

Surface/Ceiling Mounting Installation



Application

XR Bay luminaires are designed for use indoors, outdoors, wet locations, areas containing moisture, dirt, corrosion, vibration and rough usage. The XR Bay luminaire has been certified for use on marine vessels inside, outside, and in other severely wet saltwater environments.

Certified to: UL 844, UL 1598, UL 1598A, and UL 8750;
CSA C22.2 No. 250.0 and CSA C22.2 No. 250.13

Housing: Copper-free Cast Aluminium with Polycarbonate lens

Input Voltage: Based on luminaire sux in table below: Sux - AC: 120-277 VAC | Sux - HV: 347-480 VAC

Electrical Ratings:	Model	Input Voltage	Rated Wattage [Watts]	Rated Voltage [Volts]	Frequency [Hz]
	XR8	AC	Flood: 47 Optic: 60	120-277	50/60
		HV	Flood: 49 Optic: 64	347-480	50/60
	XR10	AC	Flood: 55 Optic: 75	120-277	50/60
		HV	Flood: 58 Optic: 77	347-480	50/60
	XR15	AC	Flood: 84 Optic: 103	120-277	50/60
		HV	Flood: 91 Optic: 107	347-480	50/60
	XR20	AC	Flood: 141 Optic: 156	120-277	50/60
		HV	Flood: 148 Optic: 160	347-480	50/60

Connections: 2 x 3/4" NPT Conduit | Black: Line | White: Neutral | Green: Ground
Optional: Purple: 0-10V Dimming (+) | Grey: 0-10V Dimming (-)
For connections use wire rated to a minimum of 90°C. Class 1 Wiring only.
Dimming control wires must be rated 300V minimum for luminaires with sux AC,
600V minimum for luminaires with suffix HV.

Temperature Range: XR8: -50°C to +75°C
XR10: -50°C to +74°C
XR15: -50°C to +74°C
XR20: -50°C to +67°C

Ingress Protection: IP66/67 | Suitable For Wet Locations. Marine Outside Type (Salt Water)

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 electric shock, disconnect the luminaire from the supply circuit before opening for installation and servicing. Keep tightly closed when in operation.

Surface/Ceiling Mount Installation (Ordered Separately)

(Brackets are ordered separately)

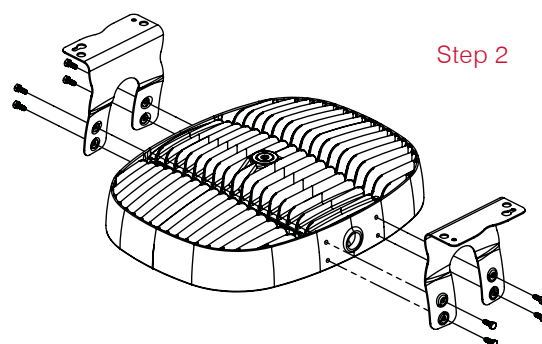
Refer to alternate instructions if using Conduit, Hook, Wall, Pole or Yoke Mount

Step 1.

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

Step 2.

Install Surface/Suspension Mount Brackets using the 8x M6 hex cap bracket mounting screws. See diagram for orientation of brackets. Torque M6 bolts to 5 Nm (45 in-lbs).

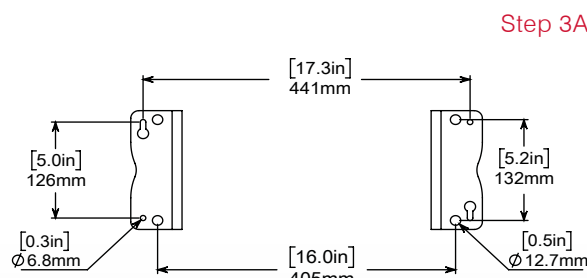


Step 2

Step 3.

A) For surface mounting configuration, mount luminaire in desired locations using 4x 1/4-20 OR 4x M6 fasteners and washers (Not provided). One mounting hole on each bracket is keyed to allow partial pre-installation of two fasteners for ease of install.

B) For ceiling mounting configurations, connect 4x anchors to the 12.7mm (0.5") holes. Suspension hardware (Not provided) must be rated for a minimum of 180 lbs.

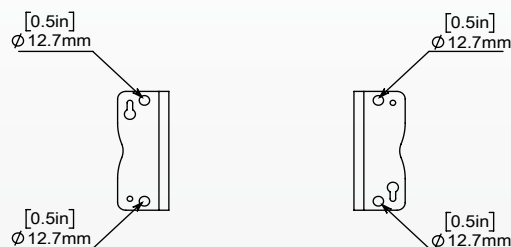


Step 3A

Step 4.

Open XR Wiring Cover and allow cover to hang via retention strap.

Note: Screws are captive fasteners and will remain attached to the cover for ease of reinstall and to prevent loss of fasteners.



Step 3B

Step 5.

Make wiring connections from branch circuit conductors to factory provided lead wires using one of the 3/4" NPT threaded entries. Follow wiring method requirements of the Canadian Electrical Code or National Electrical Code for the location of the installation.

