

AB121LDA Alarm Horn Sounder & LED Beacon

The AB121LDA combines a compact high output 126dB(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 AB121LDA 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 and third stage beacon mode can be remotely activated (as can alternative alarm tones on the horn sounder) enabling an audible and visual communication of a three 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 3 remotely activated beacon mode stages
- 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: 124dB(A) @ 1 m ±3dB
[115dB(A) @ 10ft/3m ±3dB]
Default power level: 121dB(A) @ 1 m ±3dB
[112dB(A) @ 10ft/3m ±3dB]

Nominal output: High power level: 121dB(A) @ 1m ±3dB
[112dB(A) @ 10ft/3m ±3dB]
Default power level: 118dB(A) @ 1m ±3dB
[109dB(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: 323m/1062ft @ 1KHz
Default power level: 221m/726ft @ 1KHz

In rush: 815mA within 4.0ms @ 24Vdc

Stage switching: Negative (common positive)

LED Beacon:

Light source: Array of 32 multi-function high power LEDs

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

Peak/Effective Intensity cd: 30 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: 2.30kg / 5.06lbs

Weight AC: 2.90kg / 6.39lbs

Part Codes

Variable: Identifier: Description:

Product type:	AB121LDA	Combined alarm horn sounder & LED beacon
Voltage:	DC024	24Vdc (10-50Vdc)
	AC115	115Vac 50/60Hz
	AC230	230Vac 50/60Hz
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

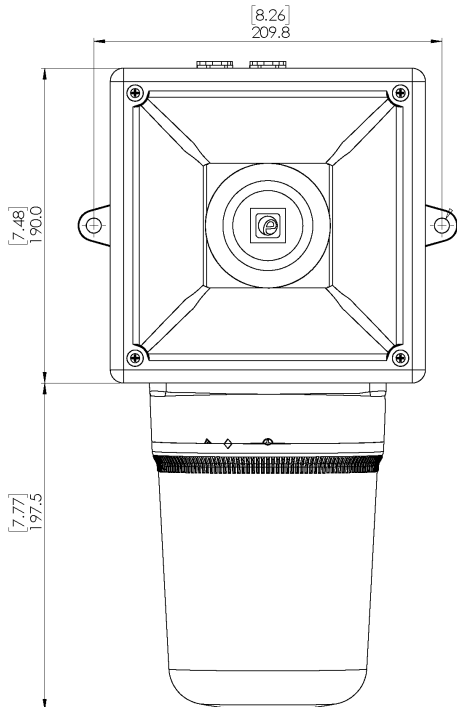
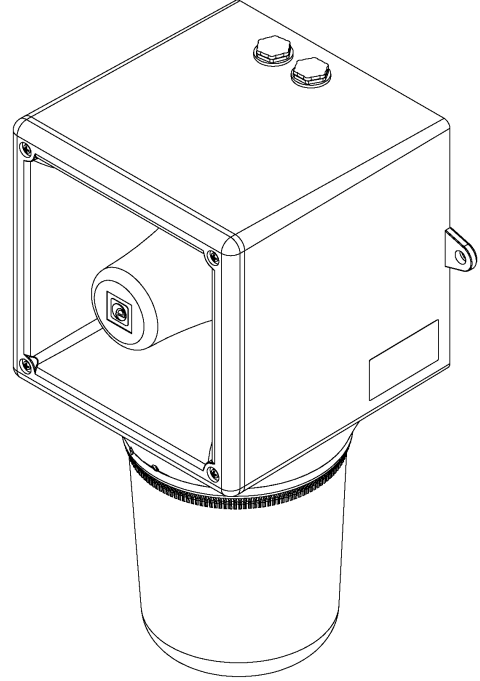
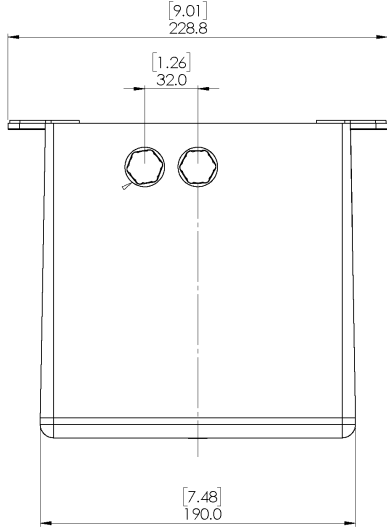
Config. 9 or 10 [AC]: Factory default. Up to 4 Alarm Stages. Stage 1 activated at power on. Stages 2, 3 and 4 via volt free contacts

