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Installation Instructions for Micro Track Suspension 48V Single Circuit End Feed Power Connector

MTS48-1C-EP


GENERAL INFORMATION

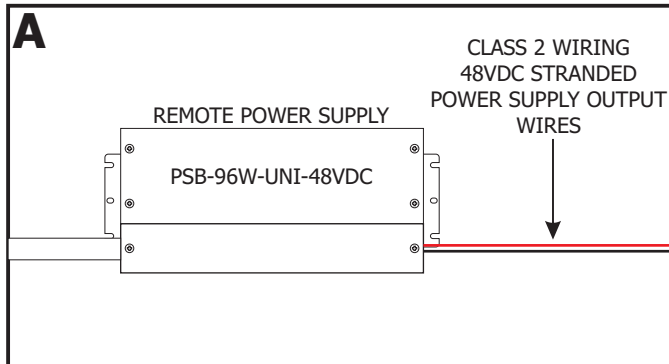
- Maximum linkable wattage per Loop: 48VDC systems, 96W
- Maximum track length per loop up to 40ft for 96W/100W systems.
- Power Supply and Dimming: 48V Power Supply & Class 2 Wiring (ELV, Triac, 0-10V)
- Tracks can be linked continuously without limitation up to 40ft before re-feeding. Sections can be individually controlled, allowing for flexible lighting layouts.
- Minimum loop voltage: Must maintain $\geq 45\text{VDC}$ at the end of each loop. Voltage below 45VDC may result in abnormal operation.
- Power buffer recommendation: Reserve - 20% buffer for linear modules & 25% buffer for other module types.
- Use only Pure Edge Lighting power supplies to avoid flickering, unstable dimming, noise or module failure and void warranty.
- When using multiple power supplies, use non-conductive connectors to separate each circuit.
- Voltage testing before installation: Measure output voltage from MTS48-1C-EP with the power supply connected and confirm the reading is 48VDC. Then measure the voltage at the end of the circuit and to confirm no voltage drop.

IMPORTANT INFORMATION

- This product must be installed by a qualified electrician and in accordance with local electrical codes.
- Before beginning any electrical work, ensure that power is turned **OFF**.
- **DO NOT** install any luminaire assembly close to any curtain or similar combustible material.
- This instruction shows a typical installation.

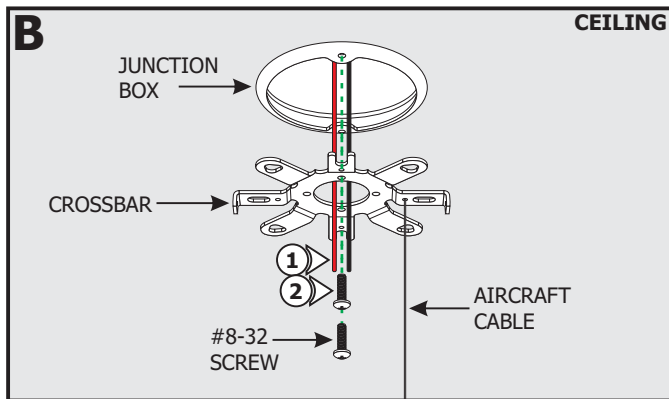
SAVE THESE INSTRUCTIONS!

Section One: Install the Remote Power Supply



- 1:** Remote power supplies must be installed within 40ft of the junction box. Refer to the instructions and wiring diagram provided with the remote power supplies.

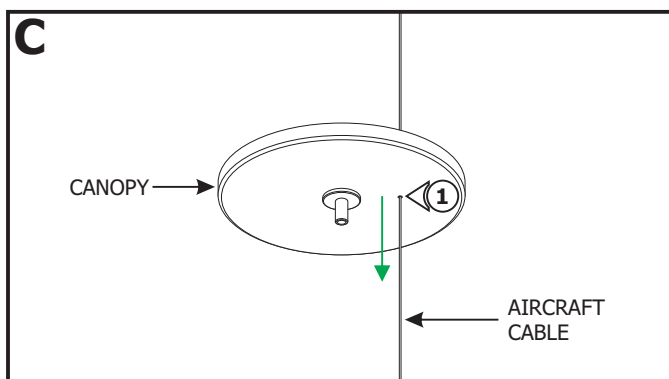
Section Two: Install the Crossbar



NOTE: Ensure remote power supply wires are present in the junction box. Refer to instructions provided with the power supplies.