For 0-10V Analog Dimming Control, connect the driver's integral Violet (+) and Gray (-) to 0-10VDC control wiring:

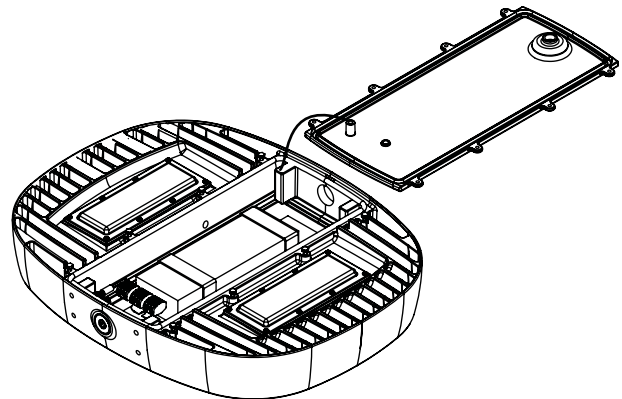
- LED Drivers will source a combined maximum of 200 μ A for control needs
- 0-10V Controller must sink current from LED driver
- 10V control connections
- 0-10V control connections.

NOTE: To aid in assembly and provide protection against ingress, use of a petrolatum or soap thickened mineral oil based thread lubricant/sealant is necessary.

Un-used conduit opening must be plugged to maintain the integrity of the enclosure.

Step 6.

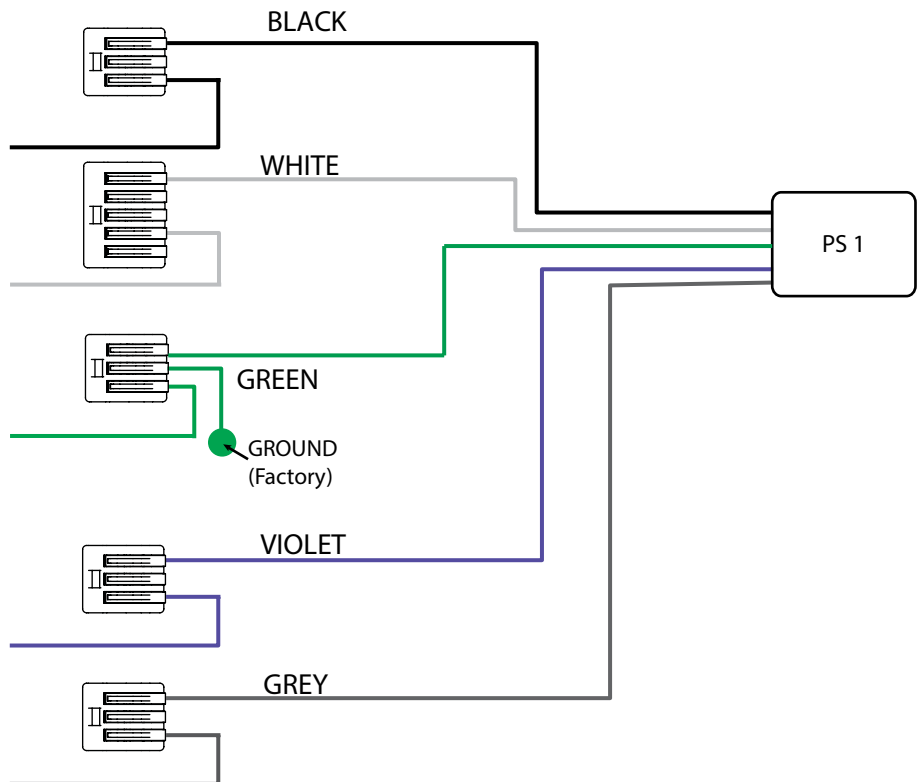
Close XR cover. Ensure the retention cable is not pinched between XR Head and the XR cover. Tighten cover bolts to 1.7 N-m (15 in-lbs).



Step 5

Wiring Diagram

- Black - Line
- White - Neutral
- Green - Ground
- Purple - DIM (+)
- Grey - DIM (-)



*Any additional wiring not shown has been capped by the factory and is not to be utilized unless part of supplemental instructions for luminaire accessory.

Pole Mount Installation

Refer to alternate instructions if using Conduit, Hook, Wall or Yoke Mount

This SPX-BKT-XR-PM kit is intended for use with UL Listed XR luminaire as marked on the luminaire nameplate.

Accessory Package Contents

SPX-BKT-XR-PM	QTY	PART NAME
	1	POLE MOUNT
	1	POLE MOUNT GASKET
	4	M6 X 25mm HEX HEAD CAP SCREW
	4	M6 FLAT WASHER
	1	M6 X 16mm HEX HEAD CAP SCREW
	1	3/4 NPT THREADED SMOOTH BORE BUSHING



Installation Steps

Step 1.

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

Step 2.

Install the provided plastic 3/4" bushing into side 3/4" NPT entry.