Multi-function patterns

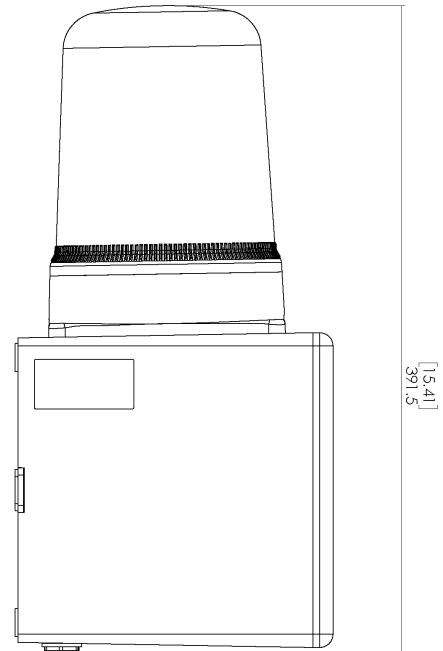
Mode:	Stage 1	Stage2 [DC only]	Stage3 [DC only]
1	All L.E.D's on	Alternate Side Flash 2Hz	Double Strike Flash 2Hz
2	Rotating: Slow1	Alternate Side Flash 2Hz	All L.E.D's on
3	Single Strike Flash 2Hz	Rotating: Fast 2	All L.E.D's on
4	Rotating: Fast 1	Single Strike Flash 2Hz	All L.E.D's on
5	Rotating: Slow 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	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	24Vdc 48Vdc	10-50Vdc	400mA 400mA	430mA 223mA	930mA 453mA
AC115	115Vac	103.5-126.5Vac 50/60Hz	140mA	173mA	340mA
AC230	230Vac	207-253Vac 50/60Hz	70mA	105mA	212mA



0.36
2-OFF Ø9.1



Tone table

S 1	Description	S 2	S 3	S 4
T 1	1000 Continuous - PFEER Toxic Gas	Any	T 2	T 44
T 2	1200/500 @ 1Hz Sweeping - DIN / PFEER P.T.A.P.	Any	T 3	T 44
T 3	1000 @ 0.5Hz (1s on, 1s off) Intermittent - P...	Any	T 2	T 44
T 4	1.4KH-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s - NF C 48...	Any	T 24	T 1
T 5	544(100mS)/440 (400mS) - NF S 32-001	Any	T 19	T 1
T 6	1500/500 - (0.5s on , 0.5s off) x3 + 1s gap - ...	Any	T 44	T 1
T 7	500-1500Hz Sweeping 2 sec on 1 sec off - AS4428	Any	T 44	T 1
T 8	500/1200Hz @ 0.26Hz(3.3s on, 0.5s off) - NEN ...	Any	T 24	T 35
T 9	1000 (1s on, 1s off)x7 + (7s on, 1s off) - IM...	Any	T 34	T 1
T 10	1000 (1s on, 1s off)x7 + (7s on, 1s off) - IM...	Any	T 34	T 1
T 11	420(0.5s on, 0.5s off)x3 + 1s gap - ISO 8201 ...	Any	T 1	T 8
T 12	1000(0.5s on, 0.5s off)x3 + 1s gap - ISO 8201...	Any	T 1	T 8
T 13	422/775 - (0.85 on, 0.5 off) x3 + 1s gap - ...	Any	T 1	T 8
T 14	1000/2000 @ 1Hz - Singapore	Any	T 3	T 35
T 15	300 Continuous	Any	T 24	T 35
T 16	440 Continuous	Any	T 24	T 35
T 17	470 Continuous	Any	T 24	T 35
T 18	500 Continuous - IMO code 2 (Low)	Any	T 24	T 35
T 19	554 Continuous	Any	T 24	T 35
T 20	660 Continuous	Any	T 24	T 35
T 21	800 Continuous - IMO code 2 (High)	Any	T 24	T 35
T 22	1200 Continuous	Any	T 24	T 35
T 23	2000 Continuous	Any	T 3	T 35
T 24	2400 Continuous	Any	T 20	T 35
T 25	440 @ 0.83Hz (0.60s on, 0.60s off) Intermittent	Any	T 44	T 8
T 26	470 @ 0.9Hz (0.55s on, 0.55s off) Intermittent	Any	T 44	T 8
T 27	470 @ 5Hz (0.10s on, 0.10s off) Intermittent	Any	T 44	T 8
T 28	544 @ 1.14Hz (0.43s on, 0.44s off) Intermittent	Any	T 24	T 8
T 29	655 @ 0.875Hz (0.57s on, 0.57s off) Intermittent	Any	T 44	T 8
T 30	660 @ 0.28Hz (1.80s on, 1.80s off) Intermittent	Any	T 24	T 8
T 31	660 @ 3.3Hz (0.15s on, 0.15s off) Intermittent	Any	T 24	T 8
T 32	745 @ 1Hz (0.50s on, 0.50s off) Intermittent	Any	T 24	T 8

