

MR Series Installation Manual



Webpage



Manual

APPLICATION

The MR luminaire is an industrial-grade product suitable for harsh and hazardous locations. Installation areas include indoor, outdoor, and wet locations. Frequent exposure to moisture, dirt, corrosion, vibration, and rough usage is common for this product family. Furthermore, the MR fixtures have certifications for use on marine vessels inside, outside, and in other severely wet saltwater environments. Part numbers containing "-HZ-" are approved for use in hazardous locations.

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

UL Listing 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 (MRX-XX-XXX-XX-HZ-XX):
UL 844, CSA C22.2 No. 137

Hazardous Location Zone Approvals:
Class I, Division 2, Groups ABCD, T3C;
Class II, Division 2, Groups FG, T4A;
Class III;
Class I, Zone 2, Group IIC;
Zone 22

Housing: Copper-free die-cast aluminum with polycarbonate lens

Voltage: AC: 120-277 VAC | HV: 347: 347 VAC 50/60Hz

Rated Current: MR3: 0.25A@120 VAC | 0.10A@347 VAC
MR4: 0.34A@120VAC | 0.12A@347 VAC
MR6: 0.50A@120 VAC

Inrush Current: Inrush Current 120V: 19A / 303uS Peak / >10% Duration 277V: 47A / 299uS
Inrush Current Peak / > 50% Duration 347V: 2.7A / 175uS

Connections: 3/4" NPT Conduit | Black or Brown : Line | White or Blue: Neutral/Line 2 | Green or Green/Yellow: Ground
All field wiring supply conductors shall be rated 90°C minimum and rated for supply voltage (300V AC Models, 600V HV models). Class 1 wiring only.

Temperature Range: -40° C to +55° C

Ingress Protection: IP66 and IP67 rated for surface/suspension mount, yoke mount, pendant hook, and conduit connected installations only. 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.



WARNING / ATTENTION

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 chiffon humide

MR-SM – SURFACE/CEILING & SUSPENSION 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 MR-SM kit is intended for use with UL listed MR luminaire, as marked on the luminaire nameplate.

Accessory Package Contents

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



SURFACE MOUNTING CONFIGURATION

INSTALLATION STEPS

STEP 1:

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

STEP 2:

Install included surface/suspension mount brackets. See the diagram for the orientation of brackets for each version.

Install with included M6 bolts and washers to 7 N-m (62 in-lbs).

STEP 3:

For surface/ceiling mounting configuration:

Mount the fixture to desired locations with 4x 1/4-20 OR M6 screws or bolts.

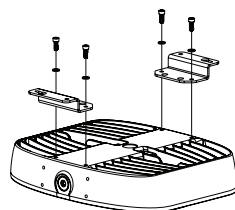
For suspension mounting configuration:

Connect 4x anchors to the points shown.

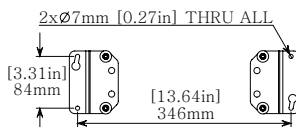
Suspension means not provided Installer to supply chain or cable and attachment hardware. Suspension components are to be rated for a minimum of 110lbs 50kg.

STEP 4:

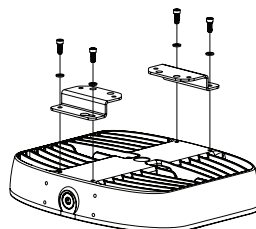
To begin wiring, remove the power supply lid by loosening six (6) M4 captive screws using a 3mm hex driver. Allow the captive fasteners to remain in the lid for ease of re-installation. The lid is secured with a retention cable.



Step 2



SUSPENSION MOUNTING CONFIGURATION



Step 2

4x Cable Anchor Holes
Ø10mm [0.40in] THRU ALL



MR-SM – SURFACE/CEILING & SUSPENSION MOUNT INSTALLATION CONT. (Ordered Separately)

INSTALLATION STEPS CONT.

STEP 5:

Supply connection to be made through one of three 3/4"-14 NPT entries on the luminaire. If using surface, suspension or yoke configuration, install the appropriate listed 3/4" NPT cable gland for cable size and follow all applicable local electrical codes for the specific hazardous locations. Torque the cable gland based on the manufacturer's recommended specification. If the fixture has unused conduit openings, plug them to maintain the enclosure's integrity (two NPT plugs provided).

