

AB112LDA Alarm Horn Sounder & LED Beacon

The AB112LDA combines a compact high output 120dB(A) alarm sounder with a powerful multi-function L.E.D. beacon. Featuring 64 alarm tone frequencies and 4 remotely activated stages/channels.

The low current consumption and high SPL in a robust fire retardant enclosure ensure the AB112LDA is suitable for all general signalling applications. The alarm horn sounder & LED beacon may be connected from a single or separate supplies for simultaneous or independent operation. The DC voltage versions feature 6 user selectable synchronised flash modes including rotating, flashing and steady. An alternative second stage beacon mode can be remotely activated via a third wire (as can alternative alarm tones on the horn sounder) enabling an audible and visual communication of a two stage alarm condition.

Features

- Automatic synchronisation on multi-sounder system
- Synchronised flash rates
- Continuously rated
- Stainless steel fixings
- Unit can be mounted using external lugs or internal fixing positions
- Dual M20 or 1/2"NPT clearance cable entries
- Duplicate pluggable cable terminations - Class A
- Diode polarized for use in supervised circuits
- 64 alarm tone frequencies and 4 remotely activated alarm stages
- Available with custom tone configurations and frequencies
- 6 LED beacon modes including rotating and steady functions
- DC voltage units feature a second remotely selectable beacon mode stage
- Can be mounted in any orientation

Approvals

- UKCA
- CE
- EAC: CU TR 04/2011 CU TR 20/2011
- Russian Marine Register of Shipping



Specification

Alarm Horn:

Maximum output: High power level: 120dB(A) @ 1 m ±3dB
[111dB(A) @ 10ft/3m ±3dB]
Default power level: 117dB(A) @ 1 m ±3dB
[108dB(A) @ 10ft/3m ±3dB]

Nominal output: High power level: 118dB(A) @ 1m ±3dB
[109dB(A) @ 10ft/3m ±3dB]
Default power level: 114dB(A) @ 1m ±3dB
[105dB(A) @ 10ft/3m ±3dB]

No. of tones: 64 (UK00A / PFEER compliant)

No. of stages: 4

Volume control: Full range to 0dB(A)

Effective range: High power level: 214m/702ft @ 1KHz
Default power level: 153m/502ft @ 1KHz

In rush: 815mA within 4.0ms @ 24Vdc

Stage switching: Negative (common positive)

LED Beacon:

Light source: Array of 16 multi-function high power LEDs

Operating modes: 4 rotating configurations
4 flashing configurations
Steady mode for indicator / status applications

Peak/Effective Intensity cd: 19 cd* - measured ref. to I.E.S.

No. of stages: DC unit also features a remotely selectable
2nd and 3rd stage flash pattern.

LED/lens colours: Amber, Blue, Clear (white LEDs),
Green, Red & Yellow

General:

Ingress protection: IP65

Enclosure: High impact UL94 V0 & 5VA FR ABS/PC

Lens colour filter: Field replaceable UV stable PC

Terminals: 0.5 - 2.5mm² (20-14 AWG)

Line monitoring: Diode polarized for use in supervised circuits

Operating: -40 to +66°C [-40° to +151°F]

Storage: -40 to +70°C [-40° to +158°F]

Relative humidity: 95% at 20°C [68°F]

Weight DC: 2.00kg / 4.40lbs

Weight AC: 2.30kg / 5.06lbs

Part Codes

Variable: Identifier: Description:

Product type:	AB112LDA	Combined alarm horn sounder & LED beacon
Voltage:	DC024	24Vdc (10-50Vdc)
	AC230	90-253Vac 50/60Hz/120-253Vdc
Back box/cable entries: [e]	A	Back box with mounting lugs - 2 x M20, 1/2"NPT clearance
Stopping plug material: [m]	A	ABS
Equip. tag/Duty label: [s]	0	No equip. tag or Duty label
	1	316 (A4) St/St Equip. tag/Duty label
	2	Metalised Polyester Equip. tag/Duty label
Product version: [v]	A	RMRS, EAC, CE, UKCA
Product option: [o]	1	Standard product
	Z	Custom alarm tone software - contact E2S
	X	Custom configuration - contact E2S
	Y	Stage control Config. 4 or 8
Enclosure colour: [x]	G	Grey
	R	Red
	S	Special colour - contact E2S
Lens colour: [y]	A	Amber
	B	Blue
	C	Clear
	G	Green
	M	Magenta
	R	Red
	Y	Yellow

