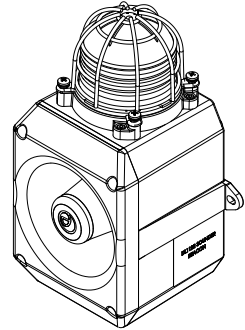


# INSTRUCTION & SERVICE MANUAL

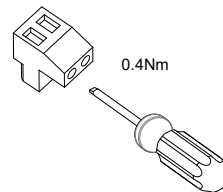
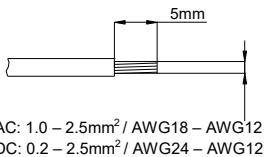
## DL112H AlertAlight Combined Metal Sounder LED Beacons

- -25°C to +55C (-13°F to 131°F)
- Type 4 / 4X / 3R / 13, IP66
- 1.8Kg (3.96lb)
- CE, UKCA
- All units UL Listed.



Unit Type Code	Nominal Voltage	Voltage Range	Nominal Sounder Current*	Nominal Beacon Current*	Nominal SPL	Max SPL
DL112HDC024	#12 V dc	10-14Vdc	200mA	79.5mA	103dB(A) Tone 44 @ 1m	119dB(A) Tone 4 @ 1m
	24V dc	16-30Vdc	200mA	86.5mA		
DL112HDC048	48V dc	42-54Vdc	120mA	60mA		
DL112HAC230	115V ac	115V ac $\pm$ 10%	100mA	34mA		
DL112HAC230	230V ac	230V ac $\pm$ 10%	60mA	18.5mA		

\*Nominal current at nominal voltage, Tone 12 / 1Hz Flash Pattern; #Factory Default setting 24Vdc, beacon customer settable to 12Vdc



Attention: Installation must be carried out by an electrician in compliance with the latest codes and regulations.

Attention: L'installation doit être effectuée par un électricien conformément aux derniers codes et réglementations.

Achtung: Die Installation muss von einem Elektriker gemäß den neuesten Vorschriften und Bestimmungen durchgeführt werden.

Attenzione: L'installazione deve essere eseguita da un elettricista in conformità con i codici e le normative più recenti.

Atención: La instalación debe ser realizada por un electricista de acuerdo con los últimos códigos y regulaciones.

Atenção: A instalação deve ser realizada por um electricista de acordo com os códigos e regulamentos mais recentes.

Внимание: установка должна выполняться электриком в соответствии с последними нормами и правилами.

Attention: Disconnect from power source before installation or service to prevent electric shock

Attention: Débranchez-le de la source d'alimentation avant l'installation ou l'entretien pour éviter tout choc électrique.

Achtung: Vor Installation oder Wartung von der Stromquelle trennen, um einen Stromschlag zu vermeiden.

Attenzione: scollegare dall'alimentazione prima dell'installazione o dell'assistenza per evitare scosse elettriche.

Atención: desconéctelo de la fuente de alimentación antes de la instalación o el servicio para evitar descargas eléctricas.

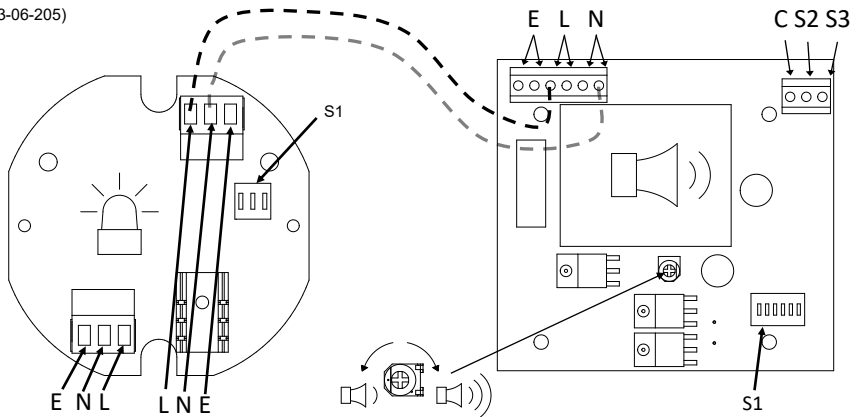
Atenção: Desconecte da fonte de alimentação antes da instalação ou serviço para evitar choque elétrico

Внимание: отключите от источника питания перед установкой или обслуживанием, чтобы предотвратить поражение электрическим током.



