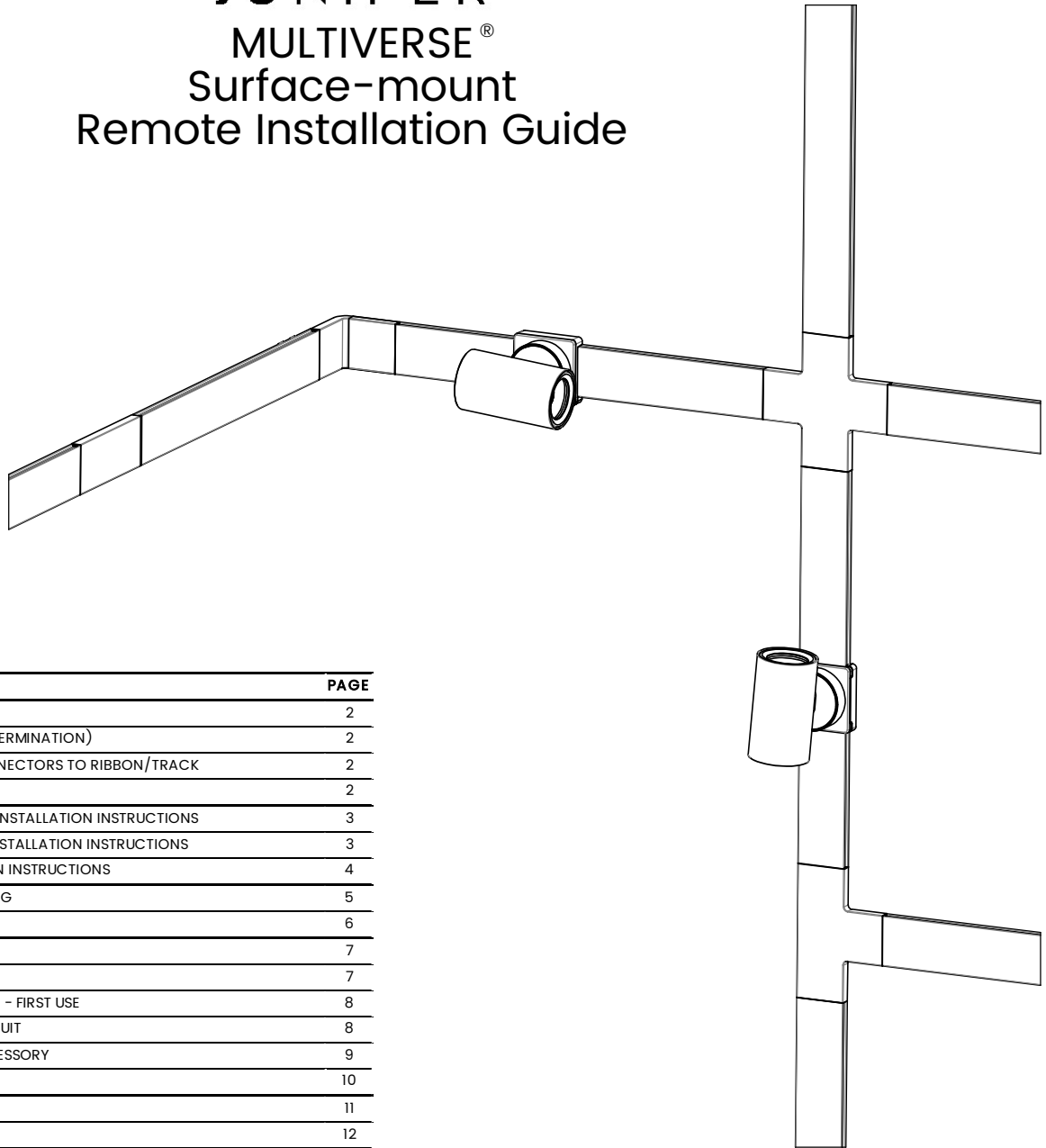


# JUNIPER<sup>®</sup> MULTIVERSE<sup>®</sup> Surface-mount Remote Installation Guide



## TABLE OF CONTENTS

INSTRUCTION	PAGE
RIBBON/TRACK INSTALLATION	2
ISOLATING ENDS OF TRACK (POWER TERMINATION)	2
CONNECTING POWER FEED AND CONNECTORS TO RIBBON/TRACK	2
RIBBON/TRACK REMOVAL	2
END-POWER FEED - SURFACE MOUNT INSTALLATION INSTRUCTIONS	3
END-POWER FEED - JUNCTION BOX INSTALLATION INSTRUCTIONS	3
CONDUIT POWER FEED - INSTALLATION INSTRUCTIONS	4
CONNECTORS INSTALLATION PLANNING	5
CUTTING THE RIBBON / TRACK	6
SPOTLIGHT INSTALLATION	7
ADJUSTING THE SPOTLIGHT	7
BRIGHTNESS & DIMMING CALIBRATION - FIRST USE	8
CHANGING SPOTLIGHT'S POWER CIRCUIT	8
CHANGING THE LENS & OPTICAL ACCESSORY	9
INSTALL SNOOT	10
POWER ADAPTOR INSTALLATION	11
SUSPENSION ADAPTOR INSTALLATION	12
APPENDIX	13
TROUBLESHOOTING GUIDE	14

## IMPORTANT SAFETY INSTRUCTIONS

When installing or using this track system, basic safety precautions should always be followed, including the following:

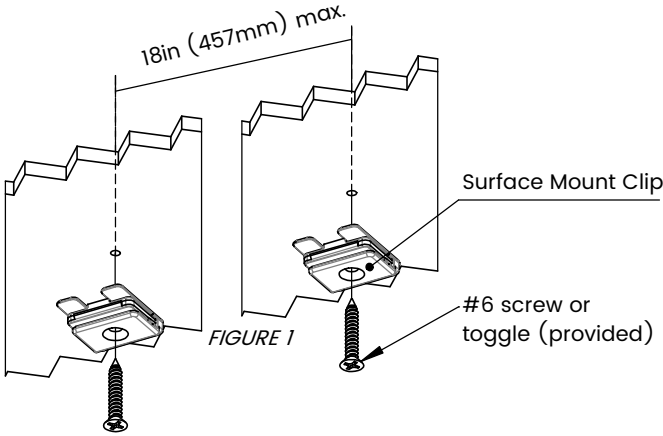
- Recommended Ambient Operating Temperature: 77°F (25°C); Maximum Ambient Operating Temperature: 95°F (35°C).
- Do not install this track in damp or wet locations.
- This track is field cuttable and hence complies with Section 31 of UL 1574, Field Cutting.
- Do not install any luminaire assembly closer than 6 inches from any curtain, or similar combustible material.
- Disconnect electrical power before adding to or changing the configuration of the track.
- Do not attempt to energize anything other than lighting track luminaires on the track. To reduce the risk of fire and electric shock, do not attempt to connect power tools, extension cords, appliances, and the like to the track.
- This track lighting system operates at 24V DC constant voltage. It is a dual circuit system, whereas each circuit is rated for a maximum of 4A current @24VDC in order to comply with low voltage luminaire Class 2 requirements.

## SAVE THESE INSTRUCTIONS

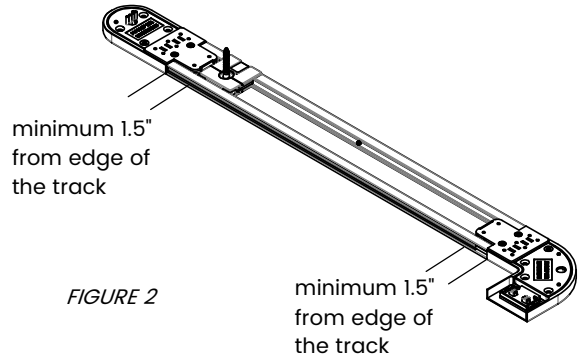
**RIBBON/TRACK INSTALLATION**

- A. Complete wiring of power feeds to Drivers.
- B. Identify where the circuit(s) need to be isolated (when using more than one driver).
- C. Install surface mount clips (per desired ribbon layout).
- D. Snap Ribbon/Track onto the surface mount clips.
- E. Install connectors and power feeds to ribbon/track - snap on. (All connectors and power feeds are connected to the Ribbon/track in the same way.)

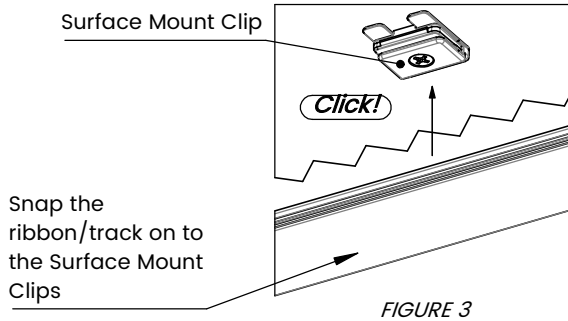
**1** NOTE 1: USE APPROPRIATE ANCHOR FOR WALL/CEILING SUBSTRATE BEING INSTALLED ON.



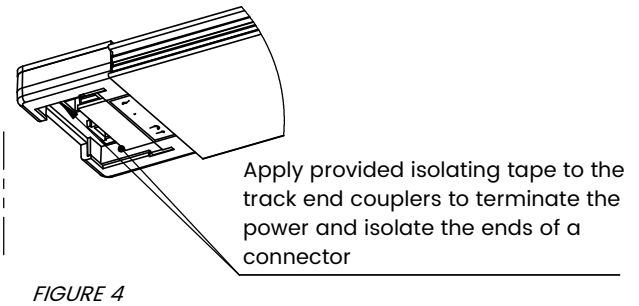
**2** NOTE 1: Surface mount clips must be mounted at least 1.5 inch from the edge of the ribbon/track



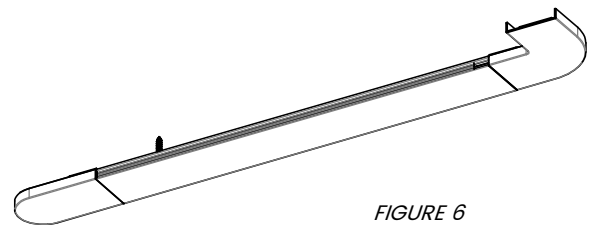
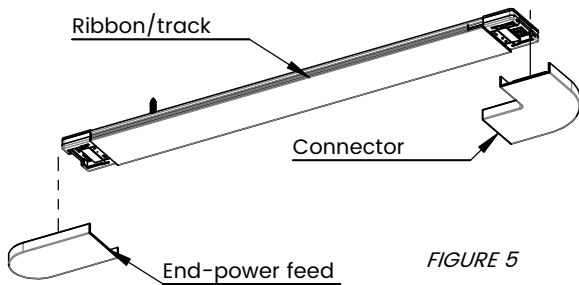
**3** Surface Mount Clip



**ISOLATING ENDS OF TRACK (POWER TERMINATION)**

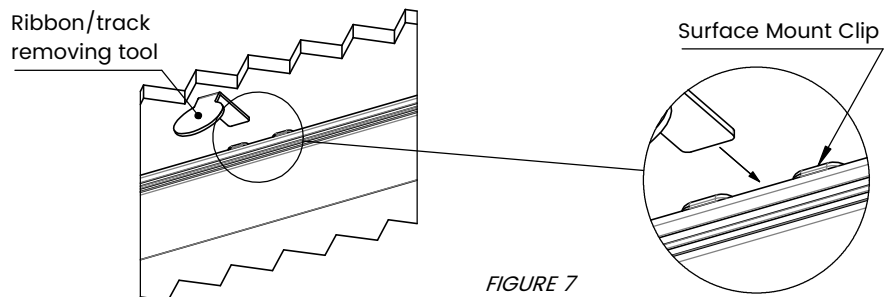


**CONNECTING POWER FEED AND CONNECTORS TO RIBBON/TRACK**



**RIBBON/TRACK REMOVAL**

Use the track removing tool or a flat head screw driver to press the release tab in the surface mount clip. This will release the track from the clip.



