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XR Series Installation Manual

APPLICATION

XR luminaires are designed for use indoors, outdoors, wet locations, and areas containing moisture, dirt, corrosion, vibration, and rough usage. The XR luminaire is also certified for use on marine vessels inside, outside and in other severely wet saltwater environments. Models XRXX-XXX-XXX-XX-HZ-XX are certified for use in hazardous location areas.

XR luminaires are suitable for use in the following areas as defined by the National Electrical Code (NEC) and the Canadian Electrical Code (CEC):

UL File Numbers:	Nemalux General Location: E477827
	Nemalux Hazardous Location: E477829
Standards that apply to all models:	UL 1598, UL 1598A and UL 8750;
	CSA C22.2 No. 250.0 and CSA C22.2 No. 250.13
Standards that apply only to Hazardous Location models (XRXX-XXX-XXX-XX-HZ-XX):	UL 844, CSA C22.2 No. 137
Hazardous Location Certication:	Class I, Division 2, Groups ABCD;
	Class II, Division 2, Groups FG;
	Class III;
	Class I, Zone 2, Group IIC;
	Zone 22
Housing:	Copper-free Cast Aluminum with Polycarbonate or Glass lens
Input Voltage:	Based on luminaire suffix in table below:
	Suffix - AC: 120-277 VAC	Suffix - HV: 347-480 VAC

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APPLICATION Cont.

Electrical Ratings:

LUMINANCE	INPUT VOLTAGE	RATED WATTAGE [Watts]	RATED VOLTAGE [Volts]	FREQUENCY [Hz]
XR8	AC	Flood: 47 Optic: 60	120-277	50/60
	HV	Flood: 49 Optic: 60	347-480	50/60
XR10	AC	Flood: 55 Optic: 75	120-277	50/60
	HV	Flood: 58 Optic: 75	347-480	50/60
XR12	AC	Flood: 84 Optic: 103	120-277	50/60
	HV	Flood: 91 Optic: 107	347-480	50/60
XR15	AC	Flood: 100 Optic: 118	120-277	50/60
	HV	Flood: 100 Optic: 120	347-480	50/60
XR17	AC	Flood: 120 Optic: 135	120-277	50/60
	HV	Flood: 120 Optic: 138	347-480	50/60
XR20	AC	Flood: 141 Optic: 156	120-277	50/60
	HV	Flood: 148 Optic: 160	347-480	50/60

Inrush Current: XR (AC): 65A peak, 1.2ms duration
                         XR (HV): 65A peak, 1.2ms duration

Ambient Temperature Range:

LUMINANCE	Temp Range General Location (Deg°C)	Temp Range Class 1 Division II / Zone 2 (Deg°C)	HazLoc Class 1 Division II T-Code	HazLoc Class 1 Zone 2 T-Code	Temp Range Class 2 Division II / Zone 22 (Deg°C)	HazLoc Class 2 Division II T-Code	HazLoc Class 2 Zone 22 T-Code
XR8	-50 to 75	-50 to 75	T2C	T2	-50 to 50	T3C	T3
XR10	-50 to 74	-50 to 74	T2C	T2	-50 to 50	T3C	T3
XR12	-50 to 74	-50 to 74	T2C	T2	-50 to 50	T3C	T3
XR15	-50 to 67	-50 to 67	T2C	T2	-50 to 50	T3C	T3
XR17	-50 to 67	-50 to 67	T2C	T2	-50 to 50	T3C	T3
XR20	-50 to 67	-50 to 67	T2C	T2	-50 to 50	T3C	T3

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

Ingress Protection: IP66 | Suitable for wet locations. Marine outside type (salt water).

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⚠ WARNING / ATTENTION

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.

Éviter tout risque d'incendie, d'explosion ou d'électrocution, ce produit doit être installé, inspecté et entretenu par un électricien qualifié uniquement, conformément à tous codes électriques applicables.

⚠ WARNING / ATTENTION

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.

Pour réduire le risque de choc électrique, débranchez le luminaire du circuit d'alimentation avant l'ouverture pour l'installation et entretien. Gardez hermétiquement fermé pendant le fonctionnement.

⚠ WARNING / ATTENTION

Potential Electrostatic Charging Hazard

Avoid electrostatic discharge: Clean exterior lens surface with damp cloth only

Risque potentiel de charge électrostatique

Éviter les décharges électrostatiques: nettoyer la surface extérieure de la lentille uniquement avec un chiffon humide

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XR-SM – SURFACE/CEILING MOUNT INSTALLATION (Ordered Separately)
Refer to desired mounting section for specific mount instructions.
Wiring instructions are in the Surface/ Ceiling Mount section.

This XR-SM kit is intended for use with UL listed XR luminaire as marked on the luminaire nameplate.

Accessory Package Contents

XR-SM	QTY	PART NAME
	2	SURFACE/SUSPENSION MOUNT BRACKET
	4	M6 X 12mm HEX HEAD CAP SCREW
	4	M6 FLAT WASHER

INSTALLATION STEPS

STEP 1.
Inspect shipping package and contents to ensure no damage has occurred during shipping.

STEP 2.
Install surface/ceiling or suspension mount brackets using the 8x M6 hex cap bracket mounting screws. See the diagram for the orientation of brackets. Torque M6 bolts to 5 Nm (45 in-lbs).

STEP 3.
For surface/ceiling 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.
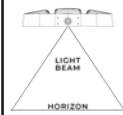
For suspension mounting configurations, connect 4x anchors to the 12.7mm (0.5") holes. Suspension hardware (Not provided) must be rated for a minimum of 180 lbs.

STEP 4.
Open XR Wiring Cover and allow cover to hang via retention strap.

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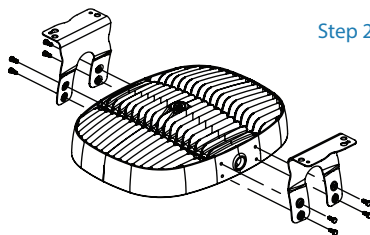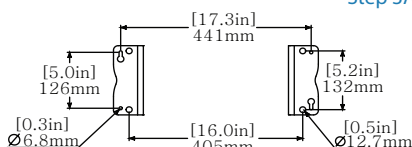
⚠ WARNING / ATTENTION

The XR head must not face upwards any degree beyond the horizontal position for Class II, Division 2, Zone 22 and Class III hazardous location installations.

