

D2xC4 Haz Loc LED/Xenon & Horn Alarm Bar

The D2xC4 is an integrated alarm bar assembly comprised of either high output LED or Xenon Strobe beacons and alarm horn sounder from the D2x family of globally approved Class I/II Div 2 and Zone 2/22 audible and visual warning signals.

The compact, close coupled alarm bar assembly is ideal for applications where combined audible and visual signals are required to provide multiple warnings. The Ex nA, non-sparking, D2xC4 features a preinstalled cable loom with a large termination area in the integrated junction box. The multi-stage alarm horn sounder can be configured to activate with the a visual signal.

Features

- Private mode fire use & General signaling UL1638
- Globally approved to UL, cUL, IECEx and ATEX
- Available with LED and/or Xenon Strobe beacons
- Integrated high output alarm horn sounder up to 116dB(A)
- 4 remotely selectable alarm stages/channels
- Choice of 64 alarm tone frequencies
- Automatic synchronisation on multi-sounder system
- Mounted on a stainless steel back plate
- Factory assembled with integrated cable loom
- Junction box
- Close coupled assembly
- LM6 marine grade aluminium enclosure
- Optional stainless steel duty labels
- Ingress protection Type 4/4X/3R/13, IP66
- High impact resistant glass lenses
- Stainless steel lens guards as standard
- Field replaceable lens colour filters
- Dual cable entries
- Supplied with haz loc rated stopping plugs

Approvals

- UL/cUL File ref: E245313, E230764
- IECEx certificate: IECEx ULD 14.0004X
- ATEX certificate: DEMKO 14 ATEX 4786493904X
- CSFM listing: 7300-2279:0500, 7136-2279:0503
- NEC / CEC: Class I Div 2 ABCD, Class II Div 2 EFG
- NEC: Class I Zone 2 AEx nA IIC, Zone 22 AEx tc IIIC
- CEC: Class I Zone 2 Ex nA IIC, Zone 22 Ex tc IIIC
- IECEx & ATEX: Zone 2 II 3G Ex nA IIC, Zone 22 II 3D Ex tc IIIC
- See web page and component data sheets for full coding.



Specification

Beacon Option: D2xB1LD2 LED Beacon

Source: Array of 4 x High Power Cree® LED's

Eff. Intensity cd: 73.4 cd UL1638 Private mode fire

Eff. Intensity cd: 180 cd UL1638 General signaling

Peak Intensity cd: 300,000 cd

Eff. Intensity cd: 87 cd High power steady

LED life: >60,000 hours

Synchronization: Synchronized 1Hz, 1.3Hz and 2Hz flash rates

In-rush: 1.88A for 2ms @ 24V dc

Beacon Option: D2xB1X10 10J Xenon Strobe Beacon

Energy: 10 Joules (10Ws)

Flash rate: 1Hz (60 fpm)

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

Eff. Intensity cd: 500 cd – calculated from energy (J)

Peak Candela: 101,784 cd* – measured ref. to I.E.S.

Eff. Intensity cd: 288.8 cd* – measured ref. to I.E.S.

Beacon Option: D2xB1X05 5J Xenon Strobe Beacon

Energy: 5 Joules (5Ws)

Flash rate: 1Hz (60 fpm)

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

Eff. Intensity cd: 250 cd – calculated from energy (J)

Peak Candela: 33,410 cd* – measured ref. to I.E.S.

Eff. Intensity cd: 94.78 cd* – measured ref. to I.E.S.

Alarm Horn Option: D2xS1 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 (UK00A / PFEER compliant)

No. of stages: 4

Volume control: Adjustable -12dB(A) [Tone 2]

Effective range: 125m/410ft @ 1KHz

Stage switching: DC units: negative or positive
AC units: common supply line

In-rush: 1.8A @ 24V dc

Genera info: Common component features:

Ingress protection: IP rating per EN60529:IP66
Type rating per UL50E/NEMA250:4/4X/3R/13

Enclosure matl: Marine grade LM6 aluminum alloy

Colour: Red (RAL3000), Grey (RAL7038)

Lens material: Borosilicate glass dome & PC colour filter

Guard: Stainless Steel dome guard as standard

Cable entries: 2 x M20x1.5 or 2 x 1/2"NPT

Stopping plugs: Brass/Nickel Plated/Stainless Steel plugs included

Grnd/Earth stud: M5

Terminals: 0.5 – 2.5mm² (20-14 AWG)

Line monitoring: Blocking diode included
EOL can be factory fitted

Certified temp: -40 to +50°C [-40° to +122°F]

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

Relative humidity: 95%

Part Codes

Part Code: Ident.: Description:

Product type: D2xC4 Integrated Alarm Bar of LED and/or Xenon Strobe Beacons with Alarm Horn Sounder

Junction box & back plate: J1 Junction box with 12 way BK12 terminal
J2 Junction box with 12 way DIN rail terminals

Beacon 1 For each beacon select the numeric identifier plus color character as follows:
Beacon 2
1 = D2xB1X05 5J Xenon Beacon
2 = D2xB1X10 10J Xenon Beacon
5 = D2xB1LD2 LED Beacon
A=Amber, B=Blue, C=Clear, G=Green, M=Magenta, R=Red, Y=Yellow
e.g. 5R = D2xB1LD2 LED Beacon with Red lens

Alarm horn: S1 D2xS1 Alarm Horn Sounder

Voltage: AC115 115-120V ac 50/60Hz
AC230 220-230V ac 50/60Hz
DC024 24V dc

Cable entries: [e] A 2 x M20x1.5
B 2 x 1/2" NPT
C 2 x 3/4" NPT – adaptors
D 2 x M25x1.5 – adaptors
E 1 x 1/2" NPT
F 1 x 3/4" NPT – adaptor
G 1 x M25x1.5 – adaptor