**WARNING**

A LICENSED ELECTRICIAN SHOULD PERFORM INSTALLATION.  
DISCONNECT MAIN POWER AT THE SOURCE PRIOR TO INSTALLATION.

INSTRUCTIONS MEANT FOR (2) 24VDC LOW VOLTAGE REMOTE CLASS 2 DRIVERS.

**1 END-POWER FEED - SURFACE MOUNT INSTALLATION INSTRUCTIONS**

\*The Inline Power feed follows the same steps for installation.

Create a  $\varnothing 1/2$ in (max.) hole 2in from the edge of the ribbon/track (to receive power cables)

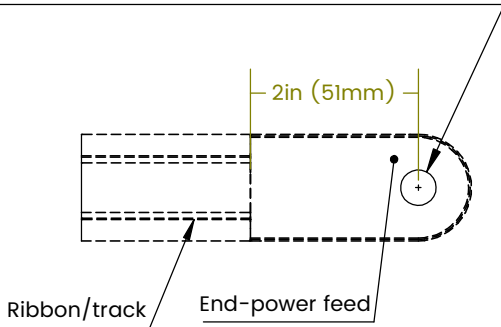


FIGURE 8

*\* Remote LED Driver (P2) is optional. The system is capable of operating on a single 24VDC LED Driver.*

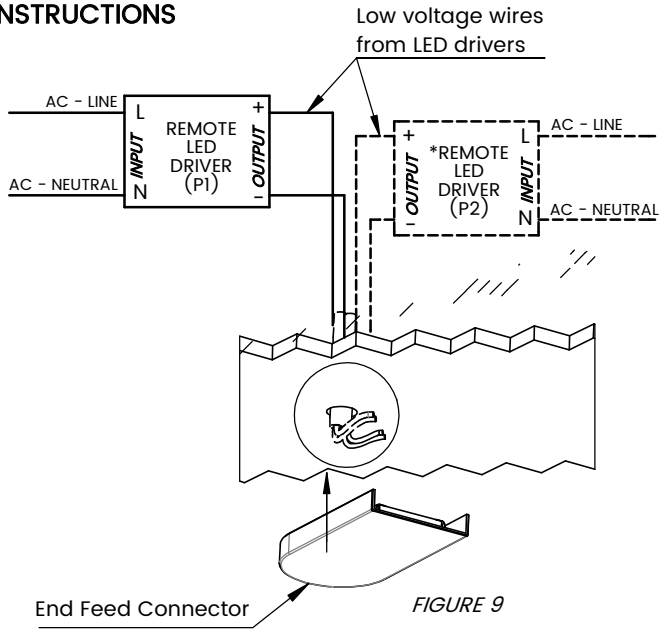


FIGURE 9

**2 END-POWER FEED - JUNCTION BOX INSTALLATION INSTRUCTIONS**

\*The Inline Power feed follows the same steps for installation.

- A. Install mounting hardware
- B. Make wiring connections
- C. Install Track Ribbon
- D. Install End Power Feed

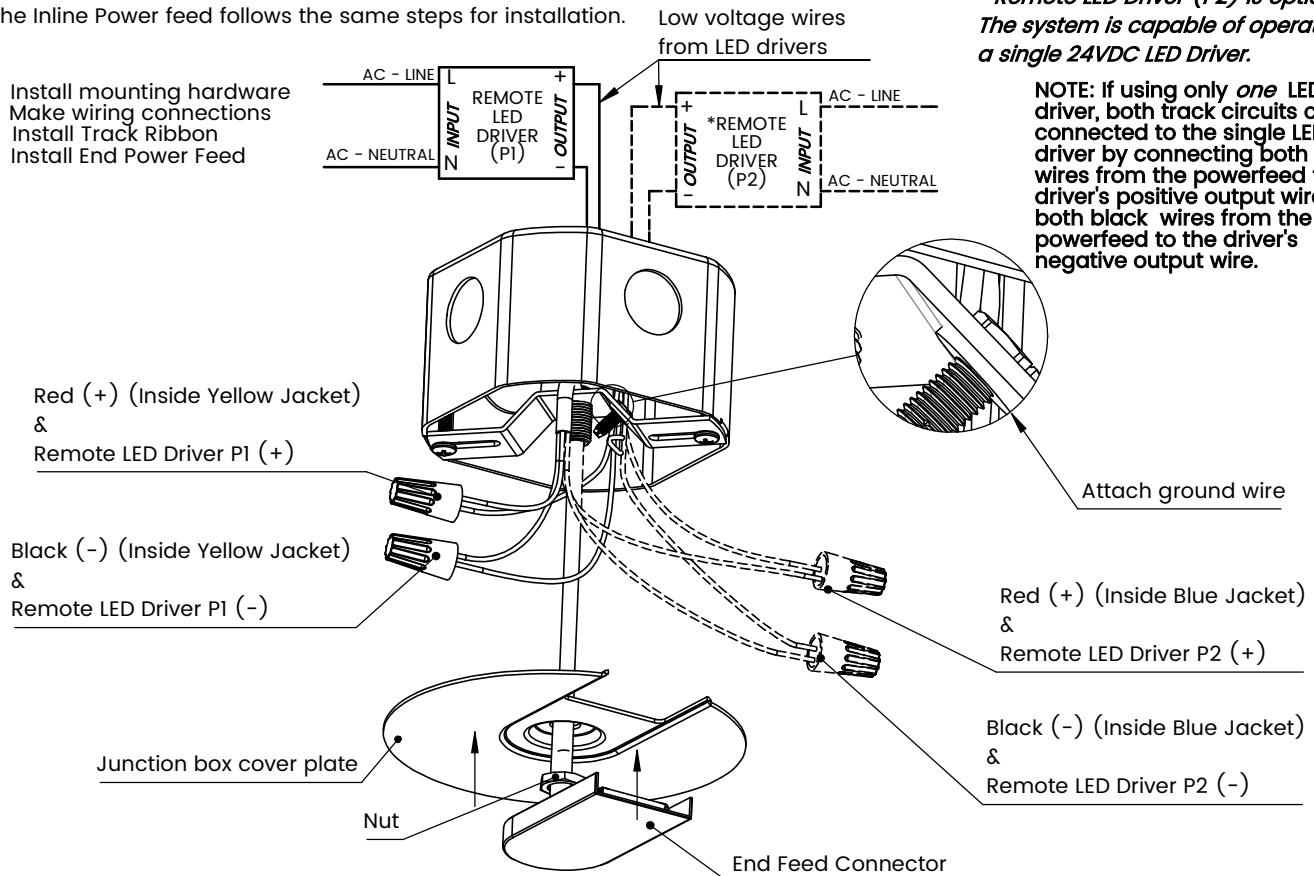


FIGURE 10

*\* Remote LED Driver (P2) is optional. The system is capable of operating on a single 24VDC LED Driver.*

**NOTE:** If using only *one* LED driver, both track circuits can be connected to the single LED driver by connecting both red wires from the powerfeed to driver's positive output wire and both black wires from the powerfeed to the driver's negative output wire.

\*Note: Wiring is the same for any power connector (Inline Power feed & 90 Inline Power feed Connectors)

