

# EXC Series Installation Manual

## Class I Division 1 | Explosion Proof



## APPLICATION

The EXC luminaire is an explosion-proof product suitable for hazardous locations. Installation areas include indoor and outdoor use. The EXC is Class I Division 1 certified. CID1 locations are those in which flammable gases or vapours are or may be present in sufficient quantities to produce explosive or flammable mixtures during normal operational conditions. Furthermore, with an IP66 protection level, the versatile EXC offers a low-profile solution for surface and yoke mount applications in the permanently mounted LED fixture category.

**Certified to:** UL 1598, UL 8750, UL 844;  
CSA C22.2 No. 250.0, CSA C22.2 No. 137;

**Hazardous Location Certification:** Class I, Division 1, Groups CD, T5;  
Class II, Division 1, Groups EFG, T4A;  
Class III, Division 1;  
Class I, Zone 1, Group IIB;  
Class I, Zone 20, Group IIIC

**Housing:** Copper-free cast aluminium with tempered glass lens

**Input Voltage:** Suffix - AC: 120-277 VAC | Suffix - DC: 22-28VDC

**Rated Power:** Suffix - AC: 30W | Suffix - DC: 35W

**Current (Typ):** Suffix - AC: 0.2A @ 120VAC | Suffix - DC: 1.1A @ 24VDC

**Connections:** 3 x 3/4" NPT Conduit  
Suffix - AC: Black: Line | White: Neutral/Line 2 | Chassis: Ground  
Class 1 Wiring only.

Suffix - AC: Black: Line | White: Neutral | Chassis: Ground  
Suffix - DC: Black: Negative (-) | Red: Positive (+) | Chassis: Ground

For connections use wire rated to a minimum of 90°C. Daisy-chain wiring must use #12AWG conductors and the total circuit load must not exceed 1200W.

The EXC does not contain any arcing, sparking, or hazardous temperature components, and no conduit seals are required when installing luminaire. Refer to NEC 501.15(A) and CEC 18-108 for details.

**Temperature Range:** -50°C to +58°C

**Ingress Protection:** IP66 | Suitable for wet locations (luminaire enclosure only).



## WARNING

To avoid the risk of fire, explosion, or electric shock, this product should be installed, inspected, and maintained by a qualified electrician only, in accordance with all applicable electrical codes.



## WARNING

To reduce the risk of ignition of hazardous atmospheres and to avoid electric shock, disconnect the luminaire from the supply circuit before opening for installation and servicing.  
 Keep tightly closed when in operation.

## EXC - SURFACE MOUNT INSTALLATION (Built In)

*Refer to alternate instructions if using Yoke Mount*

### STEP 1.

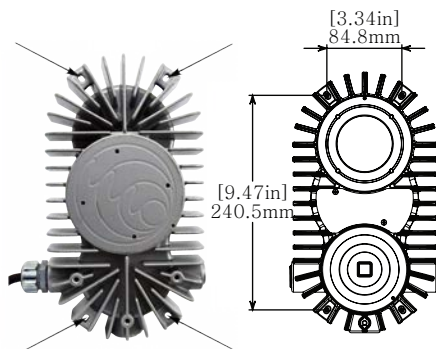
Inspect shipping package and contents to ensure no damage has occurred during shipping.

### STEP 2.

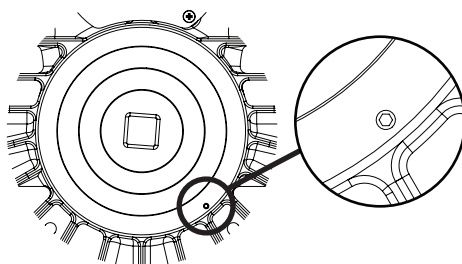
Mount EXC to desired location using minimum 2x (two) #10 bolts or screws in opposing corner mounting tabs. Use all four fastening points for more secure mounting.