Alarm stage control:

Please review the installation manual and wiring schematics for remote stage control and EOL resistor monitoring configuration options:

Config. 1 or 5 [DC]: Factory default. Common negative, positive switching. Up to 4 Alarm Stages. EOL monitoring Alarm Stage 1 only

Config. 2 or 6 [DC]: User setting. Common positive, negative switching. Up to 4 Alarm Stages. EOL monitoring Alarm Stage 1 only

Config. 3 or 7 [DC]: User setting. Common negative, positive switching activation of Alarm Stages 1 & 2 with EOL on both stages. Reverse polarity monitoring

Config. 4 or 8 [DC]: Product option 'Y'. Independent activation of Alarm Stages 1 & 2 with EOL on both stages. Forward polarity monitoring

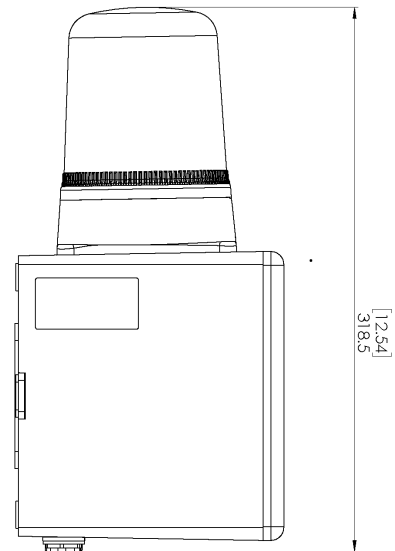
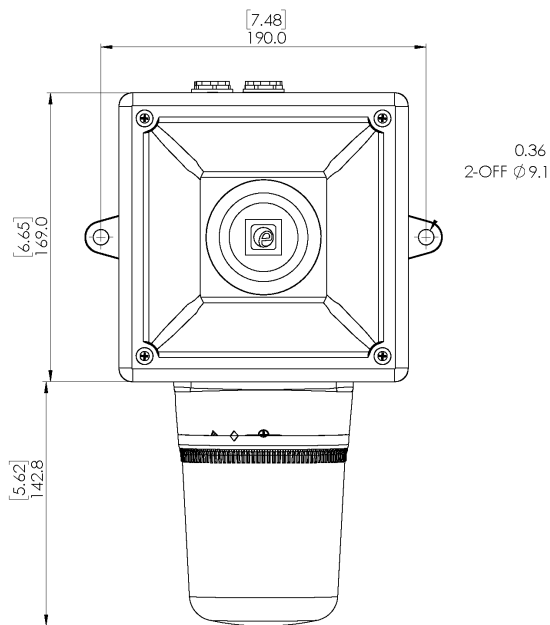
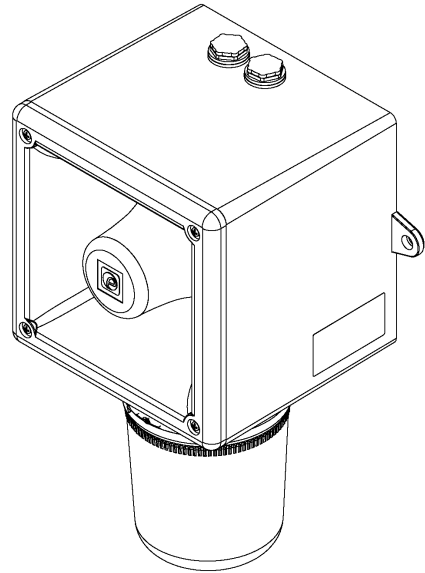
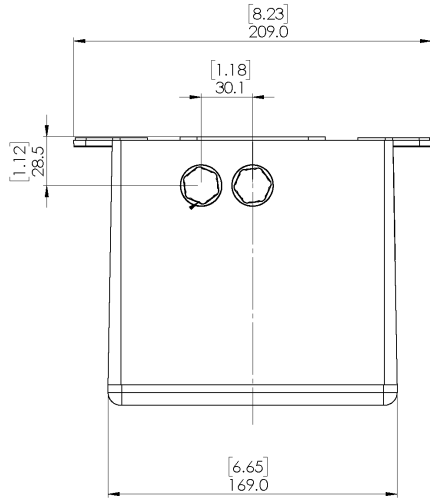
Config. 9 or 10 [AC]: Factory default. Up to 4 Alarm Stages. Stage 1 activated at power on. Stages 2, 3 and 4 via volt free contacts