OR

Install direct rigid conduit according to the local electrical code. For direct rigid conduit installation, torque hand tight plus 2 to 3 turns.

NOTE:

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

STEP 6:

Feed the wire into the power supply cavity.

NOTE:

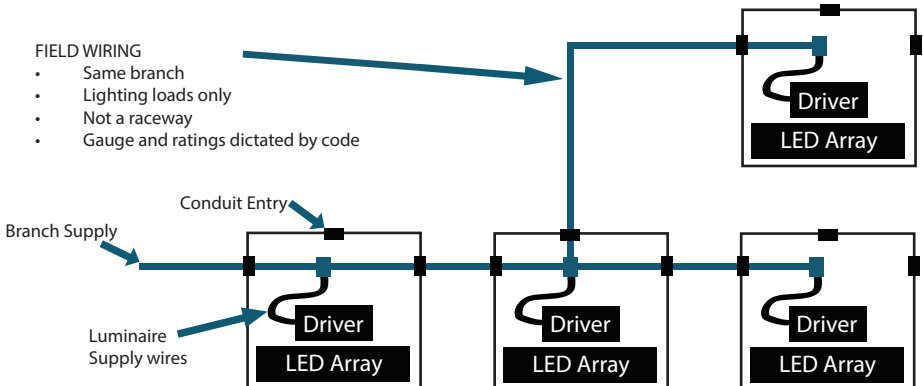
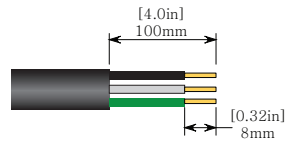
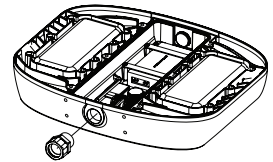
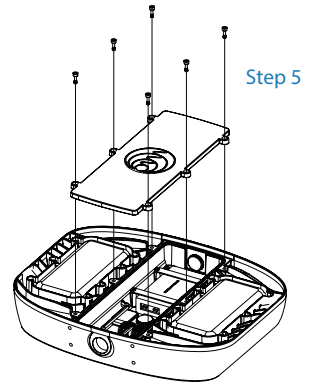
If using a cable, terminate the supply end in a suitable listed metal junction box using a suitable listed fitting approved for installation location as required.

All field wiring supply conductors shall be rated at 90°C minimum and rated at supply voltage (300V AC models, 600V HV models).

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

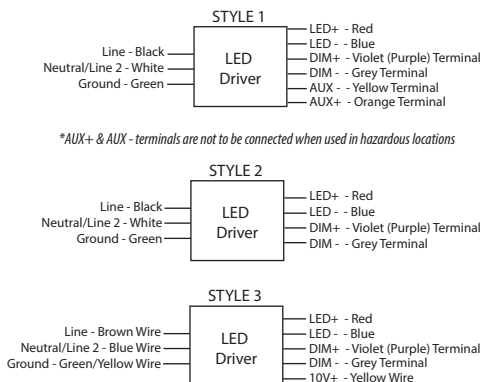
Make wiring connections from branch circuit conductors to factory-provided lead wires. Refer to NEC/CEC codes and follow all applicable local standards.

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.



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

The MR has multiple approved drivers and wiring colours may vary depending on the model installed; refer to these instructions or labels on the driver when making connections.



**AUX+ & AUX - terminals are not to be connected when used in hazardous locations*

DIMMING:

If dimming is unused, leave dimming terminals unconnected or wires capped. Dimming is wired with Class 1 methods only.

Dimming may be accomplished by connecting the Violet (Purple) (+) and Grey (-) lead wires to a certified 0-10 VDC dimming controller or potentiometer/rheostat suitable for the classification of the area of installation. A dimming controller or potentiometer must be installed outside the luminaire.

Driver styles 1 and 2 are sourcing style 0-10V connections capable of sourcing 0.165mA. If utilizing a potentiometer or rheostat, connect dim + to the wiper and dim—to one of the outer terminals.