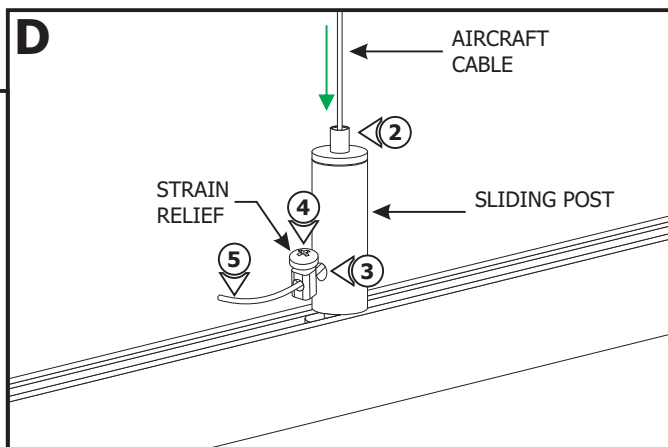
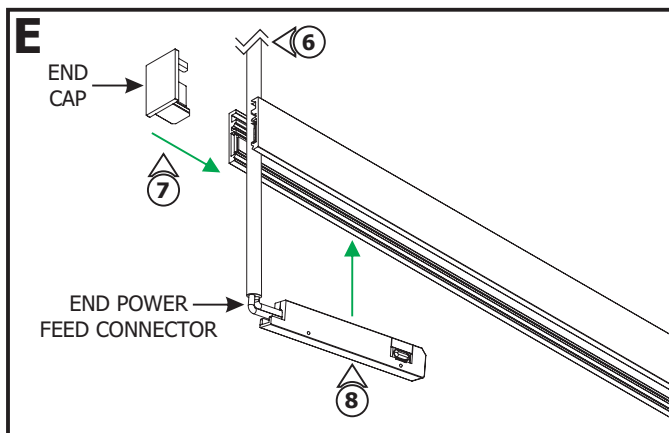
- 1:** Run the 48VDC low voltage wires coming from the power supply to the junction box. Only install conduit if required by local electrical codes.
- 2:** Feed the 48VDC low voltage wires through the center hole of the crossbar.
- 3:** Mount the crossbar to the junction box holes with two #8-32 screws.

Section Three: Power the Fixture

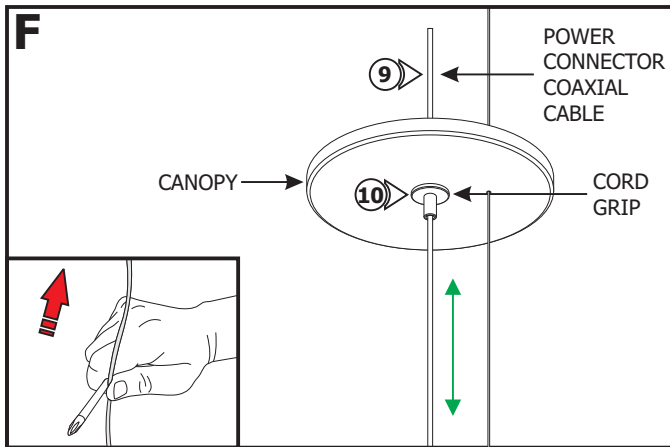


- 1:** Feed the aircraft cable through the small hole on the canopy.

- 2:** Insert the aircraft cable through the top of the tab on the sliding post.
- 3:** Adjust the height of the fixture by pushing the tab and pulling the aircraft cable out of the side of the sliding post. Release the tab to secure the cable in place.
- 4:** Feed the aircraft cable through the strain relief. Place the strain relief against the post and secure in place by tightening the screw.
- 5:** Trim excess aircraft cable using sharp cutters.



- 6:** Feed the power feed connector cable through the notch on the end of the track.
- 7:** Push the end cap into the track.
- 8:** Place the End Power Feed connector inside the track.



9: Push the coaxial cable through the cord grip on the canopy.

10: Adjust the fixture height by pushing the cord grip to slide the fixture up and down. Release the cord grip to lock the coaxial cable in place.

NOTE: If cable is curled or kinked, straighten by holding between the shaft of a screwdriver and thumb and pulling the cable through (see inset).

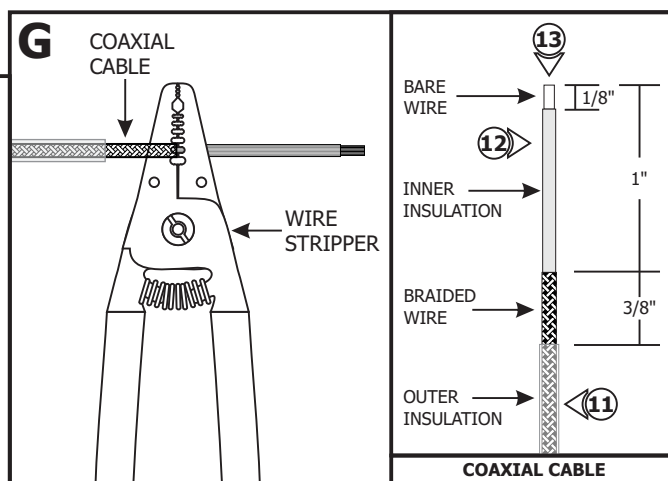
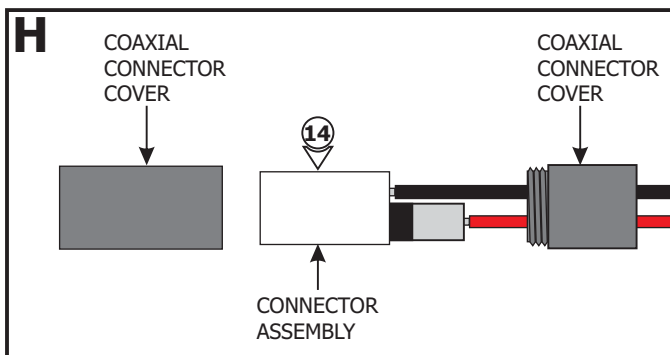


NOTE: Scan the QR Code to watch the video clip of the following steps or visit www.PureEdgeLighting.com/video_feed/installation_cxc_connector

11: Use the 18AWG hole of the wire stripper to remove 1-3/8" of the outer insulation to expose the braided wire.