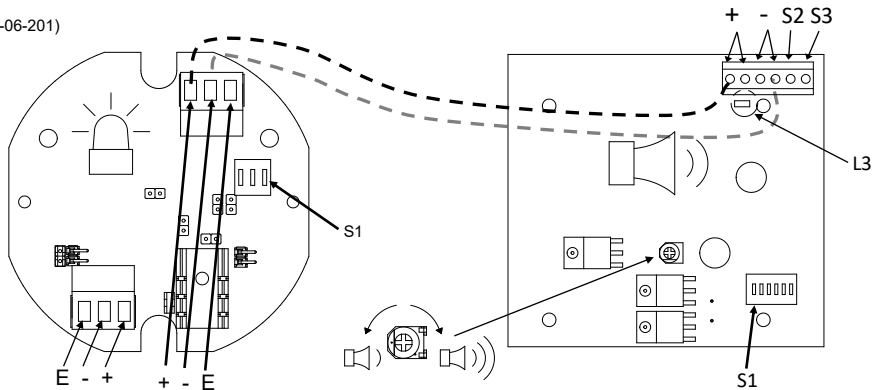
## AC

(See D173-06-205)



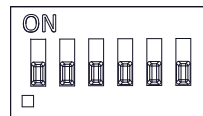
## DC

(See D173-06-201)



(AC & DC, See Tone Table)

Default = S1 - Tone 1



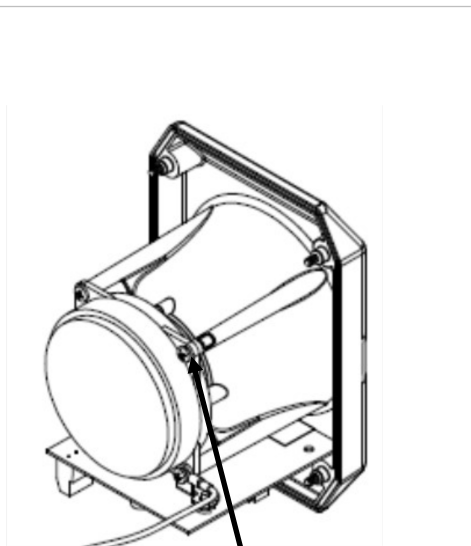
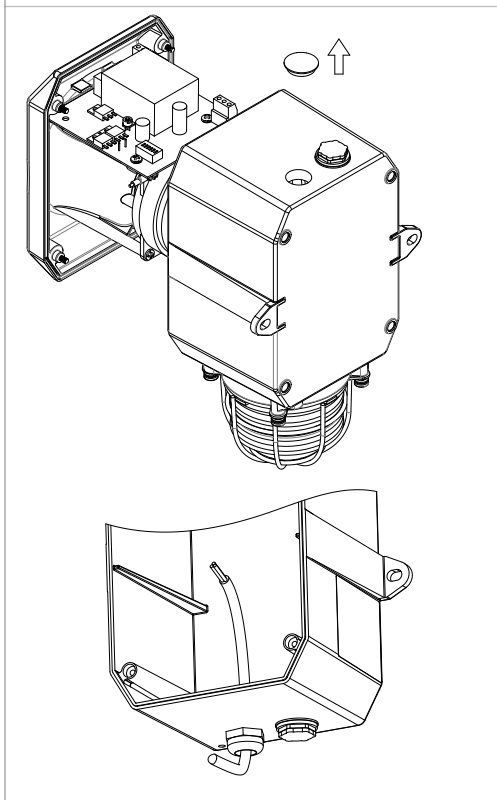
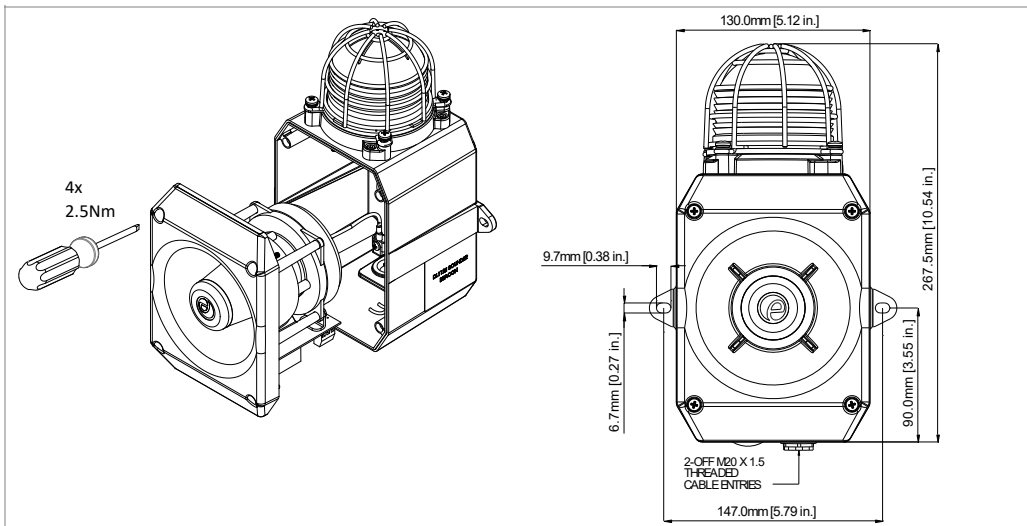
(ON = 1, OFF = 0)

