hz 3.75sec /0.25sec. Australian Evac.Tone 35Tone 45Tone 29Tone 371000Hz ContinuousTone 34Tone 45Tone 29Tone 382000Hz ContinuousTone 34Tone 27Tone 29Tone 39800Hz 0.25sec on, 1 sec off IntermittentTone 31Tone 27Tone 29Tone 41Motor Siren - slow rise to 1200 HzTone 2Tone 5Tone 29Tone 431200 Hz ContinuousTone 2Tone 5Tone 29Tone 44Motor Siren - slow rise to 2400 HzTone 2Tone 5Tone 29 | Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 | Tone 29 |
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| Tone 28440Hz ContinuousTone 2Tone 5Tone 29fone 29800/1000Hz @ 7Hz SweepingTone 7Tone 5Tone 29fone 30300Hz ContinuousTone 2Tone 5Tone 29fone 31660/1200Hz @ 1Hz SweepingTone 26Tone 5Tone 29fone 32Two tone chime.Tone 26Tone 15Tone 29fone 33745Hz @ 1Hz IntermittentTone 2Tone 5Tone 29fone 33745Hz @ 1.1z IntermittentTone 2Tone 5Tone 29fone 341000 & 2000Hz @ 0.5 sec Alternating - SingaporeTone 36Tone 5Tone 29fone 35420Hz @ 0.625 sec Australian AlertTone 36Tone 5Tone 29fone 36500-1200Hz 3.75sec /0.25sec. Australian Evac.Tone 35Tone 45Tone 29fone 371000Hz Continuous - PFEER Toxic GasTone 9Tone 45Tone 29fone 382000Hz ContinuousTone 34Tone 45Tone 29fone 4054Hz (100mS)/440Hz (400mS) - NF S 32-001Tone 31Tone 27Tone 29fone 41Motor Siren - slow rise to 1200 HzTone 2Tone 5Tone 29fone 431200 Hz ContinuousTone 2Tone 5Tone 29fone 44Motor Siren - slow rise to 2400 HzTone 2Tone 5Tone 29 | Tone 26 | Bell | Tone 2 | Tone 15 | Tone 29 |
| Tone 29800/1000Hz @ 7Hz SweepingTone 7Tone 5Tone 29fone 30300Hz ContinuousTone 2Tone 5Tone 29fone 31660/1200Hz @ 1Hz SweepingTone 26Tone 5Tone 29fone 32Two tone chime.Tone 26Tone 15Tone 29fone 33745Hz @ 1Hz IntermittentTone 2Tone 5Tone 29fone 341000 & 2000Hz @ 0.5 sec Alternating - SingaporeTone 38Tone 45Tone 29fone 35420Hz @ 0.625 sec Australian AlertTone 36Tone 5Tone 29fone 36500-1200Hz 3.75sec / 0.25sec. Australian Evac.Tone 35Tone 5Tone 29fone 382000Hz Continuous - PFEER Toxic GasTone 9Tone 45Tone 29fone 39800Hz 0.25sec on, 1 sec off IntermittentTone 23Tone 17Tone 29fone 41Motor Siren - slow rise to 1200 HzTone 2Tone 5Tone 29fone 42Motor Siren - slow rise to 800 HzTone 2Tone 5Tone 29fone 431200 Hz ContinuousTone 2Tone 5Tone 29fone 44Motor Siren - slow rise to 2400 HzTone 2Tone 5Tone 29 | Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 | Tone 29 |
| Tone 30 300Hz Continuous Tone 2 Tone 5 Tone 29 fone 31 660/1200Hz @ 1Hz Sweeping Tone 26 Tone 5 Tone 29 fone 32 Two tone chime. Tone 26 Tone 15 Tone 29 fone 33 745Hz @ 1Hz Intermittent Tone 2 Tone 5 Tone 29 fone 34 1000 & 2000Hz @ 0.5 sec Alternating - Singapore Tone 38 Tone 45 Tone 29 fone 35 420Hz @ 0.625 sec Australian Alert Tone 36 Tone 5 Tone 29 fone 36 500-1200Hz 3.75sec / 0.25sec. Australian Evac. Tone 35 Tone 5 Tone 29 fone 37 1000Hz Continuous - PFEER Toxic Gas Tone 9 Tone 45 Tone 29 fone 39 800Hz 0.25sec on, 1 sec off Intermittent Tone 31 Tone 27 Tone 29 fone 40 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 31 Tone 27 Tone 29 fone 41 Motor Siren - slow rise to 1200 Hz Tone 2 Tone 5 Tone 29 fone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 29 fone 43 | Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 31660/1200Hz @ 1Hz SweepingTone 26Tone 5Tone 29Tone 32Two tone chime.Tone 26Tone 15Tone 29Tone 33745Hz @ 1Hz IntermittentTone 2Tone 5Tone 29Tone 341000 & 2000Hz @ 0.5 sec Alternating - SingaporeTone 38Tone 45Tone 29Tone 35420Hz @ 0.625 sec Australian AlertTone 36Tone 5Tone 29Tone 36500-1200Hz 3.75sec / 0.25sec. Australian Evac.Tone 35Tone 5Tone 29Tone 371000Hz Continuous - PFEER Toxic GasTone 9Tone 45Tone 29Tone 382000Hz Continuous - PFEER Toxic GasTone 34Tone 45Tone 29Tone 39800Hz 0.25sec on, 1 sec off IntermittentTone 23Tone 17Tone 29Tone 40544Hz (100mS)/440Hz (400mS) - NF S 32:001Tone 31Tone 5Tone 29Tone 42Motor Siren - slow rise to 1200 HzTone 2Tone 5Tone 29Tone 431200 Hz ContinuousTone 2Tone 5Tone 29Tone 431200 Hz ContinuousTone 2Tone 5Tone 29Tone 44Motor Siren - slow rise to 2400 HzTone 2Tone 5Tone 29 | Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 | Tone 29 |
| Tone 32 Two tone chime. Tone 26 Tone 15 Tone 29 fone 33 745Hz @ 1Hz Intermittent Tone 2 Tone 5 Tone 29 fone 34 1000 & 2000Hz @ 0.5 sec Alternating - Singapore Tone 38 Tone 45 Tone 29 fone 35 420Hz @ 0.625 sec Australian Alert Tone 36 Tone 5 Tone 29 fone 36 500-1200Hz 3.75sec / 0.25sec. Australian Evac. Tone 35 Tone 5 Tone 29 fone 37 1000Hz Continuous - PFEER Toxic Gas Tone 9 Tone 45 Tone 29 fone 38 2000Hz Continuous OFEER Toxic Gas Tone 34 Tone 45 Tone 29 fone 39 800Hz 0.25sec on, 1 sec off Intermittent Tone 31 Tone 17 Tone 29 fone 40 544Hz (100mS)/440Hz (400mS) - NF S 32:001 Tone 31 Tone 27 Tone 29 fone 41 Motor Siren - slow rise to 1200 Hz Tone 2 Tone 5 Tone 29 fone 42 Motor Siren - slow rise to 800 Hz Tone 2 Tone 5 Tone 29 fone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 29 | Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 33 745Hz @ 1Hz Intermittent Tone 2 Tone 5 Tone 29 Tone 34 1000 & 2000Hz @ 0.5 sec Alternating - Singapore Tone 38 Tone 45 Tone 29 Tone 35 420Hz @ 0.625 sec Australian Alert Tone 36 Tone 5 Tone 29 Tone 36 500-1200Hz 3.75sec / 0.25sec. Australian Evac. Tone 35 Tone 5 Tone 29 Tone 37 1000Hz Continuous - PFEER Toxic Gas Tone 9 Tone 45 Tone 29 Tone 38 2000Hz 0.25sec on, 1 sec off Intermittent Tone 31 Tone 17 Tone 29 Tone 40 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 31 Tone 27 Tone 29 Tone 41 Motor Siren - slow rise to 1200 Hz Tone 2 Tone 5 Tone 29 Tone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 29 Tone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 29 Tone 44 Motor Siren - slow rise to 2400 Hz Tone 2 Tone 5 Tone 29 | Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 | Tone 29 |
| Tone 34 1000 & 2000Hz @ 0.5 sec Alternating - Singapore Tone 38 Tone 45 Tone 29 Tone 35 420Hz @ 0.625 sec Australian Alert Tone 36 Tone 5 Tone 29 Tone 36 500-1200Hz 3.75sec /0.25sec. Australian Evac. Tone 35 Tone 5 Tone 29 Tone 37 1000Hz Continuous - PFEER Toxic Gas Tone 9 Tone 45 Tone 29 Tone 38 2000Hz Continuous Tone 34 Tone 45 Tone 29 Tone 39 800Hz 0.25sec on, 1 sec off Intermittent Tone 23 Tone 17 Tone 29 Tone 40 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 31 Tone 27 Tone 29 Tone 41 Motor Siren - slow rise to 1200 Hz Tone 2 Tone 5 Tone 29 Tone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 29 Tone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 29 Tone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 29 Tone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 29 Tone 43 12 | Tone 32 | Two tone chime. | Tone 26 | Tone 15 | Tone 29 |
| Tone 35 420Hz @ 0.625 sec Australian Alert Tone 36 Tone 5 Tone 29 Tone 36 500-1200Hz 3.75sec /0.25sec. Australian Evac. Tone 35 Tone 5 Tone 29 Tone 37 1000Hz Continuous - PFEER Toxic Gas Tone 9 Tone 45 Tone 29 Tone 38 2000Hz Continuous Ore 34 Tone 45 Tone 29 Tone 39 800Hz 0.25sec on, 1 sec off Intermittent Tone 31 Tone 27 Tone 29 Tone 40 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 31 Tone 27 Tone 29 Tone 41 Motor Siren - slow rise to 1200 Hz Tone 2 Tone 5 Tone 29 Tone 42 Motor Siren - slow rise to 2400 Hz Tone 2 Tone 5 Tone 29 Tone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 29 Tone 44 Motor Siren - slow rise to 2400 Hz Tone 2 Tone 5 Tone 29 | Tone 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 36 500-1200Hz 3.75sec /0.25sec. Australian Evac. Tone 35 Tone 5 Tone 29 Tone 37 1000Hz Continuous - PFEER Toxic Gas Tone 9 Tone 45 Tone 29 Tone 38 2000Hz Continuous Tone 34 Tone 45 Tone 29 Tone 39 800Hz 0.25sec on, 1 sec off Intermittent Tone 23 Tone 17 Tone 29 Tone 40 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 31 Tone 27 Tone 29 Tone 41 Motor Siren - slow rise to 1200 Hz Tone 2 Tone 5 Tone 29 Tone 42 Motor Siren - slow rise to 800 Hz Tone 2 Tone 5 Tone 29 Tone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 29 Tone 44 Motor Siren - slow rise to 2400 Hz Tone 2 Tone 5 Tone 29 | Tone 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 | Tone 29 |
| Tone 37 1000Hz Continuous - PFEER Toxic Gas Tone 9 Tone 45 Tone 29 Tone 38 2000Hz Continuous Tone 34 Tone 45 Tone 29 Tone 39 800Hz 0.25sec on, 1 sec off Intermittent Tone 23 Tone 17 Tone 29 Tone 40 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 31 Tone 27 Tone 29 Tone 41 Motor Siren - slow rise to 1200 Hz Tone 2 Tone 5 Tone 29 Tone 42 Motor Siren - slow rise to 800 Hz Tone 2 Tone 5 Tone 29 Tone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 29 Tone 44 Motor Siren - slow rise to 2400 Hz Tone 2 Tone 5 Tone 29 | Tone 35 | 420Hz @ 0.625 sec Australian Alert | Tone 36 | Tone 5 | Tone 29 |
| Tone 38 2000Hz Continuous Tone 34 Tone 45 Tone 29 Tone 39 800Hz 0.25sec on, 1 sec off Intermittent Tone 23 Tone 17 Tone 29 Tone 40 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 31 Tone 27 Tone 29 Tone 41 Motor Siren - slow rise to 1200 Hz Tone 2 Tone 5 Tone 29 Tone 42 Motor Siren - slow rise to 800 Hz Tone 2 Tone 5 Tone 29 Tone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 29 Tone 44 Motor Siren - slow rise to 2400 Hz Tone 2 Tone 5 Tone 29 | Tone 36 | 500-1200Hz 3.75sec /0.25sec. Australian Evac. | Tone 35 | Tone 5 | Tone 29 |
| Tone 39 800Hz 0.25sec on, 1 sec off Intermittent Tone 23 Tone 17 Tone 29 Tone 40 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 31 Tone 27 Tone 29 Tone 41 Motor Siren - slow rise to 1200 Hz Tone 2 Tone 5 Tone 29 Tone 42 Motor Siren - slow rise to 800 Hz Tone 2 Tone 5 Tone 29 Tone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 29 Tone 44 Motor Siren - slow rise to 2400 Hz Tone 2 Tone 5 Tone 29 | Tone 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 | Tone 29 |
| Fone 40 544Hz (100mS)/40Hz (400mS) - NF S 32-001 Tone 31 Tone 27 Tone 29 fone 41 Motor Siren - slow rise to 1200 Hz Tone 2 Tone 5 Tone 29 fone 42 Motor Siren - slow rise to 800 Hz Tone 2 Tone 5 Tone 29 fone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 29 fone 44 Motor Siren - slow rise to 2400 Hz Tone 2 Tone 5 Tone 29 | Tone 38 | 2000Hz Continuous | Tone 34 | Tone 45 | Tone 29 |
| Motor Siren - slow rise to 1200 Hz Tone 2 Tone 5 Tone 29 fone 42 Motor Siren - slow rise to 800 Hz Tone 2 Tone 5 Tone 29 fone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 29 fone 44 Motor Siren - slow rise to 2400 Hz Tone 2 Tone 5 Tone 29 | Tone 39 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 | Tone 29 |
| Image: Motor Siren - slow rise to 800 Hz Tone 2 Tone 5 Tone 29 Ione 43 1200 Hz Continuous Tone 2 Tone 5 Tone 29 Ione 44 Motor Siren - slow rise to 2400 Hz Tone 2 Tone 5 Tone 29 | Tone 40 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 31 | Tone 27 | Tone 29 |
| Tone 43 1200 Hz Continuous Tone 2 Tone 5 Tone 29 Tone 44 Motor Siren - slow rise to 2400 Hz Tone 2 Tone 5 Tone 29 | Tone 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 | Tone 29 |
| Fone 44 Motor Siren - slow rise to 2400 Hz Tone 2 Tone 5 Tone 29 | Tone 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 | Tone 29 |
| | Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Fone 45 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm Tone 38 Tone 34 Tone 29 | Tone 44 | Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 | Tone 29 |
| | Tone 45 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm | Tone 38 | Tone 34 | Tone 29 |

