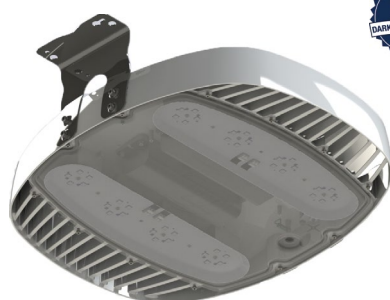


Surface/Ceiling Mounting Installation



Application

AR Bay luminaires are designed for use indoors, outdoors, wet locations, areas containing moisture, dirt, corrosion, vibration and rough usage. This luminaire is certified by NSF for use in Splash-zone and Non-Food areas of food processing locations as dened in NSF-2. The AR Bay luminaire has been certified for use on marine vessels inside, outside, and in other severely wet saltwater environments.

Certified to: UL 1598, UL 1598A, and UL 8750;
CSA 22.2 No. 250.0 and CSA22.2 No. 250.13
ABS Listed

Housing: Copper-free Cast Aluminium with Polycarbonate lens

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

Electrical Ratings:

Model	Input Voltage	Rated Wattage	Rated Voltage	Freqeuncy
AR10	AC	109	120-277	50/60
	HV	129	247-480	50/60
AR15	AC	145	120-277	50/60
	HV	145	247-480	50/60
AR20	AC	190	120-277	50/60
	HV	187	247-480	50/60
AR25	AC	247	120-277	50/60
	HV	245	247-480	50/60
AR30	AC	213	120-277	50/60
	HV	310	247-480	50/60

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

Temperature Range: AR10, 15, 20, 25 AC Models: -40°C to +55°C
AR10, 15, 20, 25 HV Models: -40°C to +50°C
AR30 AC, HV Optical models: -40°C to +45°C
AR30 AC Flood model: -40°C to +40°C
AR30 HV Flood model: -40°C to +45°C

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

Warning

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

Warning

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

Surface/Ceiling Mount Installation (Ordered Separately)

(Brackets are ordered separately)

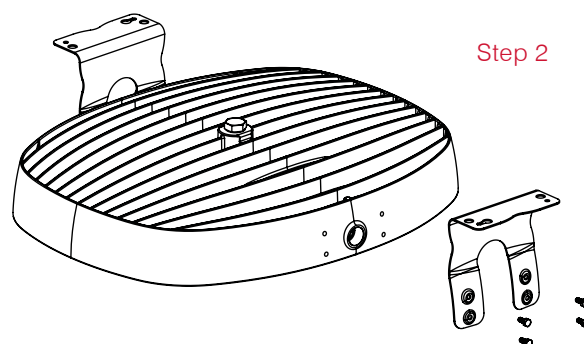
Refer to alternate instructions if using Conduit, Hook, Wall, Pole or Yoke Mount

Step 1.

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

Step 2.

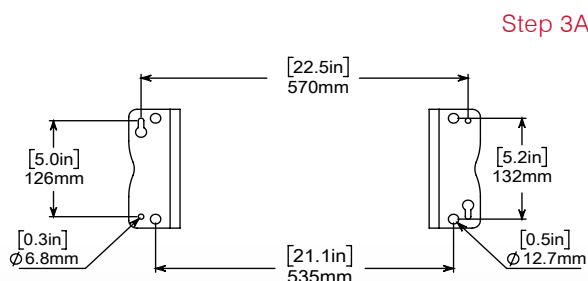
Remove 8x M6 hex cap bracket mounting screws from head and re-install with included Surface/Suspension Mount Brackets. See diagram for orientation of brackets. Torque M6 bolts to 5 Nm (45 in-lbs).



Step 3.

A) For surface mounting configuration, mount luminaire in desired ceiling location 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.

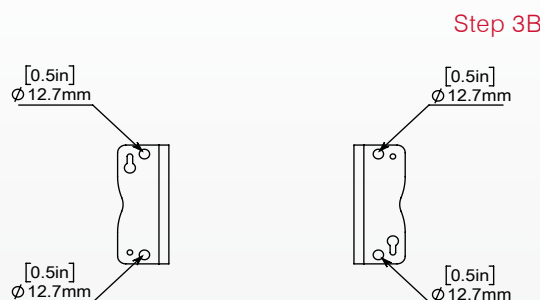
B) For ceiling mounting configurations, connect 4x anchors to the 12.7mm (0.5") holes. Suspension hardware (Not provided) must be rated for a minimum of 180 lbs.



Step 4.

Open AR Lens with a 7mm socket or wrench and allow Lens to hang via retention strap.

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



Step 5.