Multi-function patterns

Mode:	Stage 1	Stage2 [DC only]	Stage3 [DC only]
1	All L.E.D's on	Alternate Side Flash 2Hz	Double Strike Flash 2Hz
2	Rotating: Slow1	Alternate Side Flash 2Hz	All L.E.D's on
3	Single Strike Flash 2Hz	Rotating: Fast 2	All L.E.D's on
4	Rotating: Fast 1	Single Strike Flash 2Hz	All L.E.D's on
5	Rotating: Slow 2	Double Strike Flash 1Hz	All L.E.D's on
6	Double Strike Flash 2Hz	Rotating: Fast 2	All L.E.D's on
7	Rotating: Fast 2	Double Strike Flash 2Hz	All L.E.D's on
8	Double Strike Flash 1Hz	Alternate Side Flash 2Hz	All L.E.D's on
9	Alternate Side Flash 2Hz	Rotating: Fast 2	All L.E.D's on

Current Consumption

Product Version:	Nominal Voltage:	Voltage Range:	Beacon Current:	Horn Default Power Level Current:	Horn High Power Level Current:
DC024	12Vdc	10-50Vdc	250mA	280mA	376mA
	24Vdc		250mA	225mA	430mA
	48Vdc		250mA	122mA	223mA
AC230	115Vac	90-253Vac 50/60Hz/120-253Vdc	90mA	100mA	173mA
	230Vac		50mA	65mA	105mA



