

# Fire: Explosion proof Hazardous location and Industrial signals



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warning signals

Model#		UL (Fire listed)	ULC (Fire listed)	FM approval	cULs Listed	IECEX ATEX	NEC Listing	CEC Listing	MEMA UL50E	UL1971	UL1638	UL464	UL1480	Page Number
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**Combination Alarm Horns & Beacons/Lights**

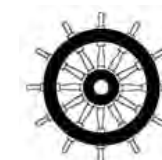
D1xC1X05R/F	Horn & Xenon	•			•	•	CI/II D1	CI Zone 1/20	4/4X/3R/13		•	•		8
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IS-mC1	Horn & LED			•			CI D1	CI Zone 0	IP65					16

**E2S is the world's leading independent warning signals manufacturer with over 27 years of engineering expertise. Our worldwide approved products combine the latest technology with leading industrial design and build quality to deliver signals you can depend on.**

Working together with system integrators, engineers and end users in the fire sector we continuously innovate to develop the most comprehensive range of signaling products that are specifically designed for use in fire applications. Our product designs offer substantial benefits such as ease of interface, quick installation, flexible customization and reliable performance. This is why our clients around the world trust E2S to protect their people and promote safety in their processes.

The E2S global network of distributors and partners, sustained by our highly efficient operations and logistics, provide fast product delivery and excellent local customer support.

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# D1x Pull Stations

Class I/II Div 1/2



D1xCP1-PS

## D1xCP1-PS Explosion Proof Manual Pull Stations.

The D1xCP1-PS is a cast aluminum manual alarm pull station available in a dual action configuration. These explosion proof stations have a DPDT switch mounted in heavy duty cast aluminum housings, complete with screw terminals that accept #22 to 12AWG field wiring.

The solid design and rugged construction of the D1xCP1-PS station makes it ideal for use in harsh operating environments and hazardous locations. The device has a NEMA type 4X rating for operation in extreme weather conditions and plant wash down applications. It is also UL Marine listed for operation in highly corrosive environments.

The D1xCP1-PS dual action model features a "PUSH" bar that moves inward, allowing the "PULL" handle to be grasped and operated by a single hand.

### Range info

**Material**  
Aluminum

**Ingress Protection**  
Type: 4X

**Cable entries**  
2 x 3/4"NPT

### Approvals

Class I, Div. 1, Group B, C and D  
Class II, Div. 1, Group E, F and G  
Class III, Div. 1 (FM)  
Ta: -40° to 150°F

### Pull Station

Ref: 1-24-110

#### D1xCP1-PS Pull Station

Double Pole, Double Throw (DPDT)  
1 Amp @ 30 VDC  
10 Amp @ 120 VAC  
UL Marine Listed  
5/16"h x 3 1/4"w x 3 7/8"d



# GNECP7 Push Buttons

Class I/II Div 2, Class I Zone 1, Zone 21



GNECP7-PB



GNECP7-PT / GNECP7-PM

## GNECP7-PT/PM/PB Hazardous Location Manual Push Buttons.

The GNECP7-PT is a UL38 fire alarm push button in a robust, corrosion proof GRP (glass reinforced polyester) enclosure. The push button mechanism, manufactured from stainless steel, is protected from accidental activation by a latching lift flap. Once activated, the push button is reset using a special tool.

Available in single switch (SPDT) or double switch (DPDT) configurations the enclosure features a large wiring area provided with either DIN rail terminals or the innovative E2S termination PCBA with multiple connectors for EOL and series resistors and diodes - all of which can be field installed or modified.

Globally approved by UL to NEC, CEC, ATEX and IECEx codes the GNECP7 family of manual alarm call points can be installed in all Class I/II Div 2 hazardous location and Class I Zone 1 and Zone 21 applications anywhere in the world.

The GNECP7-PM model offers a momentary switch action whilst the GNECP7-PB requires a twist and push action to activate.

### Range info

**Material**  
GRP (Glass Reinforced Polyester)

**Ingress Protection**  
IP66, Type 4/4x/3R/13

**Cable entries**  
3 x cable entries  
Available as 3/4"NPT, 1/2"NPT, M20 or M25

### Approvals

Class I, Div. 2, Group A, B, C and D  
Class II, Div. 1, Group F and G  
Class III, Div. 2  
Class I Zone 1  
Zone 21  
Ta: -55° to 70°C (-67° to + 158°F)

### Pull Station

Ref: 1-24-160

**GNECP7-PT** Push Button - Tool reset

Ref: 1-24-170

**GNECP7-PM** Push Button - Momentary

Ref: 1-24-180

**GNECP7-PB** Push Button - Momentary



# D1x Visual Signals Class I/II Div 1, Zone 1, Zone 21



D1xB2XH1/XH2 - surface mounting



D1xB2XH1/XH2



D1xB2XH1/XH2 - pendant mounting



D1xB2XH1/XH2 - bracket mounting allows beacon to be rotated in any orientation

## The D1x family from E2S is the brightest UL1971/UL1638 signal available for Class I/II Div 1 or Zone 1/21 explosion proof applications.

The D1xB2XH2 model has a UL1971 light output of over 190 candelas with an operating current of only 1.16A and the D1xB2XH1 model achieves over 86 candelas whilst drawing only 635mA.