Reverse Polarity Switching - On DC versions the second stage alarm tone can be selected by reversing the polarity of the

supply voltage if switch 6 is in the ON position if Link LK3 is present.

# INSTRUCTION & SERVICE MANUAL

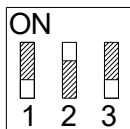
## DL112H AlertAlight Combined Metal Sounder LED Beacons



For DL112HDC units, using a ring terminal, fit an Earth to the shown location underneath the M4 screw and M4 spring washer. This point shall not be used for any other purpose (e.g. ground bonding).

## S1 - LED Flash Mode Settings (AC & DC)

The Flash Mode Dip Switch can be changed to set the desired flash pattern



Flash Mode DIP Switch – Shown with 1-OFF, 2-ON, 3-OFF (0 1 0), This denotes Flash mode 1Hz. For further flash modes refer to table:

Switch Setting	Flash Mode
0 0 0	Steady on
1 0 0	Blinking
0 1 0	Flashing 1Hz*
1 1 0	Flashing 1.5Hz*
0 0 1	Flashing - Double Strike
1 0 1	Flashing - Triple Strike
0 1 1	Flashing 2Hz*
1 1 1	Flashing - Temporal

- All models are approved for use as Audible Signal and Visual Appliance for use as General Signaling: UL464A & CSA C22.2 No 205-17, UL1638A
- Type 4 / 4X / 3R / 13, IP66
- -25°C to +55°C / -13°F to +131°F
- To maintain Ingress Protection, cable entries must be fitted with suitably rated cable glands or stopping plugs
- Units can be mounted using the 2-off 10 x 7mm obround holes in the mounting lugs.
- EOL Monitoring (DC Only): End of Line Devices may be fitted between the +ve & -ve terminals of the PCBA. Please ensure that the device legs meet the wire size range stated for the connection terminals and are fitted correctly in order to avoid a short. Refer to the compatible control panel specification for EOL device values and ratings



Model	Nominal* Voltage	Voltage Range	Nominal Operating Current <sup>#</sup>	
			Beacon	Sounder
DL112HDC024	12V dc	10-14Vdc	79.5mA	200mA
	24V dc	16-30Vdc	86.5mA	200mA
DL112HDC048	48V dc	48-60Vdc	60mA	120mA
DL112HAC115	115V ac	115V ac ± 10% 50/60Hz	34mA	100mA
DL112HAC230	230V ac	230V ac ± 10% 50/60Hz	19mA	60mA

\*Nominal Voltage, 1Hz Flash Pattern & Tone 12; <sup>#</sup>Worst-case input voltage and worst case flash pattern

### Warnings



**Attention:** Installation must be carried out by an electrician in compliance with the National Electrical Code, NFPA 70 or CSA 22.1 Canadian Electrical Code, Part I, Safety Standard for Electrical Installations, Section 32. / L'installation doit exclusivement être réalisée par du personnel qualifié, conformément au code national d'électricité américain, NFPA 70 ou CSA 22.1 Code canadien de l'électricité, première partie, norme de sécurité relative aux installations électriques, Section 32



**Attention:** Disconnect from power source before installation or service to prevent electric shock / Débranchez-le de la source d'alimentation avant l'installation ou l'entretien pour éviter tout choc électrique.



