







# **The 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-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 Aluminium with Polycarbonate lens
Input Voltage:	Based on luminaire suffix in table below: Suffix - AC: 120-277 VAC   Suffix - HV: 347-480 VAC

# Nemalux

# **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
ANO	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
ANIS	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

Inrush Current:

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

Ambient Temperature Range:

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

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)

# 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.



Potential Electrostatic Charging Hazard Risque potentiel de charge électrostatique Avoid electrostatic discharge : - Clean exterior lens surface with damp cloth only - Éviter les décharges électrostatiques nettoyer la surface extérieure de la lentille uniquement avec un chilfon humide



# **XR-SM – SURFACE/CEILING MOUNT INSTALLATION**

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 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 4.

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

#### STEP 5.

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 6.

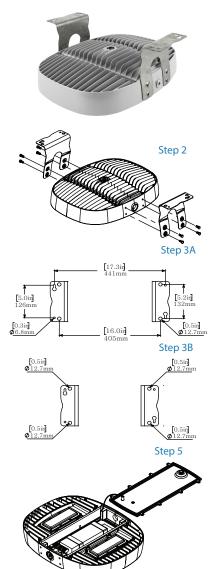
Make wiring connections from branch circuit conductors to factory provided lead wires using one of the 3/4" NPT threaded entries. Follow wiring method requirements of the Canadian Electrical Code or National Electrical Code for the specific location of the installation. If installing a hazardous location model (XRXX-XXX-XX-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.



## **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.







#### STEP 5. CONT.

- 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

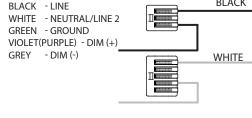
#### NOTE:

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

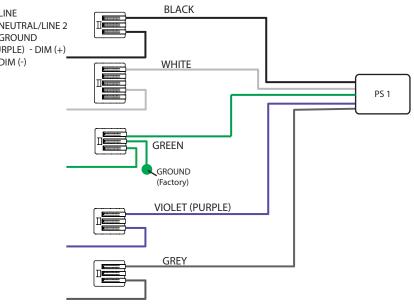
Un-used conduit opening must be plugged to maintain the integrity of the enclosure.

#### 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).



## WIRING DIAGRAM



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



# **XR-PM – POLE MOUNT INSTALLATION**

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

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

# AWARNING / 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.

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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.

XR Series



## **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.

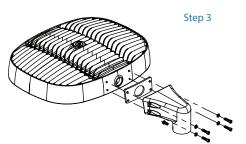
Un-used conduit opening must be plugged to maintain the integrity of the enclosure.

#### STEP 5.

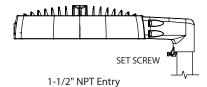
Insert and tension M6 set screw to pole to lock rotation.

#### STEP 6.

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



Step 5





# **XR-WM – WALL MOUNT INSTALLATION**

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

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

## AWARNING / 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.

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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.

XR Series



## **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 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 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).

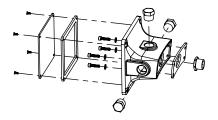
#### STEP 6.

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

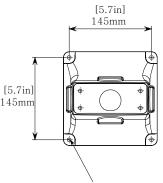
#### STEP 7.

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







4 x Ø 6.8mm THRU ALL





# XR-YK – HIGH VIBRATION YOKE

## INSTALLATION

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

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 <sup>1</sup>/<sub>4</sub>-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 specific location of the installation. If installing a hazardous location model (XRXX-XXX-XX-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 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.

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).

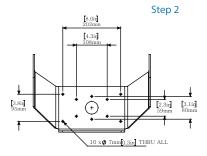


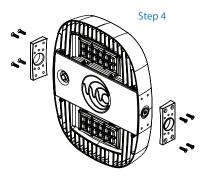
## **AWARNING / ATTENTION**

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.









# **XR-YM – YOKE MOUNT INSTALLATION**

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

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 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 specific location of the installation. If installing a hazardous location model (XRXX-XXX-XX-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 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 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 numerato 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).

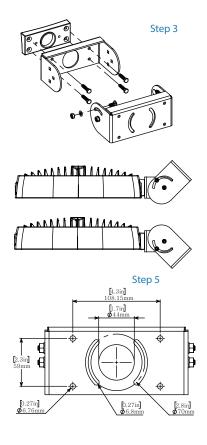


## **AWARNING / ATTENTION**

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,









# **XR-HK – HOOK PENDANT INSTALLATION**

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

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.

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 <sup>3</sup>/<sub>4</sub> 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.

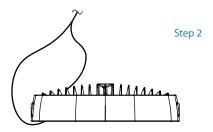
#### STEP 6.

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

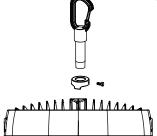


XR Serie

This kit contains Anti-Rotation-Lock (1004-01-02-201)



Step 3





# **XR-CM – CONDUIT MOUNT INSTALLATION**

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

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

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 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 ¾" NPT threaded nipple. Tighten to hand tight contact plus 1 to 2 turns. When using the XR-CC loosen set screw and slide XR-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.