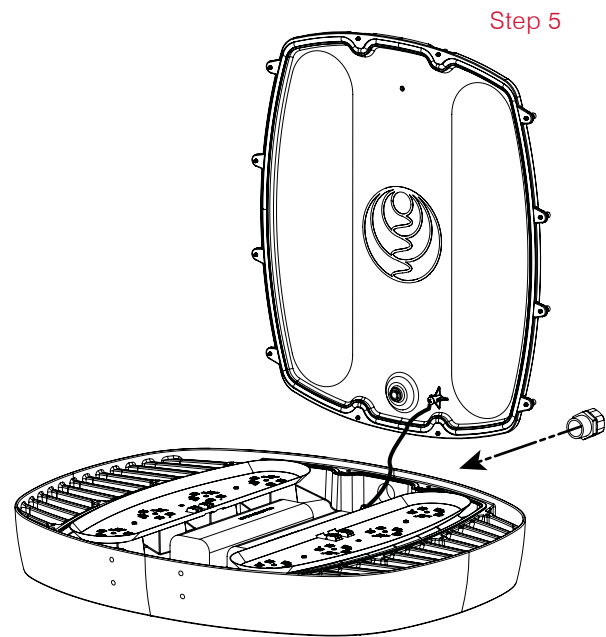
Make wiring connections from branch circuit conductors to factory provided lead wires. Refer to NEC/CEC codes and follow all applicable local standards. See wiring diagram on Page 4.

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

- 0-10V Interface can be wired as Class 1 or Class 2 Circuit.
- LED Drivers will source a combined maximum of 400 μ A for control needs.
- 0-10V Controller must sink current from LED driver 0-10V control connections.

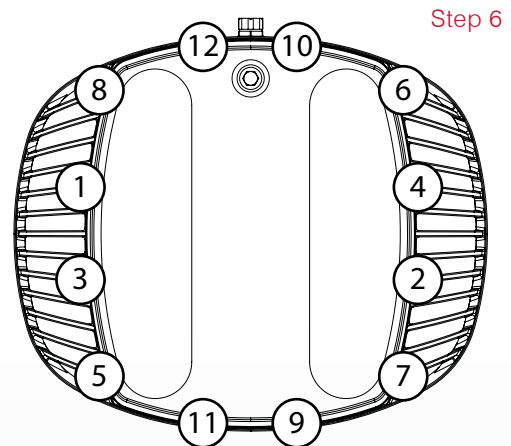
NOTE: To aid in assembly and protection against ingress use of a petrolatum or soap thickened mineral oil based thread lubricant/sealant is necessary.

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



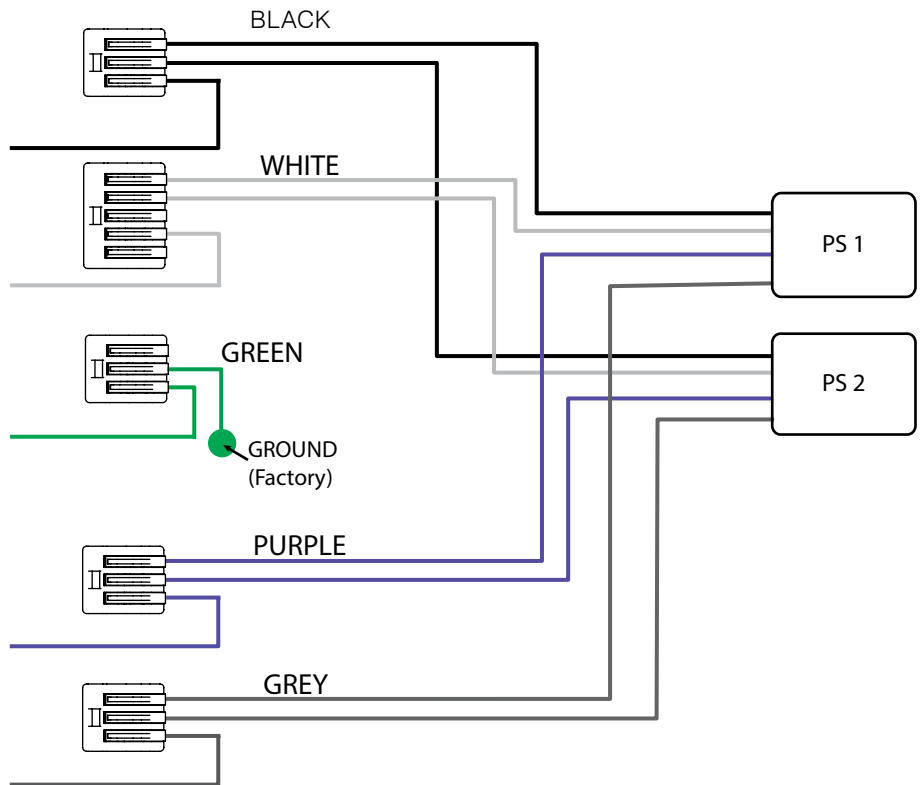
Step 6.