Le luminaire XR ne doit pas être orienté vers le haut à un degré quelconque au-delà de la position horizontale pour les installations en zones dangereuses de classe II, division 2, zone 22 et classe III.
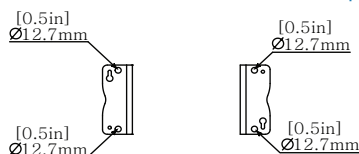
LIGHT BEAM
HORIZON

Step 2

Step 3A

[17.3in] 441mm
[5.0in] 126mm
[0.3in] Ø6.8mm
[16.0in] 405mm
[5.2in] 132mm
[0.5in] Ø12.7mm

Step 3B

[0.5in] Ø12.7mm
[0.5in] Ø12.7mm
[0.5in] Ø12.7mm
[0.5in] Ø12.7mm

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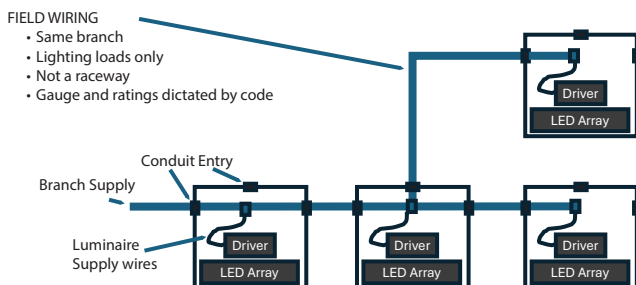## XR-SM – SURFACE/CEILING MOUNT INSTALLATION CONT. (Ordered Separately)

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 specific location of the installation. If installing a hazardous location model (XRXX-XXX-XXX-XX-HZ-XX) in a hazardous location, follow the hazardous location wiring method requirements of the Canadian Electrical Code or National Electrical Code.

Step 5

For 0-10V Analog Dimming Control. Ensure dimming control is certified and suitable for the classification of the area of installation. Connect Violet (Purple) (+) and Gray (-), driver lead wires, to 0-10VDC control wiring.
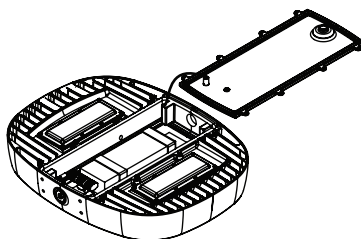
Additional lighting fixtures can be connected in parallel to the same power supply circuit, as illustrated in the provided wiring diagram. It is essential to verify the electrical specifications indicated on each luminaire to ensure that the cumulative current draw does not surpass the rated amperage capacity (maximum permissible load) of the branch circuit protection device, such as a circuit breaker or fuse, located in the distribution panel.

FIELD WIRING
• Same branch
• Lighting loads only
• Not a raceway
• Gauge and ratings dictated by code

Conduit Entry
Branch Supply
Luminaire
Supply wires

Driver
LED Array

Driver
LED Array

Driver
LED Array

Driver
LED Array

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XR-SM – SURFACE/CEILING MOUNT INSTALLATION CONT. (Ordered Separately)

STEP 5. CONTINUED.
For 0-10V Analog Dimming Control. Ensure dimming control is certified and suitable for the classification of the area of installation. Connect Violet (Purple) (+) and Gray (-), driver lead wires, to 0-10VDC control wiring.
- LED Drivers will source a combined maximum of 200µA for control needs
- 0-10V Controller must sink current from LED driver 0-10V control connections

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

*Any unused conduit openings must be plugged to maintain the enclosure's integrity.*

WIRING DIAGRAM

BLACK - LINE
WHITE - NEUTRAL/LINE 2
GREEN - GROUND
VIOLET(PURPLE) - DIM (+)
GREY - DIM (-)

BLACK

WHITE

GREEN

GROUND (Factory)

VIOLET (PURPLE)

GREY

PS 1
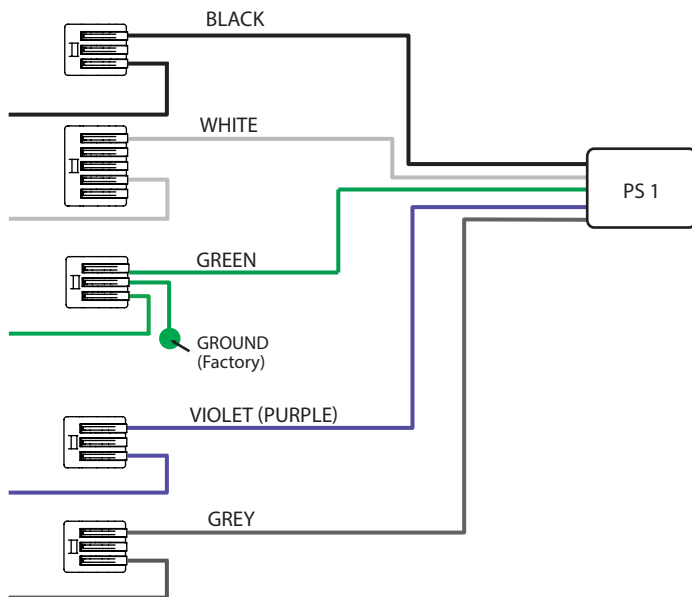
*Any additional wiring not shown has been capped by the factory and is not to be used.

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).

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XR-PM – POLE MOUNT INSTALLATION (Ordered Separately)

If using a different mounting accessory, refer to the corresponding page.
Wiring instructions are in the Surface/ Ceiling Mount section.

This XR-PM kit is intended for use with UL listed XR luminaire,
as marked on the luminaire nameplate.

Accessory Package Contents

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 at the conduit
entry. Used for supply connection to prevent wire abrasion.

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 a 1.5" NPT pole.