Driver style 3 is capable of both sourcing and sinking style 0-10V connections. Operation with sinking controllers is achieved by connecting the Yellow +10V in parallel with Dim+, and the driver will source up to 1mA. For sourcing controllers, cap the Yellow +10V wire. If utilizing a potentiometer, connect the 10V+ wire to one outer pole, connect dim + to the wiper, and dim—to the other outer potentiometer pole.

STEP 7:

Close Power Supply Cavity Lid.

- A. Re-install the power supply lid using six (6) captive M4 screws.
- B. Tighten M4 captive screws to 2 Nm (17in-lbs)

⚠ WARNING / ATTENTION

For Class II, Division 2, Zone 22, and Class III hazardous locations, the MR head must not face upwards by any degree beyond the vertical position.

Le luminaire (MR) ne doit pas être orientée vers le haut de quelque degré que ce soit au-delà de la position verticale pour les emplacements dangereux de Classe II, Division 2, Zone 22 et Classe III



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

Accessory Package Contents

| MR-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.

STEP 3:

Install pole mount and gasket with adhesive side applied to mount, including M6 bolts and washers. Torque to 7 N-m (62 in-lbs).

STEP 4:

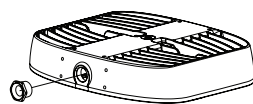
Thread fixture assembly onto 1.5" NPT pole.

STEP 5:

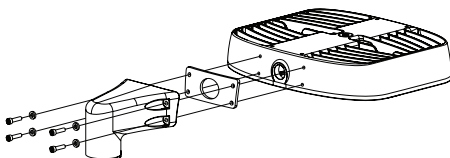
Insert and tension M6 set screw to the pole to lock rotation. Torque to 5 N-m or 44 in-lbs.

STEP 6:

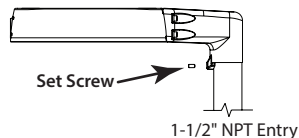
Continue installation with STEP 4 on PAGE 3.



Step 3



Step 5

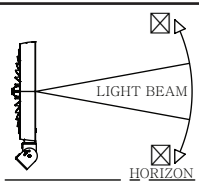


1-1/2" NPT Entry

WARNING / ATTENTION

For Class II, Division 2, Zone 22, and Class III hazardous locations, the MR head must not face upwards by any degree beyond the vertical position.

Le luminaire (MR) ne doit pas être orientée vers le haut de quelque degré que ce soit au-delà de la position verticale pour les emplacements dangereux de Classe II, Division 2, Zone 22 et Classe III



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

Accessory Package Contents

| MR-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 the provided 3/4" NPT conduit plugs in the desired locations. To maintain the ingress rating, all NPT entries not used for wiring connections must be plugged in. Torque to 10 Nm (88 in-lbs).

NOTE:

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

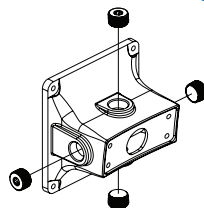
STEP 3:

Install provided 3/4" NPT plastic bushing.

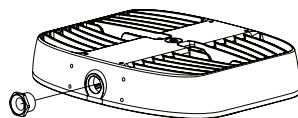
STEP 4:

Install the wall mount main body, which includes M6 bolts, washers, and an adhesive-backed gasket. Apply the gasket to mount it with an adhesive-backed side. Torque to 7 N-m (62 in-lbs).

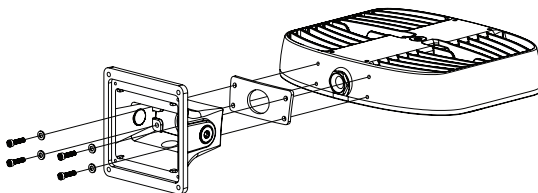
Steps 2



Steps 3



Steps 4



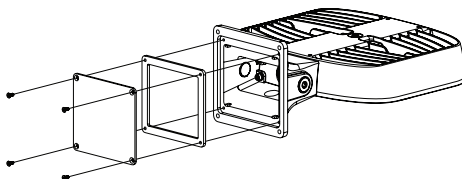
MR-WM – WALL MOUNT INSTALLATION CONT. (Ordered Separately)

INSTALLATION STEPS CONT.