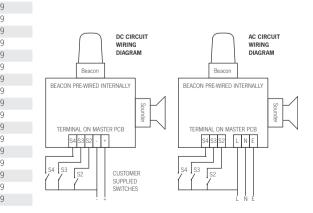
Part codes:

| Version: | Voltage: | Part code: |
|--------------------------|----------|--|
| Alarm Xenon | 12V dc | AL105NAXXDC012[x]/[y]-UL |
| Alarm+Xenon | 24V dc | AL105NAXXDC024[x]/[y]-UL |
| Alarm+Xenon | 115V ac | AL105NAXXAC115[x]/[y]-UL |
| Alarm+Xenon | 230V ac | AL105NAXXAC230[x]/[y]-UL |
| [x] = Housing | colour: | G: Grey R: Red W: White |
| [y] = Xenon Lens colour: | | A: Amber, B: Blue, C: Clear, G: Green, M: Magenta, R: Red, Y: Yellow |

Current consumption:

| Version: | Voltage: | Range: | Current: |
|-------------|--------------------|-----------|----------|
| Alarm+Xenon | 12V dc | 10-14V dc | 756mA* |
| Alarm+Xenon | 24V dc | 20-28V dc | 506mA* |
| Alarm+Xenon | 115V ac 50/60Hz | +/-10% | 212mA* |
| Alarm+Xenon | 230V ac 50/60Hz | +/-10% | 174mA* |

* current at nominal voltage on Tone 1



Specification:

| Voice output: | 101dB(A) @ 1 metre |
|---------------------|--|
| Music output: | 102dB(A) @ 1 metre |
| Alarm output: | 110dB(A) @ 1 metre |
| Alarm tones: | x 45 (UKOOA/PFEER compliant) |
| Messages: | x 4 (30 seconds each) |
| Controls: | Independent volume controls for user content and alarm tones |
| Effective range: | 60m @ 1KHz |
| Xenon beacon: | |
| Energy: | 5 Joules (5Ws) |
| Flash rate: | 1Hz (60 fpm) |
| Peak Candela: | 500,000 cd - calc. from energy (J) |
| Effective candela: | 250 cd - calc. from energy (J) |
| Peak Candela: | 86,935 cd* - measured ref. to I.E.S. |
| Effective candela: | 200 cd* - measured ref. to I.E.S. |
| General: | |
| Ingress protection: | Type 4 / 4X / 3R / 13, IP66 |
| Rating: | Continuous |
| Housing material: | UL94V0 & 5VA FR ABS |
| Housing colour: | RAL3000 Red, RAL7038 Grey and White |
| Fixings: | Stainless Steel |
| Cable entries: | 2 x M20 clearance gland entries. Custom configurations also available |
| Terminals: | 0.5 to 2.5mm ² |
| Operating temp: | -25° to +55°C |
| Storage temp: | -40° to +70°C |
| Relative humidity: | 90% at 20°C |
| Weight : | DC: 1.00kg AC: 1.20kg |

*SPL data +/-3dB(A). Measured at optimum voltage. *Candela measurements representative of performance with clear lens at optimum voltage.

Features:

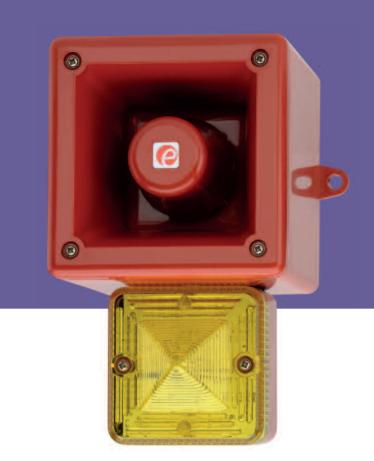
The AL105NAXX Appello user recordable unit enables the recording of any type of content such as voice or music that can be played back at CD quality output at SPL's of up to 102dB(A) at 1 metre. This content can be reproduced repeatedly, alternating with or without one of the built-in 45 alarm tones. The alarm tone notification has an output of up to 110dB(A) at 1 metre.