Stopping plug material: [m] B Brass
N Nickel Plated
S Stainless Steel

Lens guard matl. & tag: [s] 1 A2 304 Stainless Steel with Equip. Tag
2 A4 316 Stainless Steel with Equip. Tag
3 A2 304 St/St with Equip. Tag & Duty Labels
4 A4 316 St/St with Equip. Tag & Duty Labels

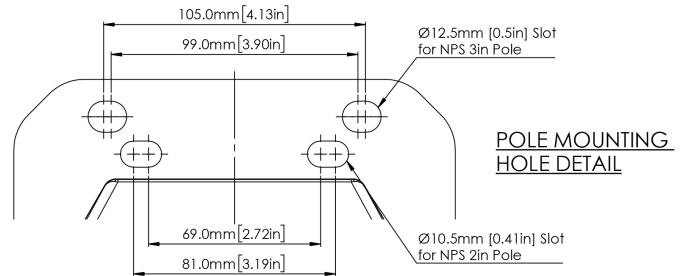
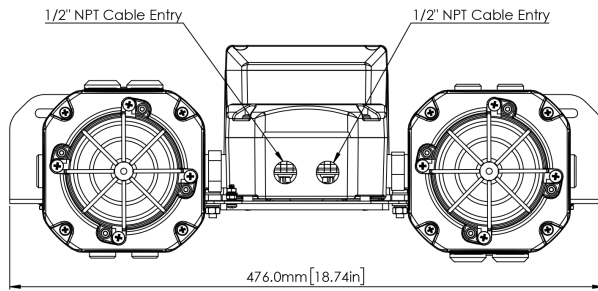
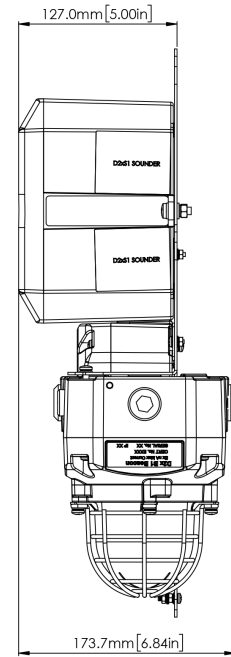
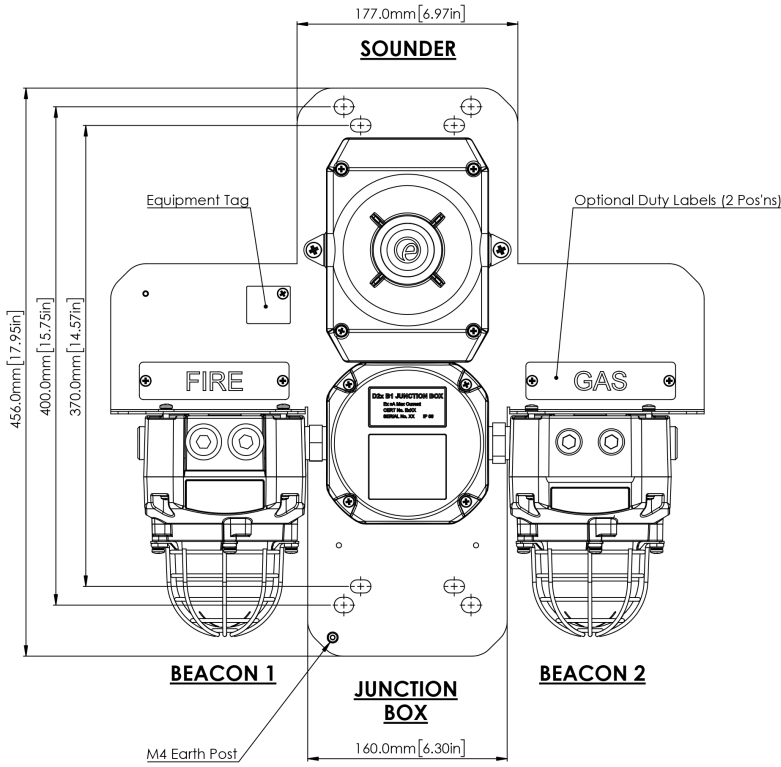
Version: [v] A1 UL, cUL, IECEx & ATEX
T1 UL, cUL, IECEx & ATEX – Tropicalised
W1 UL, cUL, IECEx & ATEX – Special wiring
Z1 UL, cUL, IECEx & ATEX – Special software
V1 Custom configuration

Enclosure: [x] G Grey RAL7038
R Red RAL3000

Example: D2xC4 J1 5G 5A 5R S1 DC024 B N 1 A1 G
D2xC4 alarm bar with a junction box with DIN rail terminals and 2 x D2xB1LD2 LED beacons with Blue and Yellow lenses, D2xS1 alarm horn sounder, 2 x 1/2" NPT entries with nickel plated brass stopping plugs and a grey enclosure

Current Consumption

| Voltage & Range: | Frequency: | D2xB1LD2 LED Beacon Component Nominal Current: | D2xB1X10 10J Xenon Beacon Component Nominal Current: | D2xB1X05 5J Xenon Beacon Component Nominal Current: | D2xS1 Alarm Horn Sounder Component Nominal Current: |
|------------------|------------|---|---|--|--|
| 24V dc | | 99.5mA | 560mA | 275mA | 313mA |
| 115-120Vac | 50/60Hz | 68mA | 185mA | 80mA | 90mA |
| 220-230Vac | 50/60Hz | 70mA | 107mA | 30mA | 52mA |



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