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

*Any unused conduit openings must be plugged to maintain
the enclosure's integrity.*

STEP 5.
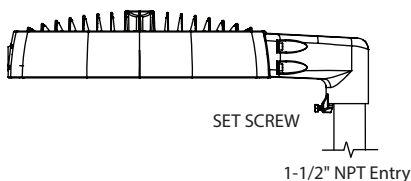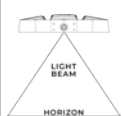Insert and tension M6 set screw to pole to lock rotation.

STEP 6.
Continue installation with STEP 4 on PAGE 3.
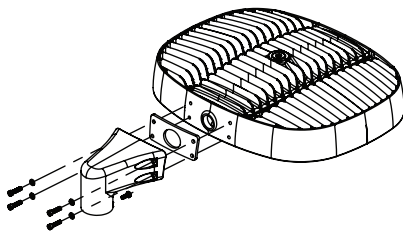
Step 3

Step 5

SET SCREW

1-1/2" NPT Entry

⚠ WARNING / ATTENTION

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XR-WM – WALL MOUNT INSTALLATION (Ordered Separately)

If using a different mounting accessory, refer to the corresponding page.
Wiring instructions are in the Surface/ Ceiling Mount section.

This XR-WM kit is intended for use with UL listed XR luminaire, as marked on the luminaire nameplate.

Accessory Package Contents

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 ENTRY 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 the provided 3/4" NPT conduit plugs in the desired locations on wall mount. To maintain the 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 protect against ingress, use of a petrolatum or soap-thickened mineral oil-based thread lubricant/sealant is necessary.

Any unused conduit openings must be plugged to maintain the enclosure's integrity.
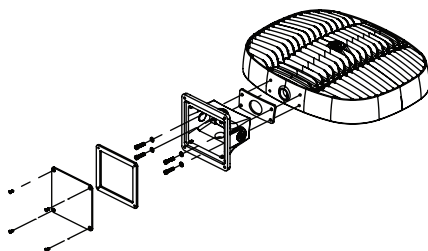
STEP 3.
Install the provided plastic 3/4" bushing at the conduit entry used for supply connection to prevent wire abrasion, rotate so that flats are parallel to lens surface to avoid interference with mount hardware.

STEP 4.
Install wall mount main body with the included M6 bolts and washers and adhesive-backed gasket. Apply gasket to mount with adhesive-backed side.
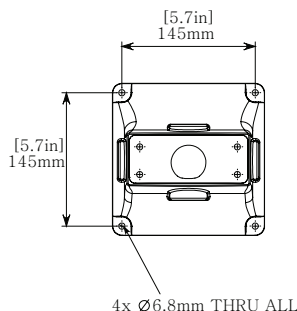Torque to 5 Nm (45 in-lbs).

STEP 5.
Install back cover plate with 4x M4 flat head screws and adhesive backed gasket. Apply gasket with adhesive side applied 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.
Continue installation with STEP 4 on PAGE 3.

Steps 4 & 5

Step 6

[5.7in] 145mm

[5.7in] 145mm

4x ⌀6.8mm THRU ALL

⚠ **WARNING/ ATTENTION**

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XR-WM2 – WALL MOUNT 2 INSTALLATION (Ordered Separately)

If using a different mounting accessory, refer to the corresponding page.
Wiring instructions are in the Surface/ Ceiling Mount section.

This XR-WM2 kit is intended for use with UL listed XR luminaire, as marked on the luminaire nameplate.

Accessory Package Contents

XR-WM2	QTY	PART NAME
	1	WALL MOUNT
	1	WALL MOUNT LID
	1	WALL MOUNT GASKET
	4	M6 x 25mm SOCKET HEAD CAP SCREW
	2	M6 x 20mm SOCKET HEAD CAP SCREW
	4	M6 FLAT WASHER
	3	3/4 NPT HEX CAP PLUG
	1	3/4 NPT THREADED SMOOTH BORE BUSHING
	1	WIRE EXTENSION KIT

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 the ingress rating, all NPT entries not used for wiring connections must be plugged. Torque to 10 Nm (88 in-lbs).

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

Any unused conduit openings must be plugged to maintain the enclosure's integrity.

STEP 3.
Open XR luminaire by removing cover bolts, note screws are captive for easy reinstallation. Install provided 3/4" smooth bore bushing in NPT entry to be used for supply wiring to prevent abrasion. Extend supply wires through bushing to prevent abrasion. Close XR & torque fasteners to 1.7 N-m (15 in-lbs).

STEP 4.
Attach the gasket to the WM2 cover face and then fasten it to the XR body with the provided M6 screws and washers. Torque to 5N-m (45in-lbs).
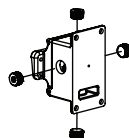
STEP 5.
Mount the WM2 base in the desired location through the 4 10mm (3/8") mounting holes using appropriate fasteners and washers for the supporting material (fasteners not provided).
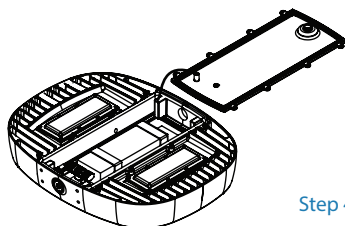
STEP 6.
Route branch conductors to WM2 base. Follow the wiring method requirements of the Canadian Electrical Code or National Electrical Code for the specific location of the installation. If installing a hazardous location model (XRXX-XXX-XXX-XX-HZ-XX) in a hazardous location, follow the hazardous location wiring method requirements of the Canadian Electrical Code or National Electrical Code.
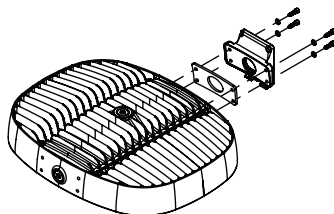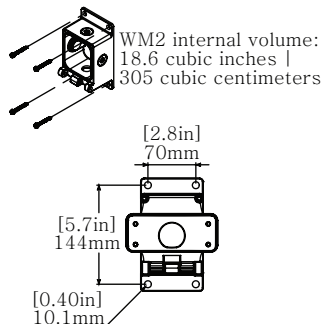
Step 2

Step 3

Step 4

Step 5

WM2 internal volume:
18.6 cubic inches |
305 cubic centimeters

[2.8in]
70mm

[5.7in]
144mm

[0.40in]
10.1mm

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XR-WM2 – WALL MOUNT 2 INSTALLATION CONTINUED (Ordered Separately)

INSTALLATION STEPS CONTINUED.