For multiple unit installations the recording process is only required once to create a master unit which can then be used to program all other AL105NAXX units on the system, guaranteeing synchronisation during playback, using the supplied 'Synch' cable.

- Message length: 4 x 30 seconds
- Easy message creation with built in microphone or line-in audio input.
- Volume controls for user content and alarm tones.
- Available with custom tone configurations and frequencies.

- · Factory programming of user supplied content also available. • UL approved for general signalling use.

Country specific or custom tone configurations and alarm frequencies are available upon request.



• Direct content storage on non-volatile memory. • CD quality reproduction.

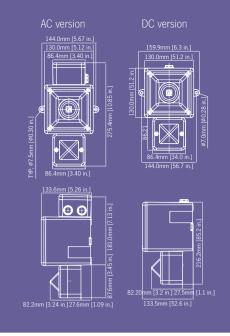
• 5J Xenon strobe beacon capable of 200cd*.





AL105NAXH User recordable Alarm Horn & L.E.D. Strobe

The AL105NAXH Appello X is the next generation of user recordable alarm sounder, capable of storing up to 2 minutes of content, combined with a high output L.E.D. beacon. The AL105NAXH records, stores and plays back with unsurpassed clarity, user defined voice messages, music or sounds stored directly to non-volatile memory.



Specification: Alarm coundor

Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 | Stage 4 |
|---------|--|---------|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 | Tone 29 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 | Tone 29 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 | Tone 29 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 | Tone 29 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 | Tone 29 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 | Tone 29 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 | Tone 29 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 | Tone 29 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 | Tone 29 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 | Tone 29 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 | Tone 29 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 | Tone 29 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 | Tone 29 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 | Tone 29 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 | Tone 29 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 | Tone 29 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 | Tone 29 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 | Tone 29 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 | Tone 29 |
| Tone 26 | Bell | Tone 2 | Tone 15 | Tone 29 |
| Fone 27 | 554Hz Continuous | Tone 26 | Tone 5 | Tone 29 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 | Tone 29 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 | Tone 29 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 | Tone 29 |
| Tone 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 | Tone 29 |
| Tone 35 | 420Hz @ 0.625 sec Australian Alert | Tone 36 | Tone 5 | Tone 29 |
| Fone 36 | 500-1200Hz 3.75sec / 0.25sec. Australian Evac. | Tone 35 | Tone 5 | Tone 29 |
| Tone 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 | Tone 29 |
| Tone 38 | 2000Hz Continuous | Tone 34 | Tone 45 | Tone 29 |
| Tone 39 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 | Tone 29 |
| Fone 40 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 31 | Tone 27 | Tone 29 |
| Tone 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 | Tone 29 |
| Tone 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 | Tone 29 |
| Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 44 | Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 | Tone 29 |
| | 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm | Tone 38 | Tone 34 | Tone 29 |

Part codes:

| Fart C | | | | |
|--|-------------------------|--|------------------------|---|
| Version: | | Voltage: | Part code: | |
| Alarm+L. | E.D. | 10-30V dc | AL105NAXHD | C024[x]/[y]- |
| UL | | | | |
| | | 00.000/ | | 00005 1 /5 1 |
| Alarm+L.I | E.D. | 90-260V ac | AL105NAXHA | C230[x]/[y]- |
| UL | | | | |
| x] = Hou | ising co | olour: | G: Grey R: Re | d W: White |
| y] = L.E. | - | | A' Amber B' B | |
| [y] L.L. | 0 0010 | ui. | | |
| | | | G: Green R: Re | ed |
| | | | | |
| | | | naximise output and | to ensure the |
| signal is mo | st effecti | ive in high ambient | t light levels. | |
| | | | | |
| Current | cons | sumption: | | |
| | | | | |
| | | | _ | • |
| | | Voltage: | Range: | Current: |
| lersion: | _ | | Range: 10-30Vdc | Current: 413mA* |
| Version: Alarm+L.I | E.D. | Voltage: DC | 0 | |
| Version: Alarm+L. | E.D. | Voltage: | 10-30Vdc | 413mA* |
| Version: Alarm+L.I Alarm+L.I | E.D. E.D. | Voltage: DC | 10-30Vdc | 413mA* |
| Version: Alarm+L.I Alarm+L.I | E.D. E.D. | Voltage: DC AC 50/60Hz | 10-30Vdc | 413mA* |
| Version: Alarm+L.I Alarm+L.I | E.D. E.D. | Voltage: DC AC 50/60Hz | 10-30Vdc | 413mA* |
| Version: Alarm+L.I Alarm+L.I | E.D. E.D. | Voltage: DC AC 50/60Hz | 10-30Vdc | 413mA* |
| Version: Alarm+L.I Alarm+L.I | E.D. E.D. | Voltage: DC AC 50/60Hz voltage on Tone 1 | 10-30Vdc | 413mA* 159mA* |
| Version: Alarm+L.I Alarm+L.I | E.D. E.D. | Voltage: DC AC 50/60Hz voltage on Tone 1 | 10-30Vdc | 413mA* 159mA* |
| Version: Alarm+L. Alarm+L. * current at | E.D. E.D. | Voltage: DC AC 50/60Hz voltage on Tone 1 | 10-30Vdc 90-260V ac | 413mA* 159mA* |
| Version: Alarm+L. Alarm+L. * current at | E.D. E.D. nominal | Voltage: DC AC 50/60Hz voltage on Tone 1 DC CIRCUIT WIRING DIAGRAM | 10-30Vdc 90-260V ac | 413mA* 159mA* Ac circuit wiring diagram |
| Version: Alarm+L. Alarm+L. * current at | E.D. E.D. nominal | Voltage: DC AC 50/60Hz voltage on Tone 1 DC CIRCUIT WIRING DIAGRAM | 10-30Vdc 90-260V ac | 413mA* 159mA* Ac circuit wiring diagram |
| Version: Alarm+L. Alarm+L. * current at | E.D. E.D. nominal | Voltage: DC AC 50/60Hz voltage on Tone 1 DC CIRCUIT WIRING DIAGRAM | 10-30Vdc 90-260V ac | 413mA* 159mA* Ac circuit wiring diagram |

| Voice output: | 101dB(A) @ 1 metre |
|---------------------|--|
| Music output: | 102dB(A) @ 1 metre |
| Alarm output: | 110dB(A) @ 1 metre |
| Alarm tones: | x 45 (UKOOA/PFEER compliant) |
| Messages: | x 4 (30 seconds each) |
| Controls: | Independent volume controls for user content and alarm tones |
| Effective range: | 60m @ 1KHz |
| L.E.D. beacon: | |
| Light source: | High intensity L.E.D. array. 24 x Superflux type high output L.E.D's |
| Options: | Steady or 2Hz flash mode (on board select) |
| Effective candela: | 176 cd (Green L.E.D.) |
| General: | |
| Ingress protection: | Type 4 / 4X / 3R / 13, IP66 |
| Rating: | Continuous |
| Housing material: | UL94V0 & 5VA FR ABS |
| Housing colour: | RAL3000 Red, RAL7038 Grey and White |
| Fixings: | Stainless Steel |
| Cable entries: | 2 x M20 clearance gland entries. Custom configurations also availabl |
| Terminals: | 0.5 to 2.5mm ² |
| Operating temp: | -25° to +55°C |
| Storage temp: | -40° to +70°C |
| Relative humidity: | 90% at 20°C |
| | DC: 1.00kg AC: 1.20kg |

Features:

The AL105NAXH Appello user recordable unit enables the recording of any type of content such as voice or music that can be played back at CD quality output at SPL's of up to 102dB(A) at 1 metre. This content can be reproduced repeatedly, alternating with or without one of the built-in 45 alarm tones. The alarm tone notification has an output of up to 110dB(A) at 1 metre.

For multiple unit installations the recording process is only required once to create a master unit which can then be used to program all other AL105NAX units on the system, guaranteeing synchronisation during playback, using the supplied 'Synch' cable.

- Easy message creation with built in microphone or line-in audio input.
- Volume controls for user content and alarm tones.
- Available with custom tone configurations and frequencies.

- also available.

Country specific or custom tone configurations and alarm frequencies are available upon request.



• Direct content storage on non-volatile memory. • CD quality reproduction.

- Message length: 4 x 30 seconds
- L.E.D. beacon with an output of 120cd*.
- Factory programming of user supplied content
- UL approved for general signalling use.





DL105AXX User recordable Alarm Horn & Xenon Strobe

The DL105AXX Appello X is the next generation of user recordable alarm sounder, capable of storing up to 2 minutes of content, combined with a Xenon strobe. The DL105AXX records, stores and plays back with unsurpassed clarity, user defined voice messages, music or sounds stored directly to non-volatile memory.



Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 | Stage 4 |
|---------|--|---------|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 | Tone 29 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 | Tone 29 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 | Tone 29 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 | Tone 29 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 | Tone 29 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 | Tone 29 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 | Tone 29 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 | Tone 29 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 | Tone 29 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 | Tone 29 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 | Tone 29 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 | Tone 29 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 | Tone 29 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 | Tone 29 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 | Tone 29 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 | Tone 29 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 | Tone 29 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 | Tone 29 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 | Tone 29 |
| Tone 26 | Bell | Tone 2 | Tone 15 | Tone 29 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 | Tone 29 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 | Tone 29 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 | Tone 29 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 | Tone 29 |
| Tone 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 | Tone 29 |
| Tone 35 | 420Hz @ 0.625 sec Australian Alert | Tone 36 | Tone 5 | Tone 29 |
| Tone 36 | 500-1200Hz 3.75sec / 0.25sec. Australian Evac. | Tone 35 | Tone 5 | Tone 29 |
| Tone 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 | Tone 29 |
| Tone 38 | 2000Hz Continuous | Tone 34 | Tone 45 | Tone 29 |
| Tone 39 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 | Tone 29 |
| Tone 40 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 31 | Tone 27 | Tone 29 |
| Tone 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 | Tone 29 |
| Tone 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 | Tone 29 |
| Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 44 | Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 | Tone 29 |
| Tone 45 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm | Tone 38 | Tone 34 | Tone 29 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

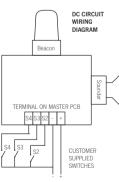
Part codes:

| Version: | Voltage: | Part code: |
|--------------------------|----------|--|
| Alarm+Xenon | 12V dc | DL105AXXDC012[x]/[y]-UL |
| Alarm+Xenon | 24V dc | DL105AXXDC024[x]/[y]-UL |
| [x] = Housing colour: | | G: Grey R: Red W: White |
| [y] = Xenon Lens colour: | | A: Amber B: Blue C: Clear G: Green M: Magenta R [:] Red Y [:] Yellow |

Current consumption:

| Version: | Voltage: | Range: | Current: |
|-------------|----------|-----------|----------|
| Alarm+Xenon | 12V dc | 10-14V dc | 756mA* |
| Alarm+Xenon | 24V dc | 20-28V dc | 506mA* |

* current at nominal voltage on Tone 1



Specification:

| Alarm sounder: | |
|--------------------------|--|
| Voice output: | 101dB(A) @ 1 metre |
| Music output: | 102dB(A) @ 1 metre |
| Alarm output: | 110dB(A) @ 1 metre |
| Alarm tones: | x 45 (UKOOA/PFEER compliant) |
| Messages: | x 4 (30 seconds each) |
| Controls: | Independent volume controls for user content and alarm tones |
| Effective range: | 60m @ 1KHz |
| Xenon beacon: | |
| Energy: | 5 Joules (5Ws) |
| Peak Candela: | 500,000 cd - calc. from energy (J) |
| Effective candela: | 250 cd - calc. from energy (J) |
| Peak Candela: | 86,935 cd* - measured ref. to I.E.S. |
| Effective candela: | 200 cd* - measured ref. to I.E.S. |
| Candela: | 200 cd* (effective intensity) |
| General: | |
| Ingress protection: | Type 4 / 4X / 3R / 13, IP66 |
| Rating: | Continuous |
| Housing material: | Marine grade aluminium A1 Si12 Cu |
| Housing colour: | RAL3000 Red, RAL7038 Grey and White |
| Fixings: | Stainless Steel |
| Cable entries: | 2 x M20 x 1.5mm threaded gland entries. Supplied with one stopping plug. |
| Terminals: | 0.5 to 2.5mm ² |
| Operating temp: | -25° to +55°C |
| Storage temp: | -40° to +70°C |
| Relative humidity: | 90% at 20°C |
| Weight : | 2.10kg |
| *SPL data +/-3dB(A). Mea | isured at optimum voltage. |

Features:

The DL105AXX Appello user recordable unit enables the recording of any type of content such as voice or _ music that can be played back at CD quality output at _ SPL's of up to 102dB(A) at 1 metre. This content can be _ reproduced repeatedly, alternating with or without one of _ the built-in 45 alarm tones. The alarm tone notification has an output of up to 110dB(A) at 1 metre.

- Easy message creation with built in microphone or line-in audio input.

 - Volume controls for user content and alarm tones. • Available with custom tone configurations and frequencies.
 - 5J Xenon strobe beacon capable of 200cd*.
 - Factory programming of user supplied content also available.

*Candela measurements representative of performance with clear lens at optimum voltage.



For multiple unit installations the recording process is only required once to create a master unit which can then be used to program all other AL105NAX units on the system, guaranteeing synchronisation during playback, using the supplied 'Synch' cable.

 Direct content storage on non-volatile memory. • CD quality reproduction.

Message length: 4 x 30 seconds

• UL approved for general signalling use.





DL105AXH User recordable Alarm Horn & L.E.D. Beacon

The DL105AXH Appello X is the next generation of user recordable alarm sounder, capable of storing up to 2 minutes of content, combined with a high output L.E.D. beacon. The DL105AXH records, stores and plays back with unsurpassed clarity, user defined voice messages, music or sounds stored directly to non-volatile memory.



Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 | Stage 4 |
|---------|--|---------|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 | Tone 29 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 | Tone 29 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 | Tone 29 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 | Tone 29 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 | Tone 29 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 | Tone 29 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 | Tone 29 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 | Tone 29 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 | Tone 29 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 | Tone 29 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 | Tone 29 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 | Tone 29 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 | Tone 29 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 | Tone 29 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 | Tone 29 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 | Tone 29 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 | Tone 29 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 | Tone 29 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 | Tone 29 |
| Tone 26 | Bell | Tone 2 | Tone 15 | Tone 29 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 | Tone 29 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 | Tone 29 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 | Tone 29 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 | Tone 29 |
| Tone 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 | Tone 29 |
| Tone 35 | 420Hz @ 0.625 sec Australian Alert | Tone 36 | Tone 5 | Tone 29 |
| Tone 36 | 500-1200Hz 3.75sec / 0.25sec. Australian Evac. | Tone 35 | Tone 5 | Tone 29 |
| Tone 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 | Tone 29 |
| Tone 38 | 2000Hz Continuous | Tone 34 | Tone 45 | Tone 29 |
| Tone 39 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 | Tone 29 |
| Tone 40 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 31 | Tone 27 | Tone 29 |
| Tone 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 | Tone 29 |
| Tone 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 | Tone 29 |
| Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 44 | Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 | Tone 29 |
| Tone 45 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm | Tone 38 | Tone 34 | Tone 29 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Part codes:

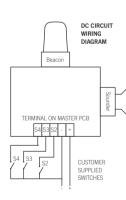
| Version: | Voltage: | Part code: |
|-----------------------|-----------|--|
| Alarm+L.E.D. | 10-30V dc | DL105AXHDC024[x]/[y]-UL |
| [x] = Housing colour: | | G: Grey R: Red W: White |
| [y] = L.E.D colour: | | A: Amber B: Blue W: White G: Green R: Red |
| | | a. aroon n. nou |

All L.E.D. colours use a Clear lens to maximise output and to ensure the signal is most effective in high ambient light levels.

Current consumption:

| Version: | Voltage: Range: | | Current: |
|--------------|-----------------|----------|----------|
| Alarm+L.E.D. | DC | 10-30Vdc | 413mA* |

* current at nominal voltage on Tone 1



Specification:

| Alarm sounder: | |
|--------------------------|--|
| Voice output: | 101dB(A) @ 1 metre |
| Music output: | 102dB(A) @ 1 metre |
| Alarm output: | 110dB(A) @ 1 metre |
| Alarm tones: | x 45 (UKOOA/PFEER compliant) |
| Messages: | x 4 (30 seconds each) |
| Controls: | Independent volume controls for user content and alarm tones |
| Effective range: | 60m @ 1KHz |
| L.E.D. beacon: | |
| Light source: | High intensity L.E.D. array. 24 x Superflux type high output L.E.D's |
| Options: | Steady or 2Hz flash mode (on board select) |
| Effective candela: | 176 cd (Green L.E.D.) |
| General: | |
| Ingress protection: | Type 4 / 4X / 3R / 13, IP66 |
| Rating: | Continuous |
| Housing material: | Marine grade aluminium A1 Si12 Cu |
| Housing colour: | RAL3000 Red, RAL7038 Grey and White |
| Fixings: | Stainless Steel |
| Cable entries: | 2 x M20 x 1.5mm threaded gland entries. Supplied with one stopping plug. |
| Terminals: | 0.5 to 2.5mm ² |
| Operating temp: | -25° to +55°C |
| Storage temp: | -40° to +70°C |
| Relative humidity: | 90% at 20°C |
| Weight : | 2.10kg |
| *SPL data +/-3dB(A). Mea | sured at optimum voltage. |

Features:

The DL105AXH Appello user recordable unit enables the recording of any type of content such as voice or music that can be played back at CD quality output at _ SPL's of up to 102dB(A) at 1 metre. This content can be reproduced repeatedly, alternating with or without one of the built-in 45 alarm tones. The alarm tone notification has an output of up to 110dB(A) at 1 metre.

- For multiple unit installations the recording process is - only required once to create a master unit which can then be used to program all other AL105NAX units on the system, guaranteeing synchronisation during - playback, using the supplied 'Synch' cable.

- Easy message creation with built in microphone or line-in audio input.
- Volume controls for user content and alarm tones. • Available with custom tone configurations and frequencies.
- Factory programming of user supplied content also available.
- UL approved for general signalling use.



• Direct content storage on non-volatile memory. • CD quality reproduction.