Step 3.

Install Pole Mount and gasket with adhesive side applied to mount using included M6 bolts and washers.

Torque to 5 Nm (45 in-lbs)

Step 4.

Thread luminaire assembly onto 1.5" NPT pole

NOTE: To aid in assembly and provide protection against ingress, use of a petrolatum or soap thickened mineral oil based thread lubricant/sealant is necessary.

Un-used conduit opening must be plugged to maintain the integrity of the enclosure.

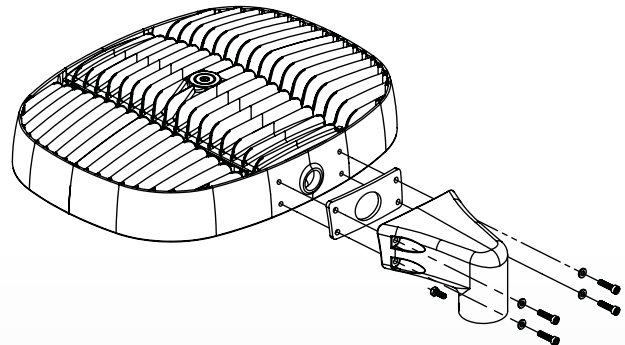
Step 5.

Insert and tension M6 set screw to pole to lock rotation.

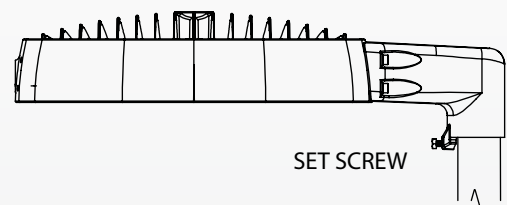
Step 6.

Resume installation instructions provided with luminaire. (STEP 4 in XR Installation Instructions from the Surface/Ceiling Mount installation provided with Luminaire).

Step 3



Step 5



Wall Mount Installation

Refer to alternate instructions if using Conduit, Hook, Pole or Yoke Mount

This SPX-BKT-XR-WM kit is intended for use with UL Listed XR luminaire as marked on the luminaire nameplate.

Accessory Package Contents

SPX-BKT-XR-WM	QTY	PART NAME
	1	WALL MOUNT
	1	WALL MOUNT PLATE
	1	WALL MOUNT PLATE SIDE GASKET
	1	WALL MOUNT GASKET
	4	6 x 25mm SOCKET HEAD CAP SCREW
	4	M4x 10mm FLAT HEAD SOCKET CAP SCREW
	4	M6 FLAT WASHER
	3	3/4 NPT HEX CAP PLUG
	1	3/4 NPT THREADED SMOOTH BORE BUSHING



Installation Steps

Step 1.

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

Step 2.

Install provided 3/4 NPT conduit plugs in desired locations on wall mount. To maintain ingress rating all NPT entries not used for wiring connections are required to be plugged. Torque to 10 Nm (88 in-lbs)

NOTE: To aid in assembly and protection against ingress use of a petrolatum or soap thickened mineral oil based thread lubricant/sealant is necessary.

Un-used conduit opening must be plugged to maintain the integrity of the enclosure.

Step 3.

Install provided 3/4" NPT plastic bushing onto side NPT entry on XR head, rotate so that flats are parallel to lens surface to avoid interference with mount hardware.

Step 4.

Install Wall Mount main body with included M6 bolts and washers and adhesive backed gasket. Apply gasket to mount with adhesive backed side. Torque to 5 Nm (45 in-lbs).

Step 5.

Install Back Cover Plate with 4x M4 Flat head screws and adhesive backed gasket. Apply gasket with adhesive side applied to mount main body. Torque to 1.7 N-m (15 in-lbs).

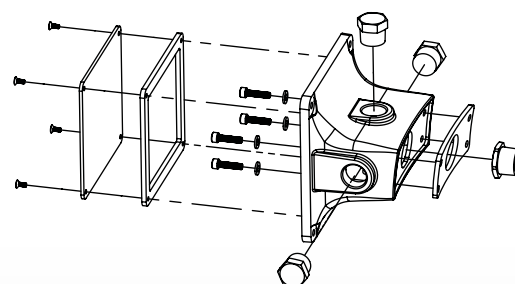
Step 6.

Mount luminaire assembly to desired location using 4x 1/4-20 OR M6 Screws or Bolts (Not Provided).

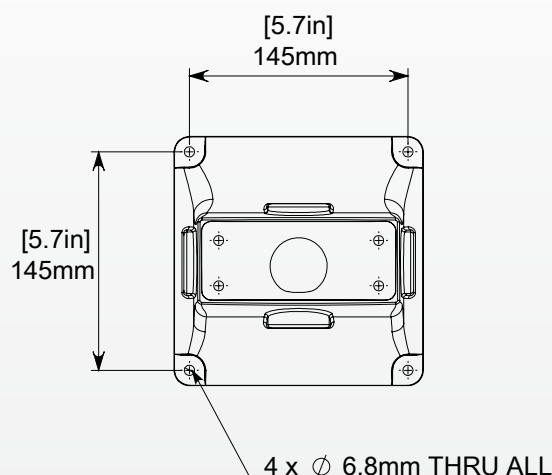
Step 7.

