

Wide Area Signalling

Section index

High Power Electronic Sirens

3-11-010	A131
3-11-020	A141
3-11-030	A151

Motor Driven Sirens

3-21-010	Motor Driver

The A131 is a high output 131dB(A) @ 1 metre electronic siren in a compact and easy to install package. Using up to four speakers, it can be mounted in a variety of ways and is ideal as a plant alarm to cover outdoor locations, areas with high background noise or smaller COMAH (Seveso II) applications with sound coverage requirements up to 300m.

Offering a choice of three alarm stages, selected from a choice 45 tones including many national standard tones, it can be incorporated in fire, security and general alarm systems where existing equipment is not powerful enough or the system needs expanding. The speaker horns are suitable for pole or wall mounting and are protected to IP66 which makes them suitable for use in the most arduous locations. They come pre-wired with 10m of cable to ensure a quick installation and can positioned in a variety of ways to suit the application.

E2S has considerable experience in this field and is able to offer full pre and post installation support including assistance with siren selection.

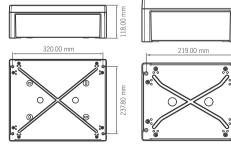
Tone table:

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	Rell	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 - PFEER TOXIC Gas	Tone 34	Tone 45
Tone 39		Tone 23	Tone 17
	800Hz 0.25sec on, 1 sec off Intermittent		
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.

Part codes:

Voltage:	Range:	Part code:	Current:		
1 Horn vers	1 Horn version				
24V dc	18-30V dc	A131DC24G1	3.20A		
115V ac	90-264V ac	A131AC230G1	0.78A		
230V ac	90-264V ac	A131AC230G1	0.39A		
2 Horn vers	sion				
24V dc	18-30V dc	A131DC24G2	6.50A		
115V ac	90-264V ac	A131AC230G2	1.60A		
230V ac	90-264V ac	A131AC230G2	0.78A		
3 Horn vers	sion				
24V dc	18-30V dc	A131DC24G3	9.80A		
115V ac	90-264V ac	A131AC230G3	3.90A		
230V ac	90-264V ac	A131AC230G3	1.50A		
4 Horn vers	sion				
24V dc	18-30V dc	A131DC24G4	13.2A		
115V ac	90-264V ac	A131AC230G4	4.20A		
230V ac	90-264V ac	A131AC230G4	1.95A		



Multi-horn Control Unit mounting Installation: A131xxxxxG2, G3 & G4

Single Horn Control Unit mounting installation: A131xxxxxG1



Specification:

Horn unit:	
Output:	131dB(A) @ 1m (Tone 2 at nominal voltage +/-3dB(A)) 102db(A) @ 30m
Operating temp:	-20°C to +55°C
Weight:	4.7Kg per horn
Horn body Material:	Aluminium LM6 phosphated & powder coated
Horn flare material:	UL94 VO & 5VA ABS
Colour:	Grey
Ingress protection:	IP66
Connection:	Supplied with 10m of cable for connection to the control unit as standard. Custom lengths available.
Mounting:	Adjustable U bracket.
Control Panel:	
Input voltage DC:	24V dc (18V dc to 30V dc range)
Input voltage AC:	115 or 230V ac (90V to 264V ac range)
Terminals:	0.5 to 4.0mm ² cable
Operating temp:	-20°C to +55°C
Ingress protection:	IP65
Weight:	1.5kg 1 Horn AC unit 2.9Kg 4 Horn AC unit

Features:

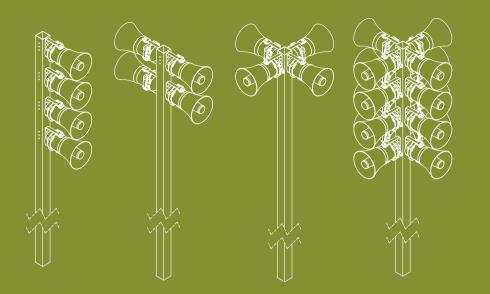
The A131 has the option of battery back up which means it can deliver it's safety warning even in the event of a power failure, for up to 30 days in standby and 30 minutes in alarm.

The siren is operated by push buttons either on the siren control box or via a remote panel or remote contact from another system which can be linked by hardwire, telephone cables or radio control using telemetry to create a secure communication network.

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



A131 High level audible warning system



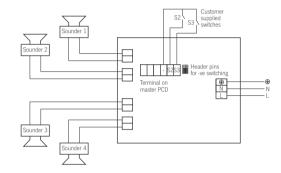
Tone Selection:

The A131 audible alarm system has the facility to use either +ve or -ve switching to change the tone to the second and third stages. For -ve switching connect the two pin headers on the master pcb to the -ve and centre pins. For +ve switching connect the pin headers to the +ve and the centre pins. To change to the second stage tone, connect either a -ve or +ve supply line to terminal S2 on the master pcb, depending on which switching mode is being usedwhile maintaining the dc supply to the +ve and -ve control unit input terminals. Similarly for the third stage tone, connect a -ve or +ve supply line to terminal S3 on the master pcb. The supply to the S3 terminal will automatically override a supply to the S2 terminal.

To switch the second and third stage tones on the AC units remotely connect the -ve terminal on the six way terminal block on the master pcb to the S2 terminal for the second stage tone and the S3 terminal for the third stage tone.

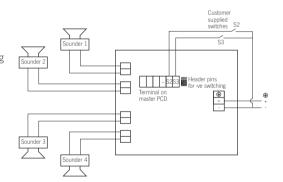
Schematic Circuit:

AC unit with connections for S2 and S3 for second and third stage alarms.