CONDUIT POWER FEED - INSTALLATION INSTRUCTIONS

1 A. Verify proper distance between track and conduit coupling

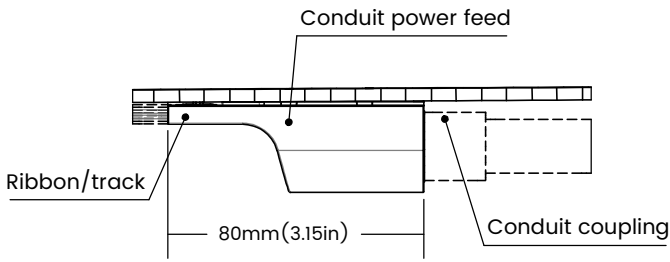


FIGURE 11

2

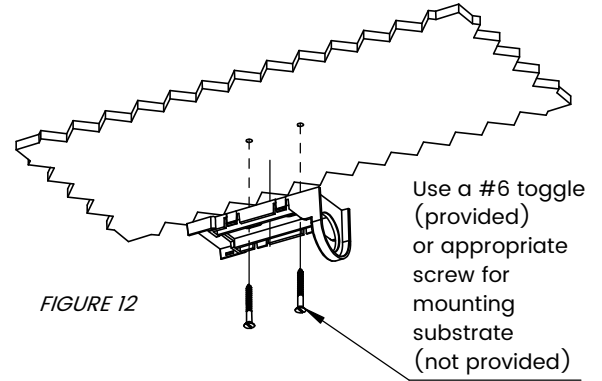


FIGURE 12

3 Mount the Conduit coupler

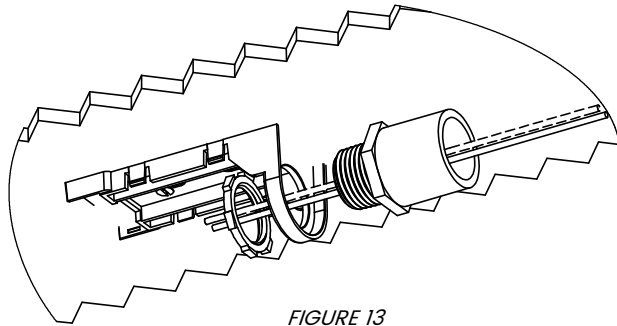


FIGURE 13

4 Align the locknut for the conduit coupling provided by others

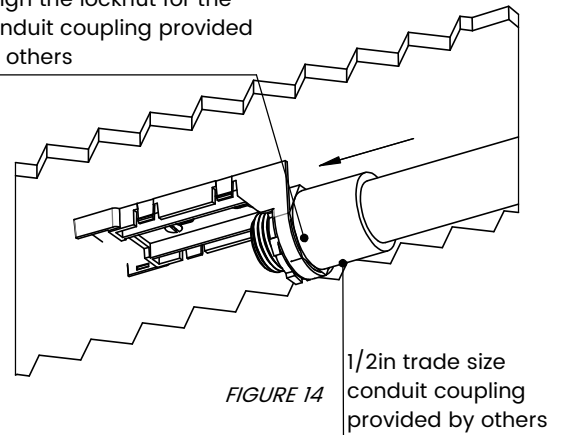


FIGURE 14

5

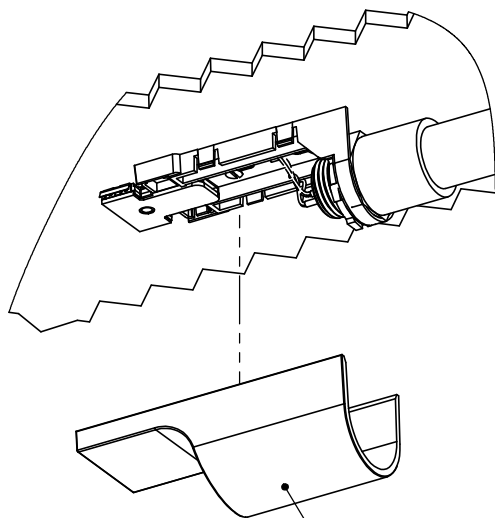
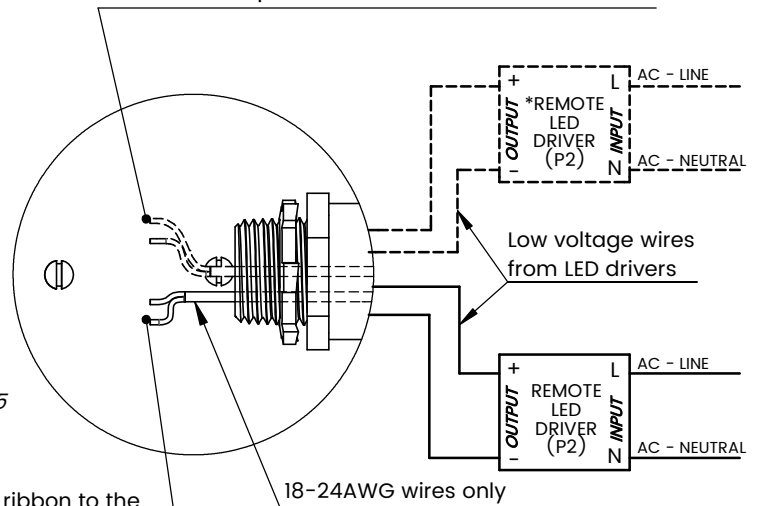


FIGURE 15

*\* Remote LED Driver (P2) is optional. The system is capable of operating on a single 24VDC LED Driver.*

- C. Mount the track/ ribbon to the surface
- D. Attach the wired power board to the track end
- E. Attach cover plate

A. Connect '+' and '-' wires from driver P2 to the Red (+) & Black (-) wires in the Blue jacketed cable on the power board



B. Connect '+' and '-' wires from driver P1 to the Red (+) & Black (-) wires in the Yellow jacketed cable on the power board

**CONNECTORS INSTALLATION PLANNING**

Illustrations below show the space needed between ribbon/track sections to install connectors. Plan your installation using given dimensions for each of the connectors.

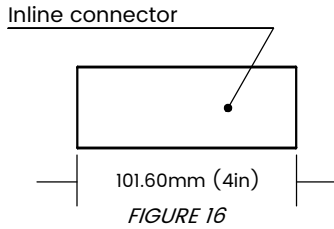


FIGURE 16

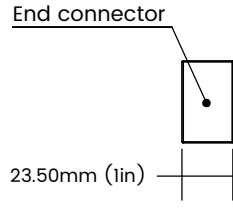


FIGURE 17

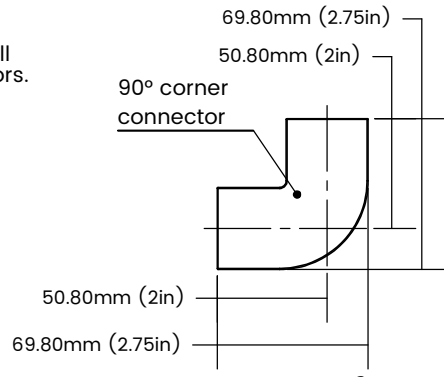


FIGURE 18

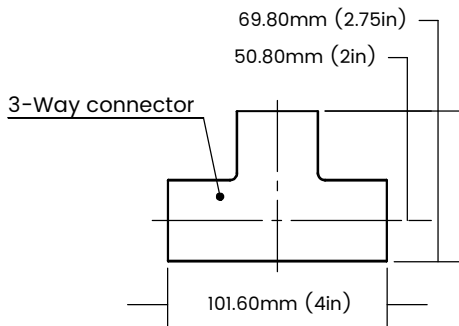


FIGURE 19

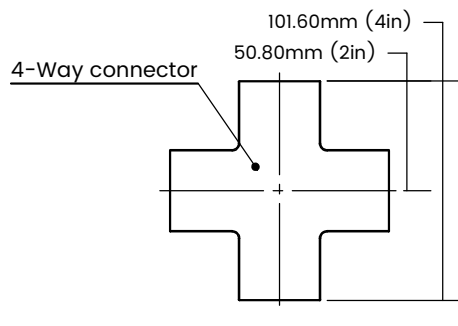


FIGURE 20

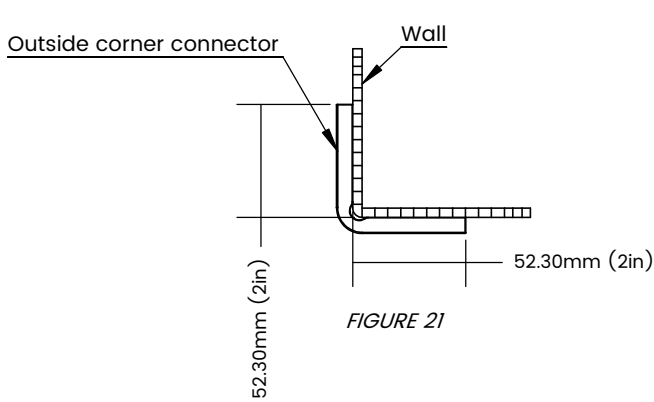


FIGURE 21

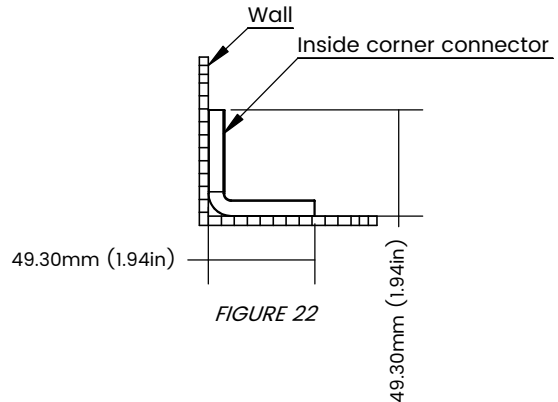


FIGURE 22

**CUTTING THE RIBBON/TRACK**

- 1 Remove both Z-Ends from the ribbon/track.

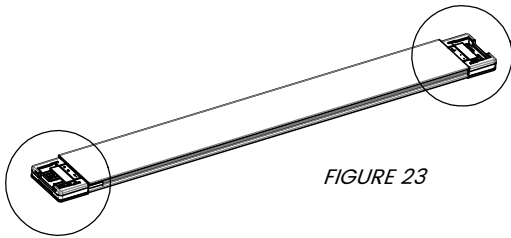


FIGURE 23

- 2 Slide out the insulated conductors toward the non-cutting end\*

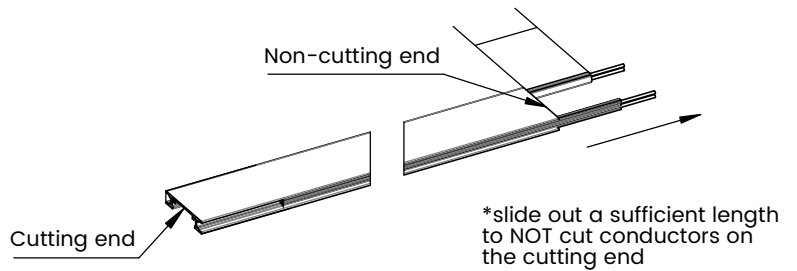


FIGURE 24

\*slide out a sufficient length to NOT cut conductors on the cutting end

- 3 Cut the track at a slow speed, using a high tooth count blade (84 teeth or more) that is suitable for cutting Aluminum AND Steel; do NOT cut conductors

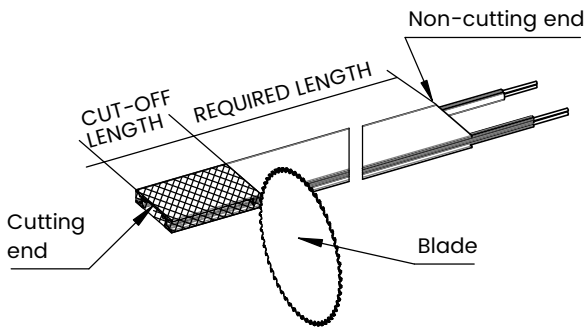


FIGURE 25

- 3 Push the conductors back into the track (toward the cutting end)

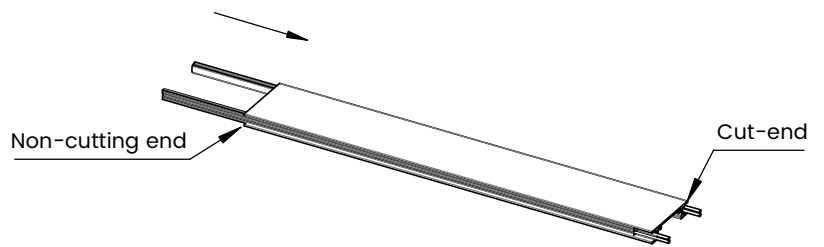


FIGURE 26

- 5 B. Trim conductors so that 1/2in is sticking out from the edge of the track

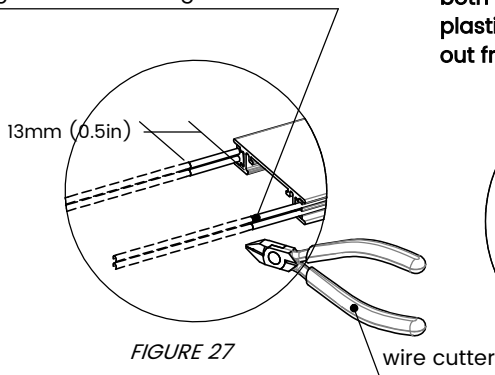


FIGURE 27

**NOTE: After stripping plastic on both ends, ensure that the plastic insulation does NOT stick out from the edges of the track.**

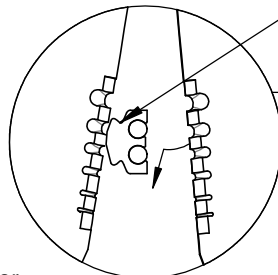


FIGURE 28

- A. Strip-off plastic insulation using 14 and 16 gauge holes on wire stripper\*

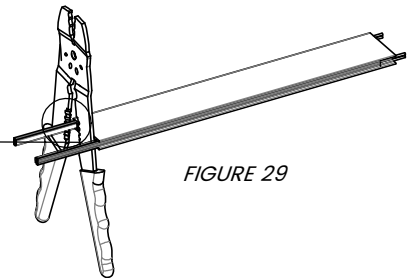


FIGURE 29

\* Alternately, the plastic insulation can be stripped off using a pair of scissors if a suitable wire stripper is not available.

