A121 Alarm Horn Sounder

The A121 is a very high output 124dB(A) automatically synchronised alarm horn sounder. Globally approved for fire, marine and general signalling applications. Featuring 64 alarm tone frequencies and 4 remotely activated stages/channels.

Low current consumption and high SPL in a outdoor rated enclosure ensure the A121 is suitable for all applications including fire, security and process control. Designed to withstand the harshest of environments. Constructed from lightweight, impact and fire resistant ABS, the A121 employs the latest in reliable D Class amplifier technology for superior sound output with low current consumption. The A121 is a member of the versatile AlertAlarm family of industrial alarm horn sounders – also available with Xenon, AL121X or LED beacons, AL121H.

Features

- Automatic synchronisation
- Continuously rated
- Dual M20 or 1/2"NPT clearance cable entries
- Duplicate pluggable cable terminations – Class A
- Ingress protection IP66 Type 4/4X/13/3R
- Conformal coated (tropicalised) electronics
- 64 alarm tone frequencies and 4 remotely activated alarm stages
- Available with custom tone configurations and frequencies
- Diode polarized for use in supervised circuits



Approvals

- UL: UL464
- cUL: CSA C22.2 No 205-17
- ULC: CAN/ULC-S525
- UL EU: (EN54-3) UL-EU-01153-CPR
- CPR 305/2011: 2821-CPR-0108
- MED 2020/1170: MEDB000074G
- DNV GL-CG-0339: TAA00002ZU
- EAC CU TR 043/2017: B.00291/21
- EAC: RU D-GB.GA05.B.12595-20
- RMRS Marine: No. 19.00193.278
- CE, UKCA



Specification

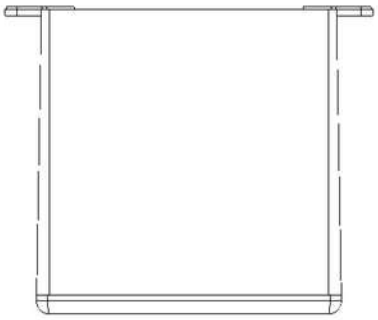
Maximum output:	High power level: 124dB(A) @ 1 m ±3dB [115dB(A) @ 10ft/3m ±3dB] Default power level: 121dB(A) @ 1 m ±3dB [112dB(A) @ 10ft/3m ±3dB]
Nominal output:	High power level: 121dB(A) @ 1m ±3dB [112dB(A) @ 10ft/3m] ±3dB Default power level: 118dB(A) @ 1m ±3dB [109dB(A) @ 10ft/3m ±3dB]
No. of tones:	64 (UKOOA / 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
Voltages DC:	11.5-54V dc
Voltages AC:	100-240V ac 50/60Hz
In rush:	815mA within 4.0ms @ 24Vdc
Stage switching:	Negative, positive, voltage free
Ingress protection:	IP66 Type 4/4X/13/3R
Enclosure:	High impact UL94 V0 & 5VA FR ABS
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:	99%
Vibration test:	35Hz for a duration 4Hr (UL464)
Jarring test:	3ft/lb Energy (UL464)
Impact test:	3x 5lb (UL464)
MTBF DC:	93.92 years / 822,706 hours – MIL 217
MTBF AC:	46.66 years / 408,508 hours – MIL 217
Weight DC:	2.10kg / 4.62lbs
Weight AC:	2.70kg / 5.94lbs

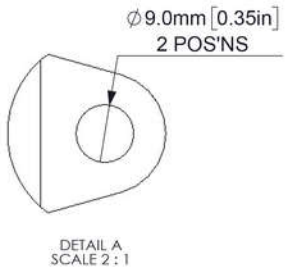
Part Codes

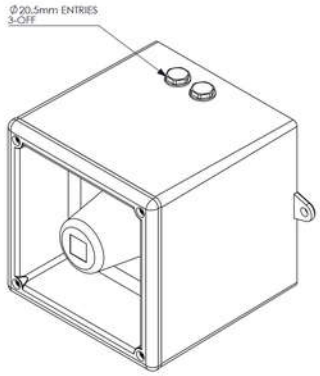
Variable:	Identifier:	Description:
Product type:	A121	Alarm horn sounder
Voltage:	DC024 AC230	11.5-54Vdc 100-240Vac 50/60Hz
Back box/cable entries: [e]	A	Back box with mounting lugs – 2 x M20, 1/2"NPT clearance entries
Stopping plug material: [m]	A	ABS
Equip. tag/Duty label: [s]	0 1 2	No equip. tag or Duty label 316 (A4) St/St Equip. tag/Duty label Metalised Polyester Equip. tag/Duty label
Product version: [v]	A	UL/cUL, ULC, CPR, MED, DNV, RMRS, EAC, CE, UKCA
Product option: [o]	1 X Z	Standard product Custom configuration – contact E2S Custom alarm tone software – contact E2S
Enclosure: [x]	R G	Red (RAL 3000) Grey (RAL7038)

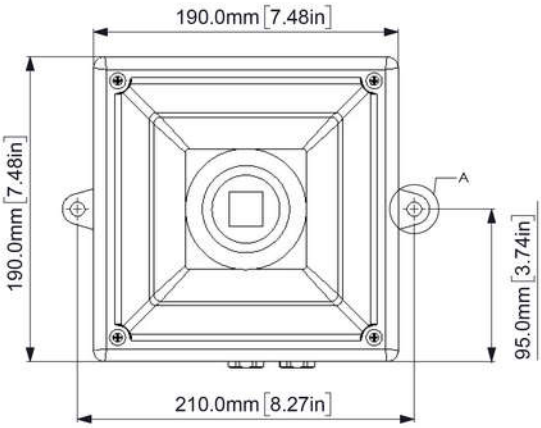
Current Consumption

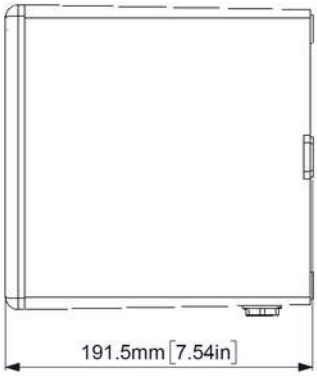
Product Version:	Nominal Voltage:	Voltage Range:	Default Power Level Current:	High Power Level Current:
DC024	12dc 24Vdc 48Vdc	11.5-54Vdc	376mA 430mA 223mA	440mA 930mA 453mA
AC230	115Vac 50/60Hz 230Vac 50/60Hz	100-240Vac	173mA 105mA	340mA 212mA

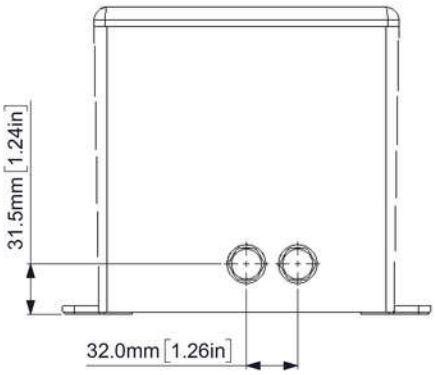












Tone table

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
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

No liability is accepted for any consequence of the use of this document. The technical specification of this unit is subject to change without notice due to our policy of continual product development. All dimensions are approximate. This unit is sold subject to our standard conditions of sale, a copy of which is available on request.