12: Use the 18AWG hole of the wire stripper to remove 1" of the braided wire making sure not to nick the inner wire insulation.

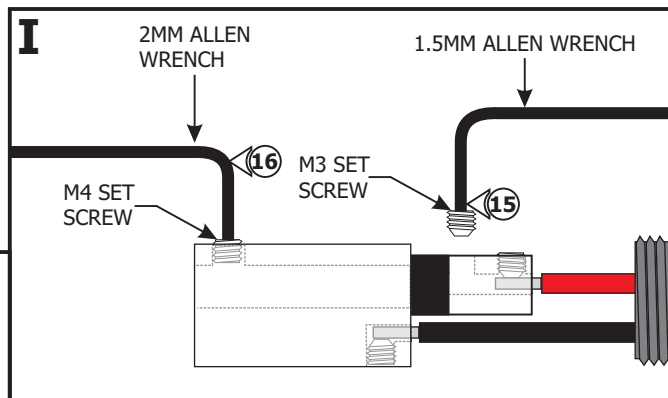
13: Use the 20AWG hole of the wire stripper to remove 1/8" of the inner insulated wire.

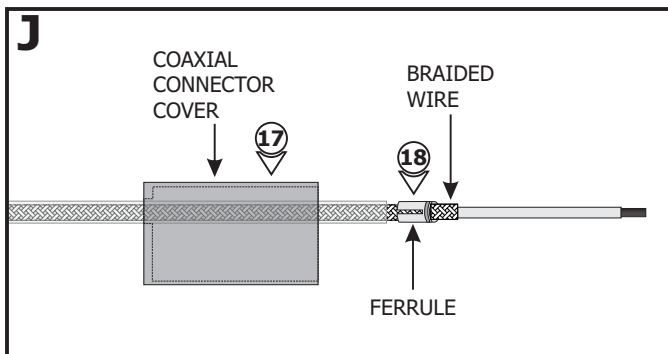


14: Unscrew the coaxial connector covers and remove from the connector assembly.

15: Using the provided 1.5mm Allen wrench, remove the M3 set screw from the coaxial connector assembly.

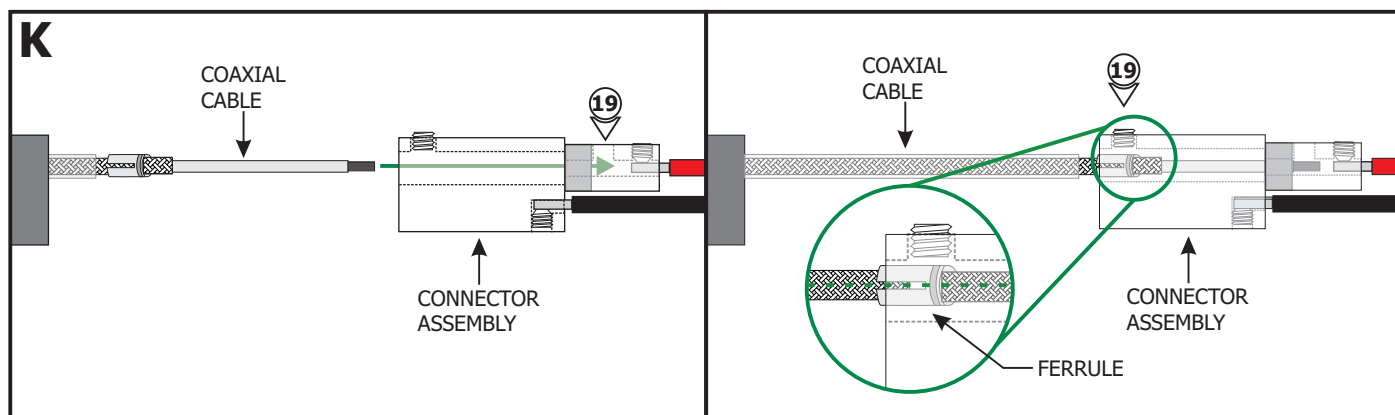
16: Using the provided 2mm Allen wrench to loosen (do not remove) the M4 set screw.





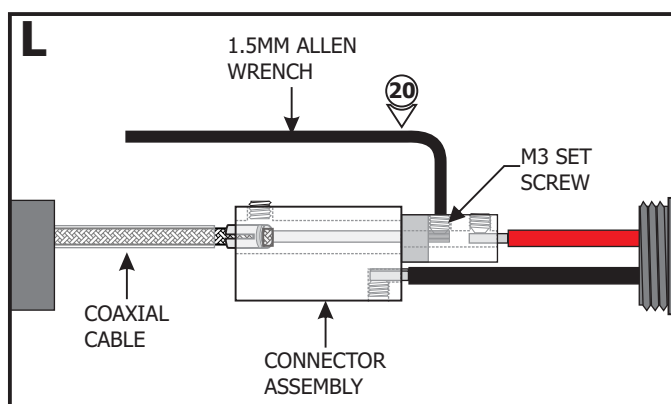
17: Slide the connector cover over the coaxial cable.

18: Place the ferrule over the 3/8" braided wire of the coaxial cable.