STEP 7.
Hang the XR-WM2 cover over hinge pins in preparation for wiring.

STEP 8.
Make wiring connections from luminaire wires to branch circuit conductors, ensuring bonding connection with WM2 base (wiring diagram on pg 4). Follow the wiring method requirements of the Canadian Electrical Code or National Electrical Code for the specific location of the installation. If installing a hazardous location model (XRXX-XXX-XXX-XX-HZ-XX) in a hazardous location, follow the hazardous location wiring method requirements of the Canadian Electrical Code or National Electrical Code. For 0-10V analog dimming control, ensure dimming control is certified and suitable for the classification of the area of installation. Connect Violet (Purple) (+) and Gray (-) driver lead wires to 0-10VDC control wiring. LED drivers will source a combined maximum of 200 uA for control needs.
   • 0-10V controller must sink current from LED driver via 0-10V control connections
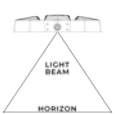
STEP 9.
Swing XR-WM2 cover upward, closing the junction box. Care is required to ensure no wires are pinched between lid and body. Secure the lid to body with two provided M6 fasteners.
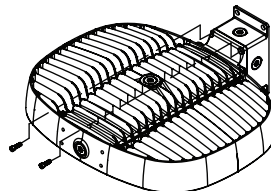
Step 7

Step 8

Step 9

⚠ WARNING / ATTENTION

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XR-YM – YOKE MOUNT INSTALLATION (Ordered Separately)

If using a different mounting accessory, refer to the corresponding page.
Wiring instructions are in the Surface/ Ceiling Mount section.

This XR-YM kit is intended for use with UL listed XR luminaire, as marked on the luminaire nameplate.

Accessory Package Contents

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 3.
Loosely assemble yoke mount with carriage bolts on the 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 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 the luminaire to desired position. Torque hardware nuts to 9 Nm (80 in-lbs).

STEP 2.
Make wiring connections from branch circuit conductors to factory-provided lead wires using one of the 3/4" NPT threaded entries. Follow the wiring method requirements of the Canadian Electrical Code or National Electrical Code for the specific location of the installation. If installing a hazardous location model (XRXX-XXX-XXX-XX-HZ-XX) in a hazardous location, follow the hazardous location wiring method requirements of the Canadian Electrical Code or National Electrical Code.
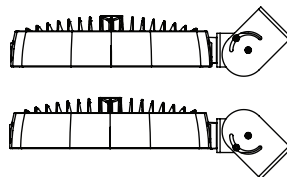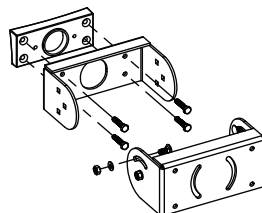
NOTE:
To aid in assembly and protect against ingress, use of a petrolatum or soap-thickened mineral oil-based thread lubricant/sealant is necessary.

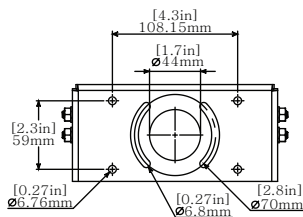*Any unused conduit openings must be plugged to maintain the enclosure's integrity.*

STEP 7.
Continue installation with STEP 4 on PAGE 3.

Step 3

Step 5

⚠ **WARNING / ATTENTION**

The XR head must not face upwards any degree beyond the horizontal position for Class II, Division 2, Zone 22 and Class III hazardous location installations.

Le luminaire XR ne doit pas être orienté vers le haut à un degré quelconque au-delà de la position horizontale pour les installations en zones dangereuses de classe II, division 2, zone 22 et classe III.

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XR-HK – HOOK PENDANT INSTALLATION (Ordered Separately)

If using a different mounting accessory, refer to the corresponding page.
Wiring instructions are in the Surface/ Ceiling Mount section.

This XR-HK kit is intended for use with UL listed XR
luminaire, as marked on the luminaire nameplate.

Accessory Package Contents

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.
Slide anti-rotation lock onto suspension hook assembly and
install hook assembly into 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 protect against ingress, use of a petrolatum
or soap-thickened mineral oil-based thread lubricant/sealant is
necessary.

*Any unused conduit openings must be plugged to maintain the*
enclosure's integrity.
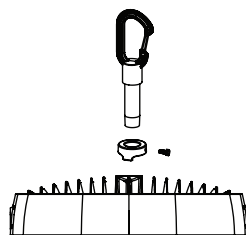
STEP 3.
It is recommended to install secondary safety cables by looping
appropriate steel cable or chain through the outer band of the
unit and fastening a closed loop. Secondary safety hardware
must be rated for a minimum of 110 lbs. Secondary safety cables
made from stainless steel aircraft cable are available upon
request.
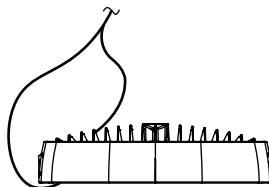
STEP 4.
Latch hook onto eyebolt or other fixed mounting loop.
Mounting point must be rated for a minimum of 110 lbs.

STEP 5.
Install the remaining loop of secondary safety chain or steel
cable to suitable mounting location and fasten securely.

STEP 6.
Continue installation with STEP 4 on PAGE 3.

Step 2

Step 3

⚠ **WARNING / ATTENTION**

LIGHT BEAM

HORIZON

The XR head must not face
upwards any degree beyond
the horizontal position for
Class II, Division 2, Zone 22
and Class III hazardous
location installations.

Le luminaire XR ne doit pas être
orienté vers le haut à un degré
quelconque au-delà de la position
horizontale pour les installations
en zones dangereuses de classe II,
division 2, zone 22 et classe III.

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XR-CC – CONDUIT MOUNT INSTALLATION (Ordered Separately)

If using a different mounting accessory, refer to the corresponding page.
Wiring instructions are in the Surface/ Ceiling Mount section.