Step 5

STEP 5:

Install back cover plate with 4x M4 Flat head screws and adhesive backed gasket. Apply a gasket with an adhesive side to mount the main body. Torque to 2 N-m (17 in-lbs).



STEP 6:

Mount fixture assembly to the desired location using 4x 1/4-20 OR M6 screws or bolts.

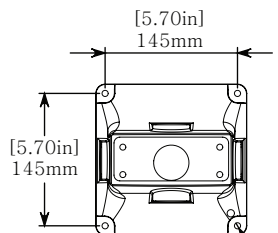
Step 6

STEP 7:

Install the appropriate listed 3/4" NPT cable gland to the desired entry location for the cable size. Follow all applicable local electrical codes for the specific hazardous locations. Torque the cable gland base and dome nut to the manufacturer's recommended specification.

OR

Install direct rigid conduit as per the local electrical code. For direct rigid conduit installation, torque hand tight plus 2 to 3 turns.



NOTE:

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

4x Ø7mm [0.27in] THRU ALL

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

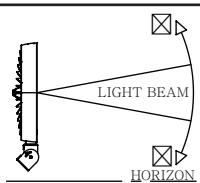
STEP 8:

Continue installation with STEP 4 on PAGE 3.

WARNING / ATTENTION

For Class II, Division 2, Zone 22, and Class III hazardous locations, the MR head must not face upwards by any degree beyond the vertical position.

Le luminaire (MR) ne doit pas être orientée vers le haut de quelque degré que ce soit au-delà de la position verticale pour les emplacements dangereux de Classe II, Division 2, Zone 22 et Classe III



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

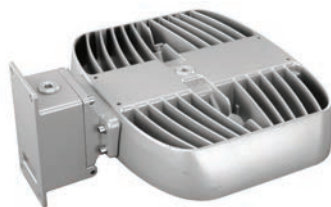
If using a different mounting accessory, refer to the corresponding page.

Wiring instructions are in the surface/ceiling mount section.

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

Accessory Package Contents

| MR-WM2 | QTY | PART NAME |
|--------|-----|--------------------------------------|
| | 1 | WALL MOUNT |
| | 1 | WALL MOUNT LID |
| | 1 | WALL MOUNT GASKET |
| | 4 | 6 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 the provided 3/4" NPT conduit plugs in the desired locations on the wall mount. To maintain the ingress rating, all NPT entries not used for wiring connections must be plugged in. Torque to 10 Nm (88 in-lbs).

NOTE:

To aid in assembly and protect against ingress, 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:

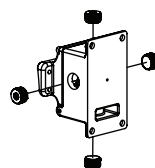
Open MR luminaire by removing cover bolts. Note screws are captive for easy reinstallation. Install provided 3/4" smooth bore bushing in side NPT entry. Extend supply wires through bushing with provided wire extensions. Close MR & torque fasteners to 1.7 N-m (15 in-lbs).

STEP 4:

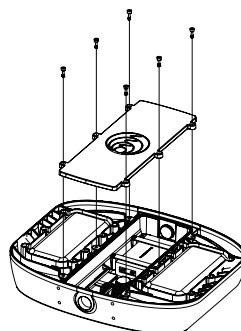
Attach the gasket to the WM2 cover face and then fasten it to the MR body with the provided M6 screws and washers. Torque to 5N-m (45in-lbs).

STEP 5:

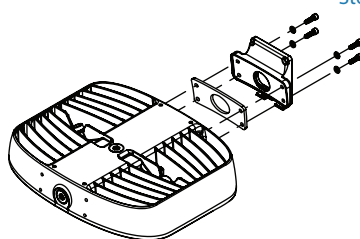
Mount the WM2 base in the desired location through the four 10mm (3/8") mounting holes using appropriate fasteners and washers for the supporting material (fasteners not provided).



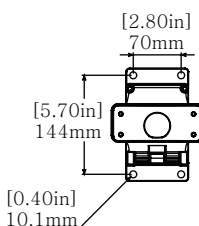
Step 2



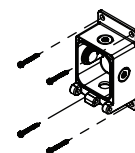
Step 3



Step 4



Step 5



WM2 internal volume:
18.6 cubic inches |
305 cubic centimeters

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

INSTALLATION STEPS CONT.