**Attention:** Do not paint / Ne pas Peinturer

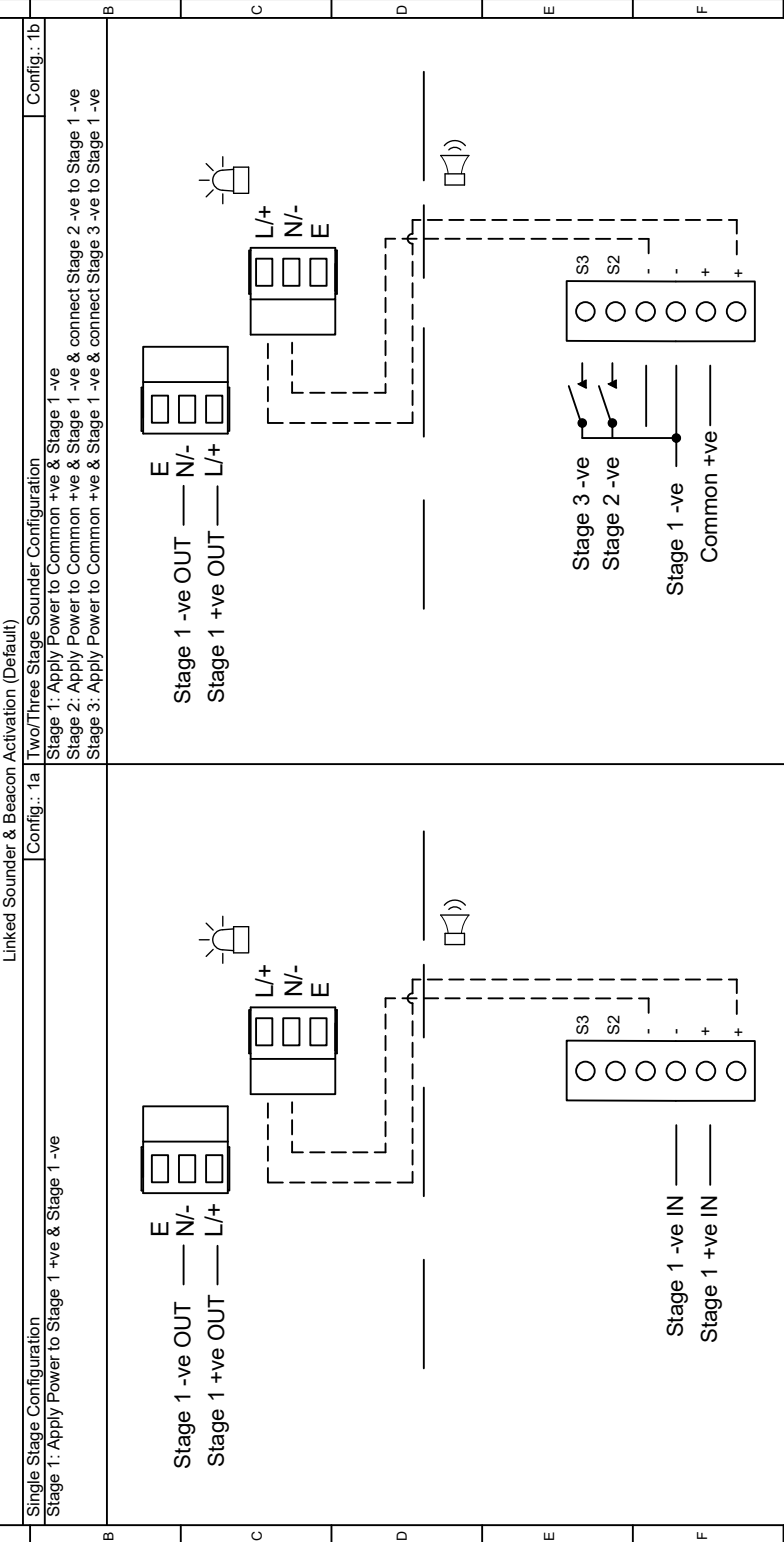
# INSTRUCTION & SERVICE MANUAL

## DL112H AlertAlight Combined Metal Sounder LED Beacons

Stage 1 Set DIP SW 1 Tone No.	Tone Description	Tone Visual	SW1 Setting 1 2 3 4 5 6	Stage 2 Tone (S2)	Stage 3 Tone (S3)
1	340Hz Continuous	—	000000	2	5
2	800/1000Hz @0.25s Alternating	⏏	100000	17	5
3	500/1200Hz @0.3Hz 0.5s Slow Whoop	⏏	010000	2	5
4	800/1000Hz @1Hz Sweeping	⏏	110000	6	5
5	2400Hz Continuous	—	001000	3	20
6	2400/2900Hz @7Hz Sweeping	⏏	101000	7	5
7	2400/2900Hz @1Hz Sweeping	⏏	011000	10	5
8	500/1200/500Hz @0.3Hz Sweeping	⏏	111000	2	5
9	1200/500Hz @1Hz DN / PFEER P.T.A.P	⏏	000100	15	
10	2400/2900Hz @2Hz Alternating	⏏	100100	7	2
11	1000Hz @1Hz Intermittent	- - - - -	010100	2	5
12	800/1000Hz @0.875Hz Alternating	⏏	110100	4	5
13	2400Hz @1Hz Intermittent	- - - - -	001100	15	5
14	800Hz @0.25s on, 1s off Intermittent	- - - - -	101100	4	5
15	800Hz Continuous	—	011100	2	5
16	660Hz 150ms on, 150ms off Intermittent	- - - - -	111100	18	5
17	544Hz (100ms)/440Hz (400ms) - NNFS 32-001	⏏	000010	2	27
18	660Hz 1.8s on, 1.8s off Intermittent	- - - - -	100010	2	5
19	1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s - NFC48-265	⏏	010010	2	5
20	660Hz Continuous	—	110010	2	5
21	554/440Hz @1Hz Alternating	⏏	001010	2	5
22	544Hz @0.875s Intermittent	- - - - -	101010	2	5
23	800Hz @2Hz Intermittent	- - - - -	011010	6	5