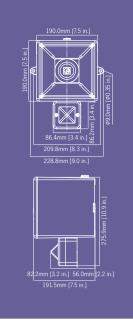
- Message length: 4 x 30 seconds
- L.E.D. beacon with an output of 120cd*.





AL121AXX User recordable Alarm Horn & Xenon Strobe

The AL121AXX Appello X is the next generation of user recordable alarm sounder, capable of storing up to 2 minutes of content, combined with a Xenon strobe. The AL121AXX records, stores and plays back with unsurpassed clarity, user defined voice messages, music or sounds stored directly to non-volatile memory without any intermediate analogue to digital conversion.



Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 | Stage 4 |
|---------|---|---------|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 | Tone 29 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 | Tone 29 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 | Tone 29 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 | Tone 29 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 | Tone 29 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 | Tone 29 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 | Tone 29 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 | Tone 29 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 | Tone 29 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 | Tone 29 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 | Tone 29 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 | Tone 29 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 | Tone 29 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 | Tone 29 |
| Fone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 | Tone 29 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 | Tone 29 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 | Tone 29 |
| Fone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 | Tone 29 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 | Tone 29 |
| Tone 26 | Bell | Tone 2 | Tone 15 | Tone 29 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 | Tone 29 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 | Tone 29 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 | Tone 29 |
| Fone 32 | Two tone chime. | Tone 26 | Tone 15 | Tone 29 |
| Fone 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Fone 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 | Tone 29 |
| Fone 35 | 420Hz @ 0.625 sec Australian Alert | Tone 36 | Tone 5 | Tone 29 |
| Tone 36 | 500-1200Hz 3.75sec / 0.25sec. Australian Evac. | Tone 35 | Tone 5 | Tone 29 |
| Tone 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 | Tone 29 |
| Fone 38 | 2000Hz Continuous | Tone 34 | Tone 45 | Tone 29 |
| Tone 39 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 | Tone 29 |
| Fone 40 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 31 | Tone 27 | Tone 29 |
| Tone 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 | Tone 29 |
| Tone 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 | Tone 29 |
| Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Fone 44 | Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 | Tone 29 |
| | | Tone 38 | Tone 34 | |

Country specific or custom tone configurations and alarm frequencies are available upon request.

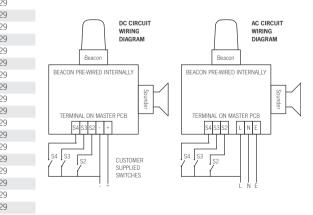
Part codes:

| Version: | Voltage: | Part code: |
|--------------------------|----------|---|
| Alarm+Xenon | 24V dc | AL121AXXDC024[x]/[y]-UL |
| Alarm+Xenon | 115V ac | AL121AXXAC115[x]/[y]-UL |
| Alarm+Xenon | 230V ac | AL121AXXAC230[x]/[y]-UL |
| [x] = Housing | colour: | G: Grey R: Red W: White |
| [y] = Xenon Lens colour: | | A: Amber B: Blue C: Clear G: Green M: Magenta D: Ded Y: Yelley: |
| | | R: Red Y: Yellow |

Current consumption:

| 29 | Version: | Voltage: | Range: | Current: |
|----------|-------------|----------|-----------|----------|
| 29 29 | Alarm+Xenon | 24V dc | 20-28V dc | 1.76A* |
| 29 | Alarm+Xenon | 115V ac | +/-10% | 602mA* |
| 29 29 | | 50/60Hz | | |
| 29 29 | Alarm+Xenon | 230V ac | +/-10% | 552mA* |
| 29 | | 50/60Hz | | |

current at nominal voltage on Tone 1



Specification:

| larm sounder: | |
|-------------------------|---|
| oice output: | 111dB(A) @ 1 metre |
| /lusic output: | 112dB(A) @ 1 metre |
| larm output: | 126dB(A) @ 1 metre |
| larm tones: | x 45 (UKOOA/PFEER compliant) |
| lessages: | x 4 (30 seconds each) |
| Controls: | Independent volume controls for user content and alarm tones |
| ffective range: | 300m @ 1KHz |
| (enon beacon: | |
| nergy: | 5 Joules (5Ws) |
| lash rate: | 1Hz (60 fpm) |
| eak Candela: | 500,000 cd - calc. from energy (J) |
| Effective candela: | 250 cd - calc. from energy (J) |
| Peak Candela: | 86,935 cd* - measured ref. to I.E.S. |
| Effective candela: | 200 cd* - measured ref. to I.E.S. |
| General: | |
| ngress protection: | Type 4 / 4X / 3R / 13, IP66 |
| Rating: | Continuous |
| lousing material: | UL94V0 & 5VA FR ABS |
| lousing colour: | RAL3000 Red, RAL7038 Grey and White |
| ixings: | Stainless Steel |
| Cable entries: | 2 x M20 clearance gland entries. Custom configurations also available. |
| erminals: | 0.5 to 2.5mm ² |
|)perating temp: | -25° to +55°C |
| Storage temp: | -40° to +70°C |
| Relative humidity: | 90% at 20°C |
| Veight : | DC: 1.00kg AC: 1.20kg |
| SPL data +/-3dB(A). Mea | sured at optimum voltage. |

*SPL data +/-3dB(A). Measured at optimum voltage. *Candela measurements representative of performance with clear lens at optimum voltage.

Features:

The AL121AXX Appello user recordable unit enables the recording of any type of content such as voice or _ music that can be played back at CD quality output at ____ SPL's of up to 112dB(A) at 1 metre. This content can be _ reproduced repeatedly, alternating with or without one of _ the built-in 45 alarm tones. The alarm tone notification has an output of up to 126dB(A) at 1 metre.

For multiple unit installations the recording process is only required once to create a master unit which can then be used to program all other AL121AXX units on the system, guaranteeing synchronisation during playback, using the supplied 'Synch' cable.

- Direct content storage on non-volatile memory. • CD quality reproduction.
- Message length: 4 x 30 seconds
- Easy message creation with built in microphone or line-in audio input.

 - Volume controls for user content and alarm tones.
 - Available with custom tone configurations and frequencies.

 - Factory programming of user supplied content also available.



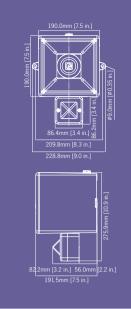
- 5J Xenon strobe beacon capable of 200cd*.
- UL approved for general signalling use.





AL121AXH User recordable Alarm Horn & L.E.D. Beacon

The AL121AXH Appello X is the next generation of user recordable alarm sounder, capable of storing up to 2 minutes of content, combined with a high output L.E.D. beacon. The AL121AXH records, stores and plays back with unsurpassed clarity, user defined voice messages, music or sounds stored directly to non-volatile memory without any intermediate analogue to digital conversion.



Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 | Stage 4 |
|---------|--|---------|---------|---------|
| Tone 1 | 340 Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 2 | 800/1000Hz @ 0.25 sec Alternating | Tone 17 | Tone 5 | Tone 29 |
| Tone 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | Tone 2 | Tone 5 | Tone 29 |
| Tone 4 | 800/1000Hz @ 1Hz Sweeping | Tone 6 | Tone 5 | Tone 29 |
| Tone 5 | 2400Hz Continuous | Tone 3 | Tone 20 | Tone 29 |
| Tone 6 | 2400/2900Hz @ 7Hz Sweeping | Tone 7 | Tone 5 | Tone 29 |
| Tone 7 | 2400/2900Hz @ 1Hz Sweeping | Tone 10 | Tone 5 | Tone 29 |
| Tone 8 | 500/1200/500Hz @ 0.3Hz Sweeping | Tone 2 | Tone 5 | Tone 29 |
| Tone 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | Tone 15 | Tone 2 | Tone 29 |
| Tone 10 | 2400/2900Hz @ 2Hz Alternating | Tone 7 | Tone 5 | Tone 29 |
| Tone 11 | 1000Hz @ 1Hz Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 12 | 800/1000Hz @ 0.875Hz Alternating | Tone 4 | Tone 5 | Tone 29 |
| Tone 13 | 2400Hz @ 1Hz Intermittent | Tone 15 | Tone 5 | Tone 29 |
| Tone 14 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 4 | Tone 5 | Tone 29 |
| Tone 15 | 800Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 16 | 660Hz 150mS on, 150mS off Intermittent | Tone 18 | Tone 5 | Tone 29 |
| Tone 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 2 | Tone 27 | Tone 29 |
| Tone 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | Tone 2 | Tone 5 | Tone 29 |
| Tone 20 | 660Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 21 | 554Hz/440Hz @ 1Hz Alternating | Tone 2 | Tone 5 | Tone 29 |
| Tone 22 | 544Hz @ 0.875 sec. Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 23 | 800Hz @ 2Hz Intermittent | Tone 6 | Tone 5 | Tone 29 |
| Tone 24 | 800/1000Hz @ 50Hz Sweeping | Tone 29 | Tone 5 | Tone 29 |
| Tone 25 | 2400/2900Hz @ 50Hz Sweeping | Tone 29 | Tone 5 | Tone 29 |
| Tone 26 | Bell | Tone 2 | Tone 15 | Tone 29 |
| Tone 27 | 554Hz Continuous | Tone 26 | Tone 5 | Tone 29 |
| Tone 28 | 440Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 29 | 800/1000Hz @ 7Hz Sweeping | Tone 7 | Tone 5 | Tone 29 |
| Tone 30 | 300Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 31 | 660/1200Hz @ 1Hz Sweeping | Tone 26 | Tone 5 | Tone 29 |
| Tone 32 | Two tone chime. | Tone 26 | Tone 15 | Tone 29 |
| Tone 33 | 745Hz @ 1Hz Intermittent | Tone 2 | Tone 5 | Tone 29 |
| Tone 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | Tone 38 | Tone 45 | Tone 29 |
| Tone 35 | 420Hz @ 0.625 sec Australian Alert | Tone 36 | Tone 5 | Tone 29 |
| Tone 36 | 500-1200Hz 3.75sec / 0.25sec. Australian Evac. | Tone 35 | Tone 5 | Tone 29 |
| Tone 37 | 1000Hz Continuous - PFEER Toxic Gas | Tone 9 | Tone 45 | Tone 29 |
| Tone 38 | 2000Hz Continuous | Tone 34 | Tone 45 | Tone 29 |
| Tone 39 | 800Hz 0.25sec on, 1 sec off Intermittent | Tone 23 | Tone 17 | Tone 29 |
| Tone 40 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | Tone 31 | Tone 27 | Tone 29 |
| Tone 41 | Motor Siren - slow rise to 1200 Hz | Tone 2 | Tone 5 | Tone 29 |
| Tone 42 | Motor Siren - slow rise to 800 Hz | Tone 2 | Tone 5 | Tone 29 |
| Tone 43 | 1200 Hz Continuous | Tone 2 | Tone 5 | Tone 29 |
| Tone 44 | Motor Siren - slow rise to 2400 Hz | Tone 2 | Tone 5 | Tone 29 |
| Tone 45 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm | Tone 38 | Tone 34 | Tone 29 |