Resume installation instructions provided with luminaire. (STEP 4 in XR Installation Instructions from the Surface/Ceiling Mount installation provided with Luminaire).

Steps 2 through 5



Step 6



High Vibration Yoke Installation (Ordered Separately)

Refer to alternate instructions if using Conduit, Hook, Pole, Wall Mount, or Yoke Mount

This SPX-BKT-XR-YK kit is intended for use with UL Listed XR luminaire as marked on the luminaire nameplate.

Accessory Package Contents

SPX-BKT-XR-YK	QTY	PART NAME
	1	XR HIGH VIBRATION YOKE
	2	CHEEK PLATE
	8	M6 x 1 x 25mm SOCKET FLAT HEAD CAP SCREW
	4	M6 FLAT WASHER
	4	M6 x 1 x 16mm SOCKET HEAD CAP SCREW



Installation Steps

Step 1.

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

Step 2.

Mount XR high vibration yoke to mounting surface using a minimum of 4x 1/4-20 or M6 fasteners (not provided).

Step 3.

Make wiring connections from branch circuit conductors to factory provided lead wires using one of the 3/4" NPT threaded entries. Follow wiring method requirements of the Canadian Electrical Code or National Electrical Code for the installation.

NOTE: Depending on which mounting hole is used in the curved slot, the luminaire may be configured for an upward or downward adjustable swing.

Step 4.

Mount XR Cheek Plates to sides of XR luminaire using 4x M6 flat head cap screws per side. Thread one cheek plate over installed wiring during assembly. Torque fasteners to 5 Nm (45 in-lbs).

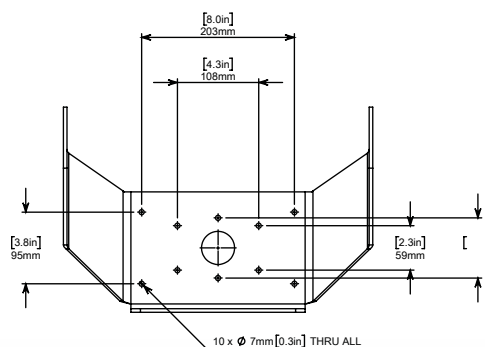
Step 5.

Thread installed wiring through opening in XR high vibration yoke mount and install XR luminaire into yoke. The raised circular bosses on the XR cheek plates should register inside of the large circular holes on the XR high vibration yoke mount arms. Rotate luminaire to aim in the desired direction and fasten in place using 2x M6 socket head cap screws and flat washers per side. Torque fasteners to 5 Nm (45 in-lbs).

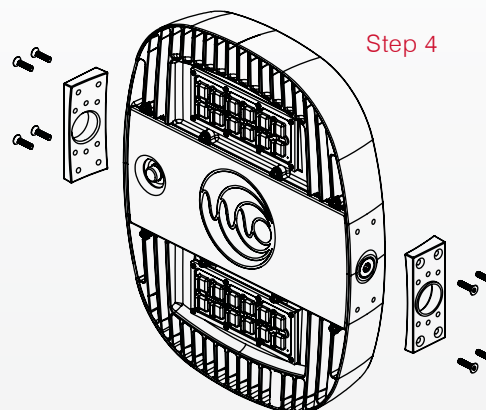
Step 6.

Resume installation instructions provided with luminaire. (STEP 4 in XR Installation Instructions from the Surface/Ceiling Mount installation provided with Luminaire).

Step 2



Step 4



Yoke Mount Installation (Ordered Separately)

Refer to alternate instructions if using Conduit, Hook, Pole or Wall Mount

This SPX-BKT-XR-YM kit is intended for use with UL Listed XR luminaire as marked on the luminaire nameplate.

Accessory Package Contents

SPX-BKT-XR-YM	QTY	PART NAME
	1	YOKE MOUNT A
	1	YOKE MOUNT B
	1	CHEEK PLATE
	4	1/4-20 HEX NUT
	4	1/4" FLAT WASHER
	4	1/4-20 x 0.5in CARRIAGE BOLT
	4	M6 x 25mm HEX HEAD CAP SCREW



Installation Steps

Step 1.

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

Step 2.

Make wiring connections from branch circuit conductors to factory provided lead wires using one of the 3/4" NPT threaded entries. Follow wiring method requirements of the Canadian Electrical Code or National Electrical Code for the location of the installation.

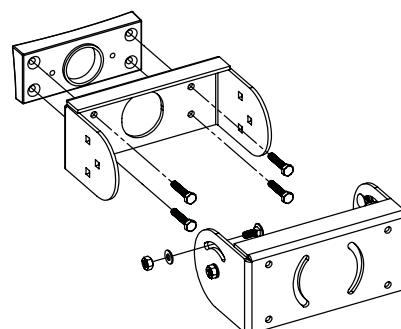
NOTE: To aid in assembly and provide protection against ingress, use of a petrolatum or soap thickened mineral oil based thread lubricant/sealant is necessary.