This XR-CC kit is intended for use with UL listed XR
luminaire as marked on the luminaire nameplate.

Accessory Package Contents

XR-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 XR-CC anti-rotation lock, slide it first onto a
suitably mounted hanging conduit or luminaire hanger and
loosely tightened the set screw. Fixed rigid metal conduit or
luminaire hanger must be suitably mounted to prevent rotation,
and the system must be rated for 110 lbs.

Install luminaire onto 3/4" NPT threaded metal conduit. Tighten
to hand tight contact plus 1 to 2 turns. When using the XR-CC,
loosen the set screw and slide XR-CC into place with flats aligned
to those on the luminaire hub and tighten the set screw to lock
the unit in place.

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

Any unused conduit openings must be plugged to maintain the
enclosure's integrity.

STEP 3.
If you are utilizing the secondary safety cable, install it by
looping the appropriate steel cable or chain through the outer
band of the unit and fasten a closed loop. Secondary safety
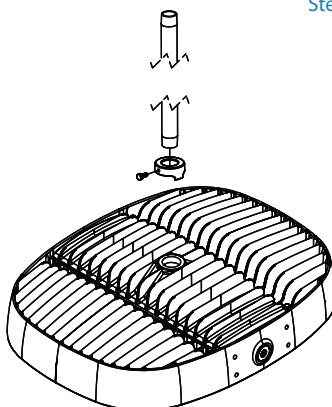hardware must be rated for a minimum of 110 lbs.

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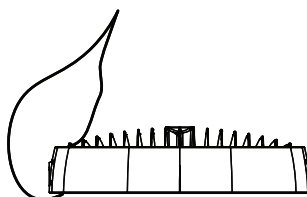Secondary safety hardware must be rated for 110 lbs.

STEP 4.
Continue installation with STEP 4 on PAGE 3.

Step 2

Step 3

⚠ **WARNING / ATTENTION**

The XR head must not face upwards any degree beyond the horizontal position for Class II, Division 2, Zone 22 and Class III hazardous location installations.

Le luminaire XR ne doit pas être orienté vers le haut à un degré quelconque au-delà de la position horizontale pour les installations en zones dangereuses de classe II, division 2, zone 22 et classe III.

LIGHT BEAM

HORIZON

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XR-YK – HIGH VIBRATION YOKE INSTALLATION (Ordered Separately)

If using a different mounting accessory, refer to the corresponding page.
Wiring instructions are in the Surface/ Ceiling Mount section.

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

Accessory Package Contents

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 ¼-20 or M6 fasteners (not provided).

STEP 3.
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 4.
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 5.
Make wiring connections from branch circuit conductors to factory-provided lead wires using one of the 3/4" NPT threaded entries. Follow the wiring method requirements of the Canadian Electrical Code or National Electrical Code for the specific location of the installation. If installing a hazardous location model (XRXX-XXX-XXX-XX-HZ-XX) in a hazardous location, follow the hazardous location wiring method requirements of the Canadian Electrical Code or National Electrical Code.
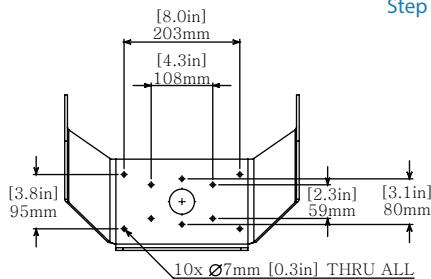
NOTE:
To aid in assembly and protect against ingress, use of a petrolatum or soap-thickened mineral oil-based thread lubricant/sealant is necessary.

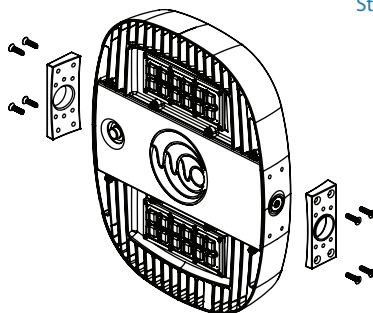*Any unused conduit openings must be plugged to maintain the enclosure's integrity.*

STEP 6.
Continue installation with STEP 4 on PAGE 3.

Step 2

[8.0in] 203mm
[4.3in] 108mm
[3.8in] 95mm
[2.3in] 59mm
[3.1in] 80mm
10x ⌀7mm [0.3in] THRU ALL

Step 4

⚠ **WARNING / ATTENTION**

The XR head must not face upwards any degree beyond the horizontal position for Class II, Division 2, Zone 22 and Class III hazardous location installations.

Le luminaire XR ne doit pas être orienté vers le haut à un degré quelconque au-delà de la position horizontale pour les installations en zones dangereuses de classe II, division 2, zone 22 et classe III.

LIGHT BEAM
HORIZON

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XR-SFY – SLIP FITTER YOKE MOUNT (Ordered Separately)

If using a different mounting accessory, refer to the corresponding page.
Wiring instructions are in the Surface/ Ceiling Mount section.

This XR-SFY kit is intended for use with UL listed XR luminaire as marked on the luminaire nameplate.

Accessory Package Contents

XR-SFY	QTY	PART NAME
	2	M6 X 16mm FLAT HEX HEAD SOCKET CAP SCREW
	1	SEALED CAP
	2	M8 X 25mm SOCKET HEAD CAP SCREWS
	6	3/8" HEX BOLTS
	4	M6 X 16mm HEX HEAD CAP SCREW
	1	SLIP FITTER YOKE MOUNT (2x PIECES)
	1	CAP GASKET
	2	POLE TOP GASKETS

INSTALLATION STEPS

STEP 1.
Inspect shipping package and contents to ensure no damage has occurred during shipping. The SFY is shipped separate from the luminaire.

STEP 2:
Install the provided plastic 3/4" bushing at the conduit entry used for supply connection to prevent wire abrasion.
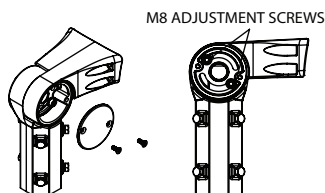
STEP 3.
Remove both M6 flat head cap screws using a 4mm hex key and remove sealed cap. If the required angle is known, adjust luminaire angle by loosening two M8 socket head cap screws inside the slip fitter pole mount using a 6mm hex key. After aiming torque M8 socket head cap screws to 17N-m (13ft-lb).