24	800/1000Hz @50Hz Sweeping	⏏	111010	29	5
25	2400/2900Hz @50Hz Sweeping	⏏	000110	29	5
26	Bell	⏏	100110	2	15
27	554Hz Continuous	—	110110	26	5
28	440Hz Continuous	—	001110	2	5
29	800/1000Hz @7Hz Sweeping	⏏	101110	7	5
30	300Hz Continuous	—	011110	2	5
31	660/1200Hz @1Hz Sweeping	⏏	111110	26	5
32	Two Tone Chime	⏏	000001	26	15
33	745Hz @1Hz Intermittent	- - - - -	100001	2	5
34	1000 & 2000Hz @0.05s Alternating - Singapore	⏏	010001	38	45
35	420Hz @0.625s - Australian Alert	- - - - -	110001	36	5
36	500-1200Hz 3.75s/0.25s - Australian Evacuation	⏏	001001	35	5
37	1000Hz Continuous - PFEER Toxic Gas	—	101001	9	45
38	2000Hz Continuous	—	011001	34	45
39	800Hz 0.25s on, 1s off Intermittent	- - - - -	111001	23	17
40	544Hz (100ms) / 440Hz (400ms) - NF S 32-001	⏏	000101	31	27
41	Motor Siren - Slow rise to 1200Hz	⏏	100101	2	5
42	Motor Siren - Slow rise to 800Hz	⏏	010101	2	5
43	1200Hz Continuous	—	110101	2	5
44	Motor Siren - Slow rise to 2400Hz	⏏		2	5
45	1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm	- - - - -		38	34

Note: Please check factory settings and ensure the correct alarm tone is selected for your country or application

1	2	3	4	5	6	7	8	9	10
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WIRING LINKING BEACON & SOUNDER FACTORY FITTED		SWITCHES FOR STAGE OPERATION CUSTOMER SUPPLIED		ISSUE MOD No		REASON - INITIAL - DATE		INTRODUCTION RSR - 20/12/2021	