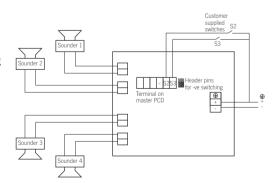
Schematic Circuit:

DC unit with connections for S2 and S3 for second and third stage alarms using negative switching.



Schematic Circuit:

DC unit with connections for S2 and S3 for second and third stage alarms using positive switching.





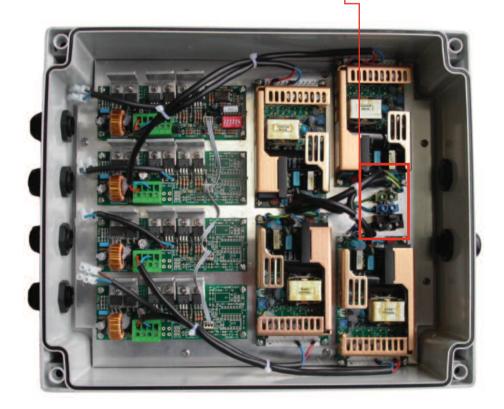
Master control board

Dip switch for tone selection (1 0 0 0 0 position shown)

S3 and S2 header pins for -ve and +ve switching (-ve shown)

Terminal on master PCB S2 / S3 connections

Terminal block for customer power input





Horn unit connection 1 to 4 off units



A141 High level audible warning system

The A141 is the latest in a new generation of high output electronic sounders from E2S which are ideal for wide area and disaster warning applications such as COMAH (Seveso II) Alarm, Toxic Gas Release, Fire, Security, Flood Warning, Tsunami Alert and Civil Defence requiring sound coverage up to 750m.

With a choice of 45 standard warning tones including many of the standard international signals the A141 can offer up to 4 different stages of alarm. A "Hootronic" version of the A141 is also available which replicates the traditional signaling sounds of bells, buzzers, sirens and claxons. By re-playing digital recordings of these products, the Hootronic produces the exact sound but without the reliability and rating problems of electro-mechanical devices.

E2S has considerable experience in this field and is able to offer full pre and post installation support including assistance with siren selection.

Tone table:

Tone 2 800/1000Hz @ 0.25 sec Alternating Tone 17 T Tone 3 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop Tone 2 T Tone 4 800/1000Hz @ 1Hz Sweeping Tone 6 T Tone 5 2400Hz Continuous Tone 3 T Tone 6 2400/2900Hz @ 7Hz Sweeping Tone 7 T Tone 7 2400/2900Hz @ 1Hz Sweeping Tone 10 T Tone 8 500/1200/500Hz @ 0.3Hz Sweeping Tone 2 T Tone 9 1200/500Hz @ 0.3Hz Sweeping Tone 15 T Tone 10 2400/2900Hz @ 2Hz Intermittent Tone 15 T Tone 11 100Hz @ 1Hz Intermittent Tone 2 T Tone 12 800/1000Hz @ 0.875Hz Alternating Tone 4 T Tone 13 2400Hz @ 1Hz Intermittent Tone 15 T Tone 14 800Hz 0.25sec on, 1 sec off Intermittent Tone 15 T Tone 15 80Hz 0.25sec on, 1 sec off Intermittent Tone 18 T Tone 16 660Hz 1.8sec on, 1.8sec off Intermittent Tone 2 T	ge 1	Stage 3
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Tone 20 660Hz Continuous Tone 2 Tone 2 Tone 21 554Hz/440Hz @ 1Hz Alternating Tone 2 Tone 29 Tone 29 Tone 29 Tone 29 Tone 29 Tone 2 Tone 3 Tone 2 Tone 3 Tone 2 Tone 3 Tone 2 Tone 3 Tone 3 Tone 3 Tone 3 Tone 3	e 19	Tone 5
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Tone 22 544Hz @ 0.875 sec. Intermittent Tone 2 Tone 2 Tone 2 Tone 6 Tone 24 800/1000Hz @ 50Hz Sweeping Tone 29 Tone 29 Tone 29 Tone 29 Tone 25 2400/2900Hz @ 50Hz Sweeping Tone 29 Tone 20 Tone 26 Tone 26 Tone 26 Tone 26 Tone 26 Tone 26 Tone 2 Tone 26 Tone 2 Tone 7 Tone 7 Tone 7 Tone 7 Tone 30 300Hz Continuous Tone 2 Tone 26 Tone 2 Tone 26 Tone 2 Tone 26 Tone 28 Ton	e 21	Tone 5
Tone 24 800/1000Hz @ 50Hz Sweeping Tone 29 Tone 26 Bell Tone 2 Tone 2 Tone 2 Tone 26 Tone 2 Tone 27 Tone 26 Tone 2 Tone 2 Tone 2 Tone 2 Tone 30 300Hz Continuous Tone 2 Tone 2 Tone 2 Tone 2 Tone 26 Tone 27 Tone 26 Tone 27 Tone 28 Tone 28 Tone 28 Tone 28 Tone 38 Tone 38 Tone 38 Tone 36 Tone 36 Tone 36 Tone 37 Tone 36 Tone 37 <td>e 22</td> <td>Tone 5</td>	e 22	Tone 5
Tone 25 2400/2900Hz @ 50Hz Sweeping Tone 29 Tone 20 Tone 2 Tone 2 Tone 2 Tone 2 Tone 26 Tone 27 Tone 26 Tone 2 Tone 30 300Hz Continuous Tone 2 Tone 2 Tone 2 Tone 26 Tone 2 Tone 26 Tone 27 Tone 28 Tone 26 Tone 27 Tone 38 Tone 28 Tone 38 Tone 38 Tone 38 Tone 38 Tone 36 Tone 36 Tone 36 Tone 37 Tone 37 Tone 37 Tone 37 Tone 38 Tone 39 Tone 39 Tone 30 </td <td>e 23</td> <td>Tone 5</td>	e 23	Tone 5
Tone 25 2400/2900Hz @ 50Hz Sweeping Tone 29 Tone 26 Tone 26 Bell Tone 2 Tone 26 Tone 27 554Hz Continuous Tone 26 Tone 26 Tone 28 440Hz Continuous Tone 2 Tone 7 Tone 29 800/1000Hz @ 7Hz Sweeping Tone 7 Tone 2 Tone 30 300Hz Continuous Tone 2 Tone 2 Tone 31 660/1200Hz @ 1Hz Sweeping Tone 26 Tone 26 Tone 32 Two tone chime. Tone 26 Tone 26 Tone 33 745Hz @ 1Hz Intermittent Tone 2 Tone 26 Tone 34 1000 & 2000Hz @ 0.5 sec Alternating - Singapore Tone 38 Tone 36 Tone 35 420Hz @ 0.625 sec Australian Alert Tone 36 Tone 36 Tone 35 Tone 36 Tone 37 Tone 37 Tone 37 Tone 37 Tone 38 Tone 39 South Continuous - PFEER Toxic Gas Tone 34	e 24	Tone 5
Tone 26 Bell Tone 2 Tone 26 Tone 27 Tone 26 Tone 2 Tone 37 Tone 30 300Hz Continuous Tone 2 Tone 2 Tone 2 Tone 31 660/1200Hz @ 1Hz Sweeping Tone 26 Tone 26 Tone 32 Two tone chime. Tone 26 Tone 26 Tone 26 Tone 36 Tone 26 Tone 37 Tone 2 Tone 38 Tone 2 Tone 38 Tone 38 Tone 38 Tone 36 Tone 37 Tone 30 Sec Alternating - Singapore Tone 36 Tone 36 Tone 36 Tone 37 Tone 37.5sec /0.25sec Australian Alert Tone 36 Tone 37 Tone 37.5sec /0.25sec Australian Evac. Tone 37 Tone 37 Tone 37 Tone 37 Tone 38 2000Hz Continuous Tone 37 Tone 37 Tone 38 Tone 39 800Hz O.25sec on, 1 sec off Intermittent Tone 37 Tone 38 Tone 39 800Hz O.25sec on, 1 sec off Intermittent Tone 30 Tone 31 Tone 31	e 25	Tone 5
Tone 28 440Hz Continuous Tone 2 Tone 2 Tone 29 800/1000Hz @ 7Hz Sweeping Tone 7 Tone 7 Tone 7 Tone 7 Tone 2 Tone 2 Tone 2 Tone 2 Tone 2 Tone 2 Tone 26 Tone 32 Tone 26 Tone 26 Tone 26 Tone 36 Tone 26 Tone 36 Tone 26 Tone 37 Tone 26 Tone 37 Tone 34 1000 & 2000Hz @ 0.5 sec Alternating - Singapore Tone 38 Tone 36 Tone 36 Tone 36 Tone 36 Tone 36 Tone 36 Tone 37 Tone 37.5 sec /0.25 sec Australian Evac. Tone 35 Tone 35 Tone 35 Tone 9 Tone 37 Tone 37 Tone 37 Tone 37 Tone 38 2000Hz Continuous - PFEER Toxic Gas Tone 34 Tone 34<	e 26	Tone 15
Tone 29 800/1000Hz @ 7Hz Sweeping Tone 7 Tone 7 Tone 7 Tone 2 Tone 2 Tone 2 Tone 2 Tone 2 Tone 2 Tone 26 Tone 37 Tone 26 Tone 26 Tone 37 Tone 26 Tone 37 Tone 36 Tone 37 Tone 37 Tone 37 Tone 37 Tone 38 Tone 38 Tone 36 Tone 35 Tone 36 Tone 36 Tone 37 Tone 38 Tone 37 Tone 37 Tone 37	e 27	Tone 5
Tone 30 300Hz Continuous Tone 2 Tone 2 Tone 31 660/1200Hz @ 1Hz Sweeping Tone 26 Tone 26 Tone 32 Two tone chime. Tone 26 Tone 26 Tone 33 745Hz @ 1Hz Intermittent Tone 2 Tone 37 Tone 34 1000 & 2000Hz @ 0.5 sec Alternating - Singapore Tone 38 Tone 36 Tone 35 420Hz @ 0.625 sec Australian Alert Tone 36 Tone 36 Tone 36 500-1200Hz 3.75sec /0.25sec. Australian Evac. Tone 35 Tone 35 Tone 37 1000Hz Continuous - PFEER Toxic Gas Tone 9 Tone 39 Tone 38 2000Hz Continuous Tone 34 Tone 34 Tone 39 800Hz 0.25sec on, 1 sec off Intermittent Tone 23 Tone 30 Tone 40 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 31 Tone 31	e 28	Tone 5
Tone 30 300Hz Continuous Tone 2 Tone 2 Tone 31 660/1200Hz @ 1Hz Sweeping Tone 26 Tone 27 Tone 27 Tone 27 Tone 27 Tone 34 1000 & 2000Hz @ 0.52 sec Alternating - Singapore Tone 38 Tone 36 Tone 35 420Hz @ 0.625 sec Australian Alert Tone 36 Tone 36 Tone 35 Tone 36 Tone 35 Tone 35 Tone 36 Tone 36 Tone 37 Tone 38 Tone 34 Tone 36 Tone 37 Tone 37 Tone 37 Tone 37 Tone 38 Tone 37 Tone 38 Tone 38 Tone 38 Tone	e 29	Tone 5
Tone 32 Two tone chime. Tone 26 Tone 26 Tone 33 Tone 2 Tone 2 Tone 2 Tone 34 1000 & 2000Hz @ 0.5 sec Alternating - Singapore Tone 38 Tone 38 Tone 35 420Hz @ 0.625 sec Australian Alert Tone 36 Tone 36 Tone 35 Tone 9 Tone 37 Tone 34 Tone 37 Tone 38 Tone 38 Tone 39 To	e 30	Tone 5
Tone 32 Two tone chime. Tone 26 Tone 26 Tone 33 Tone 27 Tone 2 Tone 2 Tone 34 1000 & 2000Hz @ 0.5 sec Alternating - Singapore Tone 38 Tone 38 Tone 35 420Hz @ 0.625 sec Australian Alert Tone 36 Tone 36 Tone 35 Tone 9 Tone 37 Tone 37 1000Hz Continuous - PFEER Toxic Gas Tone 9 Tone 34 Tone 34 Tone 34 Tone 34 Tone 34 Tone 34 Tone 35 Tone 23 Tone 36 Tone 37 Tone 37 Tone 37 Tone 37 Tone 37 Tone 37 Tone 34 Tone 34 Tone 34 Tone 34 Tone 37 Tone 37 Tone 37 Tone 37 Tone 37 Tone 37 Tone 38 Tone 37 Tone 37 Tone 37 Tone 37 Tone 37 Tone 37 Tone 38 Tone 38 <td< td=""><td></td><td>Tone 5</td></td<>		Tone 5
Tone 33 745Hz @ 1Hz Intermittent Tone 2 Tone 3 Tone 34 1000 & 2000Hz @ 0.5 sec Alternating - Singapore Tone 38 Tone 38 Tone 35 420Hz @ 0.625 sec Australian Alert Tone 36 Tone 35 Tone 35 Tone 36 500-1200Hz 3.75sec /0.25sec. Australian Evac. Tone 35 Tone 9 Tone 37 Tone 37 1000Hz Continuous - PFEER Toxic Gas Tone 9 Tone 34 Tone 34 Tone 34 Tone 34 Tone 37 Tone 39 800Hz 0.25sec on, 1 sec off Intermittent Tone 23 Tone 40 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 31 Tone 31		Tone 15
Tone 34 1000 & 2000Hz @ 0.5 sec Alternating - Singapore Tone 38 Tone 38 Tone 36 Tone 36 Tone 36 Tone 36 Tone 36 Tone 36 Tone 37 Tone 37 1000Hz Continuous - PFEER Toxic Gas Tone 9 Tone 37 Tone 38 2000Hz Continuous Tone 34 Tone 34 Tone 38 Tone 39 800Hz 0.25sec on, 1 sec off Intermittent Tone 23 Tone 23 Tone 40 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 31 Tone 32 Tone 32 Tone 31 Tone	e 33	Tone 5
Tone 35 420Hz @ 0.625 sec Australian Alert Tone 36 Tone 36 Tone 36 Tone 35 Tone 35 Tone 35 Tone 35 Tone 37 Tone 37 1000Hz Continuous - PFEER Toxic Gas Tone 9 Tone 38 Tone 34 Tone 34 Tone 34 Tone 39 800Hz 0.25sec on, 1 sec off Intermittent Tone 23 Tone 40 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 31 Tone 31 Tone 31	e 34	Tone 45
Tone 37 1000Hz Continuous - PFEER Toxic Gas Tone 9 Tone 3 Tone 38 2000Hz Continuous Tone 34 Tone 34 Tone 39 800Hz 0.25sec on, 1 sec off Intermittent Tone 23 Tone 23 Tone 40 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 31 Tone 31	e 35	Tone 5
Tone 37 1000Hz Continuous - PFEER Toxic Gas Tone 9 Tone 3 Tone 38 2000Hz Continuous Tone 34 Tone 34 Tone 39 800Hz 0.25sec on, 1 sec off Intermittent Tone 23 Tone 23 Tone 40 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 31 Tone 31		Tone 5
Tone 38 2000Hz Continuous Tone 34 T Tone 39 800Hz 0.25sec on, 1 sec off Intermittent Tone 23 T Tone 40 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 31 T		Tone 45
Tone 39 800Hz 0.25sec on, 1 sec off Intermittent Tone 23 T Tone 40 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 31 T		Tone 45
Tone 40 544Hz (100mS)/440Hz (400mS) - NF S 32-001 Tone 31 T		Tone 17
		Tone 27
10110 2		Tone 5
Tone 42 Motor Siren - slow rise to 800 Hz Tone 2 T		Tone 5
		Tone 5
		Tone 5
		Tone 34