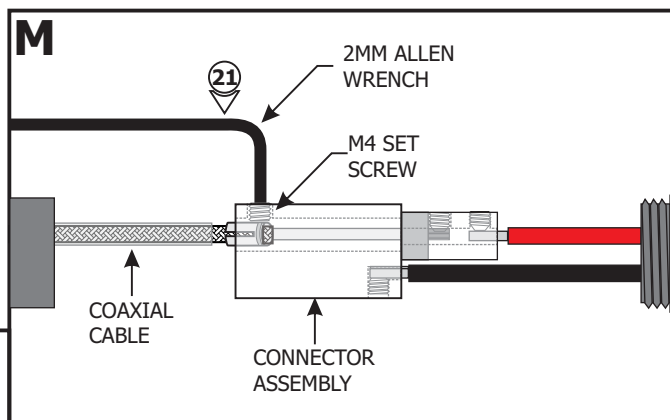


19: Insert the coaxial cable into the coaxial connector until the wires of the center conductor are visible through the M3 set screw hole.

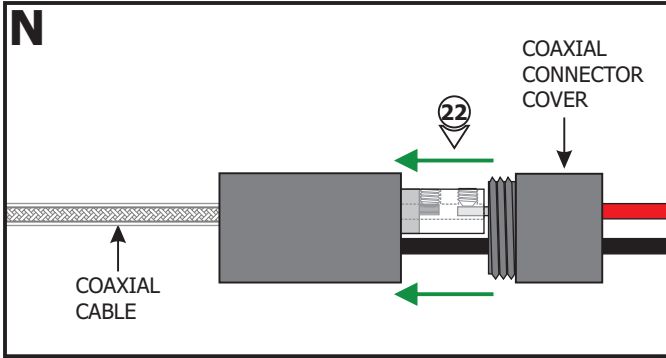
NOTE: Ensure that the split in the ferrule is aligned 90° from the M4 set screw (see inset).



20: Use the provided 1.5mm Allen wrench to replace and securely tighten the M3 set screw.

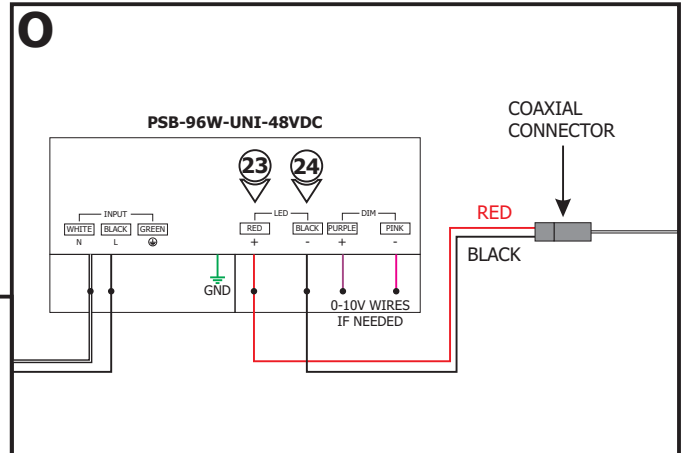
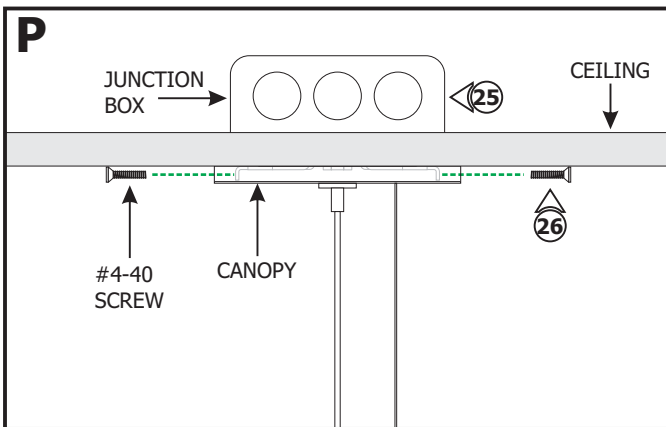


21: Use the provided 2mm Allen wrench to securely tighten the M4 set screw until it squeezes the wire ferrule tightly to the coaxial cable.



22: Replace the coaxial connector cover and tighten into place.

- 23:** Connect the red wire from the coaxial connector to the red + power supply wire using a wire nut.
- 24:** Connect the black wire from the coaxial connector to the black - power supply wire using a wire nut.

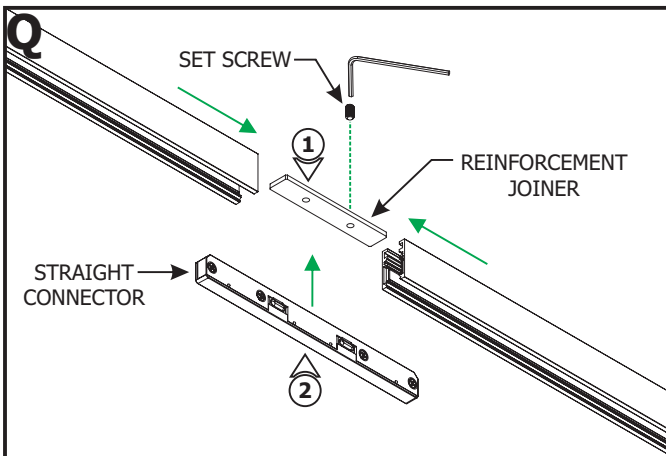


25: Place all wires and wire nut connections inside the junction box.

26: Align each canopy with the crossbars and secure them with the two #4-40 screws using a 1/16" Allen wrench.