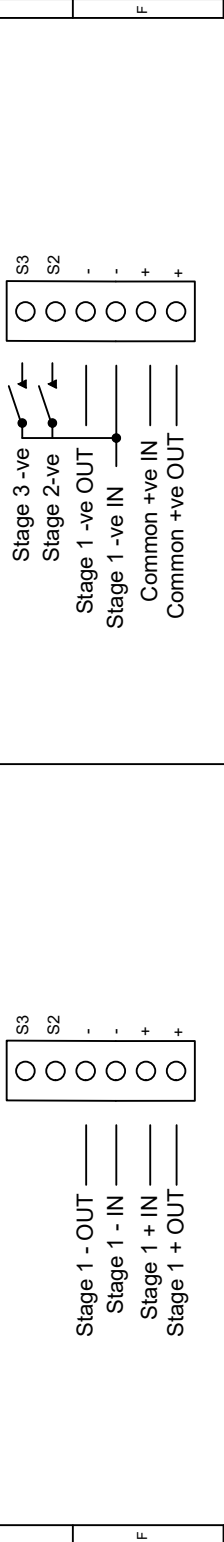
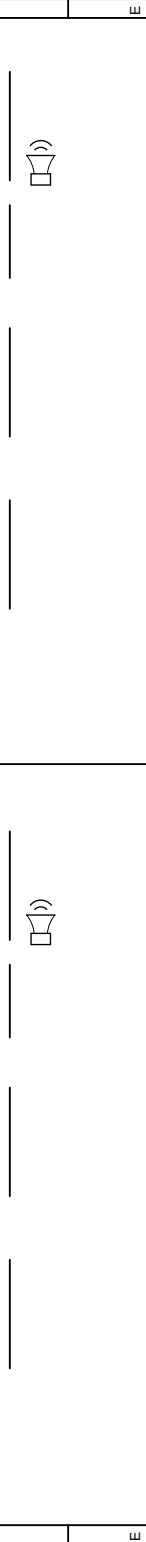
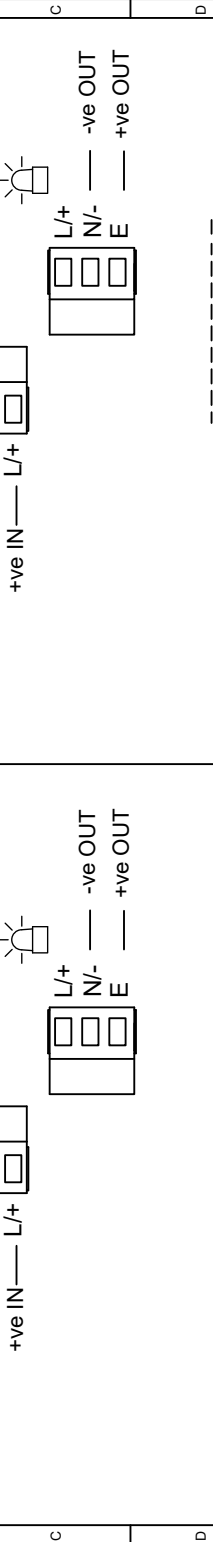
DRAWING TO BS8886:2000. GEOMETRIC TOLERANCES TO ISO 1101:1983 ANGULAR DIMENSIONAL TOLS	DRAWN	R.S. RAIT	DATE	20/12/2021	SURFACE FINISH	WEIGHT (kg)	MATERIAL
	CHECKED	B. ISARD	DATE	20/12/2021			
STANDARDS	ALERTALARM RANGE	APPROVED	R.N.POTTS	DATE	20/12/2021	ALTERNATIVE MATERIAL	
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SCALE		SHEET		DRAWING NUMBER		NTS	
1 OF 2		D173-06-251					

1	2	3	4	5	6	7	8	9	10
ISSUE		MOD No	REASON - INITIAL - DATE		INTRODUCTION		RSR - 20/12/2021		
A									

**Independent Sounder & Beacon Activation (Remove Link Wires)**

**Single Stage Configuration**  
 Stage 1: Apply Power to Stage 1 +ve & Stage 1 -ve  
**Config.: 2a**

**Two/Three Stage Sounder Configuration**  
 Stage 1: Apply Power to Common +ve & Stage 1 -ve  
 Stage 2: Apply Power to Common +ve & Stage 1 -ve & connect Stage 2 -ve to Stage 1 -ve  
 Stage 3: Apply Power to Common +ve & Stage 1 -ve & connect Stage 3 -ve to Stage 1 -ve  
**Config.: 2b**



DRAWING TO BS8888:2000. GEOMETRIC TOLERANCES TO ISO1101:1983 ANGULAR DIMENSIONAL TOLS	DRAWN	DATE	SURFACE FINISH	WEIGHT (Kg)
	R.S.RAIT	20/12/2021	MATERIAL	
STANDARDS ALERTALARM RANGE	CHECKED	DATE	ALTERNATIVE MATERIAL	
	B.JISARD	20/12/2021		
	APPROVED	DATE		
	R.N.POTTS	20/12/2021		