Close AR lens. Ensure the retention cable is not pinched between AR Head and the AR Lens. Tighten lens bolts using a 7mm socket or box wrench to 1.7 N-m (15 in-lbs) in the order designated in the diagram to ensure gasket sealing.



Wiring Diagram

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



Pole Mount Installation (Ordered Separately)

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

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

Accessory Package Contents

SPX-BKT-AR-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. Discard surface/ceiling mounting bracket provided with AR luminaire. Remove 4 x M6 bolts from supply side of luminaire and disard.

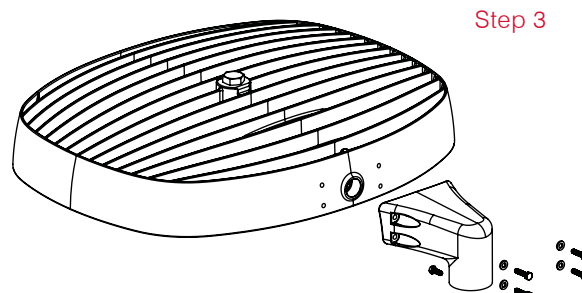
Step 2.

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)

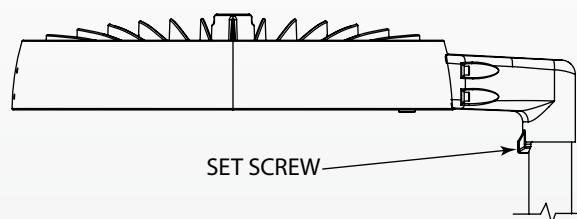


Step 3

Step 4.

Thread luminaire assembly onto 1.5" NPT pole

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



Step 5

Step 5.

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

Step 6.

Resume installation instructions provided with luminaire. (STEP 4 in AR Installation Instructions provided with Luminaire)

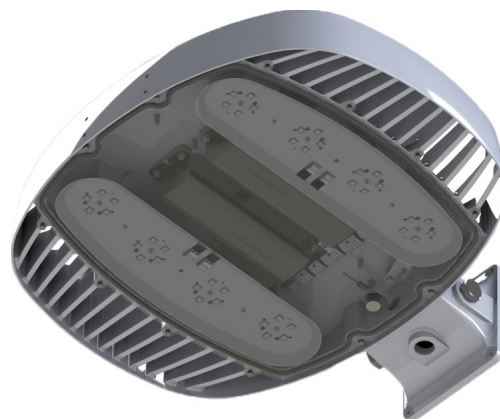
Wall Mount Installation (Ordered Separately)

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

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

Accessory Package Contents

SPX-BKT-AR-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. Discard surface/ceiling mounting bracket provided with AR luminaire. Remove 4 x M6 bolts from supply side of luminaire and discard.

Step 2.

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

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

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

Step 3.

Install provided 3/4" NPT plastic bushing onto side NPT entry on AR 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).

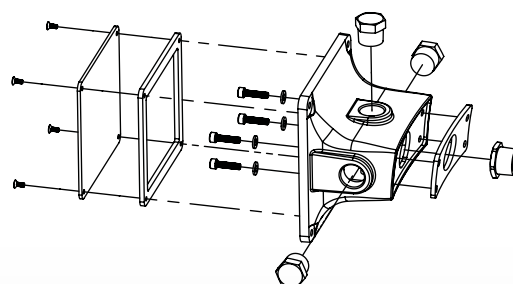
Step 6.

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

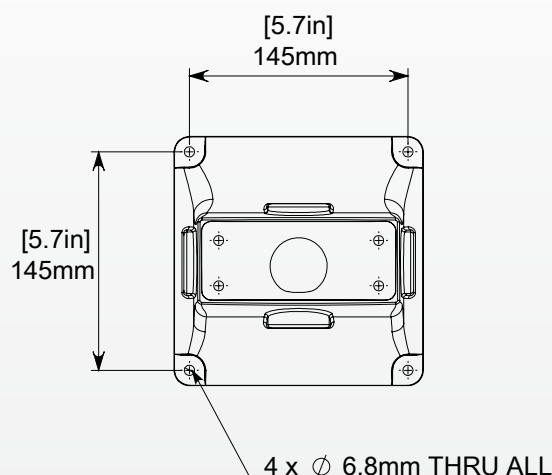
Step 7.

Resume installation instructions provided with luminaire.
(STEP 4 in AR Installation Instructions provided with Luminaire)

Steps 2 through 5



Step 6



Yoke Mount Installation (Ordered Separately)

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

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

Accessory Package Contents

SPX-BKT-AR-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. Discard surface/ceiling mounting bracket provided with AR luminaire. Remove 4 x M6 bolts from supply side of luminaire and discard.

Step 2.

