

AB121STR Alarm Horn Sounder & Xenon Strobe

The AB121STR combines a heavy duty 126dB(A) alarm sounder with a powerful 15J Xenon strobe warning beacon. Featuring 64 alarm tone frequencies and 4 remotely activated stages/channels.

Low current consumption and high SPL in a outdoor rated robust enclosure ensure the AB121STR is suitable for all general signalling applications. Designed to withstand the harshest of environments the AB121STR employs the latest in reliable D Class amplifier technology for superior sound output with low current consumption. The alarm horn sounder & rotating halogen beacon may be connected from a single or separate supplies for simultaneous or independent operation. The Xenon beacon component features an automatically synchronised flash rate of 1Hz and user selectable 1.5Hz (90 flashes per minute) and double-strike flash rates.

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
- 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)

Xenon Beacon:

Energy: 15 Joules

Flash rate: 1Hz (60 fpm)

DC units: Optionally 1.5Hz
& double strike

Synchronisation: 1Hz flash rate automatically synchronised

Peak Candela: 1,500,000 cd - calculated from energy (J)

Effective Intensity cd: 750 cd - calculated from energy (J)

Peak Candela: 94,790 cd* - measured ref. to I.E.S.

Effective Intensity cd: 500 cd* - measured ref. to I.E.S.

Lens colours: Amber, Blue, Clear, Green, Red & Yellow

Tube life: Emissions are reduced to 70% after 5 million flashes

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: | AB121STR | Combined alarm horn sounder & Xenon strobe |
| Voltage: | DC024 | 24Vdc (20-28Vdc) |
| | DC048 | 48Vdc (42-54Vdc) |
| | 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

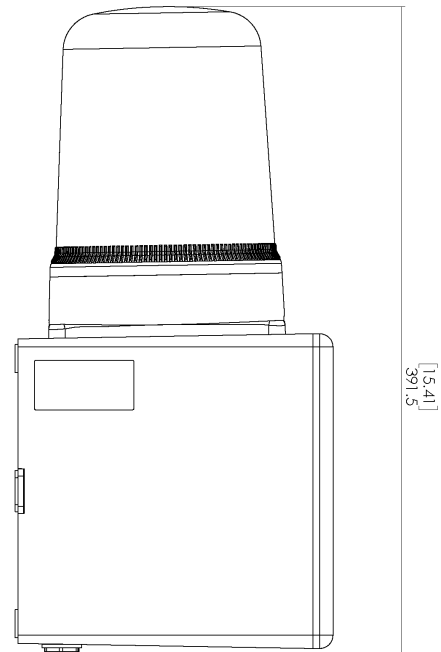
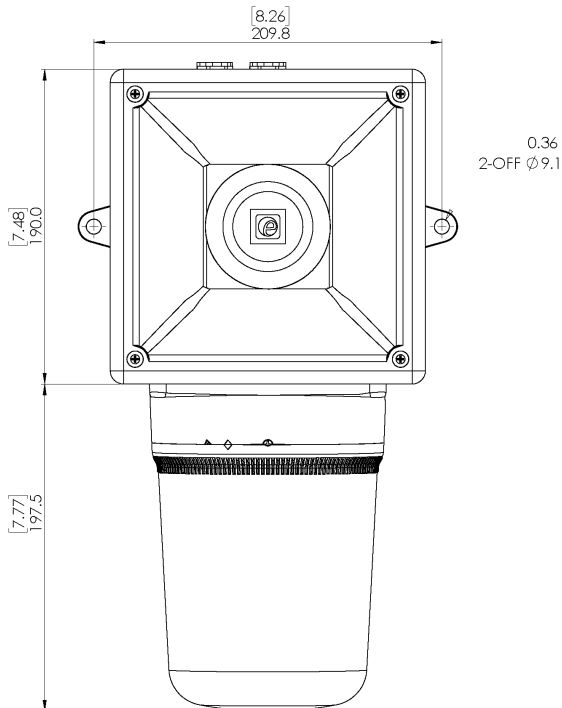
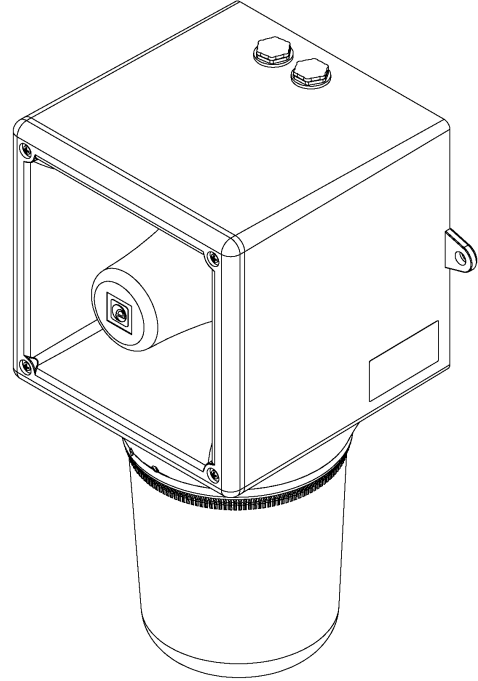
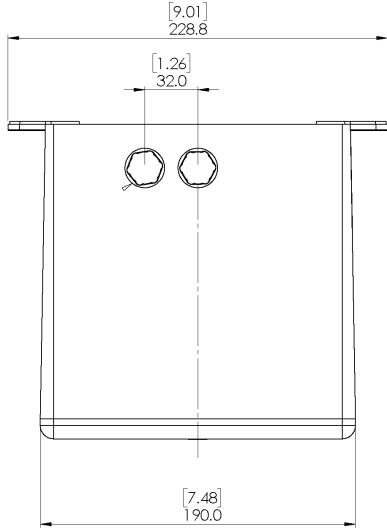
Config. 3 or 7 [DC]: User setting. Common negative, positive switching activation of Alarm Stages 1 & 2 with EOL on both stages. Reverse polarity monitoring

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

Current Consumption

| Product Version: | Nominal Voltage: | Voltage Range: | Beacon Current: | Horn Default Power Level Current: | Horn High Power Level Current: |
|------------------|------------------|------------------------|-----------------|-----------------------------------|--------------------------------|
| DC024 | 24Vdc | 20-28Vdc | 870mA | 430mA | 930mA |
| DC048 | 48Vdc | 42-54Vdc | 480mA | 223mA | 453mA |
| AC115 | 115Vac | 103.5-126.5Vac 50/60Hz | 400mA | 173mA | 340mA |
| AC230 | 230Vac | 207-253Vac 50/60Hz | 225mA | 105mA | 212mA |



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 |