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 (MRXX-XXX-XXX-XX-HZ-XX) in a hazardous area, follow the hazardous location wiring method requirements of the Canadian Electrical Code or National Electrical Code.

STEP 7:

Hang the MR luminaire/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 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 (MRXX-XXX-XXX-XX-HZ-XX) in a hazardous area, 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 - LED drivers will source a combined maximum of 200uA for control needs.

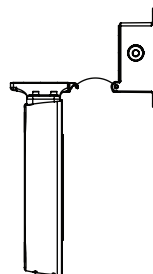
STEP 9:

Swing the MR/WM2 cover upward, closing the junction box. Care is required to ensure no wires are pinched between the lid and body. Secure the lid to the body with two M6 fasteners provided.

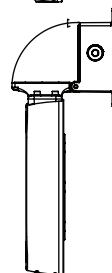
STEP 10:

Continue installation with STEP 4 on PAGE 3.

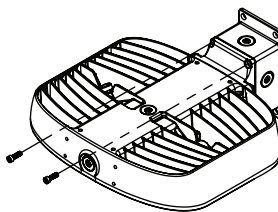
Step 7



Step 8



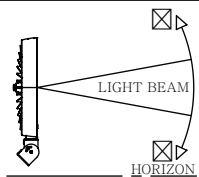
Step 9



⚠ WARNING / ATTENTION

For Class II, Division 2, Zone 22, and Class III hazardous locations, the MR head must not face upwards by any degree beyond the vertical position.

Le luminaire (MR) ne doit pas être orientée vers le haut de quelque degré que ce soit au-delà de la position verticale pour les emplacements dangereux de Classe II, Division 2, Zone 22 et Classe III



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

Accessory Package Contents

| MR-YM | QTY | PART NAME |
|-------|-----|------------------------------|
| | 1 | YOKE MOUNT A |
| | 1 | YOKE MOUNT B |
| | 4 | 1/4-20 HEX NUT |
| | 4 | 1/4" FLAT WASHER |
| | 4 | 1/4-20 x 0.5in CARRIAGE BOLT |



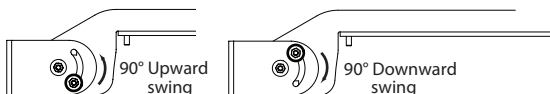
INSTALLATION STEPS

STEP 1:

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

STEP 2:

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



Step 2

Note:

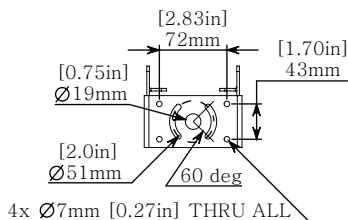
By alternating the rotation mounting hole, you can determine either an upward or downward swing.

STEP 3:

Install yoke mount with included M6 bolts and washers to MR head. Torque to 7 N-m (62 in-lbs)

STEP 4:

Mount fixture assembly to the desired location 2-4x 1/4-20 OR M6 screws or bolts.



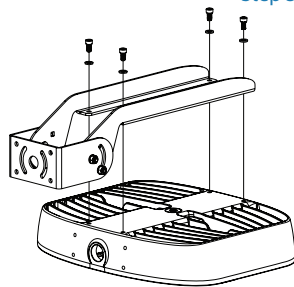
STEP 5:

Adjust and aim for the fixture to be in the desired position. Torque hardware nuts to 9 N-m (80 in-lbs).

STEP 6:

Continue installation with STEP 4 on PAGE 3.

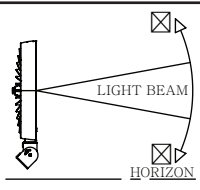
Step 3



⚠ WARNING / ATTENTION

For Class II, Division 2, Zone 22, and Class III hazardous locations, the MR head must not face upwards by any degree beyond the vertical position.

Le luminaire (MR) ne doit pas être orientée vers le haut de quelque degré que ce soit au-delà de la position verticale pour les emplacements dangereux de Classe II, Division 2, Zone 22 et Classe III



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

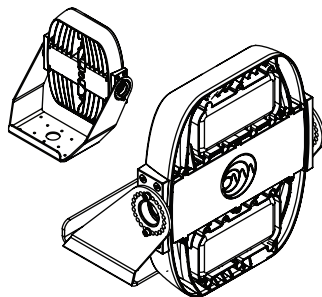
If using a different mounting accessory, refer to the corresponding page.