Country specific or custom tone configurations and alarm frequencies are available upon request.

Part codes:

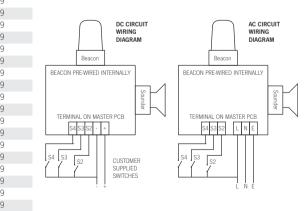
| Version: | Voltage: | Part code: |
|-----------------------|------------|-------------------------|
| Alarm+L.E.D. | 10-30V dc | AL121AXHDC024[x]/[y]-UL |
| Alarm+L.E.D. | 90-260V ac | AL121AXHAC230[x]/[y]-UL |
| [x] = Housing colour: | | G: Grey R: Red W: White |
| [y] = L.E.D colour: | | A: Amber B: Blue |
| | | C: Clear (White) |
| | | G: Green R: Red |

most effective in high ambient light levels

Current consumption:

| Version: | Voltage: | Range: | Current: |
|--------------|------------|------------|----------|
| Alarm+L.E.D. | DC | 10-30Vdc | 1.67A* |
| Alarm+L.E.D. | AC 50/60Hz | 90-260V ac | 567mA* |

* current at nominal voltage on Tone 1



Specification:

| Alarm sounder: | |
|---------------------|--|
| Voice output: | 111dB(A) @ 1 metre |
| Music output: | 112dB(A) @ 1 metre |
| Alarm output: | 126dB(A) @ 1 metre |
| Alarm tones: | x 45 (UKOOA/PFEER compliant) |
| Messages: | x 4 (30 seconds each) |
| Controls: | Independent volume controls for user content and alarm tones |
| Effective range: | 300m @ 1KHz |
| L.E.D. beacon: | 000111011112 |
| Light source: | High intensity L.E.D. array. 24 x Superflux type high output L.E.D's |
| Options: | Steady or 2Hz flash mode (on board select) |
| Effective candela: | 176 cd (Green L.E.D.) |
| General: | |
| Ingress protection: | Type 4 / 4X / 3R / 13, IP66 |
| Rating: | Continuous |
| Housing material: | UL94V0 & 5VA FR ABS |
| Housing colour: | RAL3000 Red, RAL7038 Grey and White |
| Fixings: | Stainless Steel |
| Cable entries: | 2 x M20 clearance gland entries. Custom configurations also available. |
| Terminals: | 0.5 to 2.5mm ² |
| Operating temp: | -25° to +55°C |
| Storage temp: | -40° to +70°C |
| Relative humidity: | 90% at 20°C |
| Weight : | DC: 1.00kg AC: 1.20kg |

SPL data +/-3dB(A). Measured at optin *Candela measurements representative of performance with clear lens at optimum voltage.

Features:

The AL121AXH Appello user recordable unit enables the recording of any type of content such as voice or music that can be played back at CD quality output at SPL's of up to 112dB(A) at 1 metre. This content can be reproduced rep eatedly, alternating with or without one of the built-in 45 alarm tones. The alarm tone notification has an output of up to 126dB(A) at 1 metre.

- For multiple unit installations the recording process is - only required once to create a master unit which can - then be used to program all other AL121AXH units on the system, guaranteeing synchronisation during playback, using the supplied 'Synch' cable.

- Direct content storage on non-volatile memory. • CD quality reproduction.
- Easy message creation with built in microphone or line-in audio input.
- and frequencies.
- Volume controls for user content and alarm tones. Available with custom tone configurations
- Factory programming of user supplied content also available.
 - UL approved for general signalling use.



- Message length: 4 x 30 seconds
- L.E.D. beacon with an output of 120cd*.



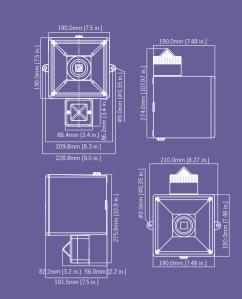


HAL121X Electronic Siren, Buzzer, Claxon & Bell

Applications and users that have traditionally demanded conventional electromechanical claxons, sirens, buzzers and bells can now choose the next generation alternative.

The E2S Hootronic series of products faithfully reproduce the sounds made by legacy electro-mechanical signalling devices but in a modern, reliable and cost effective way.

With output levels of up to 121dB(A) at 1 metre the HAL121X surpasses legacy electro-mechanical devices in performance and effectiveness, it is also continuously rated, requires zero maintenance and the signal quality will not degrade with age.



Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 |
|---------|-----------------------------------|---------|---------|
| Tone 1 | Industrial Claxon | Tone 3 | Tone 5 |
| Tone 2 | High Frequency Mechanical Siren | Tone 1 | Tone 5 |
| Tone 3 | Medium Frequency Mechanical Siren | Tone 1 | Tone 5 |
| Tone 4 | Electro Mechanical Buzzer | Tone 2 | Tone 5 |
| Tone 5 | Mechanical Bell | Tone 1 | Tone 2 |
| | | | |

Country specific or custom tone configurations and alarm frequencies are available upon request

Specification:

| Nominal output: | 121dB(A) @ 1m +/- 3dB - Tone 2 |
|---------------------|--|
| No. of tones: | 5 |
| No. of stages: | 3 |
| Volume control: | Max. 121dB(A); Min. 112dB(A) approx. |
| Effective range: | 300m @ 1KHz |
| Beacon: | |
| Energy: | 5 Joules (5Ws) |
| Flash rate: | 1Hz (60 fpm) |
| Peak Candela: | 500,000 cd - calc. from energy (J) |
| Effective candela: | 250 cd - calc. from energy (J) |
| Peak Candela: | 86,935 cd* - measured ref. to I.E.S. |
| Effective candela: | 200 cd* - measured ref. to I.E.S. |
| Lens colours: | Amber, Blue, Clear, Green, Magenta, Red & Yellow |
| Tube life: | Emissions are reduced to 70% after 8 million flashes |
| General: | |
| Voltages DC: | 12V dc; 24V dc |
| Voltages AC: | 115V ac; 230V ac |
| Ingress protection: | IP56 |
| Housing material: | High impact UL94 V0 & 5VA FR ABS |
| Colour: | Red (RAL3000) & grey (RAL7038) |
| Cable entries: | 2 x M20 clearance gland knockouts in side & back |
| Terminals: | 0.5 to 4.0mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | DC: 2.30kg AC:2.90kg |
| | |

*SPL data +/-3dB(A). Measured at optimum voltage.

*Candela measurements representative of performance with clear lens at optimum voltage.

| Version | Part code: |
|-----------------------|--|
| 12V dc | HAL121XDC012[x]/[y][|
| 24V dc | HAL121XDC024[x]/[y] |
| 115V ac | HAL121XAC115[x]/[y] |
| 230V ac | HAL121XAC230[x]/[y] |
| [x] = Housing colour: | R: Red, G: Grey |
| [y] = Lens colour: | A: Amber, B: Blue. C: Clear, M: Magenta, G: Green, R: Red, Y: Yellow |

| Version: | | Voltage : | Current: |
|----------|---------|-----------|----------|
| 24V dc | | 10-30V dc | 375mA* |
| 115V ac | 50/60Hz | +/-10% | 160mA |
| 230V ac | 50/60Hz | +/-10% | 75mA |

Xenon beacon:

| Version: | | Wattage: | Current: | • |
|----------|---------|-----------|----------|---|
| 12V dc | | 10-14V dc | 500mA | _ |
| 24V dc | | 20-28V dc | 250mA | • |
| 115V ac | 50/60Hz | +/-10% | 70mA | • |
| 230V ac | 50/60Hz | +/-10% | 35mA | _ |

Features:

The products in the Hootronic range have 5 user selectable 'traditional' sounds including:

- Tone 2 : High Frequency Mechanical Siren
- Tone 4 : Electro Mechanical Buzzer

Each of these sounds have two additional, remotely selectable, alarm stages.