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TITLE DL112H DC COMBINED  
 SOUNDER & LED WIRING DIAGRAMS

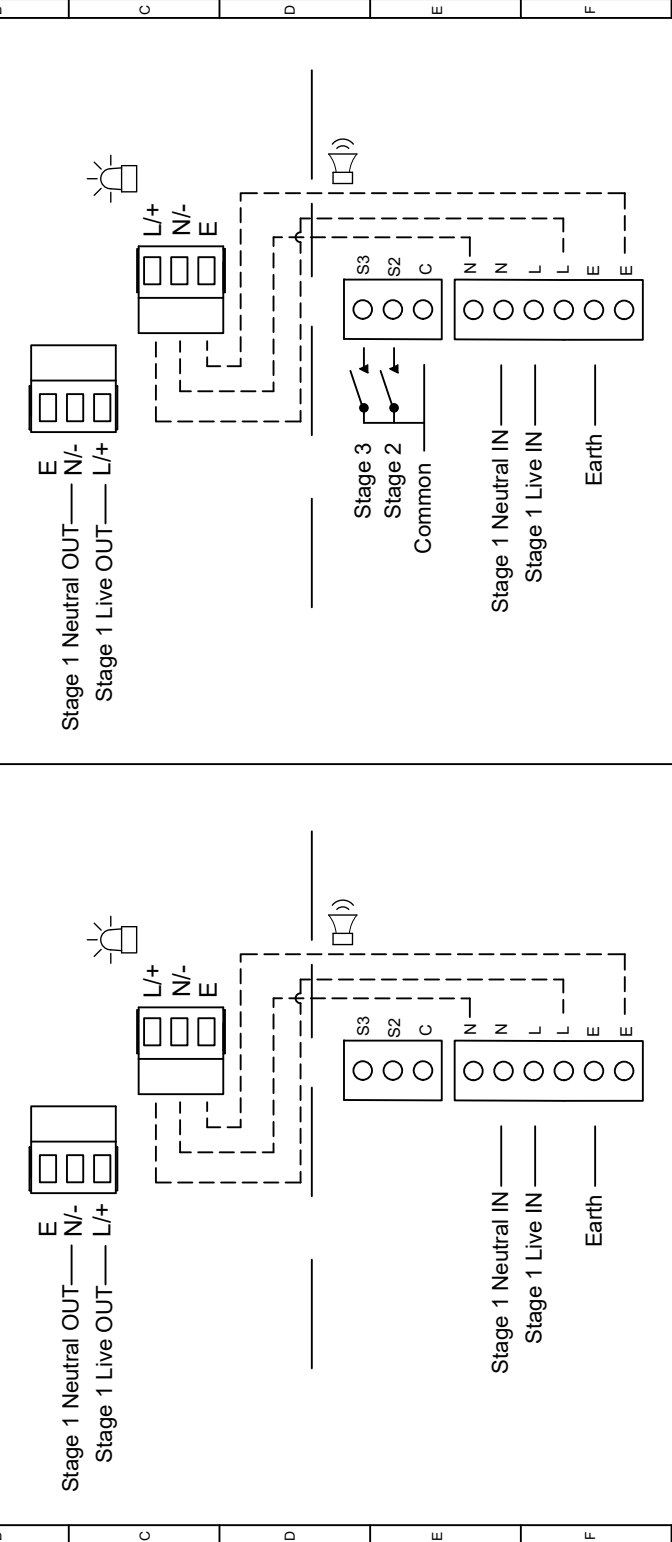
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SHEET 2 OF 2

1	2	3	4	5	6	7	8	9	10
ISSUE		MOD No	REASON - INITIAL - DATE		INTRODUCTION		RSR - 20/12/2021		
A		SWITCHES FOR STAGE OPERATION CUSTOMER SUPPLIED							