If utilizing the Secondary Safety Cable, install it 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.

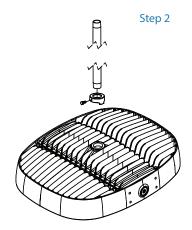
#### STEP 4.

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

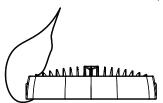


XR Serie

This kit contains Anti-Rotation-Lock (1004-01-02-201)









# XR-SFY — SLIP FITTER YOKE MOUNT (Ordered Separately)

#### WARNING / AT Listing for Class II, Division 2, Zone Luminaires marins de classe II, division 2 22, Class III, Nonrecessed Marine zone 22, classe III, non-encastré et la Luminaire and the IP66 or IP66/67

classification IP66 ou IP66 / 67 sont limitées à l'utilisation du support pour un support mécanique uniquement (l'entrée de conduit ¾" NPT couverte par le support doit être branchée à l'aide des bouchons fournies). Il n'est pas autorisé à être utilisé pour le système de câblage.

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

#### Accessory Package Contents

rating are Limited to using the

mount for mechanical support only

and not part of the wiring system

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

## **INSTALLATION STEPS**

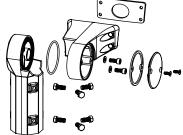
STEP 1. Inspect shipping package and contents to ensure no damage has occurred during shipping.

STEP 2. Remove both M6 flat head cap screws using a 4mm hex key and remove sealed cap. If 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: Aiming angle can be adjusted after Step 6.



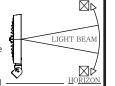
XR Series



WARNING: The XR Head must not face Le luminaire (XR) ne doit pas upwards by any degree bevond the vertical position auelaue dearé aue ce soit for Class II. Division 2. Zone 22, and Class III hazardous locations.

ATTENTION.

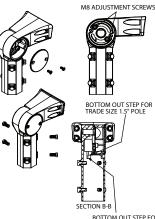
être orientée vers le haut de au-delà de la position verticale pour les emplacements dangereux de Classe II, Division 2, Zone 22 et Classe III



#### STEP 3

Install slip fitter pole mount onto pole. Poles equivalent in size to 1-1/2" or 2" trade size pipe or conduit are to be used. Ensure slip fitter pole mount is fully seated on top of pole at the internal stops. Aim and secure slip fitter pole mount using the six provided 3/8" hex bolts. Torque to 27N-m (20ft-lb)

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 (20 ft-lb). DO NOT TURN BEYOND 180° as this will induce twist and strain on conductors after wiring.



BOTTOM OUT STEP FOR TRADE SIZE 2" POLE

# Nemalux

# XR-SFY - SLIP FITTER YOKE MOUNT CONT. (Ordered Separately)

Warning: Listing for Class II, Division 2, Zone 22, Class III, Nonrecessed Marine Luminaire and the IP66 or IP66/67 rating are Limited to using the mount for mechanical support only (34" NPT Conduit entry covered by mount is to be plugged using provided plugs) and not part of the wiring system.

Luminaires marins de classe II, division 2, zone 22, classe III, non-encastré et la classification IP66 ou IP66/67 sont limitées à l'utilisation du support pour un support mécanique uniquement (l'entrée de conduit ¾ NPT couverte par le support doit étre branchée à l'aide des bouchons fournies). Il n'est pas autorisé à être utilisé pour le système de càblace.

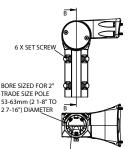
STEP 4. Install a suitable wiring system that complies with the wiring methods permitted in the Canadian Electrical Code or the National Electrical Code for the classification of the hazardous locations area of installation.

STEP 5. Ensure wiring system has appropriate strain relief in the luminaire by tying a large enough knot using the supply field wiring in the wiring compartment such that it cannot be pulled through the 3/4" inch NPT entry of the luminaire.

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

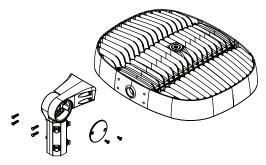
Step 7. Close sealed cap on slip fitter pole mount. Torque to 7N-m (62in-lbs)

Step 8. Follow the wiring instructions specified in the main installation instructions provided with the AR luminaire as applicable for making connections with the luminaire lead wires and testing the system.



XR Series

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







# XR-SP-AC – SURGE SUPPRESSOR KIT

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 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

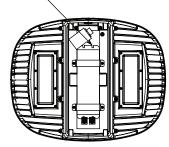
and driver lead wires together as close to the origin of the driver lead wires as possible using the provided zip tie.

#### STEP 4.

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

#### STEP 5.

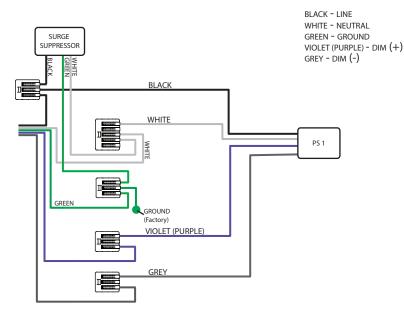
Close XR Wiring Cover. Ensure the retention cable is not pinched between XR Head and the XR Wiring Cover. Tighten lens bolts using a 7mm socket or box wrench to 1.7 N-m (15 in-lbs). SURGE PROTECTOR LOCATION







WIRING DIAGRAM (XR-SP-AC)



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

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.