The lightweight, marine grade, enclosure has been designed to create the optimal fire signal. Its innovative construction includes both conduit or surface mounting capabilities - without the need for any additional accessories. For complete flexibility an optional stainless-steel bracket enables the light to be rotated and positioned in any orientation.

Suitable for Class I environments, including all gas groups A, B, C & D, as well as Class II. The extended operating temperature range of up to -67° to +176°F ensures the D1xB2 beacons can be employed in the most arduous of applications.

The unique E2S automatic flash synchronization feature removes the need for additional synchronization modules. When combined with the innovative in-rush limiting electronic circuit design and low operating current, more D1xB2 visual signals can be installed per circuit - simplifying system design and reducing cost.

### Range Info:

#### Enclosure Material

Corrosion proof, marine grade, copper free LM6 aluminum, chromated and powder coated.

#### Enclosure color

Red (RAL3000)

#### Ingress Protection

Type 4, 4X, 13, 3R, IP67

#### Fixings

Stainless steel.

#### Mounting

Integrated pendant and surface mount capability. Optional ratchet adjustable stainless steel 'U' bracket.

#### Cable entries

1 x 3/4" NPT rear conduit entry  
2 x 3/4" NPT side conduit entries  
2 x M20 ISO side conduit/gland entries  
Stopping plugs included (brass, nickel plated or stainless steel).

### Approvals:

Class I Div 1 ABCD T6  
Class II Div 1 EFG T6  
Class III Div 1  
Class I Zone 1 AEx db IIC T6  
Zone 21 AEx tb IIIC  
Ex db IIC T6  
Ex tb IIIC 130°C  
Ta -55°C to +80°C (-67° to + 176°F)

UL, cULs, ULC

### Xenon Strobes

Ref: 1-21-201

#### D1xB2XH2

##### 21 Joule Xenon Strobe

Voltage: 24Vdc (20-28Vdc)

UL1971 190.6 candela

Nominal Current: 1.165A

Max. Current: 1.36A @ 20Vdc

In rush: 1.5A - 5ms @ 24Vdc

##### Automatically synchronized supervised public mode visual alarm.

222.5mm x 150.0mm (8.76" x 5.91")

Ref: 1-21-200

#### D1xB2XH1

##### 10 Joule Xenon Strobe

Voltage: 24Vdc (20-28Vdc)

UL1971 86.37 candela

Nominal Current: 630mA

Max. Current: 765mA @ 20Vdc

In rush: 817mA - 5ms @ 24Vdc

##### Automatically synchronized supervised public mode visual alarm.

222.5mm x 150.0mm (8.76" x 5.91")



# D1x Visual Signals Class I/II Div 1, Class Zone 1, Zone 21



D1xB2 beacons- surface mounting



D1xB2 beacons - pendant mounting



D1xB2 beacons - bracket mounting allows beacon to be rotated in any orientation

## The globally approved D1xB2 family from E2S offer the most comprehensive range of solutions for UL1638 signaling in Class I/II Div 1 or Zone 1/20 explosion proof applications..

The D1xB2X05, X10, X15 and X21 Xenon strobe beacons offer a range of light outputs options including 5 Joule, 10 Joule, 15 Joule, 21 Joule Xenon plus multifunction LED - all with industry leading candela ratings.

UL approved to NEC, CEC, IECEx and ATEX codes the D1xB2 family of visual signals can be installed in all Class I/II Div 1 explosion proof and Class I Zone 1 and Zone 21 flameproof applications anywhere in the world. Safety integrity level compliance of SIL1 is standard on all D1xB2 beacons and SIL2 is available as an option on the Xenon strobe versions.

The lightweight, marine grade, enclosure has been designed to create the optimal visual signal. Its innovative construction includes both conduit or surface mounting capabilities - without the need for any additional accessories. For complete flexibility an optional stainless-steel bracket enables the light to be rotated and positioned in any orientation.

The extended operating temperature range of up to -67° to +176°F (-55°C to +80°C) ensures the D1xB2 beacons can be employed in the most arduous of applications.

The unique E2S automatic flash synchronization feature combined with the innovative in-rush limiting electronic circuit design and low operating current eliminate system design constraints and reduce cost.

### Range Info:

#### Enclosure Material

Corrosion proof, marine grade, copper free LM6 aluminum, chromated and powder coated.

#### Enclosure color

Red (RAL3000) or Grey (RAL7038)

#### Ingress Protection

Type 4, 4X, 13, 3R, IP67)

#### Fixings

Stainless steel.

#### Mounting

Integrated pendant and surface mount capability. Optional ratchet adjustable stainless steel 'U' bracket.

#### Cable entries

1 x 3/4" NPT rear conduit entry  
2 x 3/4" NPT side conduit entries  
2 x M20 ISO side conduit/gland entries  
Stopping plugs included (brass, nickel plated or stainless steel).