Wiring instructions are in the surface/ceiling mount section.

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

Accessory Package Contents

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



INSTALLATION STEPS

STEP 1.

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

STEP 2.

Mount the MR high-vibration yoke to the mounting surface using a minimum of 4x ¼-20 or M6 fasteners (not provided).

STEP 3.

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

STEP 4.

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

NOTE:

To aid in assembly and protect against ingress, 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.

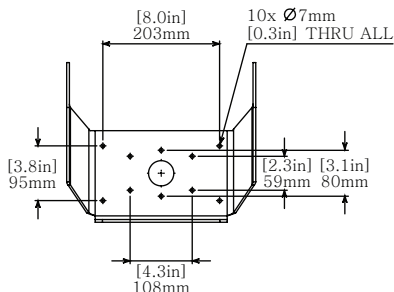
STEP 5.

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

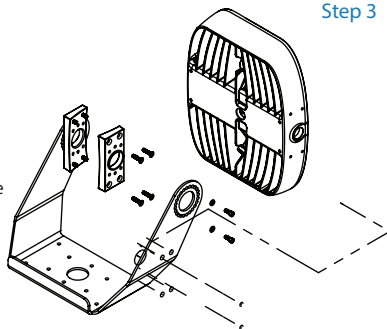
STEP 6.

Continue installation with STEP 4 on PAGE 3.

Step 2



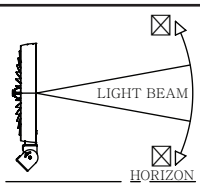
Step 3



WARNING / ATTENTION

For Class II, Division 2, Zone 22, and Class III hazardous locations, the MR head must not face upwards by any degree beyond the vertical position.

Le luminaire (MR) ne doit pas être orientée vers le haut de quelque degré que ce soit au-delà de la position verticale pour les emplacements dangereux de Classe II, Division 2, Zone 22 et Classe III



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

Accessory Package Contents

| MR-HK | QTY | PART NAME |
|-------|-----|------------------------|
| | 1 | PENDANT HOOK ASSEMBLY |
| | 1 | ANTI-ROTATION ASSEMBLY |

INSTALLATION STEPS

STEP 1.

Inspect the shipping package and its contents to ensure no damage 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 the anti-rotation lock into place and tighten the set screw to lock the unit in place.

NOTE:

To aid in assembly and protect against ingress, 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 that secondary safety cables be installed 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. The mounting point must be rated for a minimum of 110 lbs.

STEP 5.

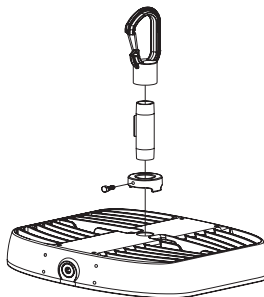
Install the remaining loop of the secondary safety chain or steel cable to a suitable mounting location and fasten it securely.

STEP 6.

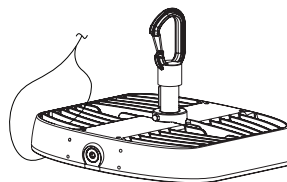
Continue installation with STEP 4 on PAGE 3.



Step 2



Step 3



MR-CC – CONDUIT CONNECTION (Ordered Separately)

If using a different mounting accessory, refer to the corresponding page.

Wiring instructions are in the surface/ceiling mount section.

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

Accessory Package Contents

| MR-CC | QTY | PART NAME |
|-------|-----|--------------------------------|
| | 1 | ANTI-ROTATION BRACKET ASSEMBLY |

INSTALLATION STEPS

STEP 1.

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

STEP 2.



WARNING / ATTENTION

When using vertical conduit to mount a hazardous location MR (MRX-XX-XXX-XX-HZ-XX) fixture or a general location MR fixture mounted below 8 feet height, an MR-CC Conduit Connection kit is required for anti-rotation locking the fixture.