## **XR-SP-HV – SURGE SUPPRESSOR KIT**

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 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

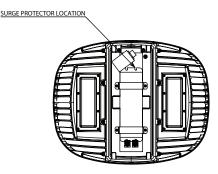
wires as possible using the provided zip tie.

#### STEP 4.

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

#### STEP 5.

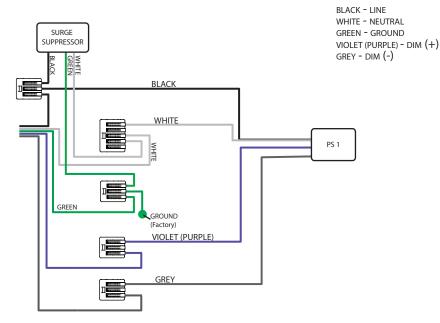
Close XR Wiring Cover. Ensure the retention cable is not pinched between XR Head and the XR Wiring Cover. Tighten lens bolts using a 7mm socket or box wrench to 1.7 N-m (15 in-lbs).







WIRING DIAGRAM (XR-SP-HV)



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

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.





## **XR-SF – YOKE MOUNT w/ SIIPFITTER INSTALLATION**

Refer to alternate instructions if using Conduit, Hook, Pole, Wall Mount, or High Vibration Yoke This XR-YM kit is intended for use with UL Listed XR Iuminaire as marked on the Iuminaire nameplate.

#### Accessory Package Contents

XR-YM	QTY	PART NAME
	1	YOKE MOUNT A
	1	YOKE MOUNT B
	1	CHEEK PLATE
	1	SLIP FITTER / TENON
	4	1/4-20 x 0.625in CARRIAGE BOLT
	4	M6 x 30mm HEX HEAD CAP SCREW
	3	3/8-16 x 0.75in HEX HEAD CAP SCREW
	4	1/4-20 x 1in SOCKET HEAD CAP SCREW
	8	1/4-20 HEX NUT
	3	3/8-16 HEX NUT
	12	1/4in FLAT WASHER

#### **INSTALLATION STEPS**

#### STEP 1.

Inspect shipping package and contents to ensure no damage has occurred during shipping. Discard surface/ceiling mounting bracket provided with AR luminaire. Remove 4 x M6 hex bolts from supply side of luminaire and discard.

#### STEP 2.

Install suitable flexible wiring system to the conduit opening per CEC/NEC requirements for the specific location of install, threading wiring through openings in the slip fitter, sheet metal yoke assemblies, and cheek plate adapter.

NOTE: To aid in assembly and protection against ingress use of a petrolatum or soap thickened mineral oil based thread lubricant/sealant is necessary. All un-used conduit openings must be plugged to maintain the integrity of the enclosure.

STEP 3.

Attach Yoke Mount Band Cheek Plate adapter to the luminaire using 4 x M6 x 30mm hex bolts (Provided). Torque fasteners to 5 Nm (45 in-lbs).

#### STEP 4.

Attach Yoke Mount A to Pole Mount using  $4 \times \frac{1}{2} \times 20 \times 0.75$  in socket head cap screws,  $8 \times \frac{1}{4}$  inch washers, and  $4 \times \frac{1}{2} \times 20$  hex nuts (Provided). Torque fasteners to 5 Nm (45 in-lbs).

#### STEP 5.

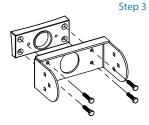
Assemble yoke mount halves with carriage bolts on inside and washers and nuts on the outside.

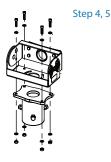
NOTE: Depending on which mounting hole is used in the curved slot, the luminaire may be configured for an upward or downward adjustable swing. STEP 6.

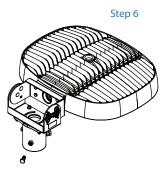
Mount luminaire with mounted slip-fitter assembly to 2.375in OD pipe or tenon (corresponding to 2 inch NPS pipe) and rotate to desired position. Secure by tightening the 3 x 3/8" hex bolts until secure, tightening jam nuts against the pole mount casting to lock in place. Torque to 200 in-lbs (16.7 ft-lbs)

#### STEP 7.

Loosen fasteners connecting both halves of the yoke mount and adjust luminaire to desired pitch angle. Torque nuts to 9 N-m (80 in-lbs) to secure. NOTE: Depending on which mounting hole is used in the curved slot, the luminaire may be configured for an upward or downward adjustable swing.









# 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



XR Series

#### 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 or suspension mounting, install safety kit hardware on top of the surface 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 chain. Secondary safety mounting point must be suitable for supporting a minimum of 120lbs:

 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