### Approvals:

Class I Div 1 ABCD  
Class II Div 1 EFG  
Class III Div 1  
Class I Zone 1 AEx db IIC  
Zone 21 AEx tb IIIC  
Ex db IIC  
Ex tb IIIC  
Ta -55°C to +80°C (-67° to + 176°F)

UL, cULs, ULC

### Xenon Strobes

Ref: 1-21-205

#### D1xB2X21

##### 21 Joule Xenon Strobe

Voltage: 24Vdc (20-28Vdc), 115Vac  
110-120Vac, 230Vac 220-240Vac  
Effective candela to IES: 1,250.66cd  
Private mode fire: 215.85 cd  
Peak candela (calc): 2,100,000cd  
Nominal Current: 1.13A  
In rush: 1.5A - 5ms @ 24Vdc  
Three flash rates: 1Hz, 1.5Hz & 2 x flash  
Automatically synchronized  
252.34mm x 150.0mm (9.93" x 5.91")

Ref: 1-21-203

#### D1xB2X10

##### 10 Joule Xenon Strobe

Voltage: 24Vdc (20-28Vdc), 115Vac  
110-120Vac, 230Vac 220-240Vac  
Effective candela to IES: 645.21cd  
Private mode fire: 69.81 cd  
Peak candela (calc): 1,000,000cd  
Nominal Current: 605mA  
In rush: 990mA - 5ms @ 24Vdc  
Three flash rates: 1Hz, 1.5Hz & 2 x flash  
Automatically synchronized  
252.34mm x 150.0mm (9.93" x 5.91")

Ref: 1-21-204

#### D1xB2X15

##### 15 Joule Xenon Strobe

Voltage: 24Vdc (20-28Vdc), 115Vac  
110-120Vac, 230Vac 220-240Vac  
Effective candela to IES: 713.71cd  
Private mode fire: 98.61 cd  
Peak candela (calc): 1,500,000cd  
Nominal Current: 835mA  
In rush: 990mA - 5ms @ 24Vdc  
Three flash rates: 1Hz, 1.5Hz & 2 x flash  
Automatically synchronized  
252.34mm x 150.0mm (9.93" x 5.91")

Ref: 1-21-202

#### D1xB2X05

##### 5 Joule Xenon Strobe

Voltage: 24Vdc (20-28Vdc), 115Vac  
110-120Vac, 230Vac 220-240Vac  
Effective candela to IES: 156.65cd  
Private mode fire: 20.44 cd  
Peak candela (calc): 500,000cd  
Nominal Current: 295mA  
In rush: 920mA - 5ms @ 24Vdc  
Three flash rates: 1Hz, 1.5Hz & 2 x flash  
Automatically synchronized  
252.34mm x 150.0mm (9.93" x 5.91")

