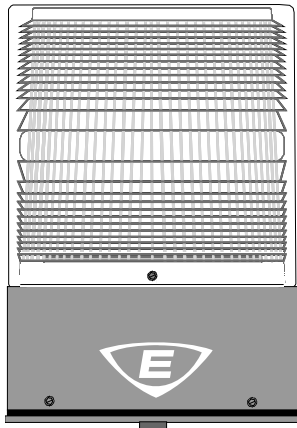


57 Series Polaris LED Beacon Installation Sheet



Description

The Edwards 57 Series Polaris LED Beacons are UL and cUL listed for general signaling use. The beacons are available in 120 VAC or 24 VAC/DC. There are six lens colors to choose from and a choice of black or gray painted bases. They utilize high-power LED lights and are suitable for indoor or outdoor use. They are provided with an enclosure rated for NEMA 4X and IP66.

The beacons are well suited for high ambient noise level areas, especially where ear protection must be worn. These LED beacons are also ideal for high vibration applications and areas where long lamp life is advantageous. The LED beacon features a 360-degree beam of light with seven user-selectable flash patterns including steady-on. The patterns are selected by pressing the Edwards logo. The factory setting is Light Burst mode.

The 57 Series beacons are designed to be mounted on 3/4 in. NPT conduit (indoor or outdoor). To maintain the NEMA and IP ratings for outdoor installation, the beacon must be mounted with the dome facing directly up. When installing the beacon indoors in dry environments, it can be mounted in any position.

Installation

Install this unit in accordance with the applicable requirements in the latest edition of the National Electrical Code, Canadian Electrical Code, and local codes.

WARNINGS

- Shock hazard. To prevent electrical shock, ensure that the power is disconnected before installing the beacon.
- Shock hazard. To prevent leakage and potential electrical shock, use care when disassembling the beacon to prevent tearing of the permanently affixed gaskets provided for the environmental integrity and ratings.
- Shock hazard. When mounting outdoors, the beacon must be installed with the lens or dome facing directly up.

Note: The 57 Series is designed to be conduit mounted.

To install the beacon:

1. Remove the three screws from the bottom of the beacon base.
2. Separate the beacon baseplate to gain access to the wiring chamber.

Note: The beacon mounts on a 3/4 in. NPT conduit pipe. The female threaded entry is located on the bottom of the base.

3. Install the baseplate on the conduit. Wrench-tighten for a leak free seal.
4. Route the field wiring from the appropriate power source through the conduit, and then through the conduit entrance in the baseplate.
5. Wire in accordance with "Wiring" below.

Wiring

Wire this unit in accordance with the applicable requirements in the latest edition of the National Electrical Code, Canadian Electrical Code, and local codes.

To wire the beacon for 120 VAC:

1. Using wire nuts (not supplied), connect the field wiring to the beacon wiring.
2. Connect the black lead to hot, the white lead to neutral, and the green lead to ground.
3. Place the connected wires inside the base and reassemble the beacon.
4. Turn the power on to verify that the beacon operates properly.

To wire the beacon for 24 VAC/VDC:

1. Using wire nuts (not supplied), connect the field wiring to the beacon wiring.
2. Connections depend on the voltage supply. Choose the connections that match your power supply:

24 VAC: Connect the black lead to hot, the red lead to neutral, and the green lead to ground.

24 VDC: Connect the red lead to positive (+), and the black lead to negative (-).
3. Place the connected wires inside the base and reassemble the beacon.
4. Turn the power on to verify that the beacon operates properly.

Selecting the flash pattern

The beacon can be configured with one of seven user-selectable flash patterns using a push button (membrane switch). The push button is located in the center of the Edwards "shield logo" on the base of the beacon. See Figure 1.

To select a flash pattern:

1. Press and hold the push button for one second to switch the beacon to the next pattern in the sequence of patterns. See Table 1.
2. The beacon can be set to the first flash pattern (Steady) by pressing and holding the push button for three seconds, and then releasing it.

Table 1: Flash patterns

Patterns	Description
1. Steady	Steady-on
2. S65	65 flashes per minute (FPM)
3. Light Burst	1000 FPM (seven pulses) 440 ms off/repeat
4. Singular Burst	120 FPM
5. Binary Burst	65 double FPM
6. Quad Burst	65 quad FPM
7. iBurst	750 FPM (nine pulses)/ 480 FPM (one pulse)/ 85 FPM (six pulses)/ 460 FPM (one pulse)

Maintenance

Lens and dome replacement

WARNING: Shock hazard. To prevent electrical shock, disconnect from the supply circuit and allow five minutes for stored energy to dissipate before disassembling the unit.

To replace the lens or dome:

1. Remove the four screws from the dome and lens assembly, and then remove the dome and lens as shown in Figure 1.
2. Make sure the O-ring is in place around the base of the unit, and then replace the lens and dome.