Specification:

Specification:	
Horn unit:	
Output:	141dB(A) @ 1m (Tone 2 at nominal voltage +/-3dB(A) 112dB(A) @ 30m
Effective distance:	400 - 700m
Dimensions:	(L) 680 X (H) 425 X (D) 550 mm
Operating temp:	-20°C to +55°C
Weight:	14Kg
Material:	Glass fibre reinforced plastic
Colour:	Grey
Ingress protection:	IP65
Connection:	Supplied with 10m of cable for connection to the control unit as standard. Custom lengths available.
Mounting:	Adjustable U bracket.
Control Panel:	
Input voltage DC:	24V dc (18V dc to 30V dc range)
Input voltage AC:	115 or 230V ac (90V to 264V ac range)
Terminals:	0.5 to 4.0mm ² cable
Dimensions:	(L) 344 X (H) 117 X (D) 289mm
Operating temp:	-20°C to +55°C
Ingress protection:	IP65
Weight:	2.9kg

912.5 912.5 [0.49 in.] (3POSNS) 370.0mm [14.57 in.] 545.0mm [21.46 in.] (21.46 in.] (22.9) 48.0mm [1.89 in.]

Features:

Using four 100W drivers, the A141 produces a powerful sound with an output in excess of 140 dB and is ideal for warning over distances of between 400m and 700m.