Remote switch generates genuine 'tail off' to sound when alarm is terminated.

- Continuously rated.
- Stainless steel fixings.
- Unit can be mounted using external lugs or internal
- Duplicate cable terminations
- (in & out for daisy-chain installations). Tropicalisation available on request.
- GOST-R certificate: POCC GB.JB05.H00144



- Tone 1 : Industrial Claxon
- Tone 3 : Medium Frequency Mechanical Siren
- Tone 5 : Mechanical Bell

• 5J Xenon strobe - 200cd output.

- Automatic synchronisation on multi-sounder system.
- BESA compatible fixing positions.

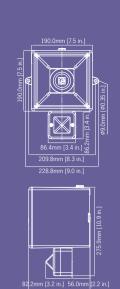


HAL121H Electronic Siren, Buzzer, Claxon & Bell

Applications and users that have traditionally demanded conventional electromechanical claxons, sirens, buzzers and bells can now choose the next generation alternative.

The E2S Hootronic series of products faithfully reproduce the sounds made by legacy electro-mechanical signalling devices but in a modern, reliable and cost effective way.

With output levels of up to 121dB(A) at 1 metre the HAL121 surpasses legacy electro-mechanical devices in performance and effectiveness, it is also continuously rated, requires zero maintenance and the signal quality will not degrade with age.



Tone table:

| age 3 |
|-------|
| ne 5 |
| ne 5 |
| ne 5 |
| ne 5 |
| ne 2 |
| |

Country specific or custom tone configurations and alarm frequencies are available upon request

Specification:

| Hootronic Sounde | r: |
|---------------------|---|
| Nominal output: | 121dB(A) @ 1m +/- 3dB - Tone 2 |
| No. of tones: | 5 |
| No. of stages: | 3 |
| Volume control: | Max. 121dB(A); Min. 112dB(A) approx. |
| Effective range: | 300m @ 1KHz |
| Beacon: | |
| Light source: | High intensity L.E.D. array. 24 x Superflux type high ouput L.E.D's |
| Options: | Steady or 2Hz flash mode (on board selection) |
| Effective candela: | 176 cd (Green L.E.D.) |
| Terminals: | 0.5 to 4.0mm ² cables |
| L.E.D. colours: | Amber Blue, Green, Red and White |
| Lens colour: | All L.E.D. colours use a Clear lens to maximise output and to ensure the signal is most effective in high ambient light |
| General: | |
| Voltages DC: | 12V dc; 24V dc |
| Voltages AC: | 115V ac; 230V ac |
| Ingress protection: | IP56 |
| Housing material: | High impact UL94 V0 & 5VA FR ABS |
| Colour: | Red (RAL3000) & grey (RAL7038) |
| Cable entries: | 2 x M20 clearance gland knockouts in side & back |
| Terminals: | 0.5 to 4.0mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | DC: 2.30kg AC:2.90kg |

*SPL data +/-3dB(A). Measured at optimum voltage.

| Part codes: | |
|-----------------------|--|
| Version | Part code: |
| 24V dc | HAL121HDC024[x]/[y] |
| 115V ac | HAL121HAC115[x]/[y] |
| 230V ac | HAL121HAC230[x]/[y] |
| [x] = Housing colour: | R: Red, G: Grey |
| [y] = Lens colour: | A: Amber, B: Blue. W: White, G: Green, R: Red |
| | |

Alarm sounder:

| Version: | | Voltage: | Current: |
|----------|---------|-----------|----------|
| 24V dc | | 10-30V dc | 375mA* |
| 115V ac | 50/60Hz | +/-10% | 160mA |
| 230V ac | 50/60Hz | +/-10% | 75mA |
| | | | |

* current at nominal voltage

L.E.D. beacon:

| Version: | Voltage: | Current: |
|------------------------|------------------|------------------|
| 24V dc | 10-30V dc | 155mA (@ 24V dc) |
| 115/230V ac 50/60Hz | 90-260V ac/dc | 35mA (@230V ac) |

eatures:

he products in the Hootronic range have 5 user electable 'traditional' sounds including:

- Tone 1 : Industrial Claxon
- Tone 2 : High Frequency Mechanical Siren
- Tone 3 : Medium Frequency Mechanical Siren
- Tone 4 : Electro Mechanical Buzzer
- Tone 5 : Mechanical Bell

Remote switch generates genuine 'tail off' to sound when alarm is terminated.

- Automatic synchronisation on multi-sounder system.
- Continuously rated.
- Stainless steel fixings.
- Unit can be mounted using external lugs or internal
- BESA compatible fixing positions. • Duplicate cable terminations
- (in & out for daisy-chain installations).
- Tropicalisation available on request.



Each of these sounds have two additional, remotely _____ selectable, alarm stages.

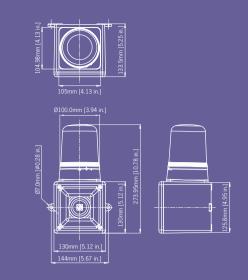
• High output L.E.D array

HAB105RTH Electronic Siren, Buzzer, Claxon & Bell

Applications and users that have traditionally demanded conventional electromechanical claxons, sirens, buzzers and bells can now choose the next generation alternative.

The E2S Hootronic series of products faithfully reproduce the sounds made by legacy electro-mechanical signalling devices but in a modern, reliable and cost effective way.

With output levels of up to 112dB(A) at 1 metre the HAB105TRH surpasses legacy electro-mechanical devices in performance and effectiveness, it is also continuously rated, requires zero maintenance and the signal quality will not degrade with age.



Spare bulb/lamp part codes:

| Version: | Wattage: | Туре: | Part code: |
|----------|----------|--------------|---------------|
| 12V dc | 20W | G6,35/GY6,35 | BJC20W12VCL |
| 24V dc | 20W | G6,35/GY6,35 | BJC20W24VCL |
| 115V ac | 25W | G6,35/GY6,35 | BJCD25W120VCL |
| 230V ac | 25W | G6,35/GY6,35 | BJCD25W230VCL |

Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 |
|---------|-----------------------------------|---------|---------|
| Tone 1 | Industrial Claxon | Tone 3 | Tone 5 |
| Tone 2 | High Frequency Mechanical Siren | Tone 1 | Tone 5 |
| Tone 3 | Medium Frequency Mechanical Siren | Tone 1 | Tone 5 |
| Tone 4 | Electro Mechanical Buzzer | Tone 2 | Tone 5 |
| Tone 5 | Mechanical Bell | Tone 1 | Tone 2 |
| | | | |

Country specific or custom tone configurations and alarm frequencies are available upon request

Specification:

| Hootronic Sounde | r: |
|---------------------|--|
| Nominal output: | 112dB(A) @ 1m +/- 3dB - Tone 2 |
| No. of tones: | 5 |
| No. of stages: | 3 |
| Volume control: | Max. 112dB(A); Min. 103dB(A) approx. |
| Effective range: | 60m @ 1KHz |
| Beacon: | |
| Light source: | Halogen Bulb G6,35 / GY6,35. |
| Light output: | max 25W |
| Rotation: | 180RPM (+/-30RPM). |
| Peak Candela: | 821 cd |
| Candela: | 125 cd* (effective intensity) |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow |
| Drive life: | > 5,000 hrs |
| General: | |
| Voltages DC: | 24V dc (10-30V dc); |
| Voltages AC: | 115V ac; 230V ac |
| Ingress protection: | IP66 |
| Housing material: | High impact UL94 V0 & 5VA FR ABS |
| Colour: | Red (RAL3000) & grey (RAL7038) |
| Cable entries: | 2 x M20 clearance gland knockouts in side & back |
| Terminals: | 0.5 to 4.0mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | DC: 1.00Kg AC:1.25kg |

*SPL data +/-3dB(A). Measured at optimum voltage.

*Candela measurements representative of performance with clear lens at optimum voltage.

Part codes: Version Part code: HAB105RTHDC12[x]/[y] 12V dc 24V dc HAB105RTHDC24[x]/[y] 115V ac HAB105RTHAC115[x]/[y] HAB105RTHAC230[x]/[y] 230V ac [x] = Housing colour: G: Grey R: Red A: Amber, B: Blue, C: Clear, [y] = Lens colour: G: Green, R: Red, Y: Yellow

50/60Hz

50/60Hz

50/60Hz

50/60Hz

* current at nominal voltage

Rotating beacon:

Alarm sounder:

Version:

24V dc

115V ac

230V ac

Version:

12V dc

24V dc

115V ac

230V ac

Features:

Wattage:

20W

20W

25W

25W

Current:

185mA*

50mA

25mA

Current:

1.72A

910mA

216mA

117mA

Voltage:

10-30V dc

+/-10%

+/-10%

Wattage:

20W

20W

25W

25W

| The | produ | cts |
|------|--------|------|
| sele | ctable | 'tra |

- Tone 4 : Electro Mechanical Buzzer

Each of these sounds have two additional, remotely selectable, alarm stages.

Remote switch generates genuine 'tail off' to sound when alarm is terminated.