### STEP 3.

Using a 2mm Allen socket key, loosen the M4 JB lid set screw.



Step 2

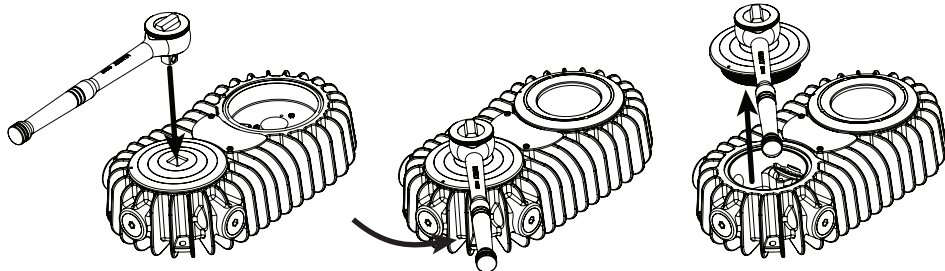


Step 3

## STEP 4.

Using a 1/2" socket wrench, remove the JB lid to access the fixture's junction box.

Step 4



## STEP 5.

Install a suitable wiring system to the conduit opening per CEC/NEC requirements for the installation's specific location.

## STEP 6.

For convenience, spring cage wire connectors have been provided. 12-28AWG solid or stranded wire with a strip length of 8-10mm (0.35-0.39") is supported. If user wiring requires it, the connectors may be replaced by an alternate listed connector.

Step 5

## STEP 6A.

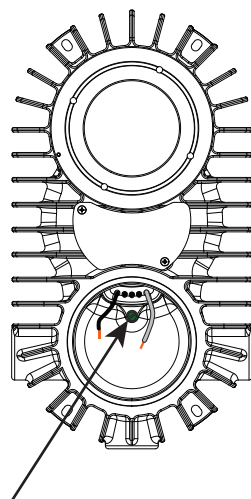
### 100-277VAC input only:

Connect wiring from branch circuit conductors to factory-provided Line (Black) and Neutral/Line 2 (White) wires. Connect the grounding conductor using provided #10-32 grounding screw. Refer to NEC/CEC codes and follow all applicable local standards. All unused NPT entries must be plugged using the provided 3/4-14 NPT plugs.

## STEP 6B.

### 22-28VDC input only:

Connect wiring from low voltage DC supply to factory-provided Positive (White) and Negative (Black) wires. Connect the grounding conductor using provided #10-32 grounding screw. Refer to NEC/CEC codes and follow all applicable local standards. All unused NPT entries must be plugged using the provided 3/4-14 NPT plugs.

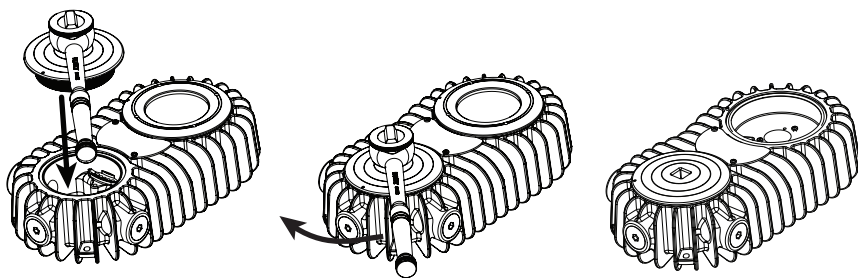


Connect Ground via provided #10-32 Green Grounding screw to Grounding Location.

## STEP 7.

Close the JB lid with a 1/2" drive socket wrench.  
Tighten firmly until the lid has bottomed out on the body.  
Torque lid to 40 ft-lbs (54 Nm).

