Type No. _____

Job Name _____

Catalog No. _____

LightGuard

# DX Series


**Shown: DXLN1RWSC**

- **Specification Grade Die Cast Aluminum Exit Signs**
- **AC Only and Self-Powered**
- **Standard Self-Diagnostics Electronics***
- **LED Illumination**

## Housing

- Frame and stencil face constructed of die cast aluminum alloy
- Choose from black or white frame with brushed aluminum stencil face, black frame with black stencil face, white frame with white stencil face, or brushed aluminum frame and stencil face
- Stencil door includes field selectable chevrons
- Hinged stencil door for easy access
- Universal knockouts located on rear allow for wall mounting directly to standard junction boxes
- Self-contained and requires no canopy for back mounted configuration

## Battery

- Maintenance free, sealed nickel cadmium battery has an expected life up to 10 years with an operating range of 32°F (0°C) to 104°F (40°C)
- Nickel cadmium batteries are ideal for high ambient temperature areas

## Illumination

- Normal and emergency illumination is accomplished with long lasting, high output Light Emitting Diodes (LEDs)
- Hot spots and striations are eliminated by the internal "light chamber" especially designed around the high performance LED array
- Average illumination levels are in excess of 25fl (79 cd/m$^2$)

## Warranty

- Electronics: 5 years
- Battery: 5 years full, 5 years pro-rata

## Application

- Ideal for commercial locations where an attractive, highly reliable and easily installed exit sign with low power consumption is desired

## Electronics

**AC Only**

- 120/277 VAC dual voltage input with surge protection

**Emergency Operation**

- Microprocessor driven charger software with routine embedded diagnostic and temperature compensation
- See specification sheet L2465 for electronics details
- 120/277 VAC input, surge protection, brownout, AC lockout and low voltage disconnect are standard

## Electrical Specifications

**AC Only**

Red - 3.8 Watts (120 VAC), PF = 0.96
- 3.8 Watts (277 VAC), PF = 0.91

Green - 4.0 Watts (120 VAC), PF = 0.95
- 4.0 Watts (277 VAC), PF = 0.90

**Self-Powered**

Red - 4.7 Watts (120 VAC), PF = 0.95
- 4.8 Watts (277 VAC), PF = 0.97

Green - 4.7 Watts (120 VAC), PF = 0.95
- 4.7 Watts (277 VAC), PF = 0.99

## Smart Charger Self-Testing Diagnostics (optional)

- The Smart Charger diagnostic/charging platform with self-testing mode automatically runs a one-minute self-test every 30 days and a 30-minute test on the sixth and twelfth month. A one-minute or 90-minute test may be initiated via the push to test switch on the unit or by activating the appropriate test command on the optional IR test device.

## Code Compliance

- UL 924 listed
- UL Damp Location Listing optional
- NFPA 101, NEC, BOCA, OSHA and IBC illumination standards
- Certified to the California Energy Commission in accordance with Califiornia law
- IEC 61951-1 Life Testing (batteries)

*Self-powered models incorporate the Smart Charger diagnostics electronics package. Self-testing is a factory installed option.

## Ordering Information

| DX | L | | | | | SC | |
|---|---|---|---|---|---|---|---|
| **SERIES** | **LAMP TYPE** | **BATTERY** | **STENCIL FACES** | **LETTER COLOR** | **STENCIL FACE/ HOUSING COLOR** | **MODEL DESIGNATOR** | **FACTORY INSTALLED OPTIONS** [1] |
| **DX** = DX Series Classic Die Cast Exit | **L** = LED Only | **N** = Nickel Cadmium<br>**A** = AC | **1** = Single<br>**2** = Double | **R** = Red<br>**G** = Green | **A** = Natural Brushed Aluminum Face w/ Black Housing<br>**B** = Black Stencil Face w/ Black Housing<br>**N** = Natural Brushed Aluminum Face w/ Natural Brushed<br>**W** = White Stencil Face w/ White Housing<br>**WA** = Natural Brushed Aluminum Face w/ White Housing | **SC** = Smart Charger Diagnostics | **2CKT1** = 120 VAC Two Circuit Wiring<br>**2CKT2** = 277 VAC Two Circuit Wiring<br>**BF** = Buzzer/Flasher (emergency units only)<br>**BZ** = Buzzer (emergency units only)<br>**DC** = 12-48 VDC Input Power (AC only models)<br>**DL** = Damp Location Listing<br>**EX** = Special Input Transformer (specify voltage and frequency)<br>**FA** = 24 VDC Fire Alarm Interface (regulated constant DC voltage)<br>**FL** = Flasher (emergency units only)<br>**LC** = Low Level Matching Die Cast Remote Exit [4]<br>**LL** = Low Level Institutional Frame Surface Mount Remote Exit [4]<br>**PM** = Pendant Mount Only (must order pendant kit accessory) [2]<br>**SW** = Special Wording/Graphics [3]<br>**T** = Self-Testing Diagnostics (non-audible)<br>**TA** = Audible Self-Testing Diagnostics<br>**TP** = Tamperproof<br>**VRS** = Vandal Resistant Lens with Tamperproof Hardware |

**NOTES:**

1) Some option combinations may impact UL listing. Consult factory for specifics.
2) Must specify "PM" option for compatibility with pendant kit.
3) Utilizes larger housing - 13.5 x 8.5 x 2.5
4) Not available with Smart Charger option