NOTE:
The aiming angle can be adjusted after Step 7.

Step 3

M8 ADJUSTMENT SCREWS

BOTTOM OUT STEP FOR TRADE SIZE 1.5" POLE

SECTION B-B

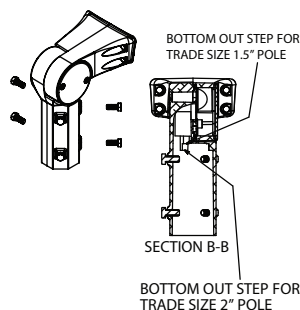BOTTOM OUT STEP FOR TRADE SIZE 2" POLE

⚠ WARNING / ATTENTION

Listing for Class I, Division 2, Class II, Division 2, Zone 22, Class III and Nonrecessed Marine Luminaire and the IP 66 or IP66/67 rating are limited to using the mount for mechanical support only and not part of the wiring system.

Le classement de Classe I, Division 2, Classe II, Division 2, Zone 22, Classe III et luminaires marins non-encastre et les classifications IP66 ou IP66/67 sont limitees a l'utilisation du support uniquement pour le support mecanique et ne font pas partie du système de cablage.

⚠ WARNING / ATTENTION

LIGHT BEAM
HORIZON

The XR head must not face upwards any degree beyond the horizontal position for Class II, Division 2, Zone 22 and Class III hazardous location installations.

Le luminaire XR ne doit pas être orienté vers le haut à un degré quelconque au-delà de la position horizontale pour les installations en zones dangereuses de classe II, division 2, zone 22 et classe III.

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XR-SFY – SLIP FITTER YOKE MOUNT CONTINUED. (Ordered Separately)

INSTALLATION STEPS CONTINUED.

STEP 4.
Poles with sizing to 1.5" or 2" trade size pipe/conduit are acceptable.
Gaskets are provided for both 1.5" and 2" pole sizes.
Install gasket for the size of pole being used by covering top of the pole.
Ensure slip fitter pinch bolts are not protruding into the slip fitter opening
at all, this may damage the gasket or prevent proper installation if the bolt
interferes with the next step.

STEP 5.
Install slip fitter onto pole to a depth of 145mm (5.7") for 1.5" 135mm (5.3")
for 2" poles. Aim and secure slip fitter pole mount using the six provided
3/8" hex bolts. Torque to 27 N-m (20ft-lbs)
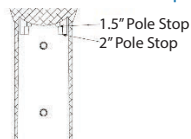
NOTE:
Aiming can be adjusted up to 180° in either direction after installation by
loosening the 6 hex bolts and tightening again to 27 N-m (20ft-lbs). DO NOT
TURN BEYOND 180° as this will induce twist and strain on conductors after
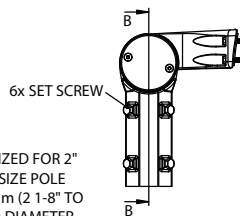*wiring.*

⚠️ **WARNING / ATTENTION**

Warning: Listing for Class I, Division 2, Class II, Division 2, Zone 22, Class III and Nonrecessed Marine
Luminaire and the IP 66 or IP66/67 rating are limited to using the mount for mechanical support
only and not part of the wiring system.

Avertissement: Le classement de Classe I, Division 2, Classe II, Division 2, Zone 22, Classe III et luminaires
marins non-encastre et les classifications IP66 ou IP66/67 sont limitees a l'utilisation du support
uniquement pour le support mecanique et ne font pas partie du système de cablage.

For Installation in hazardous/classified locations note the warning above.
Plug the 3/4" entry covered by mount with one of the supplied conduit
plugs and install wiring system per local code into either top or other
luminaire side entry.

STEP 6.
Install mount gasket to face between fixture and mount. Secure slip fitter
pole mount to luminaire with four M6 hex head cap screws provided using
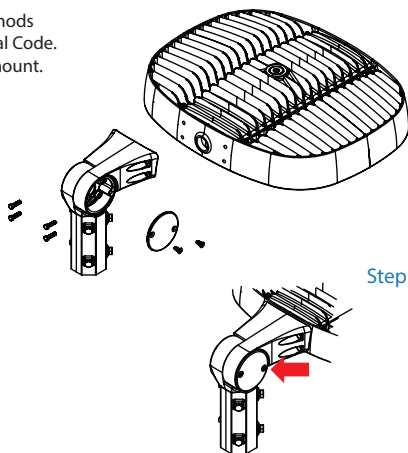a 10mm socket. Torque to 7 N-m (62in-lbs).

STEP 7.
Install a suitable wiring system that complies with the wiring methods
permitted in the Canadian Electrical Code or the National Electrical Code.
Terminations are to be made inside the luminaire not inside the mount.

Step 8.
Close sealed cap on slip fitter pole mount.
Torque to 7 N-m (62in-lbs).

Step 9.
Follow the wiring instructions specified in the main
installations provided with the XR luminaire as applicable
for making connections with the luminaire lead wires
and testing the system (STEP 4 on PAGE 3).

Step 4

1.5" Gasket
2" Gasket

Step 5

1.5" Pole Stop
2" Pole Stop

B

6x SET SCREW

BORE SIZED FOR 2"
TRADE SIZE POLE
53-63mm (2 1-8" TO
2 7-16") DIAMETER

B

INNER STEP BORE SIZED
FOR 1.5" TRADE SIZE POLE
46mm - 50mm (1 13-16" TO 2")

Step 6

Step 8

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XR-SFY-1.5 – THREADED ADJUSTABLE POLE MOUNT (Ordered Separately)

If using a different mounting accessory, refer to the corresponding page.
Wiring instructions are in the Surface/ Ceiling Mount section.

This XR-SFY-1.5 kit is intended for use with UL listed XR luminaire as marked on the luminaire nameplate.