Install suitable wiring system to the conduit opening per CEC/NEC requirements for the specific location of install.

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

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

Step 3.

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.

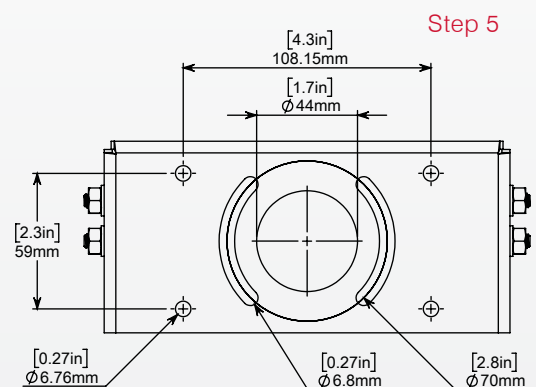
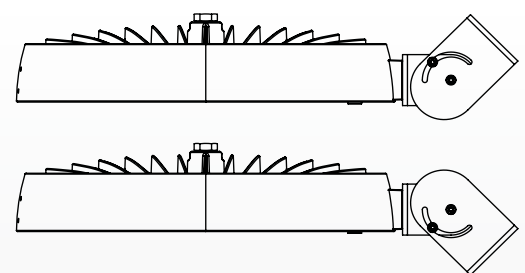
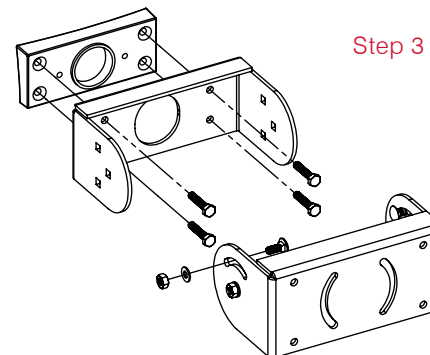
Mount luminaire assembly to desired location using 4x 1/4-20 OR M6 Screws or Bolts (Not Provided).

Step 6.

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

Step 7.

Resume installation instructions provided with luminaire.
(STEP 4 in AR Installation Instructions provided with Luminaire)



Hook Pendant Installation (Ordered Separately)

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

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

Accessory Package Contents

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

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



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.

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 180lbs. Secondary safety cables made from stainless steel aircraft cable are available upon request.

Step 3.

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

NOTE: To aid in assembly and 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.

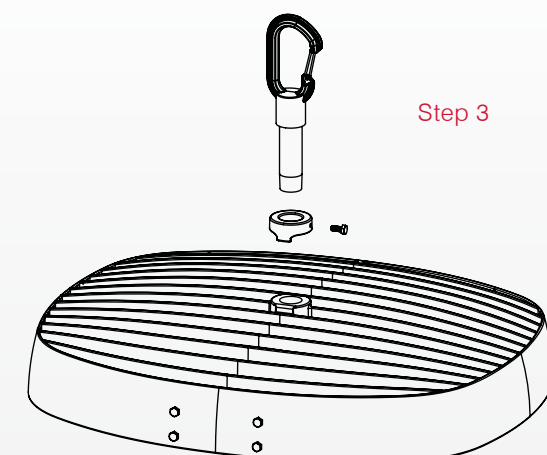
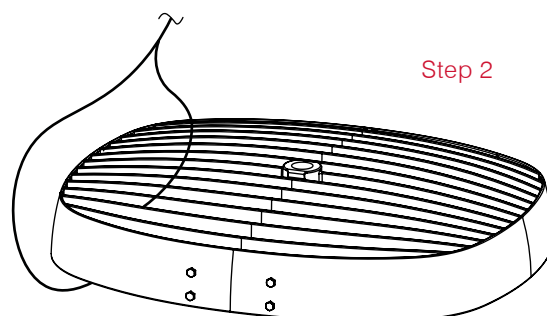
Latch hook onto eye-bolt or other fixed mounting loop. Mounting point must be rated for a minimum of 180lbs.

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 AR Installation Instructions provided with Luminaire)



Conduit Mount Installation (Ordered Separately)

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

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

Accessory Package Contents

SPX-BKT-AR-CM	QTY	PART NAME
	1	ANTI-ROTATION BRACKET ASSEMBLY

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



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.

Step 2.

Slide anti-rotation lock onto suitably mounted hanging conduit or luminaire hanger and install luminaire onto 3/4" NPT threaded nipple. Tighten to hand tight contact plus 1 to 2 turns. Slide anti-rotation lock into place and tighten set screw to lock unit in place. Fixed Rigid Metal Conduit must be suitably mounted to prevent rotation and system must be rated for 180 lbs.