NOTE: Ensure the tension is on the aircraft cable and not the power cable.

Section Four: Connecting Sections



NOTE: Ensure that additional channels are properly supported using Micro Track Suspension supports.

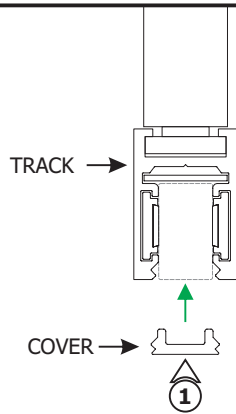
1: Insert the joiner halfway into the track. Tighten the set screw on the joiner using an Allen wrench. Slide the other section of track over the joiner and tighten the remaining set screw.

2: Place the Straight Connector inside the tracks. Ensure the connector is in the middle where the tracks are joined.

NOTE: Refer to the instructions provided with the Micro Track Suspension 48V to complete the installation.

Section Five: Install the Covers

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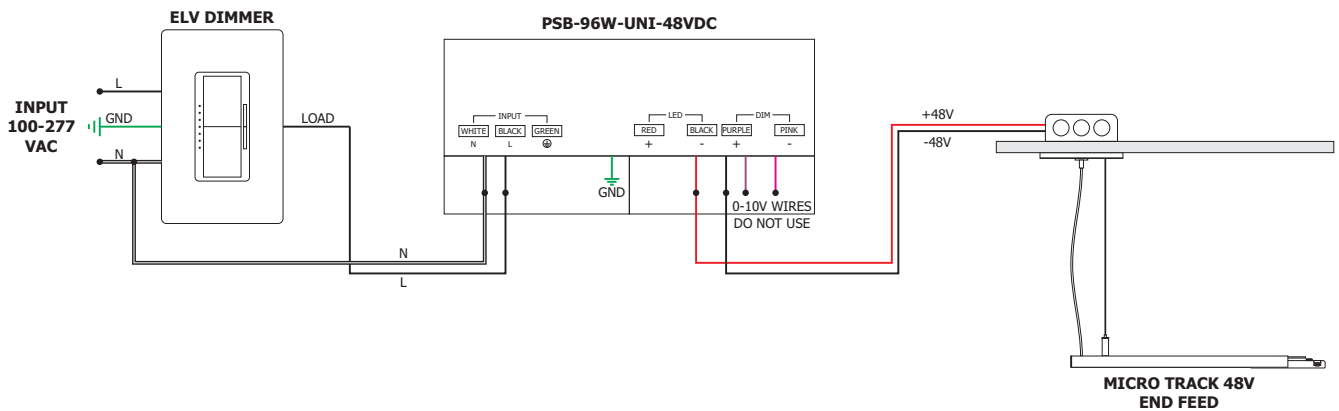


NOTE: Refer to the Assembly Guides provided with the Light Bars or Track Heads to install the fixtures.

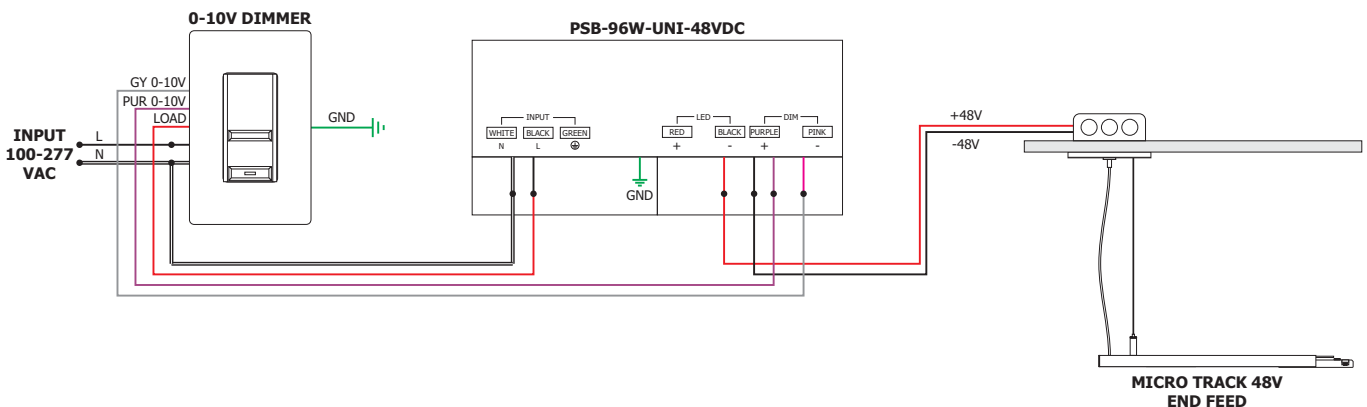
1: For a nice and uniform look, if desired, measure the distance among the track heads and light bars or from the ends and cut the track over to those lengths. Snap the covers onto the unused portions of the tracks.