Lors de l'utilisation d'un conduit vertical pour monter un luminaire pour emplacement dangereux (MRX-XX-XXX-XX-HZ-XX) ou un luminaire MR pour emplacement général monté à une hauteur inférieure à 8 pieds, un kit de connexion de conduit MR-CC est nécessaire pour verrouiller le luminaire anti-rotation.

Slide anti-rotation lock onto suitably mounted hanging conduit and install luminaire onto 3/4" conduit. Slide the anti-rotation lock into place and tighten the set screw to lock the unit in place. Tighten the anti-rotation lock set screw to 5 N-m (44 in-lbs). The conduit must be fixed and suitably mounted to prevent rotation.

NOTE:

To aid in assembly and protect against ingress, 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 that secondary safety cables be installed by looping the 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.

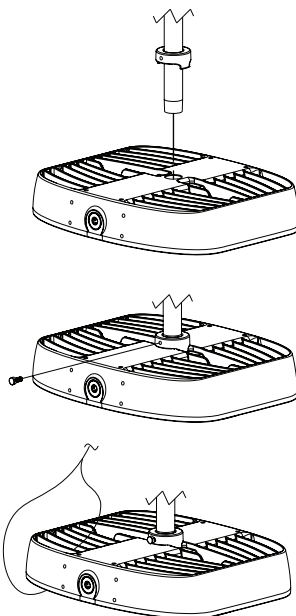
Install the remaining loop of the secondary safety chain or steel cable in a suitable mounting location and fasten it securely. Secondary safety hardware must be rated for 110 lbs.

STEP 4.

Continue installation with STEP 4 on PAGE 3.



Step 2



Step 3

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

Accessory Package Contents

| MR-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.

STEP 2.



WARNING / ATTENTION

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

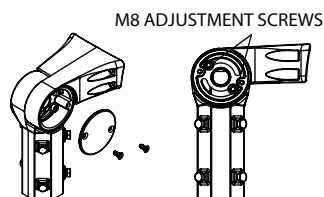
Le classement de Classe I, Division 2, Classe II, Division 2, Zone 22, Classe III et luminaires marins non-encastre et les classifications IP66 ou IP66/67 sont limitées à l'utilisation du support uniquement pour le support mécanique et ne font pas partie du système de câblage.

Remove both M6 flat head cap screws using a 4mm hex key and remove the sealed cap. If the required angle is known, adjust the luminaire angle by loosening two M8 socket head cap screws inside the slip fitter pole mount using a 6mm hex key. After aiming torque, the M8 socket head cap screws to 17N-m (13ft-lb).

NOTE:

The aiming angle can be adjusted after Step 6.

Step 2



MR-SFY – SLIP FITTER YOKE MOUNT CONT. (Ordered Separately)

INSTALLATION STEPS CONT.

STEP 3.

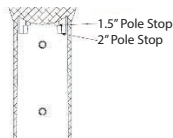
Poles with sizing to 1.5" or 2" trade size pipe/conduit are acceptable. Gaskets are provided for both 1.5" and 2" pole sizes. Install gasket for the size of pole being used by covering top of the pole. Ensure slip fitter pinch bolts are not protruding into the slip fitter opening at all, this may damage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



Step 3

STEP 4.


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 27N-m (20ft-lb)



Step 4

NOTE:

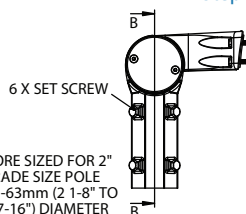
After installation, the aim can be adjusted up to 180° in either direction by loosening the 6 hex bolts and tightening again to 27 N-m (20 ft-lb). DO NOT TURN BEYOND 180°, as this will induce twist and strain on conductors after wiring.



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-encastres et les classifications IP66 ou IP66/67 sont limitées à l'utilisation du support uniquement pour le support mécanique et ne font pas partie du système de câblage.



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

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 5.

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 7N-m (62in-lbs)

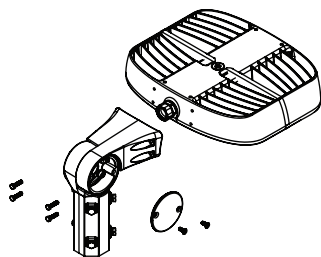
Step 5

STEP 6.

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 7.