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

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

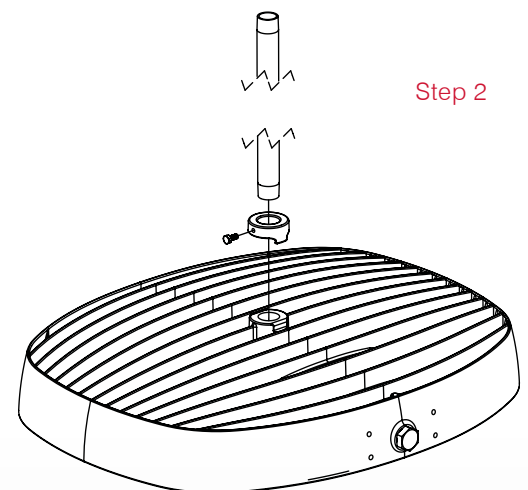
Step 3.

Install 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 180lbs.

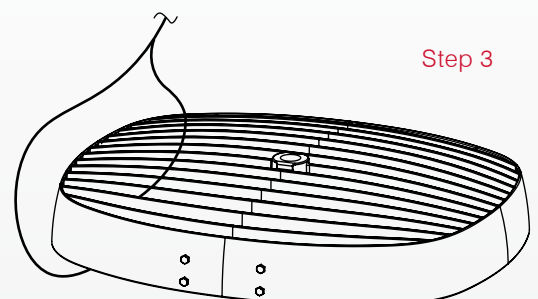
Install remaining loop of secondary safety chain or steel cable to suitable mounting location and fasten securely. Secondary safety hardware must be rated for 180lbs.

Step 4.

Resume installation instructions provided with luminaire. (STEP 4 in AR Installation Instructions provided with Luminaire)



Step 2



Step 3

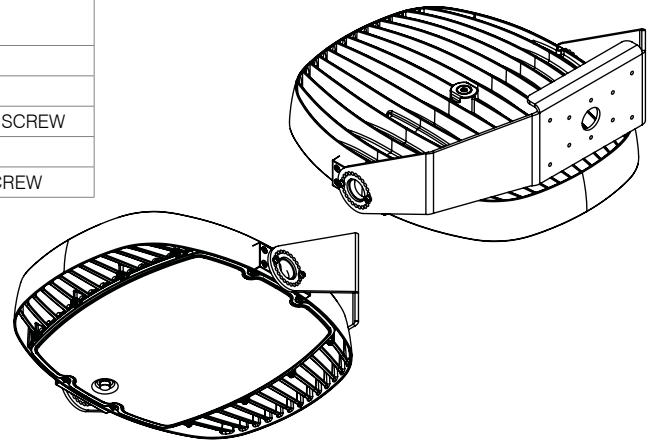
High Vibration Yoke Installation (Ordered Separately)

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

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

Accessory Package Contents

SPX-BKT-AR-YK	QTY	PART NAME
	1	AR 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. Discard surface/ceiling mounting bracket provided with AR luminaire. Remove 8 x M6 hex bolts from sides of luminaire and discard.

Step 2.

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

Step 3.

Install suitable wiring system to the conduit opening per CEC/NEC requirements for the speci-fic location of install.

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 AR Cheek Plates to sides of AR 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).

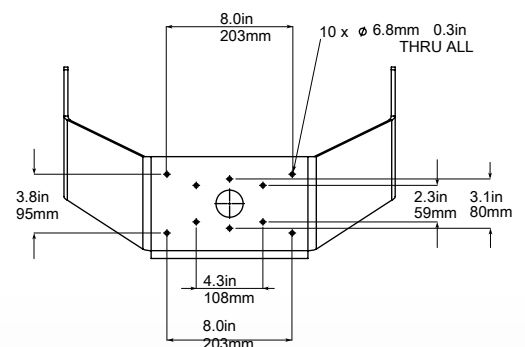
Step 5.

Thread installed wiring through opening in AR high vibration yoke mount and install AR luminaire into yoke. The raised circular bosses on the AR cheek plates should register inside of the large circular holes on the AR 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).

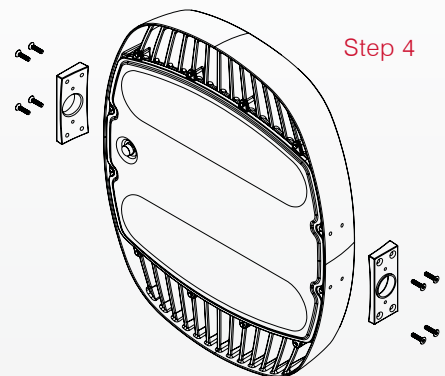
Step 6.

Resume installation instructions provided with luminaire. (STEP 4 in AR Installation Instructions provided with Luminaire)

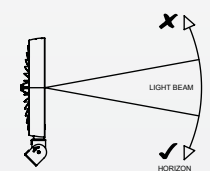
Step 2



Step 4



WARNING:
The AR Head must not face upwards by any degree beyond the vertical position for Class II, Division 2, Zone 22, and Class III hazardous locations.