**Linked Sounder & Beacon Activation (Default)**  
**Config.: 1a**

**Single Stage Configuration**  
 Stage 1: Apply Power to Stage 1 Live & Stage 1 Neutral



DRAWING TO BS8888:2000. GEOMETRIC TOLERANCES TO ISO 1101:1983. ANGULAR DIMENSIONAL TOLS	DRAWN	DATE	SURFACE FINISH	WEIGHT (Kg)
	R.S.RAIT	20/12/2021	MATERIAL	
STANDARDS ALERTALARM RANGE	CHECKED	DATE	ALTERNATIVE MATERIAL	
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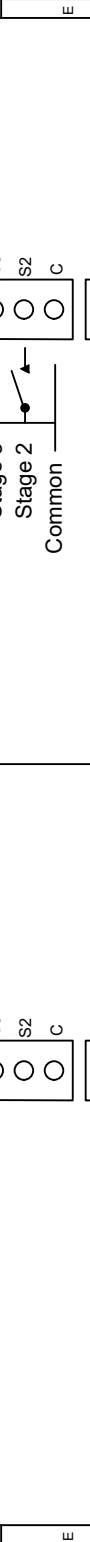
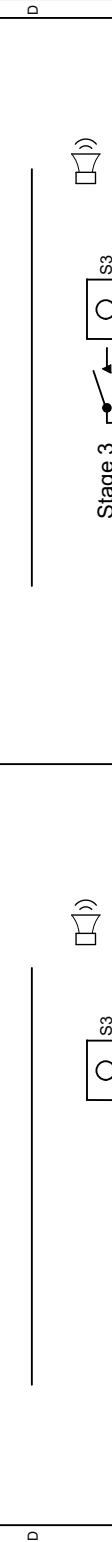
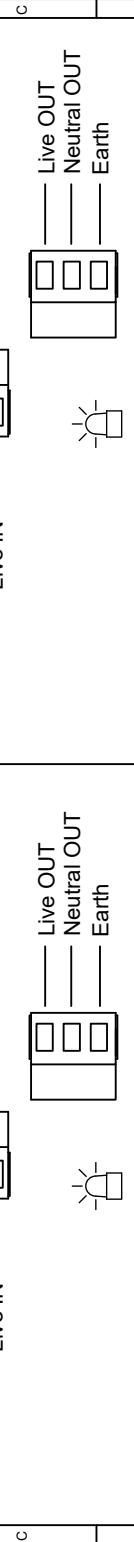
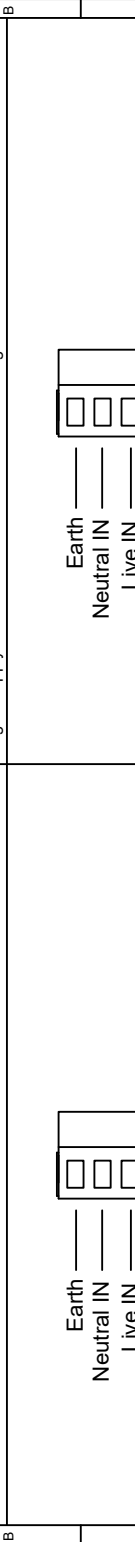
ALL DIMENSIONS IN MM IF IN DOUBT, ASK - DO NOT SCALE	A3
TITLED DL 112H AC COMBINED SOUNDER & LED WIRING DIAGRAMS	
SCALE	SHEET
NTS	1 OF 2
DRAWING NUMBER	D173-06-255



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ISSUE		MOD No	REASON - INITIAL - DATE		INTRODUCTION		RSR - 20/12/2021		
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**Independent Sounder & Beacon Activation (Remove Link Wires)**

**Single Stage Configuration**  
 Config.: 2a  
 Stage 1: Apply Power to Stage 1 Live & Stage 1 Neutral  
 Config.: 2b  
 Stage 1: Apply Power to Live & Neutral  
 Stage 2: Apply Power to Live & Neutral & connect Stage 2 to Common  
 Stage 3: Apply Power to Live & Neutral & connect Stage 3 to Common



DRAWING TO BS8888:2000. GEOMETRIC TOLERANCES TO ISO1101:1983 DIMENSIONAL TOLERANCES TO ISO2768:2013 ANGULAR DIMENSIONAL TOLS	DRAWN	DATE	SURFACE FINISH	WEIGHT (Kg)
	R.S. RAIT	20/12/2021	MATERIAL	
STANDARDS ALERT/ALARM RANGE	CHECKED	DATE	ALTERNATIVE MATERIAL	
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	R.N.POTTS	20/12/2021		

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 SOUNDER & LED WIRING DIAGRAMS

SCALE SHEET DRAWING NUMBER  
 NTS 2 OF 2 D173-06-255

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