Un-used conduit opening must be plugged to maintain the integrity of the enclosure.

Step 3.

Loosely assemble Yoke mount with carriage bolts on inside and washers and nuts on the outside.

NOTE: Depending on which mounting hole is used in the curved slot, the luminaire may be configured for an upward or downward adjustable swing.



Step 3

Step 4.

Thread installed wiring through openings in yoke mount cheek plate and yoke mount bracket. Mount yoke assembly to luminaire using 4x M6 Socket Head Cap Screws and Washers (Provided). Torque fasteners to 5 Nm (45 in-lbs).

Step 5.

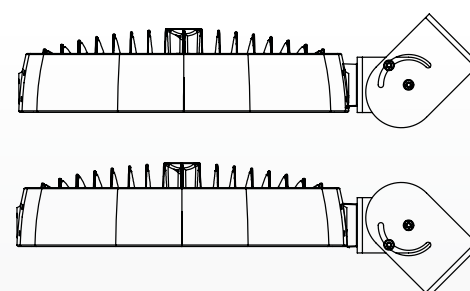
Mount luminaire assembly to desired location using 4x 1/4-20 OR M6 Screws or Bolts (Not Provided).

Step 6.

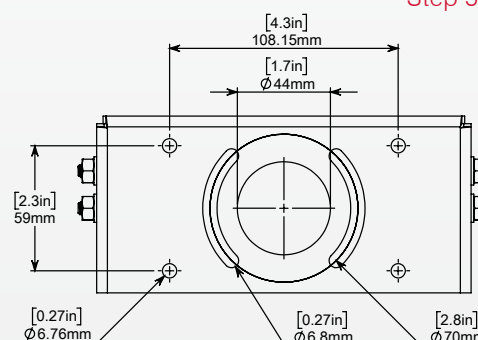
Adjust and aim luminaire to desired position. Torque hardware nuts to 9 N-m (80 in-lbs).

Step 7.

Resume installation instructions provided with luminaire. (STEP 4 in XR Installation Instructions from the Surface/Ceiling Mount installation provided with Luminaire).



Step 5



Hook Pendant Installation (Ordered Separately)

Refer to alternate instructions if using Wall, Hook, Pole or Yoke Mount

This SPX-BKT-XR-HK kit is intended for use with UL Listed XR luminaire as marked on the luminaire nameplate.

Accessory Package Contents

SPX-BKT-XR-HK	QTY	PART NAME
	1	PENDANT HOOK ASSEMBLY
	1	ANTI-ROTATION ASSEMBLY



Installation Steps

Step 1.

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

Step 2.

It is recommended to install Secondary Safety Cable by looping appropriate steel cable or chain through the outer band of the unit and fastening a closed loop. Secondary safety hardware must be rated for a minimum of 110lbs. Secondary safety cables made from stainless steel aircraft cable are available upon request.

Step 3.

Slide anti-rotation lock onto suspension hook assembly and install hook assembly into $\frac{3}{4}$ NPT threaded entry. Tighten to hand tight plus 1 to 2 turns. Slide anti-rotation lock into place and tighten set screw to lock unit in place.

NOTE: To aid in assembly and provide protection against ingress, use of a petrolatum or soap thickened mineral oil based thread lubricant/sealant is necessary.

Un-used conduit opening must be plugged to maintain the integrity of the enclosure.

Step 4.

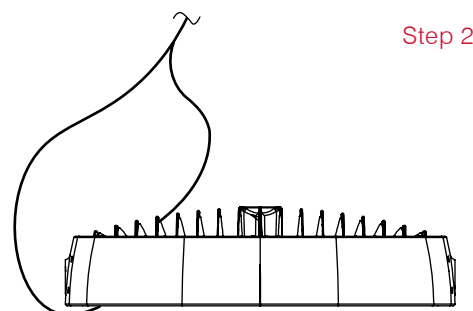
Latch hook onto eye-bolt or other fixed mounting loop. Mounting point must be rated for a minimum of 110lbs.

Step 5.

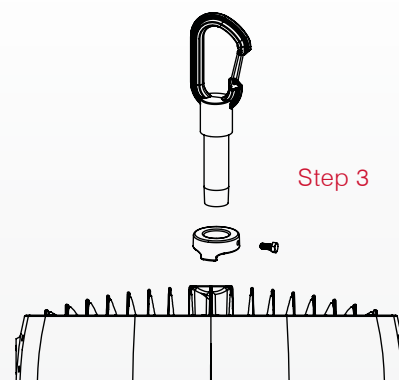
Install remaining loop of secondary safety chain or steel cable to suitable mounting location and fasten securely.

Step 6.

Resume installation instructions provided with luminaire. (STEP 4 in XR Installation Instructions from the Surface/Ceiling Mount installation provided with Luminaire).



