

# A131 High level audible warning system

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 be 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:

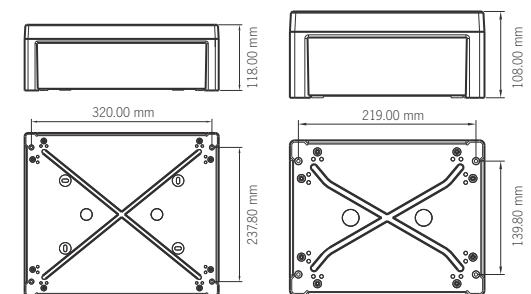
Stage 1	Frequency Description.	Stage 2	Stage 3
Tone 1	340 Hz Continuous	Tone 2	Tone 5
Tone 2	800/1000Hz @ 0.25 sec Alternating	Tone 17	Tone 5
Tone 3	500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop	Tone 2	Tone 5
Tone 4	800/1000Hz @ 1Hz Sweeping	Tone 6	Tone 5
Tone 5	2400Hz Continuous	Tone 3	Tone 20
Tone 6	2400/2900Hz @ 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	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.

### Part codes:

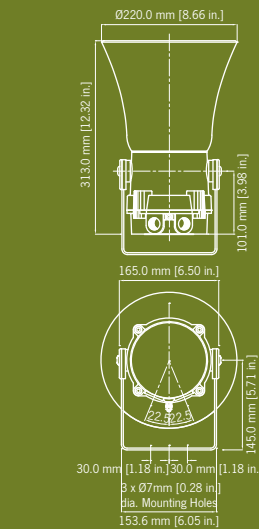
Voltage:	Range:	Part code:	Current:
<b>1 Horn version</b>			
24V dc	18-30V dc	A131DC24G1	3.20A
115V ac	90-264V ac	A131AC230G1	0.78A
230V ac	90-264V ac	A131AC230G1	0.39A
<b>2 Horn version</b>			
24V dc	18-30V dc	A131DC24G2	6.50A
115V ac	90-264V ac	A131AC230G2	1.60A
230V ac	90-264V ac	A131AC230G2	0.78A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

Other voltages available on request.



Multi-horn Control Unit mounting Installation: A131xxxxG2, G3 & G4

Single Horn Control Unit mounting installation: A131xxxxG1



### Specification:

<b>Horn unit:</b>	
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 V0 & 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.
<b>Control Panel:</b>	
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 <sup>2</sup> cable
Operating temp:	-20°C to +55°C
Ingress protection:	IP65
Weight :	1.5kg 1 Horn AC unit 2.9Kg 4 Horn AC unit

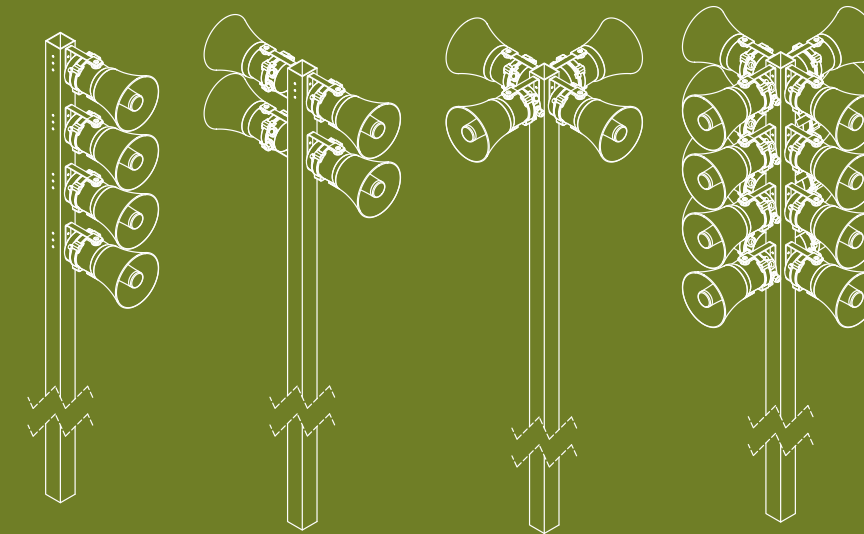
### Features:

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 hard-wire, telephone cables or radio control using telemetry to create a secure communication network.