### LED Beacon

Ref: 1-21-206

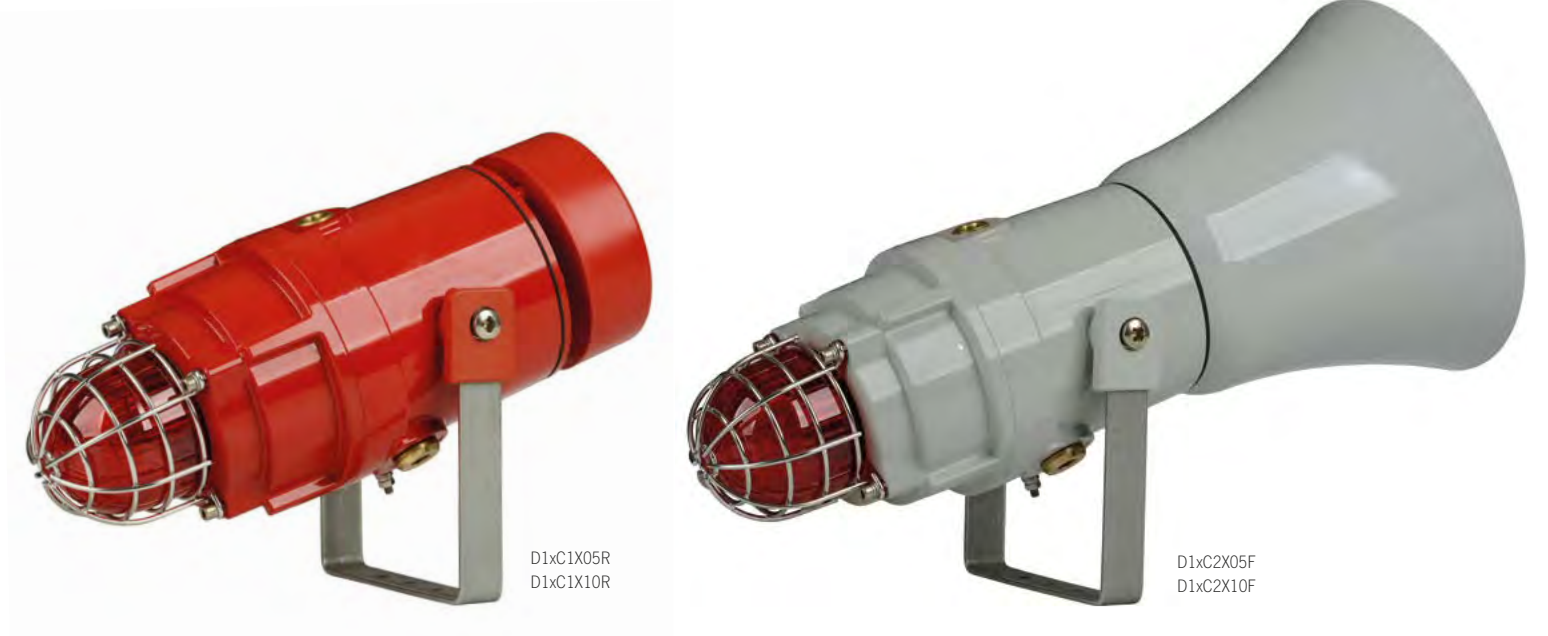
#### D1xB2LD2

##### High Output LED Beacon

Voltage: 24Vdc (18-30Vdc), 115Vac  
110-120Vac, 230Vac 220-240Vac  
Effective candela to IES: 338cd  
Nominal Current: 230mA  
In rush: 1.22A - 2ms @ 24Vdc  
Five flash rates: 1Hz, 1.5Hz, 2 Hz, double and triple flash  
High and low power Steady modes  
Three remotely selectable flash modes  
Automatically synchronized  
252.34mm x 150.0mm (9.93" x 5.91")



# D1x Combination Signals Class I/II Div 1, Zone 1, Zone 20



D1x Explosion proof Division 1 Combination

## The D1x combined signals - audible and visual warning from one device.

The Xenon strobe beacons are combined with alarm horn sounders either employing a traditional flare horn design, or the compact radial horn design which distributes sound omni-directionally and enables the beacon to be oriented optimally in any direction.

Strobe versions include 5 or 10 Joules with candela outputs of up to 1,000,000cd. Available in seven colors with a UV stable PC, field replaceable, filter. The flare version alarm horn sounders are available in sound pressure levels of up to 117 and 125dB(A).

The D1x combined signals in 24Vdc operating voltage are approved for audible public mode and visual private mode fire alarm use.

A threaded flame path enable quick installation and simplifies maintenance inspection whilst the innovative internal arrangement maximizes wiring space. The ratchet adjustable mounting bracket allows the device to be positioned for maximum effectiveness.

### Approvals:

Class I Division 1 Group ABCD  
Class I Zone 1 IIC  
D1xC1X05:  
T5 Ta -40°C to +70°C  
T6 Ta -40°C to +55°C  
D1xC1X10, D1xC2X05, D1xC2X10:  
T5 Ta -40°C to +55°C  
T6 Ta -40°C to +50°C

Class II Division 1 Group FG  
Zone 20 IIIB  
D1xC1X05, D1xC2X05:  
T4 Ta -40°C to +55°C  
T4A Ta -40°C to +40°C

UL, cULs

UL, cULs

### Range Info:

#### Enclosure Material

Corrosion proof, marine grade, copper free LM6 aluminum, chromated and powder coated.

#### Flare Material

ABS - UL94 V0 5VA FR

#### Enclosure & Flare color

Red (RAL3000) or Grey (RAL7038)

#### Lens color filters

Amber, Blue, Clear, Green, Magenta, Red & Yellow

#### Ingress Protection

Type 4, 4X, 13, 3R, IP67

#### Fixings

Stainless steel.

#### Mounting

Ratchet adjustable stainless steel 'U' bracket.

#### Cable entries

1 x 1/2" NPT  
2 x M20 ISO (or adapted to 1/2" or 3/4" NPT)  
Stopping plugs included (brass, nickel plated or stainless steel).

### Combination Signals with Xenon Strobes

Ref: 1-23-055

#### D1xC1X05R

Radial Alarm Horn & 5 Joule Strobe  
24Vdc & 115/230Vac 50/60HZ  
Max output: 115dB(A) @ 1 metre  
- 106dB(A) @ 10ft/3m  
64 alarm tones with 4 stages/channels  
5 Joule Xenon beacon  
Effective intensity 250cd  
Peak intensity 500,000cd  
122.0mm x 339.0mm (4.80" x 13.33")

Ref: 1-23-065

#### D1xC1X10R

Radial Alarm Horn & 10 Joule Strobe  
24Vdc & 115/230Vac 50/60HZ  
Max output: 115dB(A) @ 1 metre  
- 106dB(A) @ 10ft/3m  
64 alarm tones with 4 stages/channels  
10 Joule Xenon beacon  
Effective intensity 500cd  
Peak intensity 1,000,000cd  
122.0mm x 339.0mm (4.80" x 13.33")

Ref: 1-23-050

#### D1xC1X05F

Flare Alarm Horn & 5 Joule Strobe  
24Vdc & 115/230Vac 50/60HZ  
Max output: 117dB(A) @ 1 metre  
- 108dB(A) @ 10ft/3m  
64 alarm tones with 4 stages/channels  
5 Joule Xenon beacon  
Effective intensity 250cd  
Peak intensity 500,000cd  
181.0mm x 408.0mm (7.13" x 16.06")

Ref: 1-23-060

#### D1xC1X10F

Flare Alarm Horn & 10 Joule Strobe  
24Vdc & 115/230Vac 50/60HZ  
Max output: 117dB(A) @ 1 metre  
- 108dB(A) @ 10ft/3m  
64 alarm tones with 4 stages/channels  
10 Joule Xenon beacon  
Effective intensity 500cd  
Peak intensity 1,000,000cd  
181.0mm x 408.0mm (7.13" x 16.06")