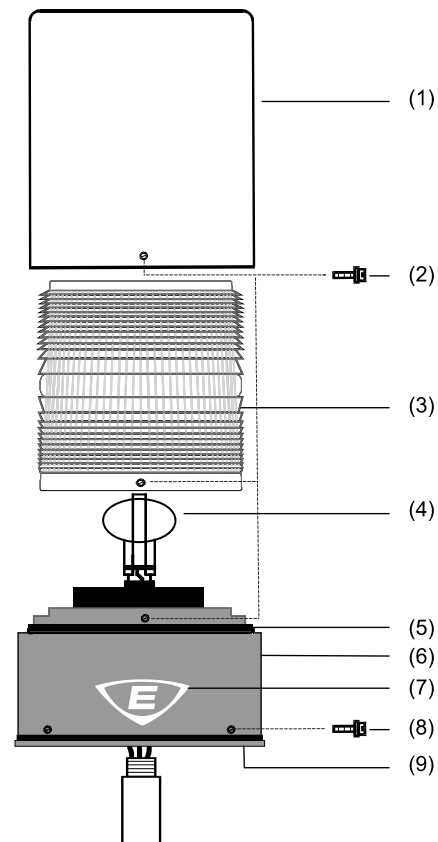
Caution: Do not overtighten the screws or damage to the dome may occur.
3. Reinstall the four screws and tighten each firmly until the gasket slightly compresses between the dome and the screw head.

Cleaning

Caution: To prevent damage to the lens or dome, do not use abrasive materials or cleaners.

Periodically clean the lens surface with a soft cloth or sponge and water or a mild detergent solution to maintain optimum light visibility. Ensure that the lens is completely dry before assembling the beacon.

Figure 1: Installation



- | | |
|----------------|-----------------|
| (1) Dome | (6) Beacon base |
| (2) Screw (4X) | (7) Push button |
| (3) Lens | (8) Screw (3X) |
| (4) LED tower | (9) Baseplate |
| (5) O-ring | |

Specifications

Table 2: Specifications

Catalog number		Electrical specs	Dimensions	Color
Gray base	Black base			
57PLEDMA24AD	57PLEDMA24ADB	12 VDC, 0.700 A 24 VAC/VDC 0.550 A	8 in. (203 mm) × 6.5 in. (165 mm)	Amber
57PLEDMB24AD	57PLEDMB24ADB	12 VDC, 0.700 A 24 VAC/VDC 0.550 A	8 in. (203 mm) × 6.5 in. (165 mm)	Blue
57PLEDMG24AD	57PLEDMG24ADB	12 VDC, 0.700 A 24 VAC/VDC 0.550 A	8 in. (203 mm) × 6.5 in. (165 mm)	Green
57PLEDMM24AD	57PLEDMM24ADB	12 VDC, 0.700 A 24 VAC/VDC 0.550 A	8 in. (203 mm) × 6.5 in. (165 mm)	Magenta
57PLEDMR24AD	57PLEDMR24ADB	12 VDC, 0.700 A 24 VAC/VDC 0.550 A	8 in. (203 mm) × 6.5 in. (165 mm)	Red
57PLEDMW24AD	57PLEDMW24ADB	12 VDC, 0.700 A 24 VAC/VDC 0.550 A	8 in. (203 mm) × 6.5 in. (165 mm)	White
57PLEDMA120A	57PLEDMA120AB	120 VAC, 0.250 A	8 in. (203 mm) × 6.5 in. (165 mm)	Amber
57PLEDMB120A	57PLEDMB120AB	120 VAC, 0.250 A	8 in. (203 mm) × 6.5 in. (165 mm)	Blue
57PLEDMG120A	57PLEDMG120AB	120 VAC, 0.250 A	8 in. (203 mm) × 6.5 in. (165 mm)	Green
57PLEDMM120A	57PLEDMM120AB	120 VAC, 0.250 A	8 in. (203 mm) × 6.5 in. (165 mm)	Magenta
57PLEDMR120A	57PLEDMR120AB	120 VAC, 0.250 A	8 in. (203 mm) × 6.5 in. (165 mm)	Red
57PLEDMW120A	57PLEDMW120AB	120 VAC, 0.250 A	8 in. (203 mm) × 6.5 in. (165 mm)	White

Figure 2: Dimensions

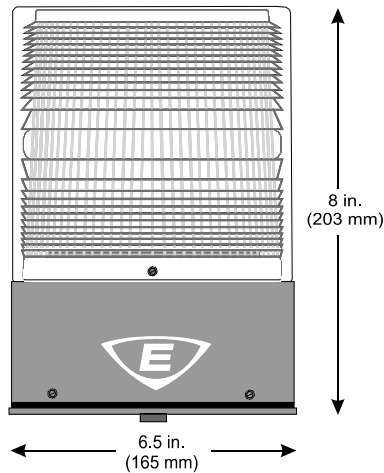


Table 4: Replacement parts

Component	Catalog number
Clear outer dome	57E-DC
Lens*	57E-L(*)

* The letter in this position signifies the color of the lens. A = amber, B = blue, C = Clear, G = green, M = magenta, or R = red. For example, a part number for a red lens would be 57E-LR.

Note: 57PLEDMW uses a clear lens.

Regulatory information

Manufacturer	Edwards, A Division of UTC Fire & Security Americas Corporation, Inc. 8985 Town Center Parkway, Bradenton, FL 34202, USA
North American standards	UL 1638, cUL C22.2 No. 205

Table 3: PLC compatibility

Catalog number	57PLEDM*24AD	57PLEDM*120A
Operating voltage	24 VDC	120 VAC
Off state leakage current	5 mA	5 mA
Continuous on current	700 mA	250 mA
Surge (inrush/duration)	8.5 A / 2 ms	4.5 A / 1 ms

* The letter in this position denotes color.

Contact information

For contact information see our Web site:
www.edwardssignaling.com