Surge Suppressor Kit (Ordered Separately)

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

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

Accessory Package Contents

SPX-BKT-AR-SP-AC	QTY	PART NAME
	1	FSP3-277-20KA SURGE PROTECTOR
	1	3M VHB TAPE
	1	SURGE SUPPRESSOR RETENTION STRAP
	2	M3 x 8mm PAN HEAD PHILLIPS MACHINE SCREW
	2	M3 FLAT WASHER

Installation Steps

Step 1.

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

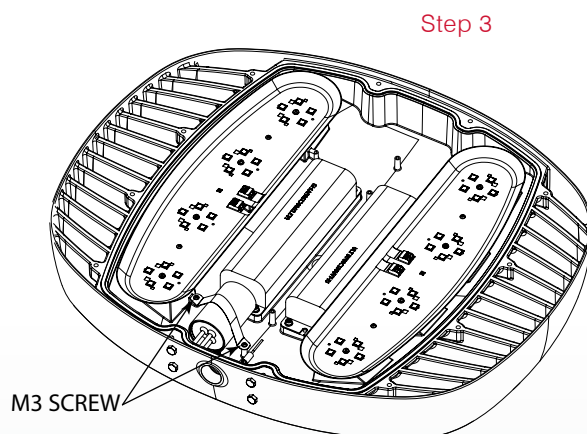
Step 2.

Open AR Lens 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. Remove backing paper and place between mounting points as shown, with tape-side down. Install retention strap with two M3 fasteners and ensure surge protector is held tightly in place.

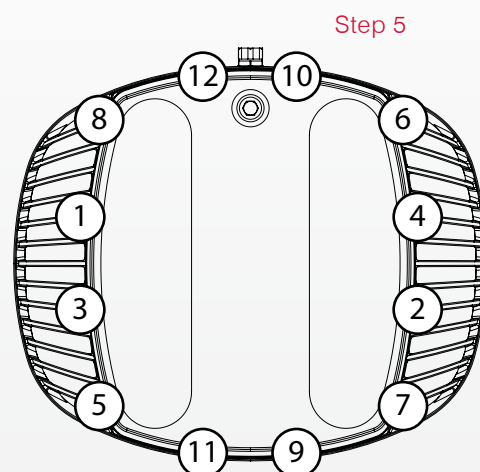


Step 4.

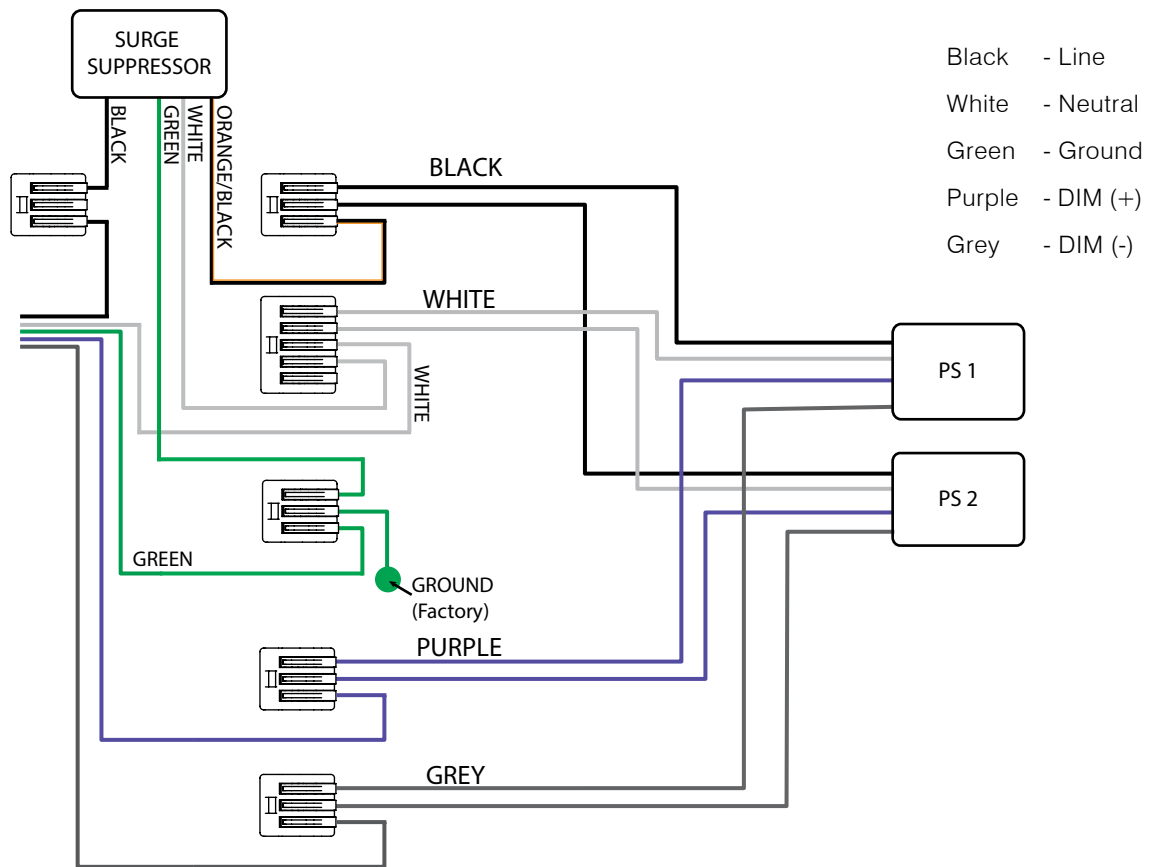
Wire according to wiring instructions on Page 2. Refer to NEC/CEC codes and follow all applicable local standards.