- 6 Re-install Z-Ends on each end of the ribbon/track.

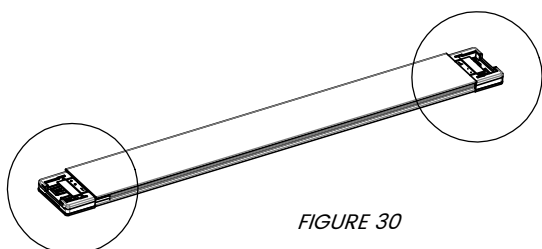


FIGURE 30

**CUTTING LENGTH EXAMPLE**

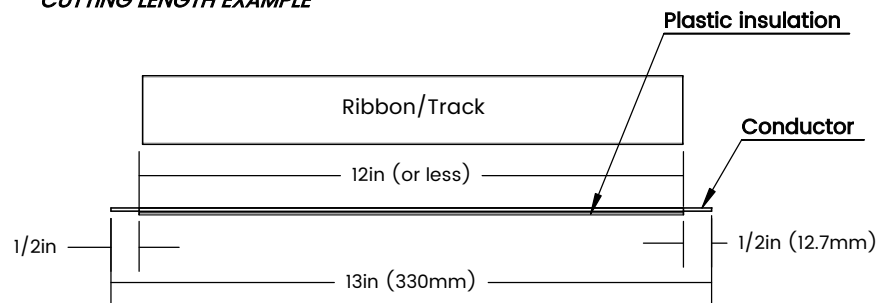
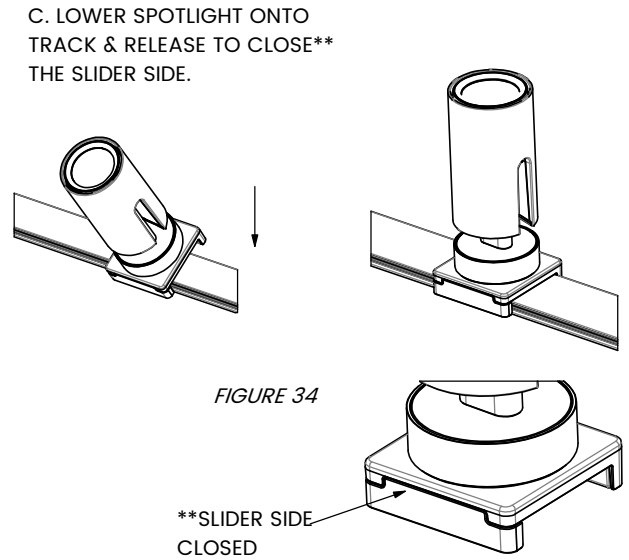
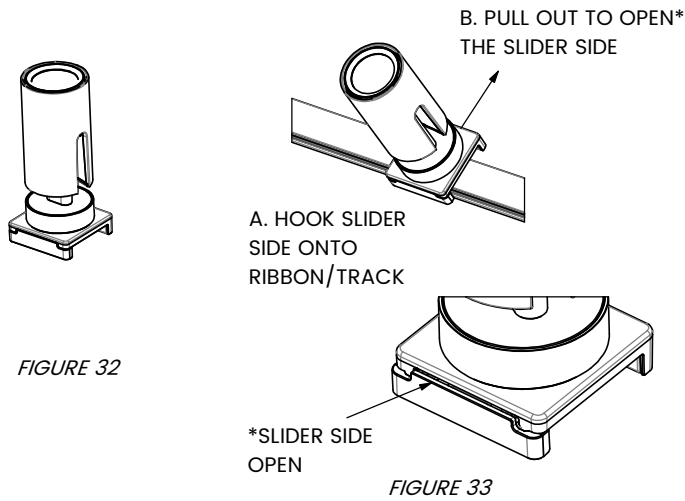


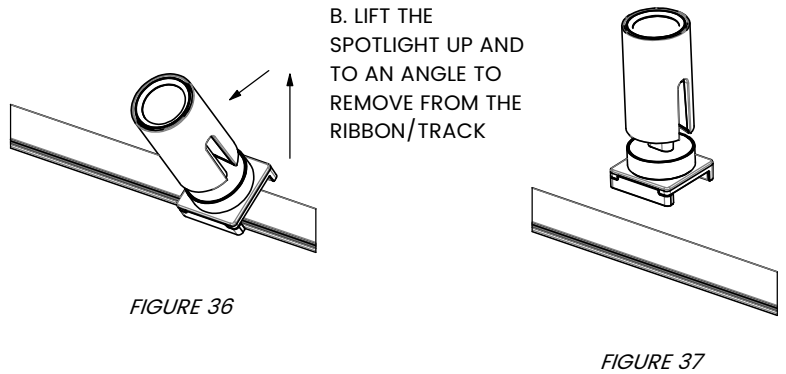
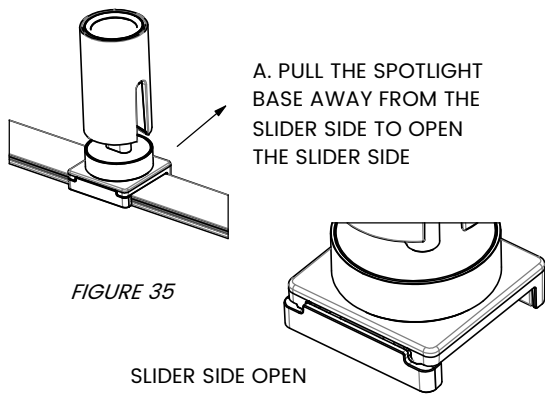
FIGURE 31

**SPOTLIGHT INSTALLATION**

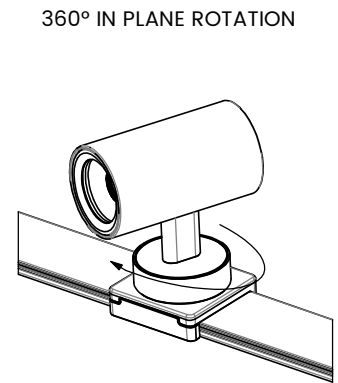
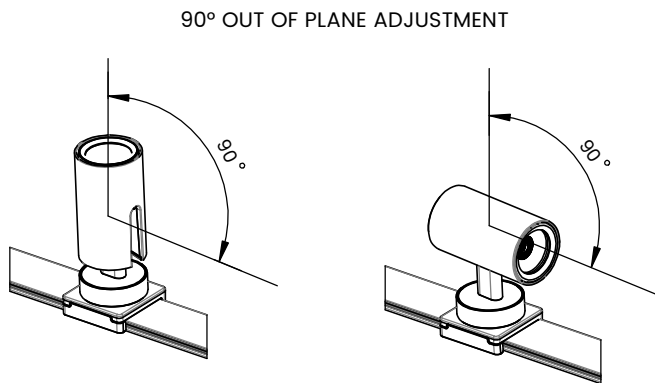
See Page 8 for first time use calibration



**REMOVING SPOTLIGHT FROM RIBBON/TRACK**



**ADJUSTING THE SPOTLIGHT**



**BRIGHTNESS & DIMMING CALIBRATION – FIRST-USE**

The spotlights further from the driver may be less bright due to voltage drop along long runs on the ribbon/track. This calibration process will balance the brightness of the spotlights along the ribbon/track run.

Calibration requires a dimmed track circuit and is performed via a process of an down-up-down-up of the dimmer.

\*If using dual circuits, ensure spotlights are on desired circuits prior to calibrating.

Perform these steps BACK-TO-BACK to calibrate spotlights for first use:

1. Turn the system off and set the dimmer to maximum brightness.
2. Turn the system **on** and dim it down to **minimum** brightness in under **three seconds**. (This will initiate the start of the calibration process to the spotlight.)
3. Next, set the dimmer to **maximum** brightness in under **three seconds**.
4. Dim the system down to **minimum** brightness in under **three seconds**.

All spotlights will flash two times indicating the completion of calibration. Spotlights will be equally bright.

**CHANGING SPOTLIGHT'S POWER CIRCUIT**

- A. Remove the spotlight from the track
- B. Rotate spotlight 180°
- C. Reinstall the spotlight on the track (SLIDER SIDE now attaches on the opposite side of the ribbon/track).

NOTE:

When setting up spotlights on circuit one vs circuit two, dim one circuit to help identify which spotlights are on each circuit.