The A141 has a lightweight, compact housing designed for easy mounting and is protected to IP65 making it suitable for installation in all locations.

Optional extras include:

- Custom Tones
- Battery Back Up (giving up to 30 minutes of alarm)
- Radio Control
- GOST-R certificate: POCC GB.JB05.H00144

Part codes:

Voltage:	Range:	Part code:	Current:
24V dc	18-30V dc	A141DC24G	13.2A
115V ac	90-264V ac	A141AC230G	4.20A
230V ac	90-264V ac	A141AC230G	1.95A

Other voltages available on request.

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



A141 High level audible warning system

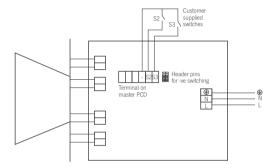
Tone Selection:

The A141 audible alarm system has the facility to use either +ve or -ve switching to change the tone to the second and third stages. For -ve switching connect the two pin headers on the master pcb to the -ve and centre pins. For +ve switching connect the pin headers to the +ve and the centre pins. To change to the second stage tone, connect either a -ve or +ve supply line to terminal S2 on the master pcb, depending on which switching mode is being used while maintaining the dc supply to the +ve and -ve control unit input terminals. Similarly for the third stage tone, connect a -ve or +ve supply line to terminal S3 on the master pcb. The supply to the S3 terminal will automatically override a supply to the S2 terminal.

To switch the second and third stage tones on the AC units remotely connect the -ve terminal on the six way terminal block on the master pcb to the S2 terminal for the second stage tone and the S3 terminal for the third stage tone.

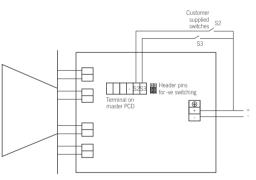
Schematic Circuit:

AC unit with connections for S2 and S3 for second and third stage alarms.



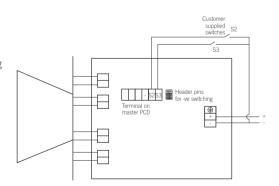
Schematic Circuit:

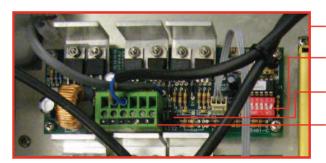
DC unit with connections for S2 and S3 for second and third stage alarms using negative switching.



Schematic Circuit:

DC unit with connections for S2 and S3 for second and third stage alarms using positive switching.





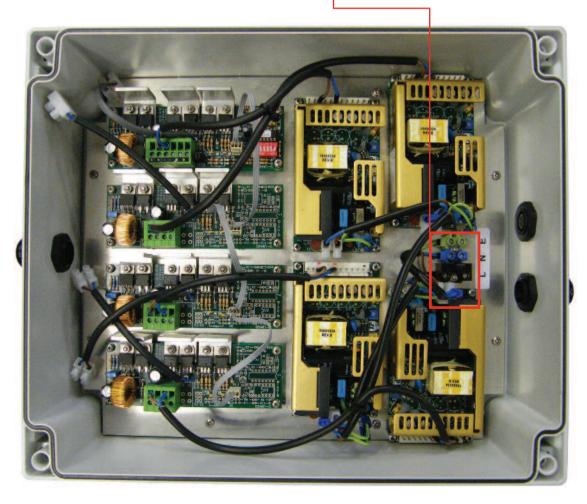
Master control board

Dip switch for tone selection (1 0 0 0 0 position shown)

S3 and S2 header pins for -ve and +ve switching (-ve shown)

Terminal on master PCB S2 / S3 connections

Terminal block for customer power input





A151 High level audible warning system

E2S offer a range of solutions for disaster and outdoor warning such as Toxic Gas Release (COMAH, SEVESO II), Flood Warning, Tsunami Alert, Civil Defence, Tornado and Weather Warning and Wide Area Fire and Security Alert

E2S has considerable experience in this field and is able to offer full pre and post installation support including assistance with siren selection.

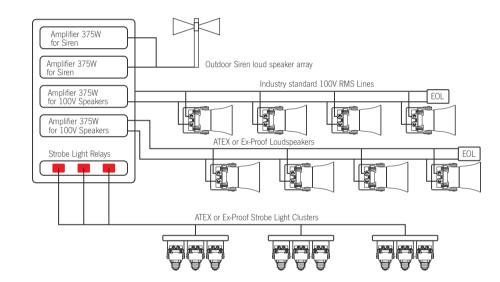
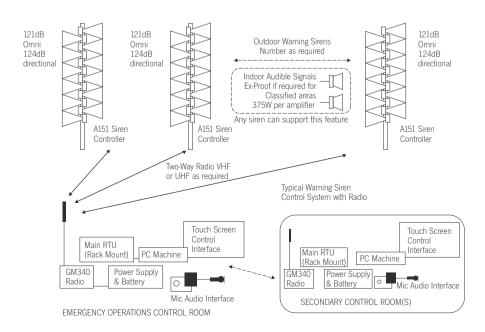


Diagram of Siren Controller with 100V RMS Line Distribution and Strobe Lights.

System Communication and Control is the same for all siren locations

Note. A Siren Controller Station can be configured for 100V Lines only ir required, with the amplifier power necessary.





Outputs of up to 125 dB @ 30m (>150 dB @ 1m) are available in both omni-directional and directional speaker arrays.

A151 Sirens can be configured into complete systems and have the ability to communicate via RS232/485, TCP/IP, Radio Control (VHF, UHF and Tetra) and can be controlled by either LCD control panel or a software solution.