S 1	Description	S 2	S 3	S 4
T 33	800 (0.25s on, 1.00s off) Intermittent	Any	T 24	T 8
T 34	800 @ 2Hz (0.25s on, 0.25s off) - IMO code 3...	Any	T 24	T 8
T 35	1000 @ 1Hz (0.50s on, 0.50s off) Intermittent	Any	T 24	T 8
T 36	2400 @ 1Hz (0.50s on, 0.50s off) Intermittent	Any	T 24	T 8
T 37	2900 @ 5Hz (0.10s on, 0.10s off) Intermittent	Any	T 24	T 8
T 38	363/518 @ 1Hz (0.50s / 0.50s) Alternating	Any	T 8	T 19
T 39	450/500 @ 2Hz (0.25s / 0.25s) Alternating	Any	T 8	T 19
T 40	554/440 @ 1Hz (0.50s / 0.50s) Alternating	Any	T 24	T 19
T 41	554/440 @ 0.65Hz (0.76s / 0.76s) Alternating	Any	T 8	T 19
T 42	561/760 @ 0.83Hz (0.60s / 0.60s) Alternating	Any	T 8	T 19
T 43	780/600 @ 0.96Hz (0.52s / 0.52s) Alternating	Any	T 8	T 19
T 44	800/1000 @ 2Hz (0.25s / 0.25s) Alternating	Any	T 24	T 19
T 45	970/800 @ 2Hz (0.25s / 0.25s) Alternating	Any	T 8	T 19
T 46	800/1000 @ 0.875Hz (0.57s / 0.57s) Alternating	Any	T 24	T 19
T 47	2400/2900 @ 2Hz (0.25s / 0.25s) Alternating	Any	T 24	T 19
T 48	500/1200 @ 0.3Hz (1.67s / 1.67s) Sweeping	Any	T 24	T 12
T 49	560/1055 @ 0.18Hz (2.73s / 2.73s) Sweeping	Any	T 24	T 12
T 50	560/1055 @ 3.3Hz (0.15s / 0.15s) Sweeping	Any	T 24	T 12
T 51	600/1250 @ 0.125Hz (4s / 4s) Sweeping	Any	T 24	T 12
T 52	660/1200 @ 1Hz (0.50s / 0.50s) Sweeping	Any	T 24	T 12
T 53	800/1000 @ 1Hz (0.50s / 0.50s) Sweeping	Any	T 24	T 12
T 54	800/1000 @ 7Hz (0.07s / 0.07s) Sweeping	Any	T 24	T 12
T 55	800/1000 @ 50Hz (0.01s / 0.01s) Sweeping	Any	T 24	T 12
T 56	2400/2900 @ 7Hz (0.07s / 0.07s) Sweeping	Any	T 24	T 12
T 57	2400/2900 @ 1Hz (0.50s / 0.50s) Sweeping	Any	T 24	T 12
T 58	2400/2900 @ 50Hz (0.01s / 0.01s) Sweeping	Any	T 24	T 12
T 59	2500/3000 @ 2Hz (0.25s / 0.25s) Sweeping	Any	T 24	T 12
T 60	2500/3000 @ 7.7Hz (0.65s / 0.65s) Sweeping	Any	T 24	T 12
T 61	800Hz Motor Siren	Any	T 24	T 12
T 62	1200Hz Motor Siren	Any	T 24	T 12
T 63	2400Hz Motor Siren	Any	T 24	T 12
T 64	Simulated Bell	Any	T 21	T 12