Accessory Package Contents

XR-SFY-1.5	QTY	PART NAME
	2	M6 X 16mm FLAT HEX HEAD SOCKET CAP SCREW
	1	SEALED CAP
	2	M8 X 25mm SOCKET HEAD CAP SCREWS
	4	M6 X 16mm HEX HEAD CAP SCREW
	1	ADJUSTABLE POLE MOUNT (2x PIECES)
	1	CAP GASKET
	1	3/4" 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 at the conduit entry used for supply connection to prevent wire abrasion.
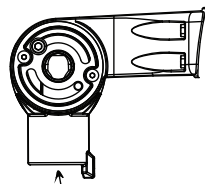
STEP 3:
Remove both M6 flat head cap screws using a 4mm hex key and remove sealed cap. If required angle is known, adjust fixture angle by loosening two M8 socket head cap screws inside the mount using a 6mm hex key Torque to 17N-m (13ft-lb).

NOTE:
Vertical angles can also be adjusted after step 6 via the two M8 socket head cap screws inside the mount.

Step 3

1.5" NPT THREADED ENTRY

⚠ WARNING / ATTENTION

LIGHT BEAM / HORIZON	The XR head must not face upwards any degree beyond the horizontal position for Class II, Division 2, Zone 22 and Class III hazardous location installations.	Le luminaire XR ne doit pas être orienté vers le haut à un degré quelconque au-delà de la position horizontale pour les installations en zones dangereuses de classe II, division 2, zone 22 et classe III.

STEP 4:
Install adjustable pole mount and gasket with adhesive side applied to mount and attach to luminaire with included M6 bolts and washers. Torque to 7 N-m (62 in-lbs)
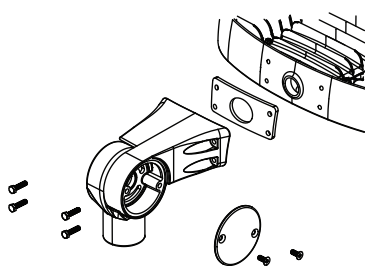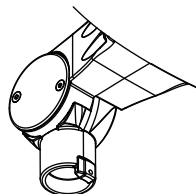
STEP 5:
Thread mount assembly onto 1.5" NPT pole.

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 at the threads of the slip fitter pole mount.

Step 4

Step 5

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XR-SFY-1.5 – THREADED ADJUSTABLE POLE MOUNT CONT. (Ordered Separately)

INSTALLATION STEPS CONT.

STEP 6:
Insert and tension M6 set screw to pole to lock rotation.

STEP 7:
Install suitable wiring system that complies with the wiring methods acceptable for the specific location per the NEC and CEC. Terminations are to be made inside the luminaire not inside the mount. Supply wires can be pulled through the center opening in mount and routed into the luminaire though the 3/4" bushing (installed before joining the luminaire to the mount).
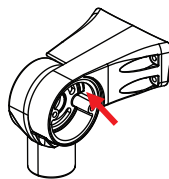
STEP 8:
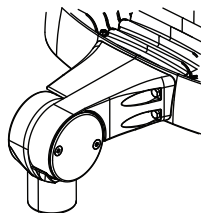Close sealed cap on SFY-1.5 Mount. Torque to 7 N-m (62in-lbs)

STEP 9:
Follow the wiring instructions specified in the surface/ceiling mount installation instructions section of this manual (STEP 4) for making connections with the luminaire lead wires and testing the system.

Step 7

Step 8

XR-SP-AC – SURGE SUPPRESSOR KIT (Ordered Separately)

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

Accessory Package Contents

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 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 it to XR body near AC input. Secure the
surge protector and driver lead wires together as close as
possible to the origin of the driver lead wires using the
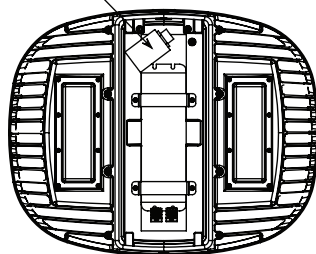provided zip tie.

STEP 4.
Wire according to wiring instructions on page 18. Refer to
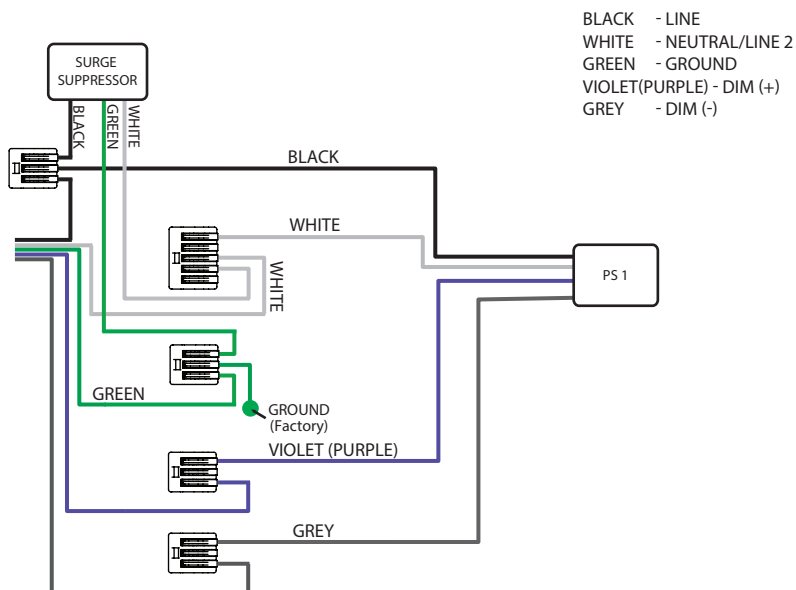NEC/CEC codes and follow all applicable local standards.

STEP 5.
Close XR wiring cover. Ensure the retention cable is not
pinched between XR head and the XR wiring cover. Tighten
bolts using a 7mm socket or box wrench to 1.7 N-m (15 in-lbs).

SURGE PROTECTOR LOCATION

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WIRING DIAGRAM

(XR-SP-AC)

BLACK   - LINE
WHITE   - NEUTRAL/LINE 2
GREEN   - GROUND
VIOLET(PURPLE) - DIM (+)
GREY   - DIM (-)

1. Connect the Black lead from surge protector to splice or terminal connected to Input branch circuit conductor and Black (line) lead from the LED driver.