Step 2



Step 3

Conduit Mount Installation

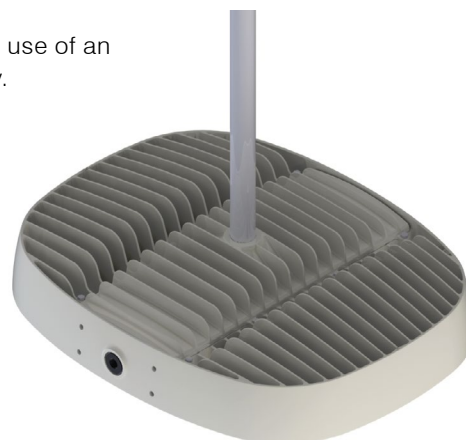
Refer to alternate instructions if using Wall, Hook, Pole or Yoke Mount

**Per NEC 314.23H2 pendant/conduit installation below 8ft (2.4m) requires the use of an anti-rotation mechanism. SPX-BKT-R-CC accessory required. Order separately.

This SPX-BKT-R-CC kit is intended for use with UL Listed XR luminaire as marked on the luminaire nameplate.

Accessory Package Contents

SPX-BKT-R-CC	QTY	PART NAME
	1	ANTI-ROTATION BRACKET ASSEMBLY



Installation Steps

Step 1.

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

Step 2.

When using the R-CC anti-rotation lock, slide it first onto suitably mounted hanging conduit or luminaire hanger loosely tighten set screw.

Fixed Rigid Metal Conduit or luminaire hanger must be suitably mounted to prevent rotation and system must be rated for 110 lbs. Install luminaire onto 3/4" NPT threaded nipple. Tighten to hand tight contact plus 1 to 2 turns. When using the R-CC loosen set screw and slide R-CC into place with flats aligned to those on luminaire hub and tighten set screw to lock unit in place.

NOTE: To aid in assembly and provide protection against ingress, use of a petrolatum or soap thickened mineral oil based thread lubricant/sealant is necessary.

Un-used conduit opening must be plugged to maintain the integrity of the enclosure.

Step 3.

Install Secondary Safety Cable by looping appropriate steel cable or chain through the outer band of the unit and fastening a closed loop. Secondary safety hardware must be rated for a minimum of 110lbs.

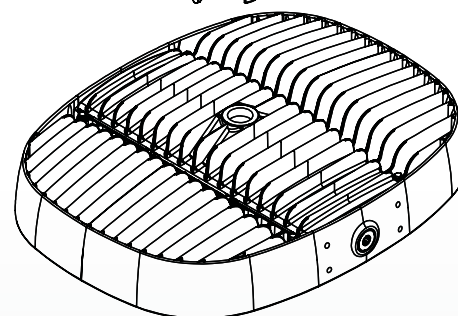
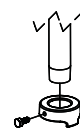
Install remaining loop of secondary safety chain or steel cable to suitable mounting location and fasten securely. Secondary safety hardware must be rated for 110lbs.

Step 4.

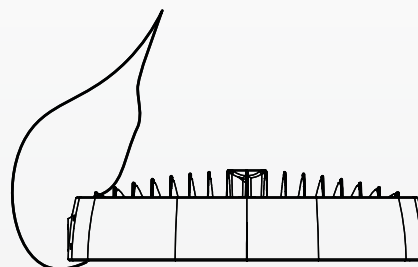
Resume installation instructions provided with luminaire. (STEP 4 in XR Installation Instructions from the Surface/Ceiling Mount installation provided with Luminaire).



Step 2



Step 4



Surge Suppressor Kit

(Requires SPX-BKT-XR-SP-AC Surge Protector Accessory Kit)

This SPX-BKT-XR-SP-AC kit is intended for use with UL Listed XR luminaire as marked on the luminaire nameplate.

Accessory Package Contents

SPX-BKT-XR-SP-AC	QTY	PART NAME
	1	BSP3-277-20KA SURGE PROTECTOR
	1	3M VHB TAPE
	1	4" Zip Tie

Installation Steps

Step 1.

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

Step 2.

Open XR Wiring Cover with 7mm hex socket driver. Allow Lens to hang via retention strap.

NOTE: Screws are captive fasteners and will remain attached to the Lens for ease of reinstall and prevent loss of fasteners.reinstall and prevent loss of fasteners.

Step 3.

Install provided double-sided tape along side of surge protector and secure to XR body near AC input. Secure the surge protector and driver lead wires together as close to the origin of the driver lead wires as possible using the provided zip tie.

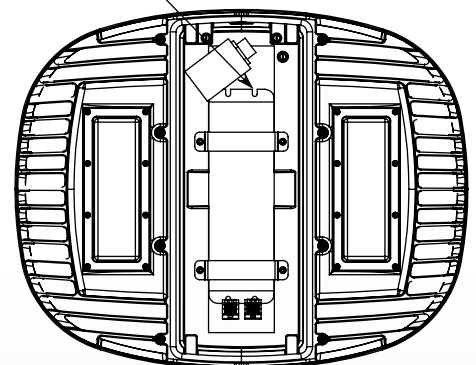
Step 4.

