D2xC2XH1 Horn & Strobe UL464 & UL1971 - Auto Sync

The D2xC2XH1 is a 18.18cd auto-synchronizing alarm horn & Xenon warning light / beacon tested to UL464 & UL1971 suitable for public mode fire alarm, ADA compliant, hearing impaired applications.

Multiple D2xC2XH1 units will auto-synchronize when powered from the same power source removing the need for any additional sync modules in the circuit. The horn & strobe can be powered from the same source, simplifying installation and reducing cabling costs. The unit is UL/cUL & ULC approved for Class I Div 2, Class II Div 2, Class I Zone 2/22 as well as IECEx and ATEX certified for Zone 2 and 22 hazardous area applications.

Features

- Public mode fire use UL464/UL1971 & CAN/ULC-S525/S526
- Auto-synchronized for over 2 hours per UL1971
- 18.18 eff. candela – UL1971 Public mode fire
- 107dB(A) @ 10ft/3m max. sound output – UL464
- 64 alarm tones, 4 remotely selectable alarm stages/channels
- Ultra low combined operating current of 405mA
- In rush limiting circuit – 2.2A for 9ms
- Choice of three UL1971 tested flash rates: 1Hz, 1.3Hz, 1.5Hz
- Marine grade aluminum enclosure
- Ingress protection Type 4/4X/3R/13, IP66
- High impact resistant Borosilicate glass lens
- Duplicate, pluggable cable terminations
- Supervisory diode
- Dual 1/2"NPT entries
- Supplied with haz loc rated stopping plugs/adaptors



Approvals

- UL File ref: E230764
- IECEx cert: IECEx ULD 14.0004X
- ATEX cert: DEMKO 14 ATEX 4786493904X
- CSFM certificate: 7136-2279:0501

Coding

- NEC / CEC:
  Class I Div 2 ABCD T3 Ta -40°C to +50°C
  Class II Div 2 FG T6 Ta -40°C to +50°C
  Class III Div 1&2 Ta -40°C to +50°C
- NEC:
  Class I Zone 2 AEx ec IIC T3 Gc Ta -40°C to +50°C
  Zone 22 AEx tc IIIB T75°C Dc Ta -40°C to +50°C
- CEC:
  Class I Zone 2 Ex ec IIC T3 Gc X Ta -40°C to +50°C
  Zone 22 Ex tc IIIC T75°C Dc Ta -40°C to +50°C
- IECEx & ATEX:
  II 3G Ex ec IIC T3 Gc Ta -40°C to +50°C
  II 3D Ex tc IIIC T75°C Dc Ta -40°C to +50°C
  See product manual for full voltage specific coding.



Specification

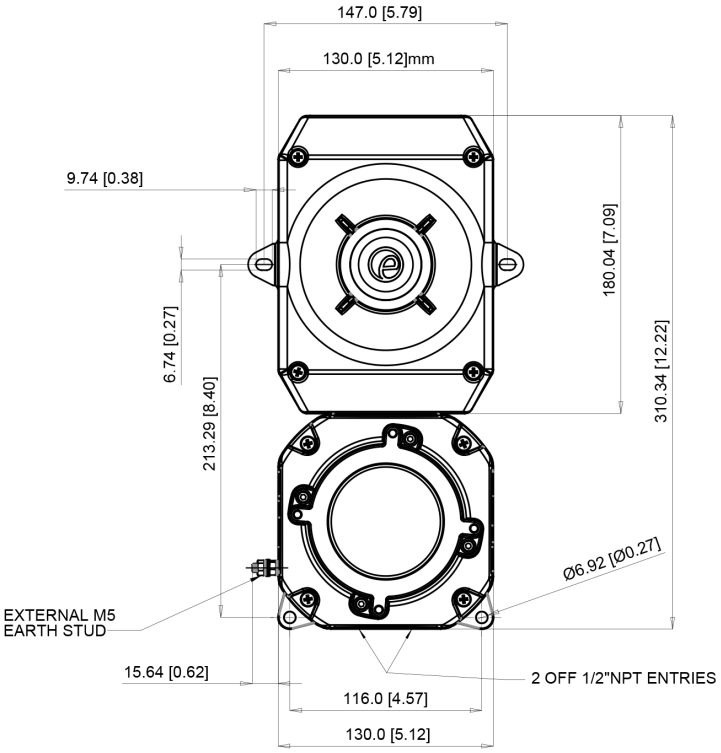
Alarm Horn Sounder:	
Maximum output:	116dB(A) @ 1 metre [107dB(A) @ 10ft/3m]
Nominal output:	112dB(A) @ 1m +/- 3dB – Tone 2 [103dB(A) @ 10ft/3m]
No. of tones:	64 (UKOOA / PFEER compliant)
No. of stages:	4
Volume control:	Adjustable -12dB(A) [Tone 2]
Effective range:	125m/410ft @ 1KHz
Synchronisation:	Automatic synchronisation
Xenon Strobe Beacon/Light:	
Source:	Xenon Strobe
Modes:	1Hz flash (60 fpm)
Eff. Intensity cd:	18.18 cd UL1971 Public mode fire
Peak Candela:	500,000 cd – calculated from energy (J)
Effective cd:	250 cd – calculated from energy (J)
Synchronisation:	Flash rates synchronise for a minimum of 2 hours per UL1971
General:	
Voltage:	24V dc [20-28V dc]
In rush:	2.2A for 9ms
Ingress protection:	IP rating per EN60529:IP66 Type rating per UL50E/NEMA250:4/4X/3R/13
Enclosure material:	Marine grade LM6 aluminum alloy
Enclosure finish:	Chromate & powder coated finish ISO 12944-6 CX, C5VH & C5H
Enclosure colour:	Red
Lens material:	Borosilicate glass
Cable entries:	2 × 1/2"NPT
Stopping plugs:	Nickel Plated Brass plugs included
Ground/Earth stud:	M5
Terminals:	0.5 – 2.5mm² (20-14 AWG)
Line monitoring:	Blocking diode included EOL can be factory fitted
Operating temp:	-40 to +50°C [-40° to +122°F]
Storage temp:	-40 to +70°C [-40° to +158°F]
Relative humidity:	99% – tropicalised/conformal coated electronics
Weight:	4.00kg/8.82lbs