2. Connect White lead from surge protector to splice or terminal connected to Neutral Input branch circuit conductor and White leads from the LED drivers.

3. Connect Green wire from the surge protector to splice or terminal connected to Grounding branch circuit conductor and Green lead from luminaire case.

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XR-SP-HV – SURGE SUPPRESSOR KIT (Ordered Separately)

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

Accessory Package Contents

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 a 7mm hex socket driver. Allow cover to hang via retention strap.

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

STEP 3.
Install provided double-sided tape along side of the surge protector and secure to XR body near the 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.
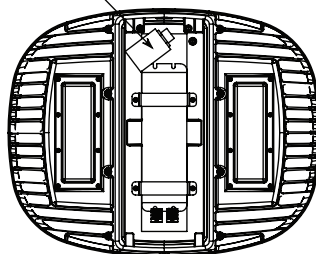
STEP 4.
Wire according to wiring instructions on pages 20. Refer to NEC/CEC codes and follow all applicable local standards.
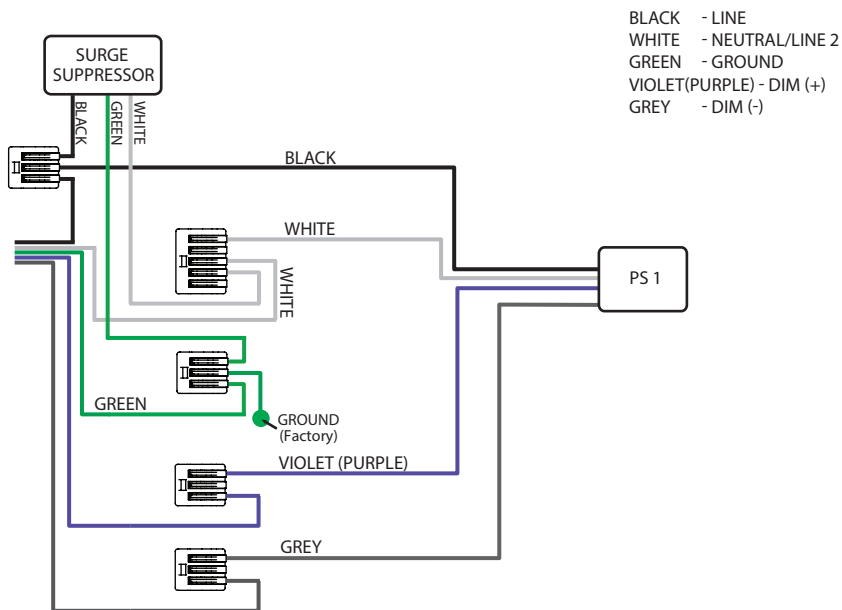
STEP 5.
Close XR wiring cover. Ensure the retention cable is not pinched between XR head and the XR wiring cover. Tighten bolts using a 7mm socket or box wrench to 1.7 N-m (15 in-lbs).

SURGE PROTECTOR LOCATION

WIRING DIAGRAM

(XR-SP-HV)

BLACK   - LINE
WHITE   - NEUTRAL/LINE 2
GREEN   - GROUND
VIOLET(PURPLE) - DIM (+)
GREY   - DIM (-)

SURGE SUPPRESSOR

BLACK
GREEN
WHITE

BLACK

WHITE

WHITE

PS 1

GREEN

GROUND (Factory)

VIOLET (PURPLE)

GREY

1. Connect the Black lead from surge protector to splice or terminal connected to Input branch circuit conductor and Black (line) lead from the LED driver.

2. Connect White lead from surge protector to splice or terminal connected to Neutral Input branch circuit conductor and White leads from the LED drivers.

3. Connect Green wire from the surge protector to splice or terminal connected to Grounding branch circuit conductor and Green lead from luminaire case.

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XR-SK-## – SECONDARY SAFETY KIT (Ordered Separately)

This XR-SK-## kit is intended for use with UL Listed XR luminaire as marked on the luminaire nameplate.

Accessory Package Contents

| XR-SK-##	QTY	PART NAME
	1	1003-01-02-301 (ZLM SECONDARY SAFETY)
	1	M6 FLAT WASHER
	1	M6 x 20mm HEX CAP SCREW
	2	OVAL SHAPED THREADED CONNECTING LINK
	1	STAINLESS STEEL CHAIN, 1/8" TRADE SIZE
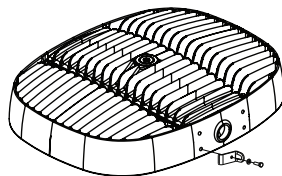
STEP 1.
Remove the bottom-left pre-installed M6 x 16mm hex cap screw.

STEP 2.
Install bracket on XR luminaire as shown using supplied M6 x 20mm hex cap screw. Torque M6 x 20mm hex cap screw to 40 in-lbs (4.5 Nm). It is strongly recommended that a medium or high-strength thread locker be used when installing the bracket. For units using surface/ceiling or suspension mounting, install safety kit hardware on top of the surface/ceiling mount or suspension mount brackets in the same location as shown.
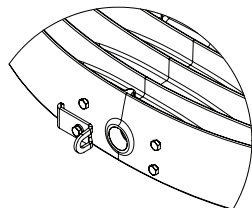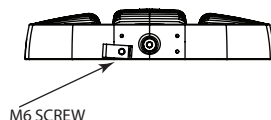
STEP 3.
Attach stainless steel chain to safety kit bracket using stainless steel oval shaped threaded connecting link.

STEP 4.
Attach loose end of the chain. Secondary safety mounting point must be suitable for supporting a minimum of 120 lbs:

- Attach loose end of stainless steel chain to fixed eye bolt (not supplied) using the second stainless steel oval-shaped threaded connecting link.

- Alternate attachment method: Wrap loose end of chain around fixed beam or other immovable support and create a closed loop using the second stainless steel oval-shaped threaded connecting link. Supporting beam or structure must form a closed loop to prevent the secondary safety chain from slipping off or becoming unhooked.

Step 1

M6 SCREW

Step 2