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

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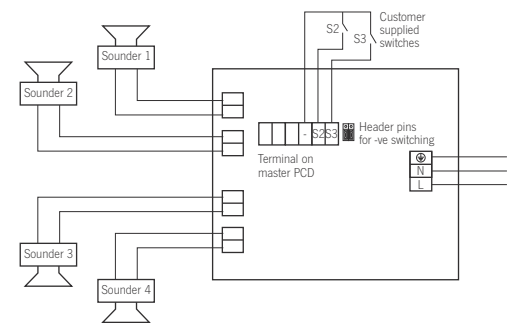
### Tone Selection:

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 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.

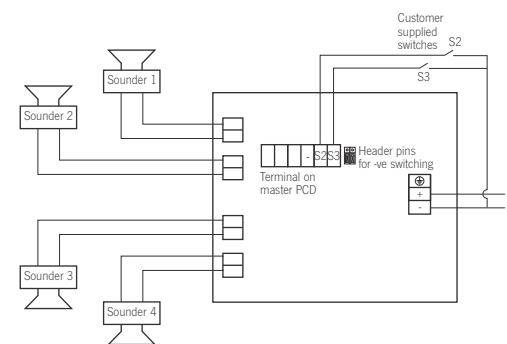
### Schematic Circuit:

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



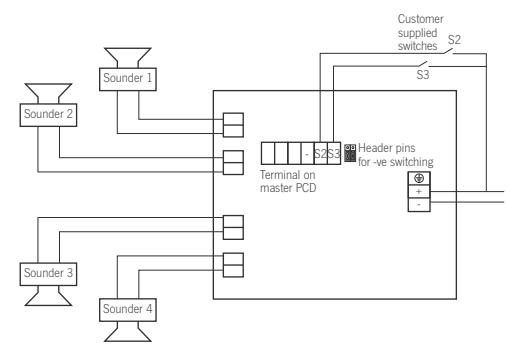
### Schematic Circuit:

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

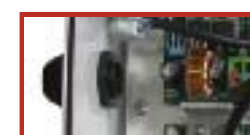
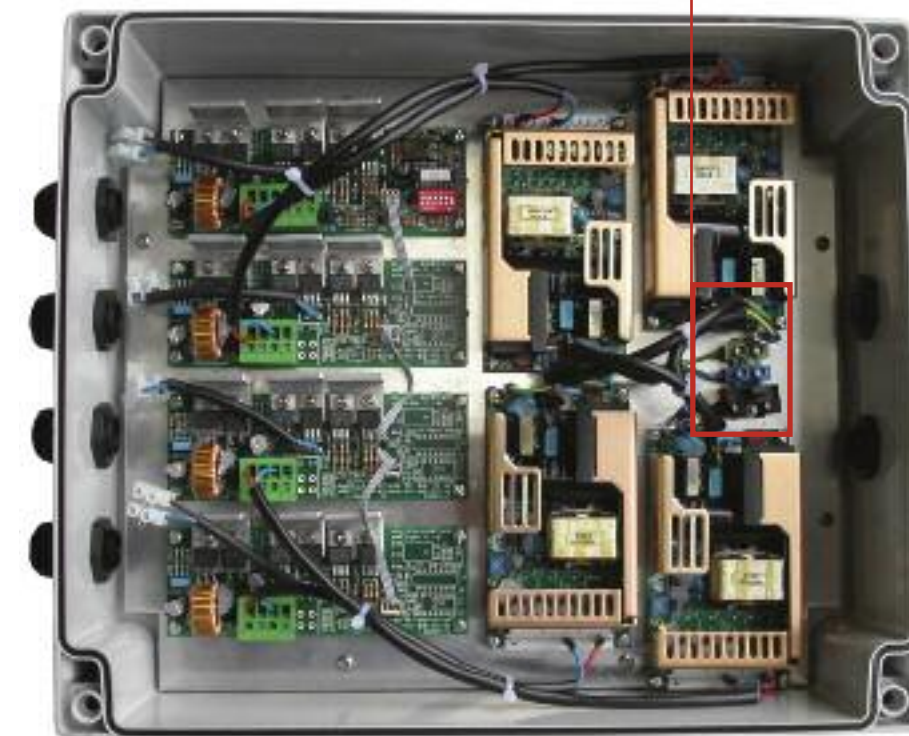


### Schematic Circuit:

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



- Horn unit connection 1 to 4 off units