- Continuously rated.
- Stainless steel fixings.
- Unit can be mounted using external lugs or internal
- BESA compatible fixing positions.
- Duplicate cable terminations
- Tropicalisation available on request.





in the Hootronic range have 5 user raditional' sounds including:

- Tone 1 : Industrial Claxon
- Tone 2 : High Frequency Mechanical Siren
- Tone 3 : Medium Frequency Mechanical Siren
- Tone 5 : Mechanical Bell

• Automatic synchronisation on multi-sounder system.

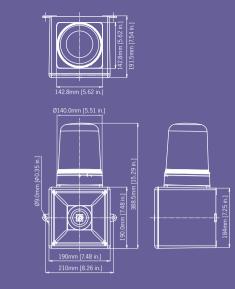
(in & out for daisy-chain installations).

HAB121RTH Electronic Siren, Buzzer, Claxon & Bell

Applications and users that have traditionally demanded conventional electromechanical claxons, sirens, buzzers and bells can now choose the next generation alternative.

The E2S Hootronic series of products faithfully reproduce the sounds made by legacy electro-mechanical signalling devices but in a modern, reliable and cost effective way.

With output levels of up to 121dB(A) at 1 metre the HAB121RTH surpasses legacy electro-mechanical devices in performance and effectiveness, it is also continuously rated, requires zero maintenance and the signal quality will not degrade with age.



Spare bulb/lamp part codes:

| Version: | Wattage: | Туре: | Part code: |
|----------|----------|--------------|---------------|
| 12V dc | 35W | G6,35/GY6,35 | BJC35W12VCL |
| 24V dc | 35W | G6,35/GY6,35 | BJC35W24VCL |
| 115V ac | 40W | G6,35/GY6,35 | BJCD40W120VCL |
| 230V ac | 40W | G6,35/GY6,35 | BJCD40W230VCL |

Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 |
|---------|-----------------------------------|---------|---------|
| Tone 1 | Industrial Claxon | Tone 3 | Tone 5 |
| Tone 2 | High Frequency Mechanical Siren | Tone 1 | Tone 5 |
| Tone 3 | Medium Frequency Mechanical Siren | Tone 1 | Tone 5 |
| Tone 4 | Electro Mechanical Buzzer | Tone 2 | Tone 5 |
| Tone 5 | Mechanical Bell | Tone 1 | Tone 2 |

Country specific or custom tone configurations and alarm frequencies are available upon request

Specification:

| Specification. | |
|---------------------|--|
| Hootronic Sounde | r: |
| Nominal output: | 121dB(A) @ 1m +/- 3dB - Tone 2 |
| No. of tones: | 5 |
| No. of stages: | 3 |
| Volume control: | Max. 121dB(A); Min. 112dB(A) approx. |
| Effective range: | 300m @ 1KHz |
| Beacon: | |
| Light source: | Halogen Bulb G6,35 / GY6,35. |
| Light output: | max 40W |
| Rotation: | 180RPM (+/-30RPM). |
| Peak Candela: | 1,204 cd |
| Candela: | 325 cd* (effective intensity) |
| Lens colours: | Amber, Blue, Clear, Green, Red & Yellow |
| Drive life: | > 5,000 hrs |
| General: | |
| Voltages DC: | 12V dc; 24V dc |
| Voltages AC: | 115V ac; 230V ac |
| Ingress protection: | IP66 |
| Housing material: | High impact UL94 V0 & 5VA FR ABS |
| Colour: | Red (RAL3000) & grey (RAL7038) |
| Cable entries: | 2 x M20 clearance gland knockouts in side & back |
| Terminals: | 0.5 to 4.0mm ² cables. |
| Operating temp: | -25 to +55°C |
| Storage temp: | -40 to +70°C |
| Relative humidity: | 90% at 20°C. |
| Weight : | DC: 2.10kg AC:2.70kg |

*SPL data +/-3dB(A). Measured at optimum voltage.

*Candela measurements representative of performance with clear lens at optimum voltage.

Part codes: Version Part code: Wattage: HAB121RTHDC12[x]/[y] 12V dc 35W 24V dc HAB121RTHDC24[x]/[y] 35W 115V ac HAB121RTHAC115[x]/[y] 40W 230V ac HAB121RTHAC230[x]/[y] 40W [x] = Housing colour: G: Grey R: Red [y] = Lens colour:

Alarm sounder:

* current at nominal voltage

Rotating beacon:

50/60Hz

50/60Hz

50/60Hz

50/60Hz

Version:

24V dc

115V ac

230V ac

Version:

12V dc

24V dc

115V ac

230V ac

A: Amber, B: Blue, C: Clear G: Green, R: Red, Y: Yellow

Wattage:

35W

35W

40W

40W

Voltage: Current: 10-30V dc 375mA* +/-10% 160mA +/-10% 75mA

Current:

186mA

• Continuously rated.

Features:

- Stainless steel fixings.
- Unit can be mounted using external lugs or internal
- BESA compatible fixing positions.
- 3.0A 1.54A 338mA





The products in the Hootronic range have 5 user selectable 'traditional' sounds including:

- Tone 1 : Industrial Claxon
- Tone 2 : High Frequency Mechanical Siren
- Tone 3 : Medium Frequency Mechanical Siren
- Tone 4 : Electro Mechanical Buzzer
- Tone 5 : Mechanical Bell

Each of these sounds have two additional, remotely selectable, alarm stages.

Remote switch generates genuine 'tail off' to sound when alarm is terminated.

• Automatic synchronisation on multi-sounder system.

- Duplicate cable terminations
- (in & out for daisy-chain installations).
- Tropicalisation available on request.

HMCA112-05 Electronic Siren, Buzzer, Claxon & Bell

Applications and users that have traditionally demanded conventional electromechanical claxons, sirens, buzzers and bells can now choose the next generation alternative.

The E2S Hootronic series of products faithfully reproduce the sounds made by legacy electro-mechanical signalling devices but in a modern, reliable and cost effective way.

With output levels of up to 122dB(A) at 1 metre the HMCA112-05 surpasses legacy electro-mechanical devices in performance and effectiveness, it is also continuously rated, requires zero maintenance and the signal quality will not degrade with age.



Tone table:

| Stage 1 | Frequency Description. | Stage 2 | Stage 3 |
|---------|-----------------------------------|---------|---------|
| Tone 1 | Industrial Claxon | Tone 3 | Tone 5 |
| Tone 2 | High Frequency Mechanical Siren | Tone 1 | Tone 5 |
| Tone 3 | Medium Frequency Mechanical Siren | Tone 1 | Tone 5 |
| Tone 4 | Electro Mechanical Buzzer | Tone 2 | Tone 5 |
| Tone 5 | Mechanical Bell | Tone 1 | Tone 2 |

Country specific or custom tone configurations and alarm frequencies are available upon request

Specification:

| 122dB(A) @ 1m +/- 3dB |
|---|
| 5 |
| 3 |
| Max. 122dB(A); Min. 113dB(A) approx. |
| |
| 5 Joules (5Ws) |
| 1Hz (60 fpm) |
| 500,000 cd - calc. from energy (J) |
| 250 cd - calc. from energy (J) |
| 16,428 cd* - measured ref. to I.E.S. |
| 51 cd* - measured ref. to I.E.S. |
| Amber, Blue, Clear, Green, Red & Yellow |
| Emissions are reduced to 70% after 8 million flashes |
| |
| 12V dc; 24V dc |
| 115V ac; 230V ac |
| IP66 & IP67 (Third party tested) |
| High impact UL94 V0 & 5VA FR ABS |
| Grey (RAL7038) |
| 2 x M20 supplied with 1 blanking plug |
| Borosilicate glass dome with PC prismatic lens cover. |
| Stainless Steel dome guard as standard |
| 0.5 to 4.0mm ² cables. |
| -25 to +55°C |
| -40 to +70°C |
| 90% at 20°C. |
| 50% dt 20 °C. |
| |

*SPL data +/-3dB(A). Measured at optimum voltage.

*Candela measurements representative of performance with clear lens at optimum voltage.

| Part codes: | | Features: | |
|---------------------|--|--|--|
| Version | Part code: | The produc | |
| 12V dc | HMCA11205DC12G-xx | selectable | |
| 24V dc | HMCA11205DC24G-xx | - - • Tone 1 : | |
| 115V ac | HMCA11205AC115G-xx | | |
| 230V ac | HMCA11205AC230G-xx | • Tone 2 : • Tone 3 : | |
| [xx] = Lens colour: | AM: Amber, BL: Blue, CL: Clear, GN: Green, RD: Red, YW: Yellow | Tone 4 : Tone 5 : | |

| Version: | | Voltage: | Current: | |
|----------|---------|-----------|----------|--|
| 24V dc | | 10-30V dc | 375mA* | |
| 115V ac | 50/60Hz | +/-10% | 160mA | |
| 230V ac | 50/60Hz | +/-10% | 75mA | |

| Version: | | Wattage: | Current: |
|----------|---------|-----------|----------|
| 12V dc | | 10-14V dc | 550mA |
| 24V dc | | 20-28V dc | 300mA |
| 115V ac | 50/60Hz | +/-10% | 140mA |
| 230V ac | 50/60Hz | +/-10% | 55mA |

- Continuously rated.
- Large termination area.
- Ratchet adjustable stainless steel 'U' bracket for
- 360° positioning.
- Duplicate cable terminations (in & out for daisy-chain installations).
- Tropicalisation available on request.
 - GOST-R certificate: POCC GB.JB05.H00144



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