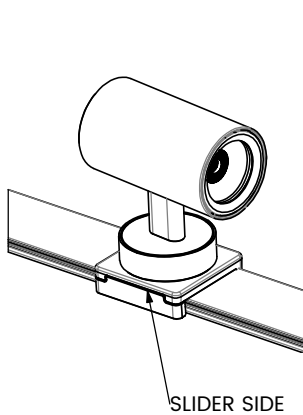


FIGURE 42 ON CIRCUIT 1

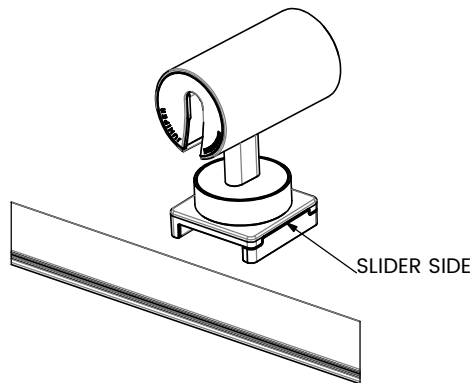


FIGURE 43

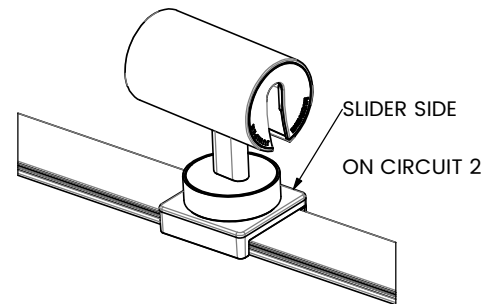
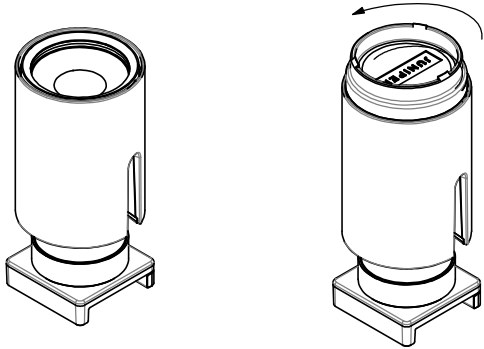


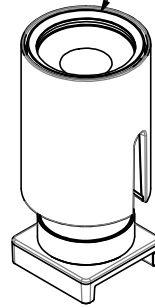
FIGURE 44

CHANGING THE LENS AND OPTICAL ACCESSORY

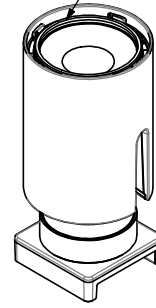
1. PLACE THE LENS REMOVAL TOOL AROUND THE LENS RING; ROTATE THE TOOL COUNTER CLOCKWISE.



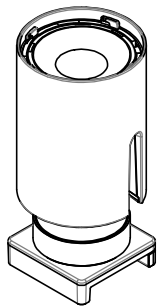
2. LIFT UP THE LENS REMOVAL TOOL AND REMOVE THE LENS RING.



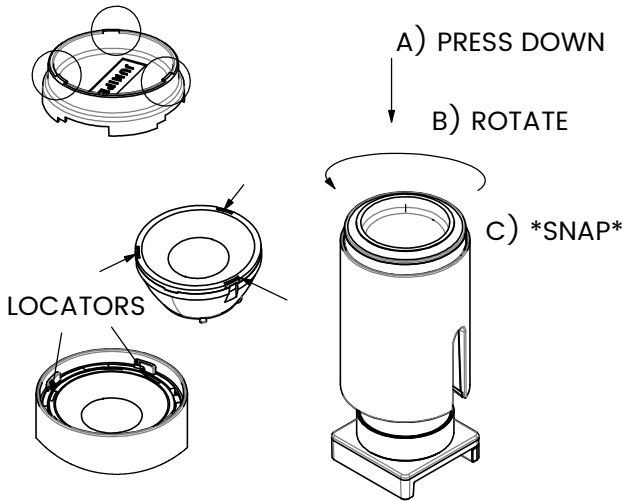
3. REMOVE THE LENS SPACER.



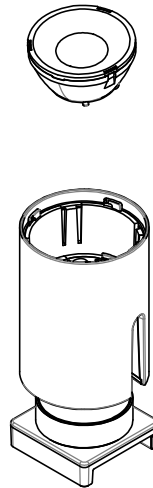
SKIP TO STEP 9 IF THE LENS IS NOT BEING REPLACED.



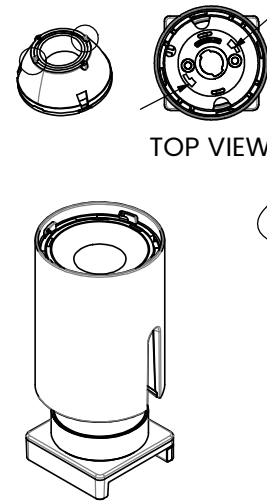
5. ALIGN THE 3 POSTS ON THE LENS REMOVAL TOOL TO THE 3 LOCATORS ON THE LENS HOLDER.



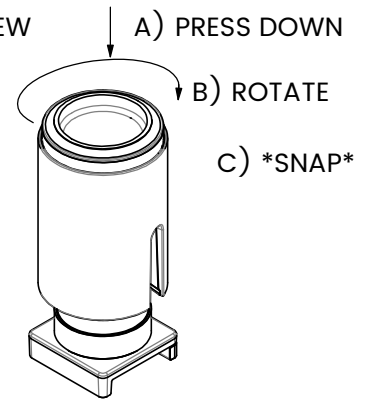
6. REMOVE THE LENS.



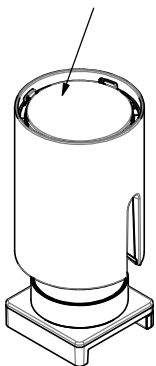
7. PLACE THE NEW LENS IN THE SPOTLIGHT - ALIGNING THE 2 POSTS.



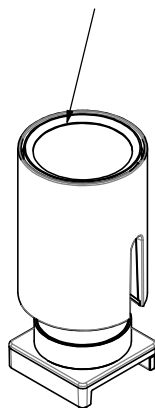
8. USE THE LENS REMOVAL TOOL TO INSERT THE NEW LENS.



9. PLACE THE SOFTENING GLASS OR HEX LOUVER ON TOP OF THE LENS.



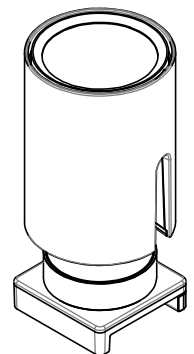
10. PUT THE LENS RING IN PLACE.



11. PLACE THE LENS REMOVAL TOOL ON THE LENS RING & ROTATE CLOCKWISE TO SECURE THE LENS RING IN PLACE.

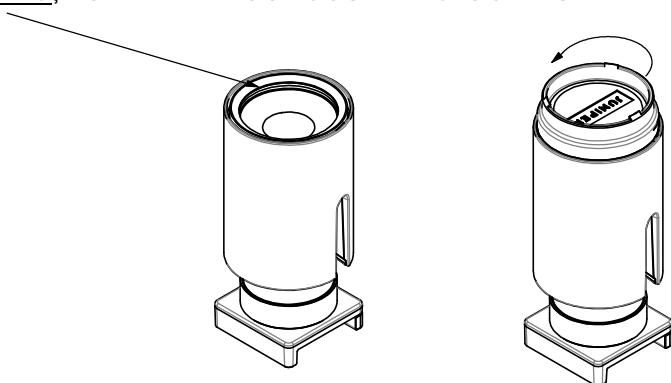


SPOTLIGHT IS READY FOR USE.

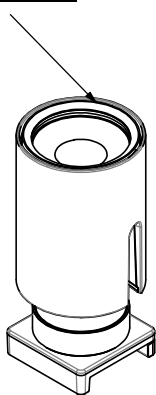


**INSTALLING THE SNOOT**

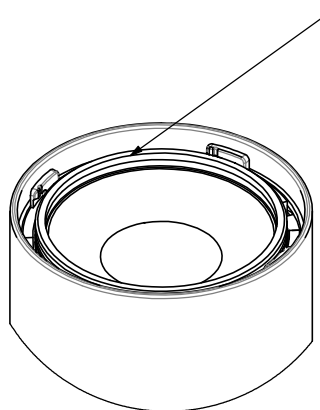
1. PLACE THE LENS REMOVAL TOOL AROUND THE LENS RING; ROTATE THE TOOL COUNTER CLOCKWISE.



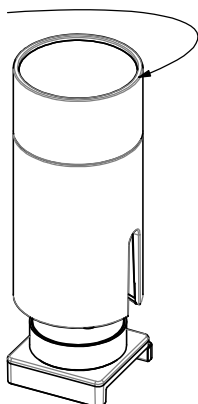
2. LIFT UP THE LENS REMOVAL TOOL AND REMOVE THE LENS RING.



3. REMOVE THE LENS SPACER.

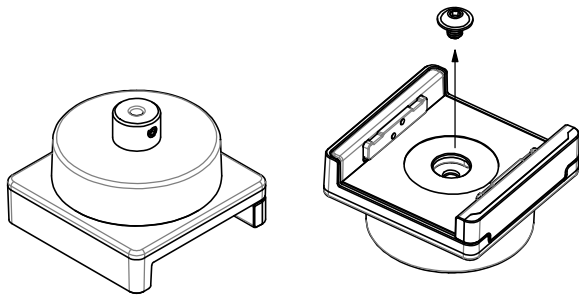


4. PLACE THE SNOOT ON THE SPOTLIGHT AND ROTATE CLOCKWISE TO LOCK IN PLACE.

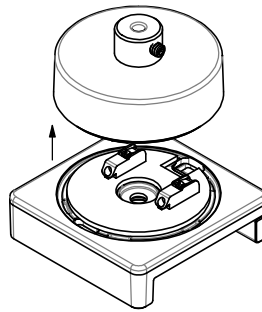


POWER ADAPTOR INSTALLATION

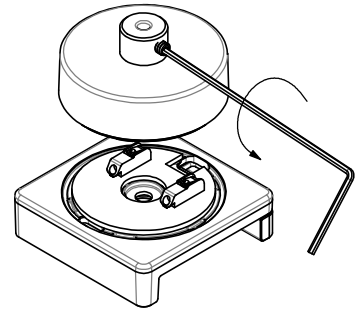
1. REMOVE THE CENTER SCREW FROM THE BASE OF THE ADAPTOR.



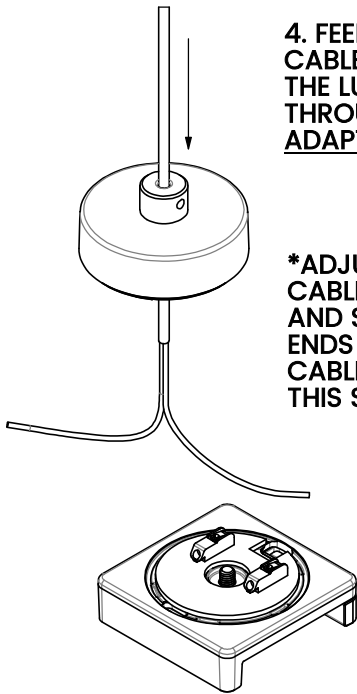
2. REMOVE THE ADAPTOR CAP.