General Wiring Diagram

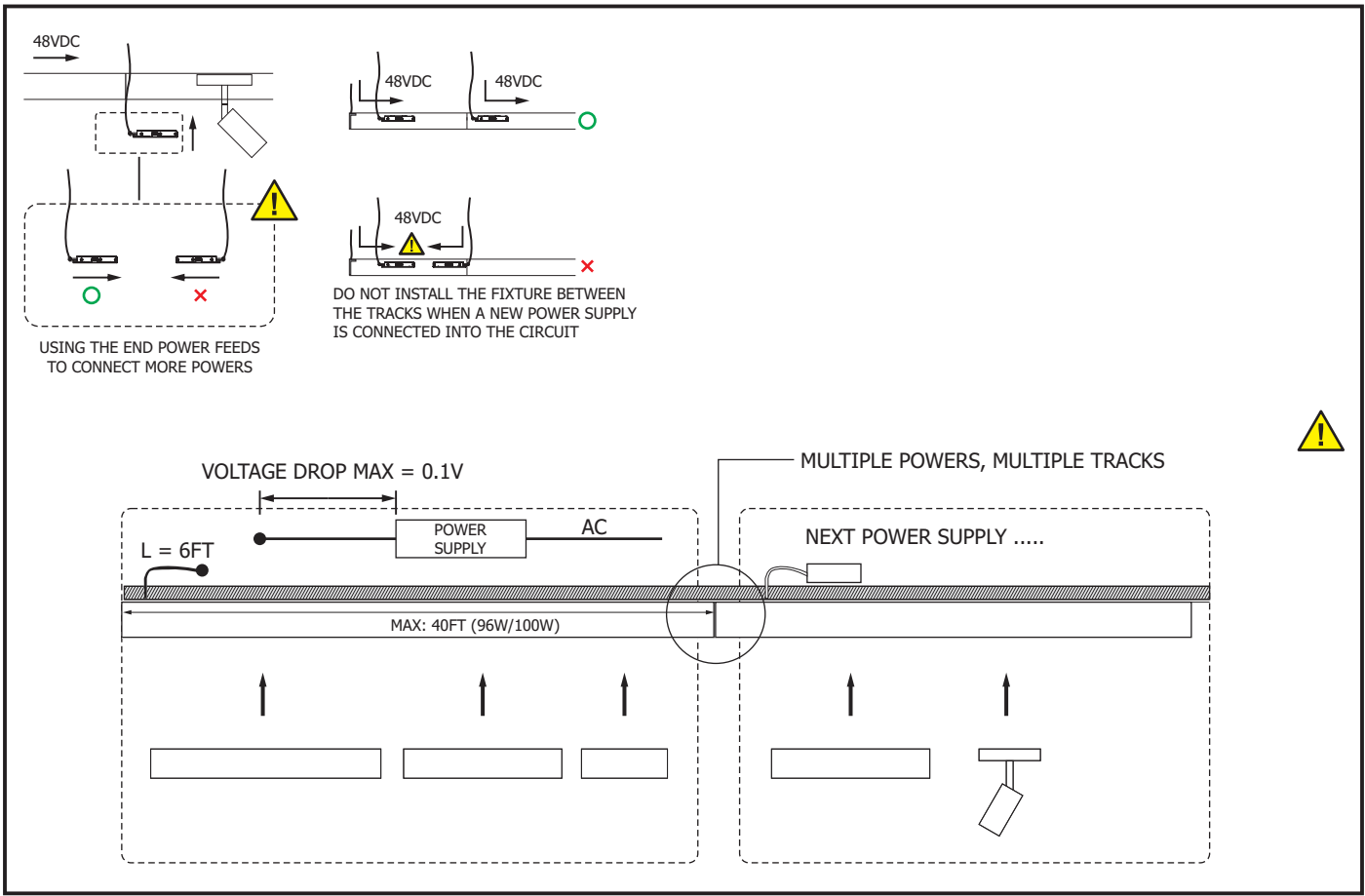
ELV DIMMING



0-10V DIMMING



Section Six: Calculate Cable Length

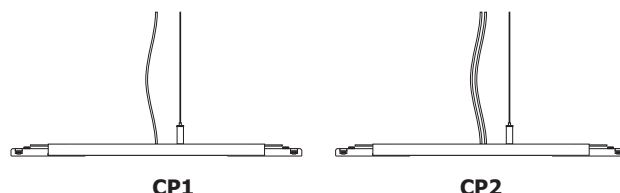




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Installation Instructions for **Micro Track Suspension 48V Single Circuit Center Feed Power Connector**

MTS48-1C-CP_ _



GENERAL INFORMATION

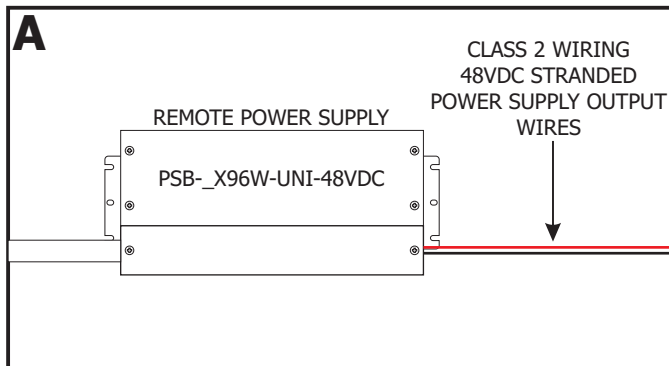
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- Voltage testing before installation: Measure output voltage from MTS48-1C-EP with the power supply connected and confirm the reading is 48VDC. Then measure the voltage at the end of the circuit and to confirm no voltage drop.