Step 5.

Close AR lens. Ensure the retention cable is not pinched between AR Head and the AR Lens. Tighten lens bolts using a 7mm socket or box wrench to 1.7 N-m (15 in-lbs) in the order designated in the diagram to ensure gasket sealing.



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



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

Surge Suppressor Kit (Ordered Separately)

(Requires SPX-BKT-AR-SP-HV Surge Protector Accessory Kit)

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

Accessory Package Contents

SPX-BKT-AR-SP-HV	QTY	PART NAME
	1	FSP3-480-20KA SURGE PROTECTOR
	1	3M VHB TAPE
	1	SURGE SUPPRESSOR RETENTION STRAP
	2	M3 x 8mm PAN HEAD PHILLIPS MACHINE SCREW
	2	M3 FLAT WASHER

Installation Steps

Step 1.

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

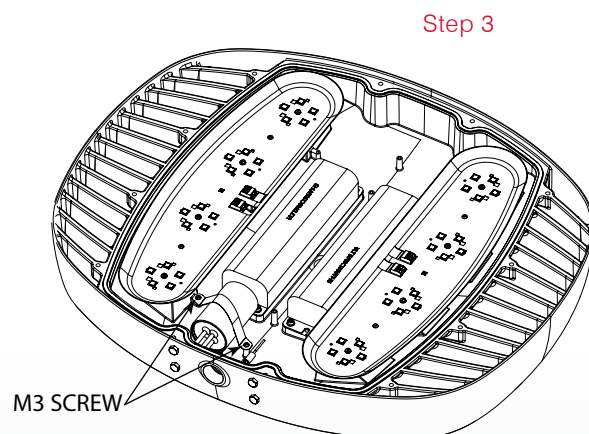
Step 2.

Open AR Lens 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. Remove backing paper and place between mounting points as shown, with tape-side down. Install retention strap with two M3 fasteners and ensure surge protector is held tightly in place.

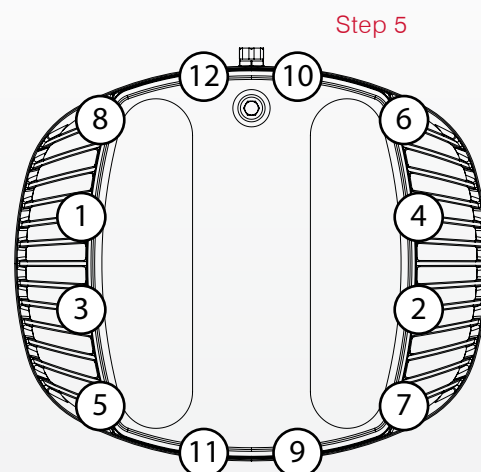


Step 4.