3. LOOSEN THE SET SCREW.

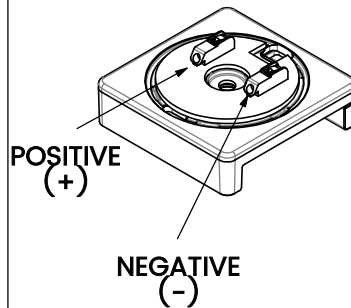


4. FEED THE CABLE FROM THE LUMINAIRE THROUGH THE ADAPTOR CAP.

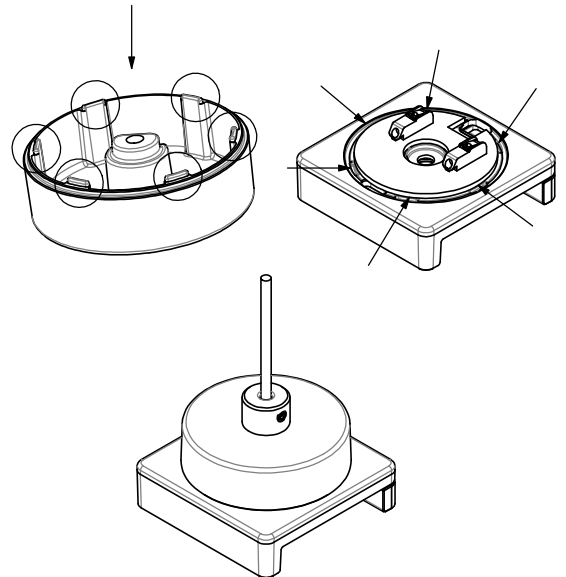


\*ADJUST THE CABLE LENGTH AND STRIP THE ENDS OF THE CABLE DURING THIS STEP.

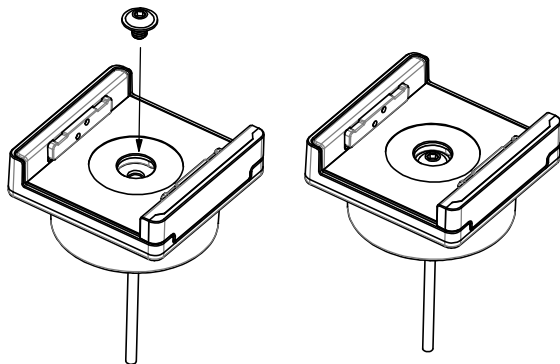
5. COMPLETE THE WIRING OF THE LUMINAIRE TO THE ADAPTOR BY PRESSING DOWN ON THE CONNECTORS.



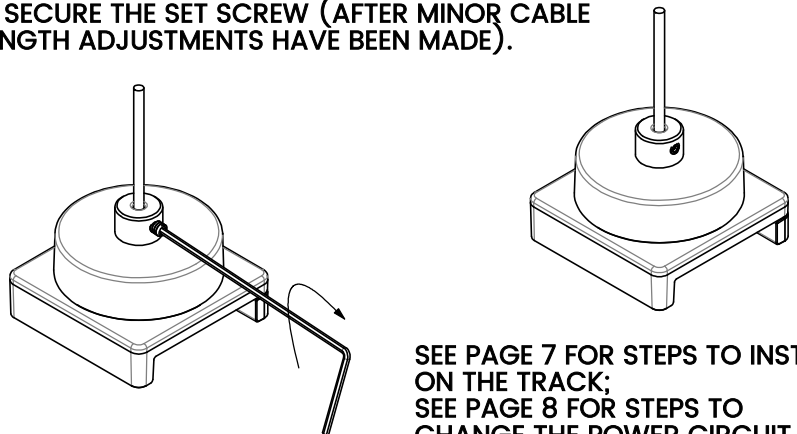
6. PLACE THE ADAPTOR CAP ON THE BASE OF THE ADAPTOR, ALIGNING THE 6 POSTS.



7. SECURE THE CENTER SCREW IN THE BASE OF THE ADAPTOR.



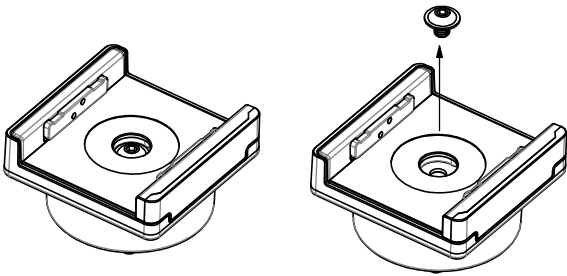
8. SECURE THE SET SCREW (AFTER MINOR CABLE LENGTH ADJUSTMENTS HAVE BEEN MADE).



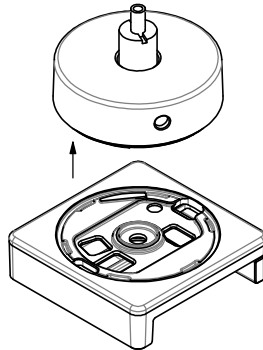
SEE PAGE 7 FOR STEPS TO INSTALL ON THE TRACK;  
SEE PAGE 8 FOR STEPS TO CHANGE THE POWER CIRCUIT.

SUSPENSION ADAPTOR INSTALLATION

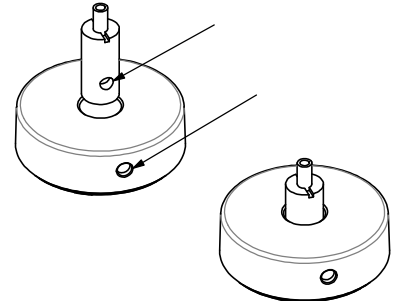
1. REMOVE THE CENTER SCREW FROM THE BASE OF THE ADAPTOR.



2. REMOVE THE ADAPTOR CAP AND CABLE GRIPPER.

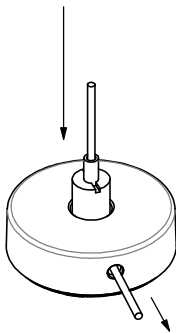


3. ALIGN THE SIDE HOLES OF THE ADAPTOR CAP AND CABLE GRIPPER; HOLD IN PLACE.

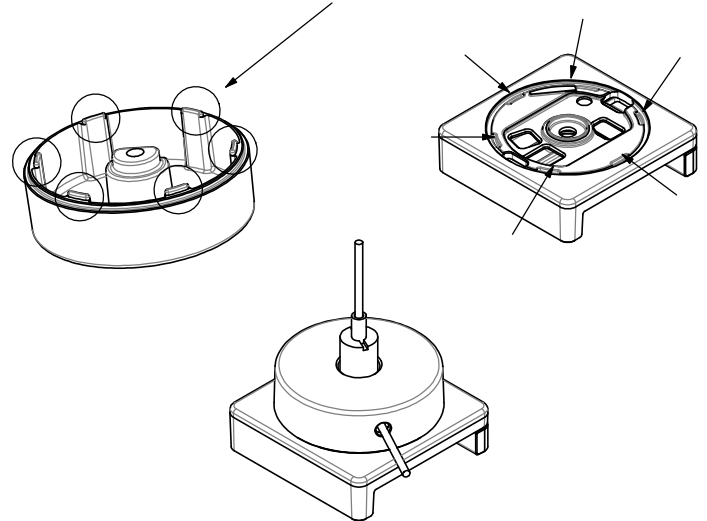


4. FEED THE AIRCRAFT CABLE FROM THE LUMINAIRE THROUGH THE TOP OF THE CABLE GRIPPER AND OUT THE SIDE HOLE OF THE ADAPTOR CAP.

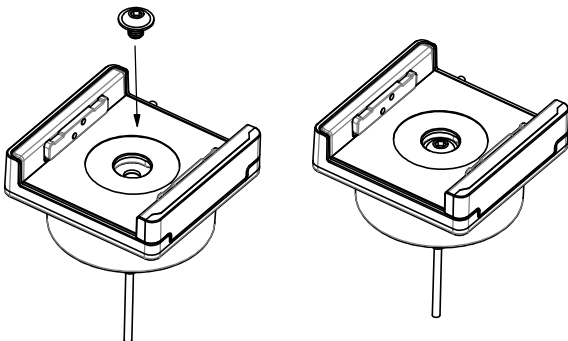
PRESS THE TOP OF THE CABLE GRIPPER DOWN TO ACCEPT THE AIRCRAFT CABLE.



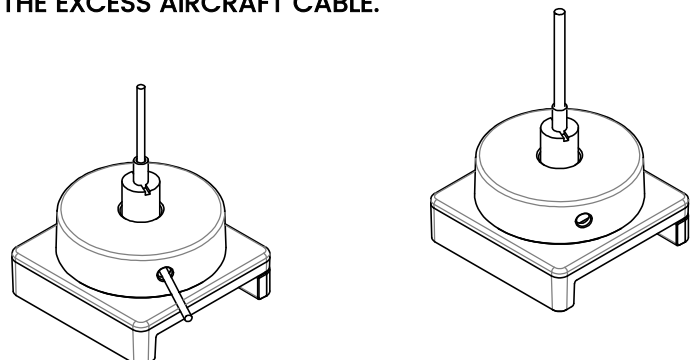
5. PLACE THE ADAPTOR CAP ON THE BASE OF THE ADAPTOR, ALIGNING THE 6 POSTS.



6. SECURE THE CENTER SCREW IN THE BASE OF THE ADAPTOR.



7. PRESSING IN THE TOP OF THE CABLE GRIPPER TO ADJUST THE SUSPENSION HEIGHT OF THE LUMINAIRE. CUT THE EXCESS AIRCRAFT CABLE.



SEE PAGE 7 FOR STEPS TO INSTALL ON THE TRACK.

**APPENDIX**

**ELECTRICAL POWER INFORMATION**

NOMINAL DRIVER WATTAGE	LENGTH OF POWER FEED + RIBBON (FT)	POWER AVAILBLE (W)	500LM SPOTLIGHTS @5.1W	1000LM SPOTLIGHTS @10.9W	1500LM SPOTLIGHTS @17.2W
30	15	26.5	4	2	1
	75	25.3			
	150	23.8			
60	15	53.1	9	4	3
	75	51.9			
	150	47.9			2
96	15	83.2	15	7	4
	75	72.9	14	6	
	150	52.8	9	4	2

**GENERAL INFORMATION**

Installation, commissioning and maintenance may only be performed by a qualified personnel, taking into consideration these installation instructions and any standards and regulations applicable to the respective area of application. The electrical, mechanical and thermal suitability of the luminaire for the intended area of application must be ensured and the secure fastening of the luminaire after its installation must be controlled. Turn off supply voltage before replacing any lamps (if applicable) as well as before performing any other works on the luminaire (e.g. cleaning) and wait until luminaire and lamp have completely cooled off. Use a soft, damp cloth to clean the luminaire. Keep these installation instructions in a safe place as reference for any future maintenance works.

1. The lamp is not suitable for outdoor use.
2. Do not touch the luminaire when it is on; the casing gets very hot during operation.
3. Corrosive chemical products must NOT be used as this may have a detrimental effect the luminaire and track.
4. No liability is accepted for any subsequent change of the luminaire.
5. LEDs are high-quality electronic components! Please avoid touching the LED light limiting surface by hand while assembling or replacing parts and during maintenance work.
6. To avoid damaging the ribbon/track, unevenness on the wall or ceiling must be leveled out before assembling ribbon/track. While assembling the ribbon/track, make sure they do not deform in order to guarantee their proper function.
7. The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person.
8. The LED circuit must always be closed, before the LED driver is connected to the main power. Juniper does not assume any liability for damages resulting from nonobservance of this rule.
9. Luminous flux and connected electrical load are subject to an initial tolerance of up to +/- 10%. Color temperature subject to an initial tolerance of up to 1/150 Kelvin from the nominal value.