IMPORTANT INFORMATION

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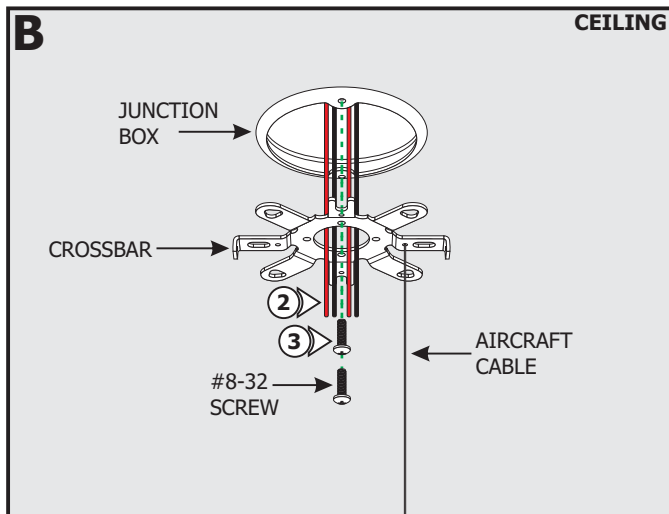
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Section Two: Install the Crossbar

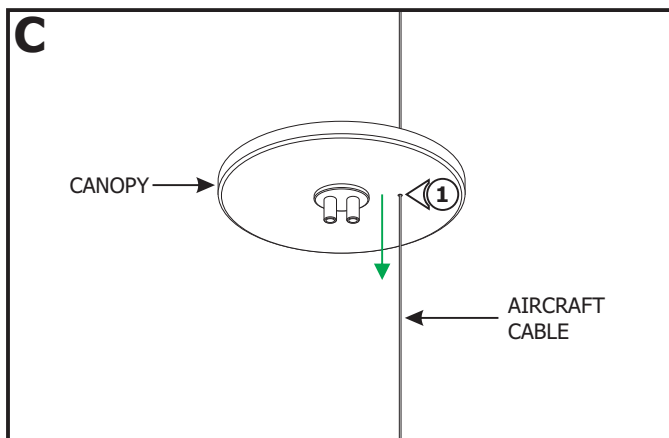


NOTE: Ensure remote power supply wires are present in the junction box. Refer to instructions provided with the power supplies.

- 1:** Run the 48VDC low voltage wires coming from the power supply to the junction box. Only install conduit if required by local electrical codes.
- 2:** Feed the 48VDC low voltage wires through the center hole of the crossbar.
- 3:** Mount the crossbar to the junction box holes with two #8-32 screws.

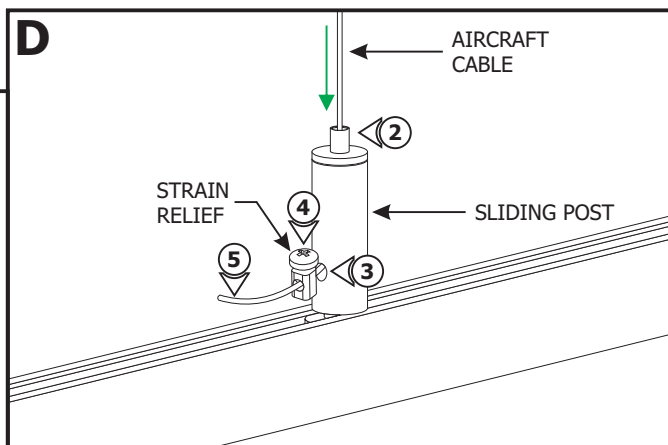
NOTE: For Center Power Dual Feed (CP2), run the 48V wires coming from the second remote power supply to the junction box.

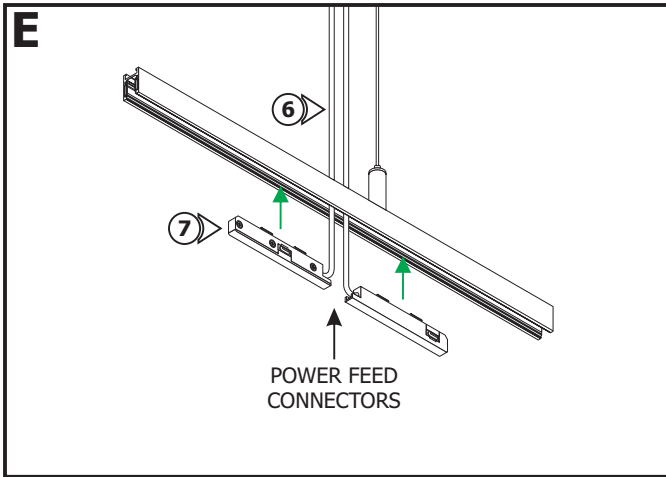
Section Three: Power the Fixture



- 1:** Feed the aircraft cable through the small hole on the canopy.

- 2:** Insert the aircraft cable through the top of the tab on the sliding post.
- 3:** Adjust the height of the fixture by pushing the tab and pulling the aircraft cable out of the side of the sliding post. Release the tab to secure the cable in place.
- 4:** Feed the aircraft cable through the strain relief. Place the strain relief against the post and secure in place by tightening the screw.
- 5:** Trim excess aircraft cable using sharp cutters.