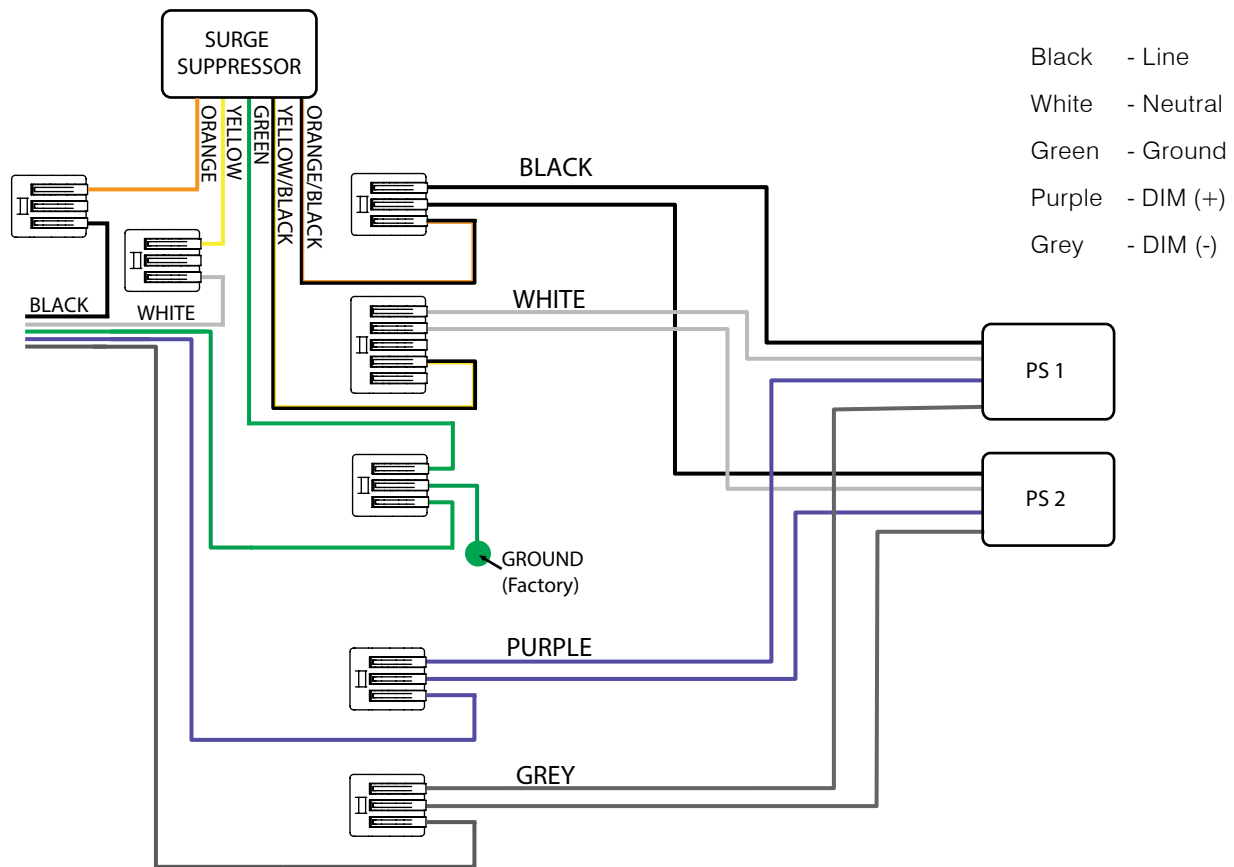
Wire according to wiring instructions on Page 2. Refer to NEC/CEC codes and follow all applicable local standards.

Step 5.

Close AR lens. Ensure the retention cable is not pinched between AR Head and the AR Lens. Tighten lens bolts using a 7mm socket or box wrench to 1.7 N-m (15 in-lbs) in the order designated in the diagram to ensure gasket sealing.



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



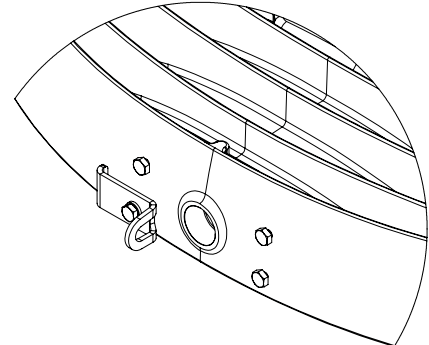
1. Disconnect Line Input branch circuit conductor from splice or terminal connected to Black leads from LED Driver. Re-connect Line Input branch circuit conductor to Orange wire from surge protector.
2. Connect Orange/Black wire from surge protector to splice or terminal connected to Black leads from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

Secondary Safety Kit (Ordered Separately)

This SPX-BKT-AR-K-## kit is intended for use with UL Listed AR luminaire as marked on the luminaire nameplate.

Accessory Package Contents

SPX-BKT-AR-K-##	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



Installation Steps

Step 1.

Remove the bottom-left pre-installed M6 x 16mm Hex Cap Screw.

Step 2.

Install bracket on AR 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.

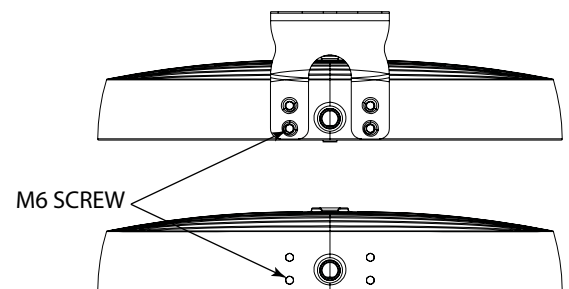
Attach stainless steel chain to safety kit bracket using stainless steel oval shaped threaded connecting link.

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 3



Step 5