Tone table

S 1	Description	S 2	S 3	S 4	S 1	Description	S 2	S 3	S 4
T 1	1000 Continuous - PFEER Toxic Gas	Any	T 2	T 44	T 33	800 (0.25s on, 1.00s off) Intermittent	Any	T 24	T 8
T 2	1200/500 @ 1Hz Sweeping - DIN / PFEER P.T.A.P.	Any	T 3	T 44	T 34	800 @ 2Hz (0.25s on, 0.25s off) - IMO code 3...	Any	T 24	T 8
T 3	1000 @ 0.5Hz (1s on, 1s off) Intermittent - P...	Any	T 2	T 44	T 35	1000 @ 1Hz (0.50s on, 0.50s off) Intermittent	Any	T 24	T 8
T 4	1.4KH-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s - NF C 48...	Any	T 24	T 1	T 36	2400 @ 1Hz (0.50s on, 0.50s off) Intermittent	Any	T 24	T 8
T 5	544(100mS)/440 (400mS) - NF S 32-001	Any	T 19	T 1	T 37	2900 @ 5Hz (0.10s on, 0.10s off) Intermittent	Any	T 24	T 8
T 6	1500/500 - (0.5s on , 0.5s off) x3 + 1s gap -...	Any	T 44	T 1	T 38	363/518 @ 1Hz (0.50s / 0.50s) Alternating	Any	T 8	T 19
T 7	500-1500Hz Sweeping 2 sec on 1 sec off - AS4428	Any	T 44	T 1	T 39	450/500 @ 2Hz (0.25s / 0.25s) Alternating	Any	T 8	T 19
T 8	500/1200Hz @ 0.26Hz(3.3s on, 0.5s off) - NEN ...	Any	T 24	T 35	T 40	554/440 @ 1Hz (0.50s / 0.50s) Alternating	Any	T 24	T 19
T 9	1000 (1s on, 1s off)x7 + (7s on, 1s off) - IM...	Any	T 34	T 1	T 41	554/440 @ 0.65Hz (0.76s / 0.76s) Alternating	Any	T 8	T 19
T 10	1000 (1s on, 1s off)x7 + (7s on, 1s off) - IM...	Any	T 34	T 1	T 42	561/760 @ 0.83Hz (0.60s / 0.60s) Alternating	Any	T 8	T 19
T 11	420(0.5s on, 0.5s off)x3 + 1s gap - ISO 8201 ...	Any	T 1	T 8	T 43	780/600 @ 0.96Hz (0.52s / 0.52s) Alternating	Any	T 8	T 19
T 12	1000(0.5s on, 0.5s off)x3 + 1s gap - ISO 8201...	Any	T 1	T 8	T 44	800/1000 @ 2Hz (0.25s / 0.25s) Alternating	Any	T 24	T 19
T 13	422/775 - (0.85 on, 0.5 off) x3 + 1s gap - ...	Any	T 1	T 8	T 45	970/800 @ 2Hz (0.25s / 0.25s) Alternating	Any	T 8	T 19
T 14	1000/2000 @ 1Hz - Singapore	Any	T 3	T 35	T 46	800/1000 @ 0.875Hz (0.57s / 0.57s) Alternating	Any	T 24	T 19
T 15	300 Continuous	Any	T 24	T 35	T 47	2400/2900 @ 2Hz (0.25s / 0.25s) Alternating	Any	T 24	T 19
T 16	440 Continuous	Any	T 24	T 35	T 48	500/1200 @ 0.3Hz (1.67s / 1.67s) Sweeping	Any	T 24	T 12
T 17	470 Continuous	Any	T 24	T 35	T 49	560/1055 @ 0.18Hz (2.73s / 2.73s) Sweeping	Any	T 24	T 12
T 18	500 Continuous - IMO code 2 (Low)	Any	T 24	T 35	T 50	560/1055 @ 3.3Hz (0.15s / 0.15s) Sweeping	Any	T 24	T 12
T 19	554 Continuous	Any	T 24	T 35	T 51	600/1250 @ 0.125Hz (4s / 4s) Sweeping	Any	T 24	T 12
T 20	660 Continuous	Any	T 24	T 35	T 52	660/1200 @ 1Hz (0.50s / 0.50s) Sweeping	Any	T 24	T 12
T 21	800 Continuous - IMO code 2 (High)	Any	T 24	T 35	T 53	800/1000 @ 1Hz (0.50s / 0.50s) Sweeping	Any	T 24	T 12
T 22	1200 Continuous	Any	T 24	T 35	T 54	800/1000 @ 7Hz (0.07s / 0.07s) Sweeping	Any	T 24	T 12
T 23	2000 Continuous	Any	T 3	T 35	T 55	800/1000 @ 50Hz (0.01s / 0.01s) Sweeping	Any	T 24	T 12
T 24	2400 Continuous	Any	T 20	T 35	T 56	2400/2900 @ 7Hz (0.07s / 0.07s) Sweeping	Any	T 24	T 12
T 25	440 @ 0.83Hz (0.60s on, 0.60s off) Intermittent	Any	T 44	T 8	T 57	2400/2900 @ 1Hz (0.50s / 0.50s) Sweeping	Any	T 24	T 12
T 26	470 @ 0.9Hz (0.55s on, 0.55s off) Intermittent	Any	T 44	T 8	T 58	2400/2900 @ 50Hz (0.01s / 0.01s) Sweeping	Any	T 24	T 12
T 27	470 @ 5Hz (0.10s on, 0.10s off) Intermittent	Any	T 44	T 8	T 59	2500/3000 @ 2Hz (0.25s / 0.25s) Sweeping	Any	T 24	T 12
T 28	544 @ 1.14Hz (0.43s on, 0.44s off) Intermittent	Any	T 24	T 8	T 60	2500/3000 @ 7.7Hz (0.65s / 0.65s) Sweeping	Any	T 24	T 12
T 29	655 @ 0.875Hz (0.57s on, 0.57s off) Intermittent	Any	T 44	T 8	T 61	800Hz Motor Siren	Any	T 24	T 12
T 30	660 @ 0.28Hz (1.80s on, 1.80s off) Intermittent	Any	T 24	T 8	T 62	1200Hz Motor Siren	Any	T 24	T 12
T 31	660 @ 3.3Hz (0.15s on, 0.15s off) Intermittent	Any	T 24	T 8	T 63	2400Hz Motor Siren	Any	T 24	T 12
T 32	745 @ 1Hz (0.50s on, 0.50s off) Intermittent	Any	T 24	T 8	T 64	Simulated Bell	Any	T 21	T 12