Because many of the applications are critical alarms, it is essential to know the siren is fully functional at all times. The A151 sirens have built fault diagnostics and use a silent test function to check all the key features of the siren at pre-determined time intervals (usually every 3 hours).

A choice of warning tones is available together with the option of pre-recorded or live voice and the same control panels can be used to power 100V line loudspeakers for effective warning inside buildings or areas with high background noise levels.

For applications which do not require fault monitoring, a more basic siren (WPAS) is available.

E2S offer full technical support during the design and commissioning phase of a project. Contact our sales team to see how E2S can fulfil your outdoor warning requirements.



K-SML05/10/15 Motor Driven Sirens

The E2S range of motor driven sirens offer the traditional "air raid" type warning signal designed to give effective warning over wide areas. The powerful low frequency sound is ideal for covering long distances and is instantly recognisable.

The simple, rugged design is low maintenance and offers the lowest cost solution to disaster warning applications such as COMAH (SEVESO II) toxic gas alarms, flood and tsunami warning, security alert, civil defence, tornado and bad weather alert. Using the matching control panel, these sirens can produce up to 3 distinct warning tones and there are a variety of control options to suit customer requirements. Controls can be linked by hard wire, telephone cables or radio control using digital telemetry to create a secure communication network.

E2S has considerable experience in this field and is able to offer full pre and post installation support including assistance with siren selection.

K-SML05 features:

A robust, rugged cast aluminium siren with a very powerful low frequency output. Ideally suited for use in factories, refineries, quarries, construction and industrial sites, as well as both underground and surface mining.

- Maximum Output: 135 db (A) @ 1m
- Tones: Continuous or Wail Tone (when supply is switched on/off)
- Frequency: 560Hz
- 1 Km effective range
- Voltages: 400v 3 Phase
- Motor Power: 2.2kW
- Duty: Continuous
- Enclosure Material: Cast Aluminium
- Colour: Grey, other colours available
- Operating Temperature: -20 to +40°C
- Storage Temperature: -40 to +70°C
- Relative Humidity: 90% at 20°C
- Weight: 50Kg

K-SML10 features:

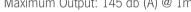
Precision machined aluminium body with all weather enclosed, continuously rated motor. Ideally suited for use in factories, refineries, quarries, construction civil defence and industrial sites, as well as both underground and surface mining.

- Maximum Output: 140 db (A) @ 1m
- Tones: Continuous or Wail Tone (when supply is switched on/off)
- Frequency: 560Hz
- 1.5Km effective range
- Voltages: 400V 3 Phase
- Motor Power: 4kW
- Duty: Continuous
- Enclosure Material: Cast Aluminium
- Colour: Grey, other colours available
- Operating Temperature: -20 to +40°C
- Storage Temperature: -40 to +70°C
- Relative Humidity: 90% at 20°C
- Weight: 68Kg

K-SML15 features:

All weather enclosed motor is ideally suited for outdoor use. This siren would be used for audible warning at refineries, oil rigs, in the event of fires and open-cast mining operations. This precision machined unit produces a powerful dual low frequency sound that is ideal for long distance signalling.

- Maximum Output: 145 db (A) @ 1m
- Tones: Continuous or Wail Tone
- 2.5Km effective range
- Motor Power: 7.5kW
- Duty: Continuous
- Enclosure Material: Cast Aluminium
- Colour: Grey, other colours available



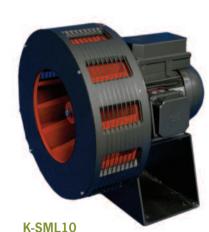
- (when supply is switched on/off)
- Frequency: 560Hz
- Voltages: 400V 3 Phase

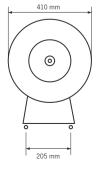
- Operating Temperature: -20 to +40°C
- Storage Temperature: -40 to +70°C
- Relative Humidity: 90% at 20°C
- Weight: 118Kg

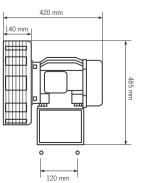


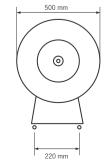
K-SML05

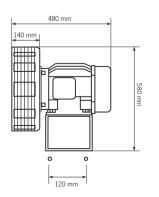
K-SML15

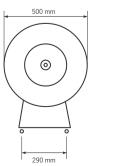


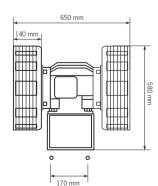












Part codes:

Version:	Part code:	SPL:
K-SML05 380V ac	K-SML05AC380G	135dB(A) @ 1m
K-SML10 380V ac	K-SML10AC380G	140dBA() @ 1m
K-SML15 380V ac	K-SML15AC380G	145dB(A) @ 1m

Other voltages available on request.