Ref: 1-23-070

#### D1xC2X05F

Flare Alarm Horn & 5 Joule Xenon  
24Vdc & 115/230Vac 50/60HZ  
Max output: 125dB(A) @ 1 metre  
- 116dB(A) @ 10ft/3m  
64 alarm tones with 4 stages/channels  
5 Joule Xenon beacon  
Effective intensity 250cd  
Peak intensity 500,000cd  
220.0mm x 458.0mm (8.66" x 18.04")

Ref: 1-23-080

#### D1xC2X10F

Flare Alarm Horn & 10 Joule Xenon  
24Vdc & 115/230Vac 50/60HZ  
Max output: 125dB(A) @ 1 metre  
- 116dB(A) @ 10ft/3m  
64 alarm tones with 4 stages/channels  
10 Joule Xenon beacon  
Effective intensity 500cd  
Peak intensity 1,000,000cd  
220.0mm x 458.0mm (8.66" x 18.04")



# D1x Horns & Loudspeakers Class I/II Div 1. Zone 1. Zone 20



The powerful D1x alarm horn sounders are available with traditional flare horn design or the compact radial horn design which distributes the warning signal omni-directionally.

All versions offer 64 different first stage/channel alarm sounds which can be selected via an internal switch. Each tone can be remotely triggered e.g. via an external relay, to change to a second, third or fourth stage/channel alarm sound.

The D1xS1 alarm horn variants, in 24Vdc operating voltage, are approved for public mode fire alarm use.

The D1x PA loudspeaker driver and flare horn is available in 15 or 25W versions. Input options include 8 or 16 ohm low impedance and 70V line transformer.

The 70V line transformer units feature multiple tappings for each version of the loudspeaker. Field replaceable flare - driver employs standard 1 3/8" -18 male thread coupling.

## Range Info:

### Enclosure Material

Corrosion proof, marine grade, copper free LM6 aluminum, chromated and powder coated.

### Flare Material

ABS - UL94 V0 5VA FR

### Enclosure & Flare color

Red (RAL3000) or Grey (RAL7038)

### Ingress Protection

Type 4, 4X, 13, 3R, IP67

### Fixings

Stainless steel.

### Mounting

Ratchet adjustable stainless steel 'U' bracket.

### Cable entries

1 x 1/2" NPT  
2 x M20 ISO (or adapted to 1/2" or 3/4" NPT)  
Stopping plugs included (brass, nickel plated or stainless steel).

## Approvals:

Class I Division 1 Group ABCD  
Class I Zone 1 IIC  
T6 Ta -40°C to +70°C  
Class II Division 1 Group FG  
Zone 20 IIIB  
T6 Ta -40°C to +70°C

UL, cULs

## Alarm Sounders/Horns

Ref: 1-22-140

### D1xS1F Flare Alarm Horn Sounders

24Vdc (10-30vdc) & 115/230Vac 50/60HZ  
Max output: 117dB(A) @ 1m  
- 108dB(A) @ 10ft/3m  
64 alarm tones with 4 stages/channels  
181.0mm x 285.0mm (7.13" x 11.20")

Ref: 1-22-160

### D1xS2F Flare Alarm Horn Sounders

24Vdc (10-30vdc) & 115/230Vac 50/60HZ  
Max output: 125dB(A) @ 1m  
- 116dB(A) @ 10ft/3m  
64 alarm tones with 4 stages/channels  
220.0mm x 334.0mm (8.66" x 13.14")

## Omnidirectional Alarm Horns

Ref: 1-22-150

### D1xS1R Radial Horn Alarm Sounders

24Vdc (10-30vdc) & 115/230Vac 50/60HZ  
Max output: 115dB(A) @ 1m  
- 106dB(A) @ 10ft/3m  
64 alarm tones with 4 stages/channels  
122.0mm x 215.0mm (4.80" x 8.48")

## PA Loudspeakers

Ref: 1-22-180

### D1xL2F PA Loudspeakers 25W

Re-entrant flare horn  
70V line transformer  
8 or 16 Ohm low impedance  
Rated SPL 119dB +/-3dB @ 25W @ 1m  
220.0mm x 334.0mm (8.66" x 13.14")

Ref: 1-22-170

### D1xL1F PA Loudspeakers 15W

Re-entrant flare horn  
70V line transformer  
8 or 16 Ohm low impedance  
Rated SPL 113dB +/-3dB @ 15W @ 1m  
181.0mm x 285.0mm (7.13" x 11.20")



# D2x Visual & Audible Signals - Public Mode Fire

UL1971, UL1638 & UL464 - Class I/II Div 2, Zone 2/22 - Haz Loc.



D2xB2LD2-H



D2xB1XH1 / D2xB1XH2



D2xS1



D2xC2XH1/XH2



D2xC2LD2-H

**The D2x range provides high-performance signaling for hazardous and industrial locations in a compact enclosure. Globally certified by UL to: NEC Class I/II Div 2 and NEC & CEC Class I Zone 2/22 plus IECEx & ATEX Zone 2/22.**

Designed for applications requiring compliant signals to UL464 and UL1638 for public mode fire alarm installations and to UL1971 as emergency-signaling devices for the hearing impaired.