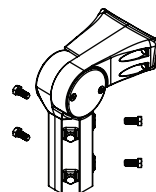
Close sealed cap on slip fitter pole mount. Torque to 7N-m (62in-lbs).



Step 8.

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

Step 6





WARNING/ ATTENTION

For Class II, Division 2, Zone 22, and Class III hazardous locations, the MR head must not face upwards by any degree beyond the vertical position.

Le luminaire (MR) ne doit pas être orientée vers le haut de quelque degré que ce soit au-delà de la position verticale pour les emplacements dangereux de Classe II, Division 2, Zone 22 et Classe III



LIGHT BEAM

HORIZON

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

Accessory Package Contents

| MR-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.

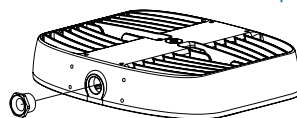
STEP 3:

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).

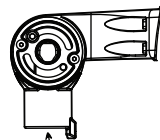
NOTE:

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

Step 2



Step 3

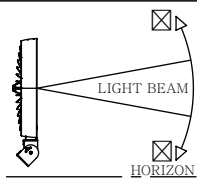


1.5" NPT THREADED ENTRY

⚠ WARNING / ATTENTION

For Class II, Division 2, Zone 22, and Class III hazardous locations, the MR head must not face upwards by any degree beyond the vertical position.

Le luminaire (MR) ne doit pas être orientée vers le haut de quelque degré que ce soit au-delà de la position verticale pour les emplacements dangereux de Classe II, Division 2, Zone 22 et Classe III



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

INSTALLATION STEPS CONT.

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 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 through the 3/4" bushing (installed before joining the luminaire to the mount).

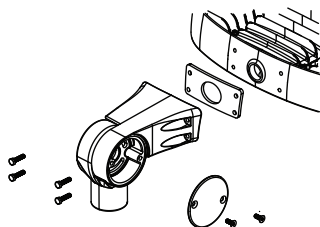
STEP 8:

Close sealed cap on SFY-1.5 Mount. Torque to 7 N-m (62 in-lbs)

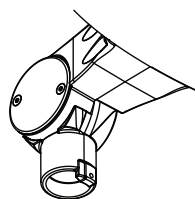
STEP 9:

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.

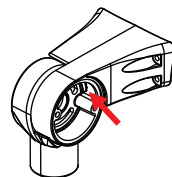
Step 4



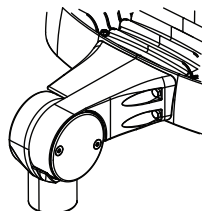
Step 6



Step 7



Step 8

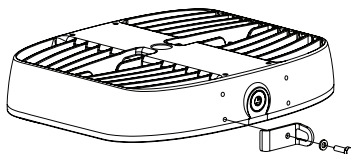


MR-SK-## – SECONDARY SAFETY KIT (Ordered Separately)

This MR-SK-## kit is intended for use with UL listed MR luminaire, as marked on the luminaire nameplate.

Accessory Package Contents

| MR-SK-## | QTY | PART NAME |
|----------|-----|--|
| | 1 | SECONDARY SAFETY BRACKET |
| | 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 |



INSTALLATION STEPS

STEP 1.

Remove the bottom-left pre-installed M6 x 16mm hex cap screw.

STEP 2.

Install bracket on MR 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.

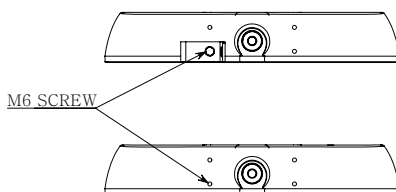
Attach the stainless steel chain to the safety kit bracket using an oval, stainless steel threaded connecting link.

STEP 4.

Attach the loose end of the chain. The secondary safety mounting point must be suitable for supporting a minimum of 110lbs:

- Attach the loose end of the stainless steel chain to the fixed eye bolt (not supplied) using the second stainless steel oval-shaped threaded connecting link.
- Alternate attachment method: Wrap the loose end of the chain around a fixed beam or other immovable support and create a closed loop using the second stainless steel oval-shaped threaded connecting link. The supporting beam or structure must form a closed loop to prevent the secondary safety chain from slipping off or becoming unhooked.

Step 1



Step 2