Wire according to wiring instructions on Page 13-14. Refer to NEC/CEC codes and follow all applicable local standards.

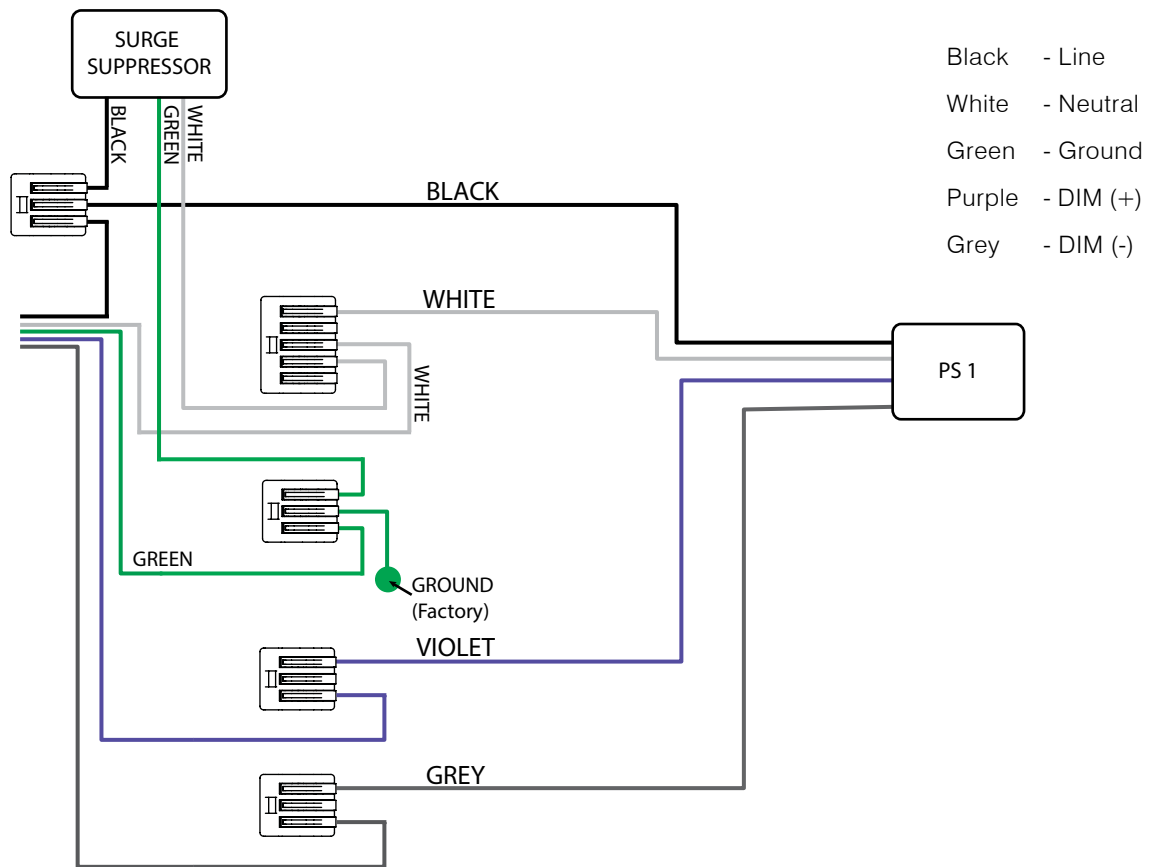
Step 5.

Close XR Wiring Cover. Ensure the retention cable is not pinched between XR Head and the XR Wiring Cover. Tighten lens bolts using a 7mm socket or box wrench to 1.7 N-m (15 in-lbs).

SURGE PROTECTOR LOCATION



Wiring Diagram (SPX-BKT-XR-SP-AC)



1. Disconnect Line Input branch circuit conductor from splice or terminal connected to Black leads from LED Driver. Re-connect Line Input branch circuit conductor to Black wire from surge protector.
2. Connect White lead from surge protector to splice or terminal connected to Neutral Input branch circuit conductor and White leads from LED Drivers.
3. Connect Green wire from surge protector to splice or terminal connected to Grounding branch circuit conductor and green lead from luminaire case.

Surge Suppressor Kit

This SPX-BKT-XR-SP-HV kit is intended for use with UL Listed XR luminaire as marked on the luminaire nameplate.

Accessory Package Contents

SPX-BKT-XR-SP-HV	QTY	PART NAME
	1	BSP3-480-20KA SURGE PROTECTOR
	1	3M VHB TAPE
	1	4" Zip Tie

Installation Steps

Step 1.

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

Step 2.

Open XR Wiring Cover with 7mm hex socket driver. Allow Lens to hang via retention strap.

NOTE: Screws are captive fasteners and will remain attached to the Lens for ease of reinstall and prevent loss of fasteners.