**AFTER SALES SERVICE HOT LINE**

The Juniper After Sales Hotline is available by phone from Monday to Friday, 9AM - 5PM (EST)

Hotline:

**+1 347 799-2915**

Or 24/7 via mail:

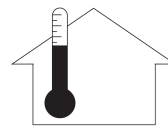
**INFO@JUNIPER-DESIGN.COM**



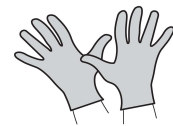
**DO NOT TOUCH!**  
The lamp is hot when on.



**Don't touch the LED**



Maximum Ambient Temperature: 35°C (95 °F).



Use gloves.

## TROUBLESHOOTING GUIDE

### The spotlights strobing/blinking:

Check that one circuit/driver is not overloaded by installing fixtures on the other circuit or by removing them.

### One of the spotlights does not light up:

Make sure the spotlight is properly seated on the ribbon/track. See SPOTLIGHT INSTALLATION on page 7.

### Spotlights on a length of track do not light up:

Make sure the connectors and power feed are firmly attached to the ribbon/track.

### None of the spotlights are turning on:

1. Check all wiring is correct and all connections are fastened properly.
2. Check line voltage to driver is present.
3. Check that low voltage to power feed is present.
4. Check driver wiring (see **Juniper Power Supply Guide** for details) and check wiring to fixture.
5. Check driver and dimming system are compatible (see **Juniper Power Supply Guide** and the dimmer manufacturer's website).

If fixture still doesn't light up, check that all dimming wires are installed correctly. Reversed polarity on any driver will cause the entire system to not work, (see **Juniper Power Supply Guide** for wiring details).

### The fixture is not dimming properly:

1. Check all wiring is correct and all connections are fastened properly.
2. Check driver wiring (see **Juniper Power Supply Guide** for details). Make sure driver is compatible with dimming controls (see **Juniper Power Supply Guide** and the dimmer manufacturer's website).

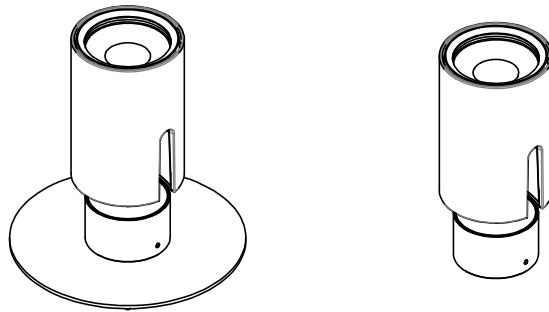
### Some of the spotlights are brighter than the others, even though they are controlled by the same dimmer:

Perform brightness and dimming calibration. See 'BRIGHTNESS AND DIMMING Calibration - First-use' on page 8.

# JUNIPER<sup>®</sup>

## MULTIVERSE<sup>®</sup>

### Monopoint Spotlight JPR-MLTV-MPT1-XX-\* Remote Installation Guide



#### TABLE OF CONTENTS

SECTION	PAGE
INSTALLATION TO MOUNTING SURFACE - REMOTE DRIVER	2
INSTALLATION TO JUNCTION BOX - REMOTE DRIVER	3
INSTALLATION TO JUNCTION BOX - LOCAL DRIVER	3
ADJUSTING THE MONOPOINT	4
BRIGHTNESS & DIMMING CALIBRATION - FIRST USE	4
ELECTRICAL POWER INFORMATION	4
APPENDIX	5
TROUBLESHOOTING GUIDE	5

#### IMPORTANT SAFETY INSTRUCTIONS

When installing or using this fixture, basic safety precautions should always be followed, including the following:

- a) Recommended Ambient Operating Temperature: 77 °F (25 °C); Maximum Ambient Operating Temperature: 95 °F (35 °C)
- b) Do not install in damp or wet locations.
- d) Do not install the fixture closer than 6 inches from any curtain, or similar combustible material.

**SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.**

INSTALLATION TO MOUNTING SURFACE – REMOTE DRIVER

Monopoint Mounting Bracket DIMENSIONS

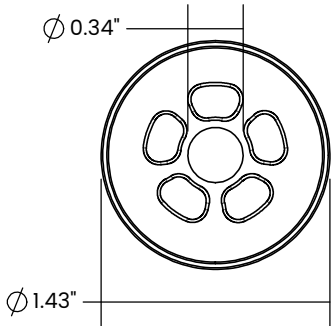


FIGURE 1

1 Insert the threaded bushing into the monopoint mounting bracket.

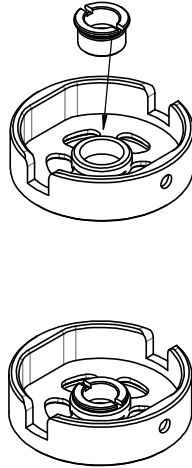


FIGURE 2

2 Use the #6 toggle provided (or appropriate mounting anchor for substrate) to secure the mounting bracket and feed the wiring from the remote power supply through one of the 5 openings in the bracket.

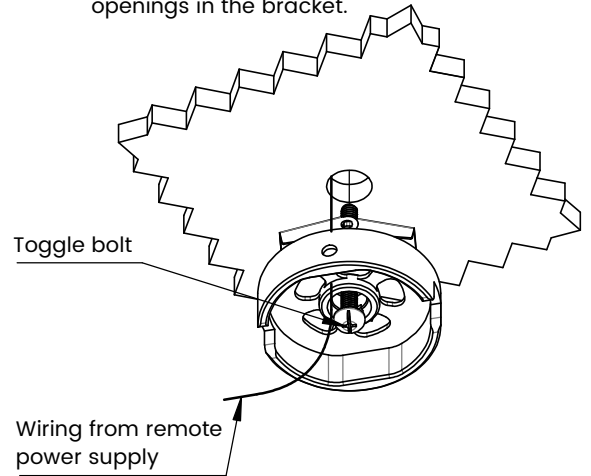


FIGURE 3

3 Complete the wiring connections (see Figure 4).

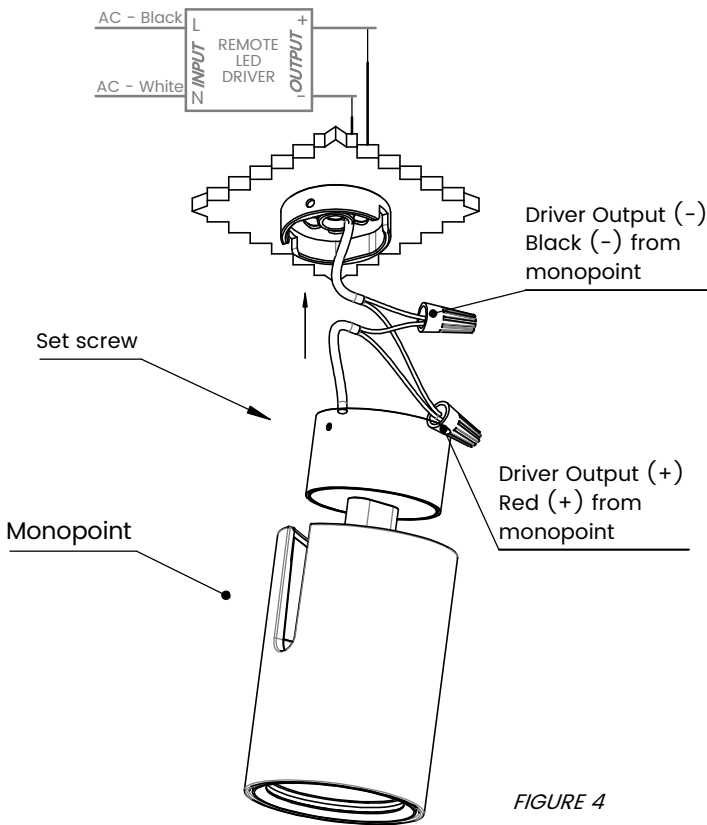


FIGURE 4

4 Place the monopoint on the mounting bracket and tighten the two set screws.

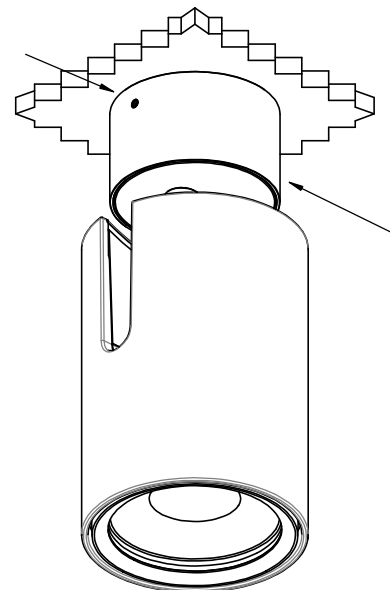


FIGURE 5

INSTALLATION TO JUNCTION BOX

STEP 1:

Feed the monopoint wires through the mounting bracket's center hole.

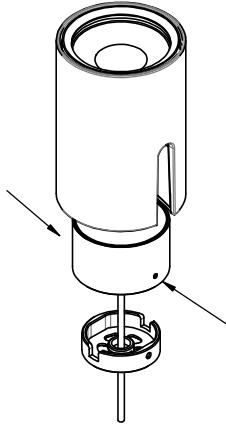


FIGURE 6

STEP 2:

Insert the mounting bracket to the base of the monopoint and tighten the two set screws.

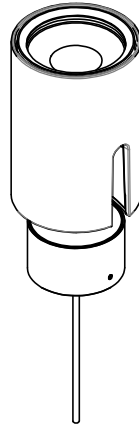


FIGURE 7

STEP 3:

Feed the wires through the center hole in the junction box cover plate.

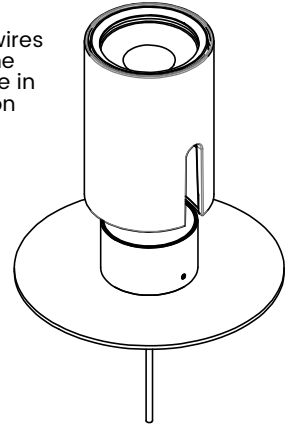


FIGURE 8

OPTION 1: REMOTE DRIVER

- A. Install junction box cross bar and threaded rod.
- B. Make wiring connections (SEE FIGURE 9 BELOW).
- C. Install the monopoint by rotating the monopoint mounting bracket to the threaded rod.