### ACCESSORIES
**(Ordered Separately)**

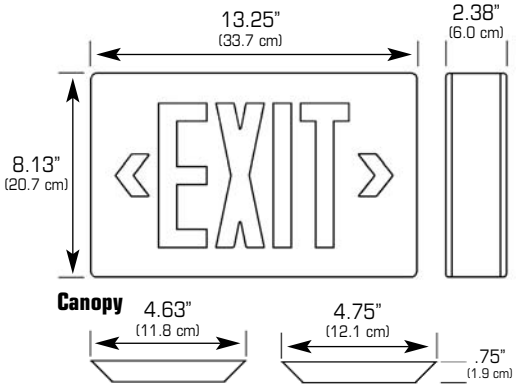
**DXKIT12B** = 12" Pendant Kit, Black [3]
**DXKIT12W** = 12" Pendant Kit, White [3]
**SCIR** = Smart Charger Infra-Red Remote
**T15TPTOOL** = Tamperproof Screwdriver
**PVS** = Polycarbonate Vandal Shield
**WG4** = Wire Guard
**WG10** = Wire Guard for Side Mounting

## Ordering Example

DX L N 1 R W SC DL

- DX — Series
- L — Lamp Type
- N — Battery
- 1 — Stencil Faces
- R — Letter Color
- W — Stencil Face/Housing Color
- SC — Model Designator
- DL — Factory Installed Options

## Dimensions




Dimensions are approximate and subject to change.

## Suggested Specification

Furnish and install LightGuard's LED exit sign model _____. The exit shall be constructed to meet Underwriter's Laboratories, Inc. Standard #924 and the National Electrical Code (NEC).

**INSTALLATION AND OPERATION** - Exit shall be easily field connected to a 120 or 277 VAC, 60 hertz, unswitched power source. Installation must comply with the NEC as well as other applicable codes. (Self-Powered Only) - Upon utility power failure or brownout, the unit shall automatically transfer to battery power and maintain the required illumination level for a minimum period of 90 minutes. Upon restoration of utility power, the charger shall restore the battery to full charge within UL 924 requirements following a rated discharge of not more than 90 minutes.

**ELECTRONICS AC-Only Models** - The DX Series exit sign shall be easily field connected to 120 or 277 VAC, 60 HZ un-switched power source. The DX Series exit sign equipped with red LED's shall consume 3.8 watts with a power factor of 0.96 (120 VAC) and 3.8 watts with a power factor of 0.91 (277 VAC). The DX Series exit sign equipped with green LED's shall consume 4.0 watts with a power factor of 0.95 (120 VAC) and 4.0 watts with a power factor of 0.90 (277 VAC). Available, factory-installed options shall include a two-circuit module to accommodate 120/120 or 277/277 VAC for use with a generator or central inverter system; a fire alarm activated flasher option to accommodate an input from a fire alarm panel and provide a flashing rate when the alarm system is activated.

**Self-Powered Models** - All self-powered models shall be provided with LightGuard's Smart Charger diagnostics electronics platform. The exit sign shall be easily field connected to 120 or 277 VAC, 60 HZ un-switched power source. Smart Charger will detect and notify the installer regarding incorrect wiring of the transformer primary and restrict the damaging effects from affecting the printed circuit board. The DX Series exit sign equipped with red LED's shall consume 4.7 watts with a power factor of 0.95 (120 VAC) and 4.8 watts with a power factor of 0.97 (277 VAC). The DX Series exit sign equipped with green LED's shall consume 4.7 watts with a power factor of 0.95 (120 VAC) and 4.7 watts with a power factor of 0.99 (277 VAC). The Smart Charger electronics package shall provide continuous, real-time monitoring of all the critical equipment functions including, but not limited to: line voltage status and condition, charger fault, transfer fault, battery fault, and LED load fault and notify personnel with a visual indicator sequence. Optional audible diagnostics as well as self-testing diagnostics shall be available from the factory. The self-testing option shall satisfy the periodic testing requirements in NFPA 101, Life Safety Code as well as the International Building Code (IBC). The Smart Charger circuit shall continuously sample ambient temperature conditions and adjust the charging regime to compensate for typical and dramatic ambient conditions to maximize the life of the battery. An on-board IR receiver shall be standard and pre-programmed to operate from an optional IR user interface device (available as an accessory item).

**BATTERY (Self-Powered Only)** - The battery shall be maintenance free, sealed nickel cadmium utilizing sintered plate construction and polypropylene separators for trouble-free operation in ambient temperatures up to 104°F (40°C). Nickel cadmium batteries are supplied with a five year warranty and comply with IEC 61951-1.

**ILLUMINATION** - The DX Series indirect view LED exit signs shall incorporate high intensity LEDs. The LEDs shall be designed so that the unlikely failure of one LED will not affect the integrity of the total sign in the emergency mode.

**ENCLOSURE** - The exit sign housing shall be constructed of heavy duty die cast aluminum. The final housing finish shall be an epoxy-based powder coat paint. The exit stencil face shall be constructed of the same aluminum alloy and will be completed with a brushed finish or matching paint. Chevron direction shall be field selectable, and if left in place will not disturb the visual line of the exit face.

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

ISO 9001 CERTIFIED
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