Step 3.

Install provided double-sided tape along side of surge protector and secure to XR body near AC input. Secure the surge protector and driver lead wires together as close to the origin of the driver lead wires as possible using the provided zip tie.

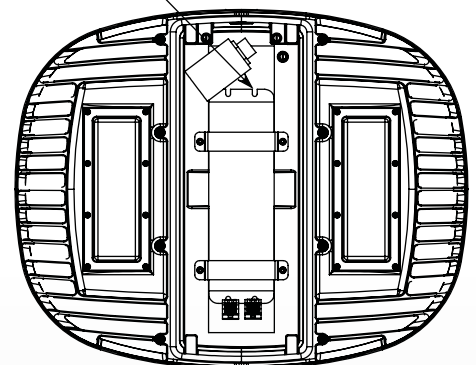
Step 4.

Wire according to wiring instructions on Page 12-14. Refer to NEC/CEC codes and follow all applicable local standards.

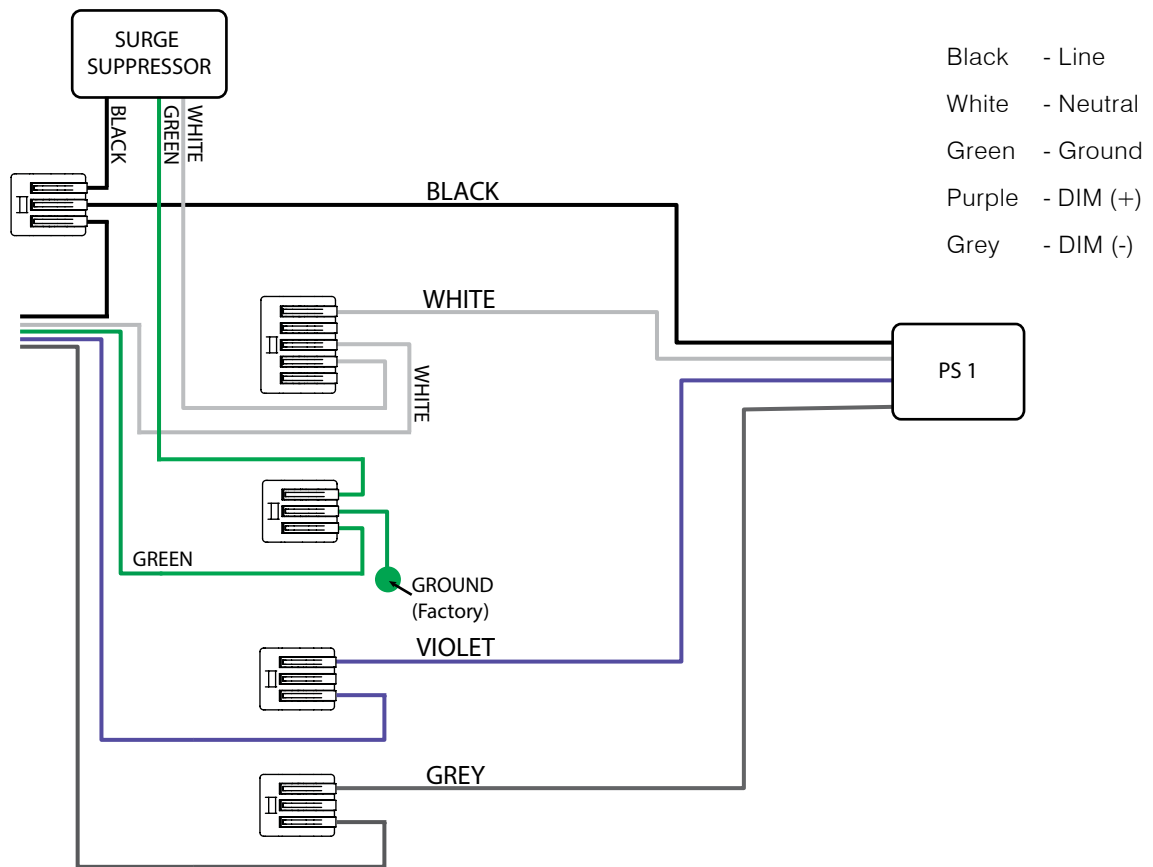
Step 5.

Close XR Wiring Cover. Ensure the retention cable is not pinched between XR Head and the XR Wiring Cover. Tighten lens bolts using a 7mm socket or box wrench to 1.7 N-m (15 in-lbs).

SURGE PROTECTOR LOCATION



Wiring Diagram (SPX-BKT-XR-SP-HV)



1. Disconnect Line Input branch circuit conductor from splice or terminal connected to Black leads from LED Driver. Re-connect Line Input branch circuit conductor to Black wire from surge protector.
2. Connect White lead from surge protector to splice or terminal connected to Neutral Input branch circuit conductor and White leads from LED Drivers.
3. Connect Green wire from surge protector to splice or terminal connected to Grounding branch circuit conductor and green lead from luminaire case.