Product category index

Hazardous	Area Signalling	Explosion / fla	me proof: Audible	Non-sparking: Vi	sual	Visual: Xenon S	Strobes
Intrinsic safe	ety: Visual	1-22-010	GNExS1	1-31-010	E2xB05	2-13-010	L101X
1-11-010	IS-mB1	1-22-020	GNExS2	1-31-020	E2xB10	2-13-020	L101FLASHTEL
1-11-020	IS-L101L	1-22-030	GNExS1-R			2-13-030	B300STR
1-11-030	IS-pB1	1-22-040	BExS110	Non-sparking: A	udible	2-13-040	B400STR
		1-22-050	BExS120	1-32-010	E2xS112	2-13-050	B100STR
Intrinsic safe	ntrinsic safety: Audible 1-22-060 BExS110-R		1-32-020	E2xS121	2-13-060	B200STR	
1-12-010	IS-mA1	1-22-070	BExH120	1-32-030	E2xL15	2-13-070	MB005
1-12-020	IS-A105N	1-22-080	BExH120-R	1-32-040	E2xL25	2-13-080	MB010
1-12-030	IS-D105	1-22-090	BExTS110			2-13-090	MCB005-05
1-12-040	IS-pA1	1-22-100	GNExL1	Non-sparking: C	ombination		
		1-22-110	GNExL2	1-34-010	E2xCS112-5	Visual: L.E.D A	rray
Intrinsic safe	ety: Combination	1-22-120	BExL15			2-14-010	L101H
1-13-010	IS-mC1	1-22-130	BExL25	Fire and Indust	trial Signalling	2-14-020	B300LDA
1-13-020	IS-A105N+IS-L101L			Visual: Status Li	ghts	2-14-030	B400LDA
1-13-030	IS-DL105L	Explosion / flar	me proof:	2-11-010	STB2	2-14-040	B100LDA
		Combination		2-11-011	STB3	2-14-050	B200LDA
Intrinsic safe	ety: Manual Call Points	1-23-010	BExCS110-05	2-11-012	STB4	2-14-060	MBL1
1-14-010	IS-CP4-BG	1-23-020	BExCS110-05-R	2-11-020	B450TLA		
1-14-020	IS-CP4-PB	1-23-030	BExCS110-L1	2-11-030	B450TSB	Visual: Filamer	nt Lamp
1-14-030	IS-CP4-PT	1-23-040	BExCS110-L1-R	2-11-040	B450TDB	2-15-010	B300SL
				2-11-050	B350TLA	2-15-020	B300SLH
Explosion/fla	ame proof: Visual	Explosion/flam Manual Alarm		2-11-060	B350TSB	2-15-030	B300FLF
1-21-080	BEXPLATED	1-24-010	GNExCP6A-BG			2-15-040	B300FLH
1-21-090	BExBG21	1-24-020	GNExCP6B-BG	Visual: Rotating	Beacons/Lamps	2-15-050	B400SLF
1-21-100	BExBGL1	1-24-030	GNExCP6A-PB	2-12-010	B300RTH	2-15-060	B400SLH
1-21-110	BExBG05	1-24-040	GNExCP6B-PB	2-12-020	B400RTH	2-15-070	B400FLF
1-21-120	BExBG10	1-24-050	GNExCP6A-PT			2-15-080	B400FLH
1-21-130	BExBG15	1-24-060	GNExCP6B-PT			2-15-090	B100SLF
1-21-140	BExCBG05-05	1-24-070	BExCP3-BG			2-15-100	B100FLF
1-21-150	BExTBG05	1-24-080	BExCP3-PB			2-15-110	B200SLF
		1-24-090	BExCP3-PT			2-15-120	B200FLF
						Visual: Accesso	ories
						2-16-010	Accessories

2-21-010	SONF1		Sirens, Bells & Buzzers
2-21-020	SONF1-H	2-23-010	HA105N
2-21-030	SON2	2-23-020	HA121
2-21-040	A100	2-23-030	HMA121
2-21-050	A100SONTEL		
2-21-060	A105N	Audible: Sp	
2-21-070	A105NSONTEL	2-24-010	ML15
2-21-080	A112N	2-24-020	ML25
2-21-090	A121		
2-21-100	D105	Combined:	horns with lights
2-21-110	D112	2-31-010	STAZ
2-21-120	GPH1 & 2	2-31-011	STAS
2-21-130	GPH3 & 4	2-31-012	STA4
2-21-140	B300SND	2-31-020	SON4E
2-21-150	B400SND	2-31-030	SON4L
2-21-160	H100T	2-31-040	SON4
2-21-170	H100B	2-31-050	SONFL1)
2-21-180	H110T	2-31-060	SONFL1F
2-21-190	MA112	2-31-070	SONFL1X-F
2-21-200	MA121	2-31-080	SONFL1H-F
2-21-210	E2S22D	2-31-090	AL100>
2-21-220	E2S28D	2-31-100	AL100H
2-21-230	BEDHEAD	2-31-110	AL100SONTELFLASH
		2-31-120	AL105N
Audible: Voice 8	User recordable	2-31-130	AL105NH
2-22-010	A105NAX	2-31-140	AL105NSONTELFLASH
2-22-020	A121AX	2-31-150	AB105RTH
2-22-030	D105AX	2-31-160	AB105STF
2-22-040	MV121	2-31-170	AB105LDA
		2-31-180	AL112N
		2-31-190	AL112NF

2-31-200	AB112RTH
2-31-210	AB112STR
2-31-220	AB112LDA
2-31-230	AL121X
2-31-240	AL121H
2-31-250	AB121RTH
2-31-260	AB121STR
2-31-270	AB121LDA
2-31-280	H100BX
2-31-290	H100BL
2-31-300	H100TX
2-31-310	H100TL
2-31-320	H100TF
2-31-330	H110TR
2-31-340	H110TX
2-31-350	H110TL
2-31-360	DL105X
2-31-370	DL105H
2-31-380	DL112X
2-31-390	DL112H
2-31-400	MCA112-05
	MCA112-L1

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2-32-060

2-31-200	ABI12RIH	Combined:
2-31-210	AB112STR	Electronic Sirens, Bells & Buzzers with lights
2-31-220	AB112LDA	2-33-010 HAL
2-31-230	AL121X	2-33-020 HAL
2-31-240	AL121H	2-33-030 HAB10
2-31-250	AB121RTH	2-33-040 HAB12
2-31-260	AB121STR	2-33-050 HMCA1
2-31-270	AB121LDA	
2-31-280	H100BX	Wide Area Signalling
2-31-290	H100BL	High Power Electronic Sirens
2-31-300	H100TX	3-11-010
2-31-310	H100TL	3-11-020
2-31-320	H100TF	3-11-030
2-31-330	H110TR	
2-31-340	H110TX	Motor Driven Sirens
2-31-350	H110TL	3-21-010 Motor [
2-31-360	DL105X	
2-31-370	DL105H	
2-31-380	DL112X	
2-31-390	DL112H	
2-31-400	MCA112-05	
2-31-410	MCA112-L1	
Combined: Voice & User rec	ordable with lights	
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2-32-020	AL105NAXH	
2-32-030	DL105AXX	
2-32-040	DL105AXH	