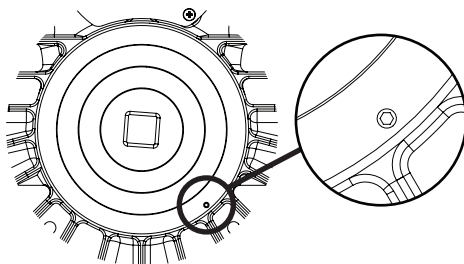
Step 7



## STEP 8.

Tighten M4 JB lid set screw.  
Torque to 10-inch pounds.

Step 8



## STEP 9.

Energize fixture.

## EXC-YM – YOKE MOUNT INSTALLATION (Order Separately)

Refer to alternate instructions if using Surface Mount

This EXC-YM kit is intended for use with UL-listed EXC luminaires, as marked on the luminaire nameplate. It is intended for mounting to wall and ceiling surfaces.

### Accessory Package Contents

EXC-YM	ITEM NO.	PART NAME	QTY.
	1	EXC YOKE MOUNT A	1
	2	EXC YOKE MOUNT B	1
	3	1/4-20 x 0.625in CARRIAGE BOLT	4
	4	1/4-20 HEX NUT	4
	5	M6 x 1 x 12mm SOCKET HEAD CAP SCREW	3
	6	M6 FLAT WASHER	3

## INSTALLATION STEPS

### STEP 1.

Inspect shipping package and contents to ensure no damage has occurred during shipping.

### STEP 2.

Mount the EXC luminaire to pre-assembled EXC yoke mount A using 3x M6 fasteners (Provided). Torque M6 fasteners to 40 in-lbs (4.5 N-m).

### STEP 3.

Mount EXC yoke mount B to the wall or ceiling mounting surface using 4x 1/4" or M6 fasteners (not provided).

### STEP 4.

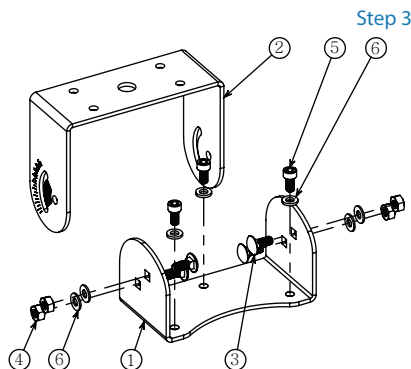
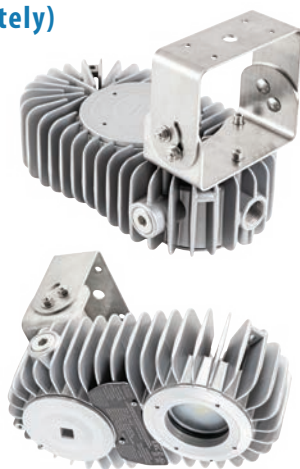
Loosen rotation lock nuts on the side of the EXC-YM assembly and aim the luminaire. Long angle markings are in 10° increments. Torque rotation lock nuts to 48 in-lbs (5.4 N-m).

### STEP 5.

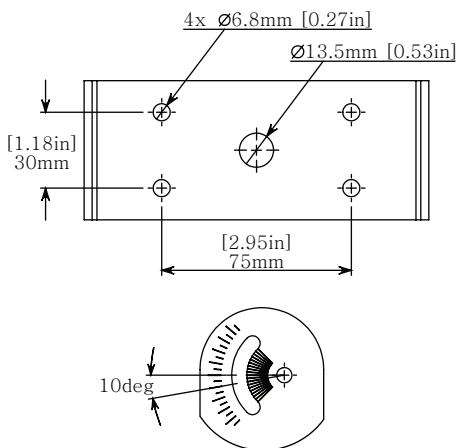
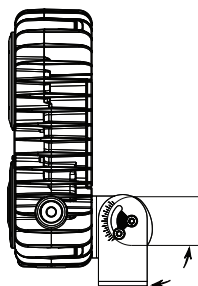
Install a suitable wiring system to the conduit opening per CEC/NEC requirements for the installation's specific location.

### STEP 6.

Continue installation with STEP 6 on PAGE 3.



Step 3



Step 4