The D2xB1LD2-H is a synchronized, supervised, hazardous location LED beacon signal with a 38.38cd output. Automatically synchronized without the need for additional modules. Industry leading low in-rush and minimal current consumption coupled with a LED life time of over 60,000 hours - the D2xB1LD2-H is the next generation of hazardous location fire signals.

The D2xB1XH1 (18.18cd) and the D2xB1XH2 (70.29cd) satisfy applications requiring Xenon strobes. These high output visual signals also automatically synchronize without the need for additional modules, reducing overall system cost and installation time. Designed to minimize inrush and maximize the number of devices per circuit.

For complete audio-visual warning the D2xC2 type combination unit provides the ultimate in fire signaling. With a sound output up to 116dB(A), 64 alarm tone frequencies and 4 remotely selectable stages/channels, the alarm horn can provide safe signaling for multiple scenarios from one device. The integrated LED or Xenon beacon can be linked internally to the alarm horn minimizing cabling and installation time.

The entire assembly is automatically synchronized with other D2xC2 units on the same circuit without the need for synchronization modules. The D2xS1 alarm horn is also available for applications requiring only audible signaling.

The marine grade aluminum enclosure with an ingress protection of IP66/Type 4, 4X is suitable for the harshest of environments. The range is approved for use in both gas and dust atmospheres.

## Range info

### Material

LM6 & A1-Si12 Marine Grade Aluminum

### Ingress Protection

IP66, Type 4, 4X, 13

### Fixings

Stainless steel.

### Mounting

**Beacon:** Surface or 3/4" conduit pendant

**Horn/Combination:** Surface mount

### Cable entries

**Beacon:** 2 x 1/2"NPT, 1 x 3/4"NPT and 2 x M20 ISO

**Horn/Combination:** 2 x M20 ISO

### Enclosure color

RAL3000 Red.

## Approvals

Class I Div 2 Groups A, B, C, D  
Class II Div 2 Groups E, F & G  
Class III Div 1 & 2

Class I Zone 2 AEx nA IIC Gc  
Class I Zone 22 AEx tc IIC Dc

Zone 2 II 3G Ex n IIC Gc  
Zone 22 II 3D Ex tc IIC Dc

NEC, CEC, ATEX, IECEx

## Alarm Sounders/Horns UL464

Ref: 1-32-025

### D2xS1 Alarm Horn Sounder

24Vdc - 10-30Vdc

313mA @ 24Vdc

1.81A for 9ms in-rush

Max 116dB(A) @ 1m - 107dB(A) @ 10ft/3m

64 alarm tones with 4 stages/channels

181.0mm x 273.1mm (7.13" x 10.75")

### Automatically synchronized supervised public mode audible alarm.

## LED & Xenon Beacons/Lights UL1638 & UL1971

Ref: 1-31-060

### D2xB1LD2-H LED Beacon/Light

24Vdc - 16-33Vdc

99.5mA @ 24Vdc (60fpm)

1.88A for 2ms in-rush

Effective candela: 38.38cd - UL1971

Flash modes: 60fpm / 80fpm / 120fpm

Remotely activated 2nd stage/channel mode

Ref: 1-31-070

### D2xB1XH1 Xenon Strobe Beacon/Light

24Vdc - 16-33Vdc

276mA @ 24Vdc (60fpm)

800mA for 5.42ms in-rush

Effective candela: 18.18cd - UL1971

Energy: 5 Joules

Ref: 1-31-080

### D2xB1XH2 Xenon Strobe Beacon/Light

24Vdc - 16-33Vdc

615mA @ 24Vdc (60fpm)

828mA for 4.4ms in-rush

Effective candela: 70.29cd - UL1971

Energy: 10 Joules

130.3mm x 130.3mm (5.13" x 5.13")

### Automatically synchronized supervised public mode visual alarm.

## Combination Signals UL464, UL1638 & UL1971

Ref: 1-34-040

### D2xC2LD2-H Alarm Horn & LED Beacon

24Vdc - 16-33Vdc 412.5mA @ 24Vdc (60fpm)

2.1A for 10ms in-rush

Effective candela: 38.38cd - UL1971

Flash modes: 60fpm / 80fpm / 120fpm

Remotely activated 2nd stage/channel mode

Ref: 1-34-050

### D2xC2XH1 Alarm Horn & Xenon Beacon

24Vdc - 20-28Vdc

405mA @ 24Vdc (60fpm)

2.2A for 9ms in-rush

Effective candela: 18.18cd - UL1971

Energy: 5 Joules

Ref: 1-34-050

### D2xC2XH2 Alarm Horn & Xenon Beacon

24Vdc - 20-28Vdc

759mA @ 24Vdc (60fpm)

2.3A for 9ms in-rush

Effective candela: 70.29cd - UL1971

Energy: 10 Joules

Horn: Max 107dB(A) @ 10ft/3m

181.0mm x 403.4mm (7.13" x 15.88")

### Automatically synchronized supervised public mode audible and visual alarm.





# D2x Visual & Audible Signals - Private Mode Fire

UL1638 & UL464 - Class I/II Div 2, Zone 2/22 - Haz Loc.