AL121AXX

AL121AXH

Combined:

HAL121X

HAL121H

HAB105RTH

HAB121RTH HMCA112-05

A141

A151

Motor Driven

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				1-31-020	E2xB
2-21-050	A100SONTEL	2-22-020	A121AX	1-32-010	E2xS1
2-21-060	A105N	2-22-030	D105AX	1-32-020	E2xS1
2-21-070	A105NSONTEL	2-22-040	MV121	1-32-030	E2xL
2-21-080	A112N	2-32-010	AL105NAXX	1-32-040	E2xL
2-21-090	A121	2-32-020	AL105NAXH	1-34-010	E2xCS11
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2-21-110	D112	2-32-040	DL105AXH	GNEx:	
3-11-010	A131	2-32-050	AL121AXX	Explosion/flam	e proof signals
3-11-020	A141	2-32-060	AL121AXH	1-22-010	GNEx
3-11-030	A151			1-22-020	GNEx
3-21-010	Motor Driven	BEx:		1-22-030	GNExS
			ne proof signals	1-22-100	GNE
AlertAlight		1-21-080	BEXPLATED	1-22-110	GNE
	strial visual signals	1-21-090	BExBG21	1-24-010	GNExCP6A-
2-11-010	STB2	1-21-100	BExBGL1	1-24-020	GNExCP6B-
2-11-011	STB3	1-21-110	BExBG05	1-24-030	GNExCP6A-
2-11-012	STB4	1-21-120	BExBG10	1-24-040	GNExCP6B-
2-13-010	L101X	1-21-130	BExBG15	1-24-050	GNExCP6A
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2-14-010	L101H	1-21-150	BExTBG05		
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2-31-110	AL100SONTELFLASH	1-22-060	BExS110-R	2-21-120	GPH1
2-31-120	AL105NX	1-22-070	BExH120	2-21-130	GPH3 8
2-31-130	AL105NH	1-22-080	BExH120-R	2-23-010	HA10
2-31-140	AL105NSONTELFLASH	1-22-090	BExTS110	2-23-020	HA1
2-31-180	AL112NX	1-22-120	BExL15	2-23-030	HMA1
2-31-190	AL112NH	1-22-130	BExL25	2-33-010	HAL12
2-31-230	AL121X	1-23-010	BExCS110-05	2-33-020	HAL12
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DL105H

DL112X

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BExCP3-PT

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D105AX	1-32-020	E2xS121
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DL105AXH	GNEx:	
AL121AXX	Explosion/fla	me proof signals
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	1-22-020	GNExS2
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BExBGL1	1-24-020	GNExCP6B-BG
BExBG05	1-24-030	GNExCP6A-PB
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BExBG15	1-24-050	GNExCP6A-PT
BExCBG05-05	1-24-060	GNExCP6B-PT
BExTBG05		
BExS110	Hootronic:	
BExS120	Electronic Sir	ens, Bells & Buzzers
BExS110-R	2-21-120	GPH1 &2
BExH120	2-21-130	GPH3 & 4
BExH120-R	2-23-010	HA105N
BExTS110	2-23-020	HA121
BExL15	2-23-030	HMA121
BExL25	2-33-010	HAL121X
BExCS110-05	2-33-020	HAL121H
BExCS110-05-R	2-33-030	HAB105RTH
BExCS110-L1	2-33-040	HAB121RTH
BExCS110-L1-R	2-33-050	HMCA112-05
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1-12-010	IS-mA1	2-21-030	
1-12-020	IS-A105N	2-21-230	
1-12-030	IS-D105	2-31-010	
1-12-040	IS-pA1	2-31-011	
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1-13-030	IS-DL105L	2-31-030	
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-31-070	SONFL1X-H
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pectra: Industr	ial audible
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-11-020	B450TLA
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-11-040	B450TDB
-11-050	B350TLA
-11-060	B350TSB
-12-010	B300RTH
-12-020	B400RTH
-13-030	B300STR
-13-040	B400STR
-13-050	B100STR
-13-060	B200STR
-14-020	B300LDA
-14-030	B400LDA
-14-040	B100LDA
-14-050	B200LDA
-15-010	B300SLF
-15-020	B300SLH
-15-030	B300FLF
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SONF1

SONF1-H

BEDHEAD STA2

SON2

STA3

STA4

SON4B

SON4L

SON4

SONFL1X

2-15-040	B300FLH
2-15-050	B400SLF
2-15-060	B400SLH
2-15-070	B400FLF
2-15-080	B400FLH
2-15-090	B100SLF
2-15-100	B100FLF
2-15-110	B200SLF
2-15-120	B200FLF
2-16-010	Accessories
2-21-140	B300SND
2-21-150	B400SND
2-21-160	H100T
2-21-170	H100B
2-21-180	H110T
2-21-210	E2S22D
2-21-220	E2S28D
2-31-280	H100BX
2-31-290	H100BL
2-31-300	H100TX
2-31-310	H100TL
2-31-320	H100TF
2-31-330	H110TR
2-31-340	H110TX
2-31-350	H110TL

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2-31-160	AB105STR
2-31-170	AB105LDA
2-31-200	AB112RTH
2-31-210	AB112STR
2-31-220	AB112LDA
2-31-250	AB121RTH
2-31-260	AB121STR
2-31-270	AB121LDA