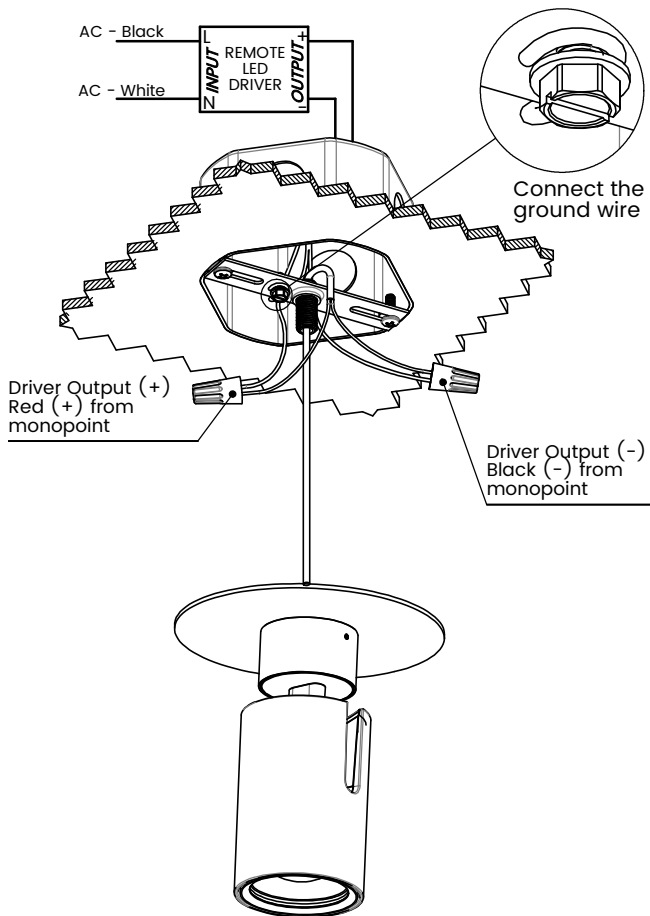


FIGURE 9

OPTION 2: LOCAL DRIVER

- A. Make wiring connections (SEE FIGURE 10 BELOW).
- B. Place the LED driver inside the junction box.
- C. Install junction box cross bar and threaded rod.
- D. Install the monopoint by rotating the monopoint mounting bracket to the threaded rod.

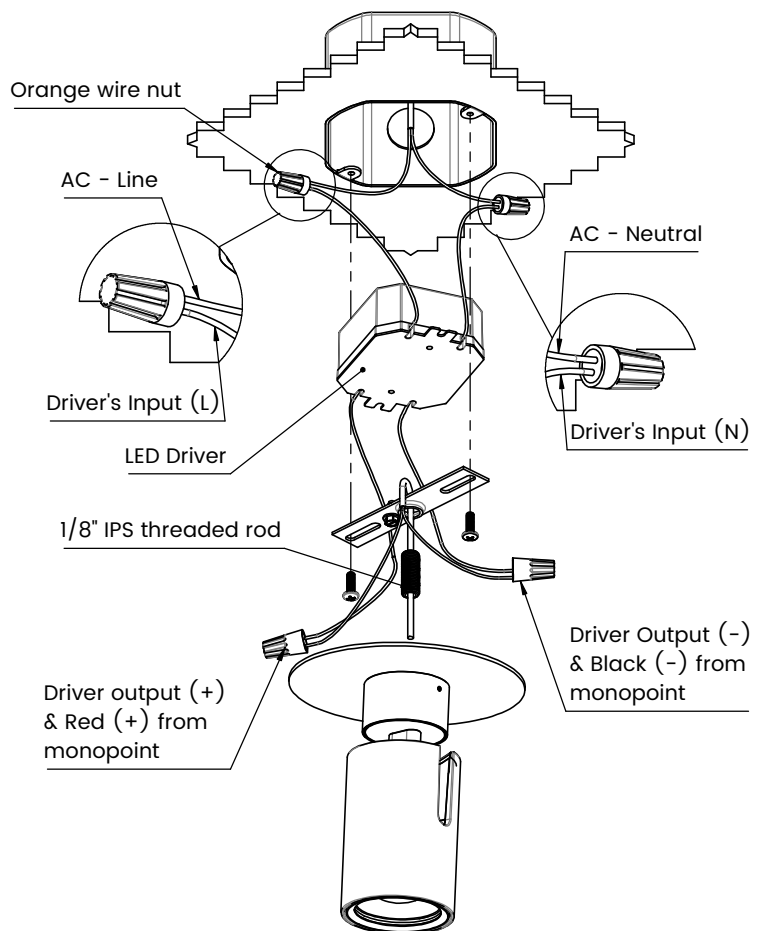


FIGURE 10

**ADJUSTING THE MONOPOINT**

Same as the MLTV Track/Ribbon-Mounted Spotlight

90 DEGREE OUT OF PLANE ADJUSTMENT

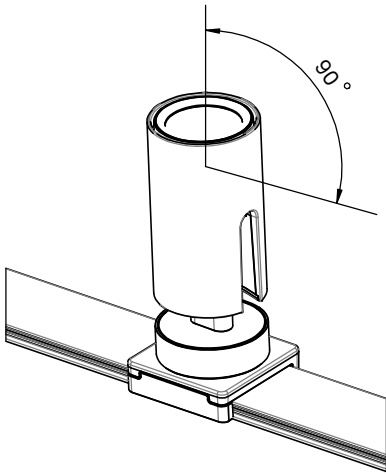


FIGURE 11

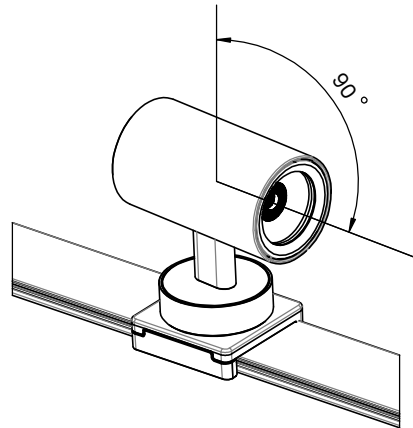


FIGURE 12

360 DEGREE IN PLANE ROTATION

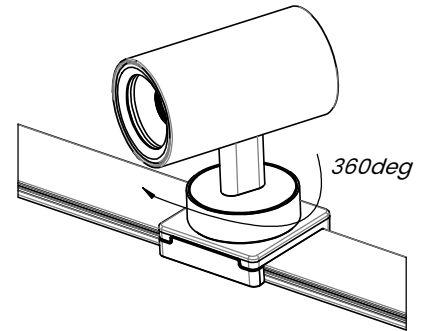


FIGURE 13

**BRIGHTNESS & DIMMING CALIBRATION - FIRST USE**

The monopoint spotlights further from the remote driver (if using with multiples) may be less bright due to voltage drop along long runs. This calibration process will balance the brightness of the monopoint spotlights.

Calibration requires a dimmed circuit and is performed via a process of an down-up-down-up of the dimmer.

Perform these steps BACK-TO-BACK to calibrate monopoint spotlights for first use:

1. Turn the system off and set the dimmer to maximum brightness.
2. Turn the system **on** and dim it down to **minimum** brightness in under **three seconds**. (This will initiate the start of the calibration process to the spotlight.)
3. Next, set the dimmer to **maximum** brightness in under **three seconds**.
4. Dim the system down to **minimum** brightness in under **three seconds**.

All spotlights will flash two times indicating the completion of calibration. Spotlights will be equally bright.

**ELECTRICAL POWER INFORMATION**

NOMINAL DRIVER WATTAGE	POWER AVAILABLE (W)	500 LM MONOPOINTS @ 5.1 W	1000 LM MONOPOINTS @ 10.9 W	1500 LM MONOPOINTS @ 17.2 W
30	26.5	4	2	1
60	53.1	9	4	3
96	83.2	15	7	4

## APPENDIX

### GENERAL INFORMATION

Installation, commissioning and maintenance may only be performed by a qualified personnel, taking into consideration these installation instructions and any standards and regulations applicable to the respective area of application. The electrical, mechanical and thermal suitability of the luminaire for the intended area of application must be ensured and the secure fastening of the luminaire after its installation must be guaranteed. Turn off supply voltage before replacing any lamps (if applicable) as well as before performing any other work on the luminaire (e.g. cleaning), and wait until luminaire and lamp have completely cooled off. Use a soft, damp cloth to clean the luminaire. Keep these installation instructions in a safe place as reference for any future maintenance work.

1. The luminaire is not suitable for outdoor use.
2. Do not touch the luminaire when it is on; the casing gets very hot during operation.
3. Corrosive chemical products must not be used as this may have a detrimental effect on the luminaire.
4. No liability is accepted for any subsequent change of the luminaire.
5. LEDs are high-quality electronic components! Please avoid touching the LED light emitting surface by hand while assembling or replacing parts and during maintenance work.
6. The light source contained in this luminaire shall only be replaced by the manufacturer, their service agent or a similar qualified person.
7. The LED circuit must always be closed before the LED driver is connected to the main power. Juniper does not assume any liability for damages resulting from non-observance of this rule.
8. Luminous flux and connected electrical load are subject to an initial tolerance of up to +/- 10%. Color temperature subject to an initial tolerance of up to 1/150 Kelvin from the nominal value.

## TROUBLESHOOTING GUIDE

### The spotlight is not turning on:

Check all wiring is correct and all connections are fastened properly:

- 1) Check line voltage to driver is present.
- 2) Check if 24 VDC to the fixture is present.
- 2) Check driver wiring (see **Juniper Power Supply Guide** for details) and check wiring to fixture.
- 3) Verify that driver and dimming system are compatible (see **Juniper Power Supply Guide** and the dimmer manufacturer's website).

If fixture still doesn't light up, check that all dimming wires are installed correctly. Reversed polarity on any driver will cause the entire system to not work (see **Juniper Power Supply Guide** for wiring details).

### The fixture is not dimming properly:

Check all wiring is correct and all connections are fastened properly.

Check driver wiring (see **Juniper Power Supply Guide** for details).

Make sure driver is compatible with dimming controls (see **Juniper Power Supply Guide** and the dimmer manufacturer's website).

## AFTER-SALES SERVICE HOT LINE

The Juniper After Sales Hotline is available by phone from Monday to Friday, 8AM - 5PM (EST)

Hotline:

**+1 347 799-2915**

Or 24/7 via mail:

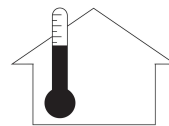
**INFO@JUNIPER-DESIGN.COM**



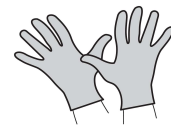
**DO NOT TOUCH!**  
The lamp is hot  
when on.



**Don't  
touch  
the LED**



Recommended  
room  
temperature:  
25 °C (77 °F).



Use gloves.