D2xB1-Clear



D2xB1-Red



D2xS1



D2xC1



D2xC2

The D2x range provides high-performance signaling for hazardous and industrial locations in a compact enclosure. The alarm horn sounders and combination signals are globally certified by UL to: NEC Class I/II Div 2 and NEC & CEC Class I Zone 2/22, IECEx & ATEX Zone 2/22.

Designed for applications requiring compliant signals to UL464 and UL1638 for private mode fire alarm installations.

The D2xB1X05 & X10 are supervised, hazardous location, Xenon strobe beacon signals. 24Vdc versions are UL & cUL approved for visual private mode fire alarm use (UL1638).

The D2xC1X05 & X10 are supervised, hazardous location, combination alarm horn and Xenon beacon signals. 24Vdc versions are UL & cUL approved for audible public mode (UL464) and visual private mode fire alarm use (UL1638).

The D2xS1 is a supervised, hazardous location, alarm horn sounder featuring 64 alarm tones and 4 remotely activated stages/channels. The 24Vdc version is UL & cUL approved for audible (UL464) public mode fire alarm use. The audible output is automatically synchronized without the need for additional modules.

The marine grade aluminum enclosure with an ingress protection of IP66/Type 4, 4X is suitable for the harshest of environments. The range is approved for use in both gas & dust atmospheres.

## Range info

### Material

LM6 & A1-Si12 Marine Grade Aluminum

### Ingress Protection

IP66, Type 4, 4X, 13

### Fixings

Stainless steel

### Mounting

**Beacon:** Surface or 3/4" conduit pendant

**Horn/Combination:** Surface mount

### Cable entries

**Beacon:** 2 x 1/2"NPT, 1 x 3/4"NPT and 2 x M20 ISO

**Horn/Combination:** 2 x M20 ISO

### Enclosure color

RAL3000 Red

## Approvals

Class I Div 2 Groups A, B, C, D  
Class II Div 2 Groups E, F & G  
Class III Div 1 & 2

Class I Zone 2 AEx nA IIC Gc  
Class I Zone 22 AEx tc IIC Dc

Zone 2 II 3G Ex n IIC Gc  
Zone 22 II 3D Ex tc IIC Dc

NEC, CEC, ATEX, IECEx

## Alarm Sounders/Horns UL464

Ref: 1-32-025

### D2xS1 Alarm Horn Sounder

12/24/48Vdc & 115/230Vac 50/60Hz.  
Max 116dB(A) @ 1m - 107dB(A) @ 10ft/3m  
64 alarm tones with 4 stages/channels  
181.0mm x 273.1mm (7.13" x 10.75")

## Xenon Strobe Beacons UL1638

Ref: 1-31-040

### D2xB1X05 Xenon Strobe

20-28Vdc 275mA @ 24Vdc  
115/230Vac 50/60Hz.  
5 Joule Xenon beacon.  
Effective intensity 250cd  
Flash rates:60fpm - 1Hz  
90fpm - 1.5Hz  
Double strike  
130.3mm x 130.3mm (5.13" x 5.13")

Ref: 1-31-050

### D2xB1X10 Xenon Strobe

20-28Vdc 560mA @ 24Vdc  
115/230Vac 50/60Hz.  
10 Joule Xenon beacon.  
Effective intensity 500cd  
Flash rates:60fpm - 1Hz  
90fpm - 1.5Hz  
Double strike  
130.3mm x 130.3mm (5.13" x 5.13")

## LED Beacons UL1638

Ref: 1-31-065

### D2xB1LD2 LED Beacon

18-54Vdc 99.5mA @ 24Vdc  
115/230Vac 50/60Hz  
Effective candela: 73.4 cd UL1638  
Modes: 60fpm/80fpm/120fpm, Steady,  
Double strike & Triple Strike  
Remotely activated 2nd & 3rd stage/channels  
130.3mm x 130.3mm (5.13" x 5.13")

## Combination Signals with LED UL464 & UL1638

Ref: 1-34-045

### D2xC2LD2 Alarm Horn & LED Beacon

24Vdc 412.5mA @ 24Vdc  
115/230Vac 50/60Hz.  
Max 116dB(A) @ 1m - 107dB(A) @ 10ft/3m  
64 alarm tones with 4 stages/channels  
Effective candela: 73.4 cd UL1638  
Modes: 60fpm/80fpm/120fpm, Steady,  
Double strike & Triple Strike  
Remotely activated 2nd & 3rd stage/channels  
Amber, Blue, Clear, Green, Magenta, Red  
& Yellow lenses  
130.0mm x 310.3mm (5.12" x 12.22")

## Combination Signals with Xenon UL464 & UL1638

Ref: 1-34-020

### D2xC1X05 Alarm Horn Sounder & Xenon Strobe Beacon

20-28Vdc 518mA @ 24Vdc  
115/230Vac 50/60Hz.  
Max 116dB(A) @ 1m - 107dB(A) @ 10ft/3m  
64 alarm tones with 4 stages/channels  
5 Joule Xenon beacon.  
Effective intensity 250cd  
Amber, Blue, Clear, Green, Magenta, Red  
& Yellow lenses  
130.0mm x 267.5mm (5.12" x 10.54")

Ref: 1-34-030

### D2xC1X10 Alarm Horn Sounder & Xenon Strobe Beacon

20-28Vdc 823mA @ 24Vdc  
115/230Vac 50/60Hz.  
Max 116dB(A) @ 1m - 107dB(A) @ 10ft/3m  
64 alarm tones with 4 stages/channels  
10 Joule Xenon beacon.  
Effective intensity 500cd  
Amber, Blue, Clear, Green, Magenta, Red  
& Yellow lenses  
130.0mm x 267.5mm (5.12" x 10.54")



# IS-mini Range

Class I Div 1, Zone 0, 1 & 2 - Haz Loc.