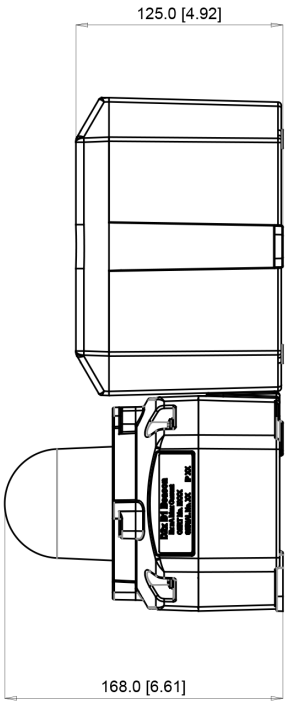
Part Codes

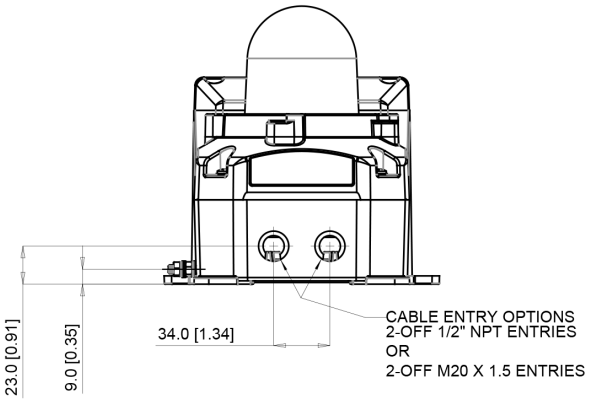
Part Code:	Identifier:	Description:
Product type:	D2xC2XH1	Combination Alarm Horn & Xenon Beacon / Warning Light
Voltage:	DC024	24V dc (20-28Vdc)
Cable entries: [e]	B	2 × 1/2" NPT
Stopping plug material: [m]	N S	Nickel plated brass Stainless Steel
Guard material & tag: [s]	0 3 5	No lens Guard No lens guard with Equip. Tag No lens guard with Equip. Tag & Duty Label
Product version: [v]	H	UL, cUL, ULC, IECEx, ATEX, CSFM – UL1971
Product option: [o]	1 X	Standard product Custom configuration – contact E2S
Enclosure colour: [x]	R	Red
Lens colour: [y]	C	Clear
Accessories:		
SP65-0001-A4		Pole Mount Bracket Kit St/St A4 (316)
SP65-0003-A4		Sunshade – St/St A4 (316)

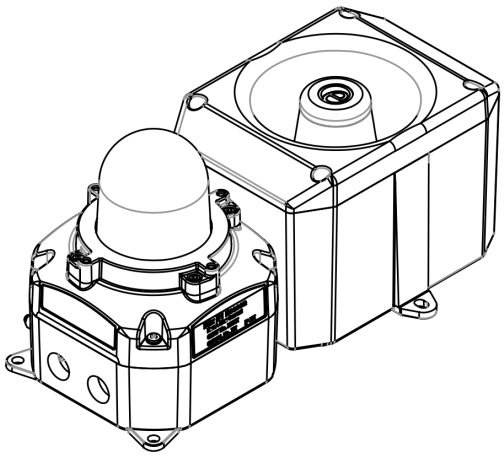
Current Consumption

Nominal Voltage:	In rush:	Voltage range:	Nominal operating current:
24V dc	2200mA <9.0ms	20-28V dc	405mA









Tone table

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