IS-mA1



IS-mB1



IS-mC1

## The compact IS mini-range offers a complete audible and visual signaling solution for Zone 0 applications.

The IS-mA1M minialarm is also suitable for group I mining use. The devices can be operated from a single Zener barrier or galvanic isolator. The sounders feature 49 alarm tones that can be selected by an internal switch, each one can be remotely changed to a second or third stage alarm sound. The beacon section can be set internally for a flash rate of either 1Hz or 2Hz. The combined unit sounder and beacon can be operated simultaneously from one barrier or from separate barriers if independent operation is required.

### Range info

**Material & Color**  
UL94V0 & 5VA FR ABS & PC, RAL 3000 Red

**Ingress Protection**  
IP65

**Fixings**  
Stainless steel.

**Mounting**  
Surface mount.

**Cable entries**  
2 x M20 clearance gland knockouts.

### Approvals

II 1G Ex ia IIC T4 Ga - Zone 0, 1 & 2  
IS Class I, Div 1, Groups A, B, C, D T4  
IS Class I, Zone 0, AEx ia IIC T4  
IS-mA1M:  
I M1 Ex ia I Ma (Mining)

ATEX, IECEx, FM

### L.E.D Warning Signal

Ref: 1-11-010  
**IS-mB1 IS-minialite L.E.D Beacon**  
16-28Vdc via Zener barrier or galvanic isolator  
Array of 6 high intensity L.E.D.s.  
Effective intensity 23cd  
Double flash at 1Hz and 2Hz  
Red, Amber, Blue, Green & Clear lenses  
Diameter: 88.7mm Length: 85.0mm  
Diameter: 3.49" Length: 3.35"

### Alarm Sounder/Horn

Ref: 1-12-010  
**IS-mA1 IS-minialarm**  
16-28vdc via Zener barrier or galvanic isolator  
100dB(A) @ 1m - 91dB(A) @ 10ft/3m  
49 alarm tones with 3 stages/channels  
Diameter: 88.7mm Length: 99.0mm  
Diameter: 3.49" Length: 3.90"

### Combination Signal

Ref: 1-13-010  
**IS-mC1 IS-minialert**  
16-28Vdc via Zener barrier or galvanic isolator  
100dB(A) @ 1m - 91dB(A) @ 10ft/3m  
49 alarm tones with 3 stages/channels  
Array of 6 high intensity L.E.D.s.  
Effective intensity 23cd  
Double flash at 1Hz and 2Hz  
Red, Amber, Blue, Green & Clear lenses  
Diameter: 88.7mm Length: 116.0mm  
Diameter: 3.49" Length: 4.57"



# M Audible Signals - Loudspeakers

## Industrial Fire Signals



The 'M' series of products, constructed from lightweight, impact and fire resistant ABS, have been designed to withstand the harshest of environments.

The range features stainless steel, ratchet adjustable mounting brackets and have been third party tested to Type 4/4X/ 3R/13 and IP66/67. All models have dual cable entries and large termination areas containing in & out terminals.

The ML15 and ML25 PA loudspeakers (70V models) are UL & cUL approved for Fire Alarm & Emergency and Professional & Commercial use for the US and Canada.

### Range info

#### Material

High impact UL94 V0 & 5VA FR ABS

#### Ingress Protection

Type: 4/4X/3R/13, IP66/67

#### Fixings

Stainless steel.

#### Mounting

Ratchet adjustable stainless steel 'U' bracket.

#### Cable entries

2 x 1/2"NPT with 1 blanking plug  
M20 and 3/4"NPT optional

### PA Loudspeakers

Ref: 2-24-010

#### ML15 PA Horn Loudspeaker

70V or 100V or 8 or 16 Ohm low impedance  
Rated SPL 118dB +/-3dB @ 15W @ 1m  
181.0mm x 273.1mm (7.13" x 10.75")

Ref: 2-24-020

#### ML25 PA Horn Loudspeaker

70V or 100V or 8 or 16 Ohm low impedance  
Rated SPL 121dB +/-3dB @ 25W @ 1m  
220.0mm x 323.5mm (8.66" x 12.74")



## The benefits of working with E2S

- E2S is the world's leading independent signalling manufacturer
- Our life saving signalling products help you create safer environments
- We have global reach and local technical support on every continent
- Working closely with you means we meet your specific needs
- Our products have proven performance across a range of applications
- We continually invest in the latest technology, innovation and research to create the best signalling products possible

# E2S global network





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