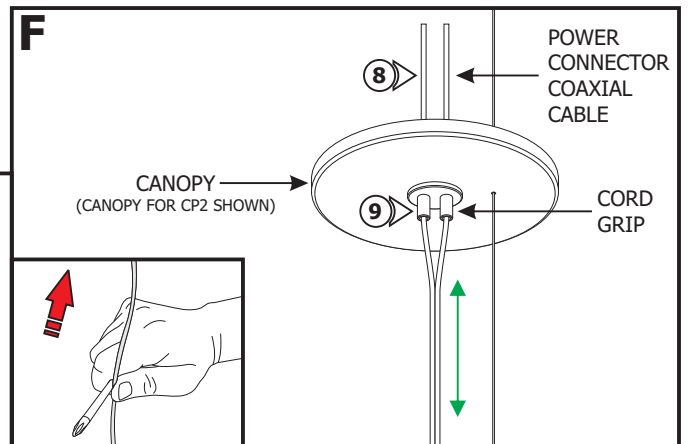
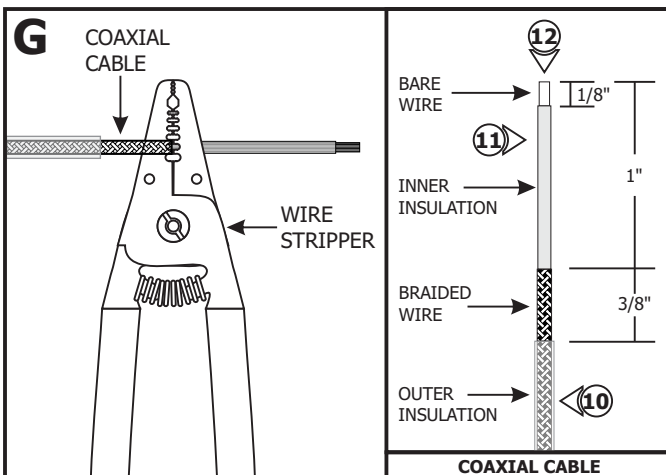
6: Feed the Power Feed Connector cables through the center feed opening on the track.

7: Place the Power Feed Connectors inside the track.

8: Push the coaxial cable through the cord grip on the canopy.

9: Adjust the fixture height by pushing the cord grip to slide the fixture up and down. Release the cord grip to lock the coaxial cable in place.

NOTE: If cable is curled or kinked, straighten by holding between the shaft of a screwdriver and thumb and pulling the cable through (see inset).



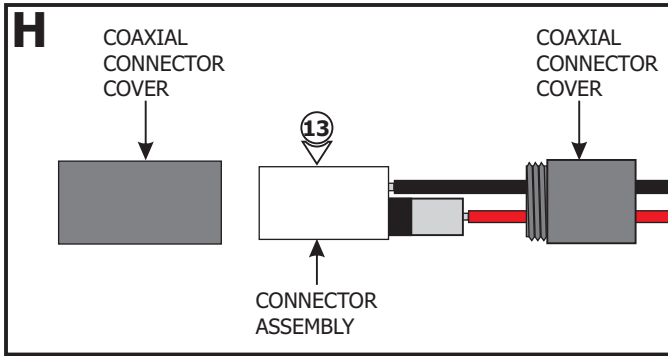
NOTE: Scan the QR Code to watch the video clip of the following steps or visit

www.PureEdgeLighting.com/video_feed/installation_cxc_connector

10: Use the 18AWG hole of the wire stripper to remove 1-3/8" of the outer insulation to expose the braided wire.

11: Use the 18AWG hole of the wire stripper to remove 1" of the braided wire making sure not to nick the inner wire insulation.

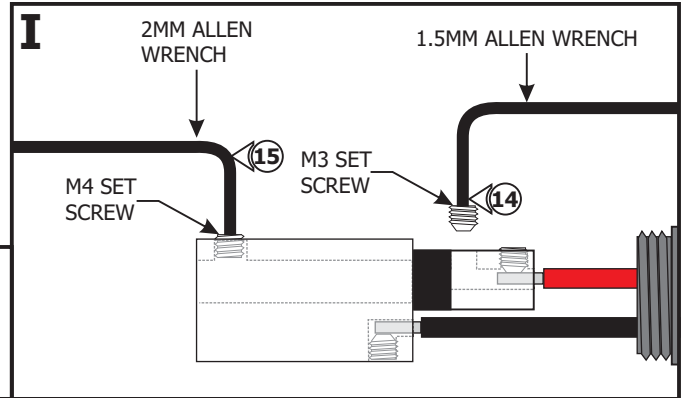
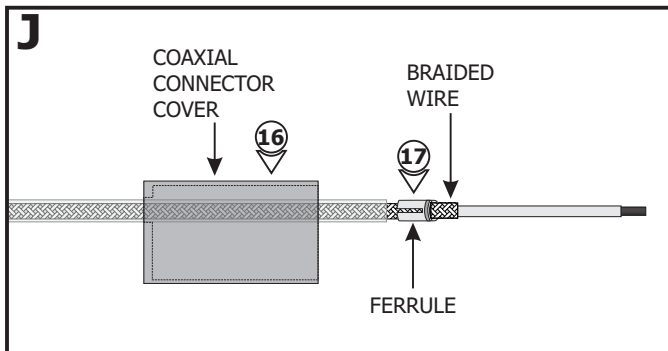
12: Use the 20AWG hole of the wire stripper to remove 1/8" of the inner insulated wire.



13: Unscrew the coaxial connector covers and remove from the connector assembly.

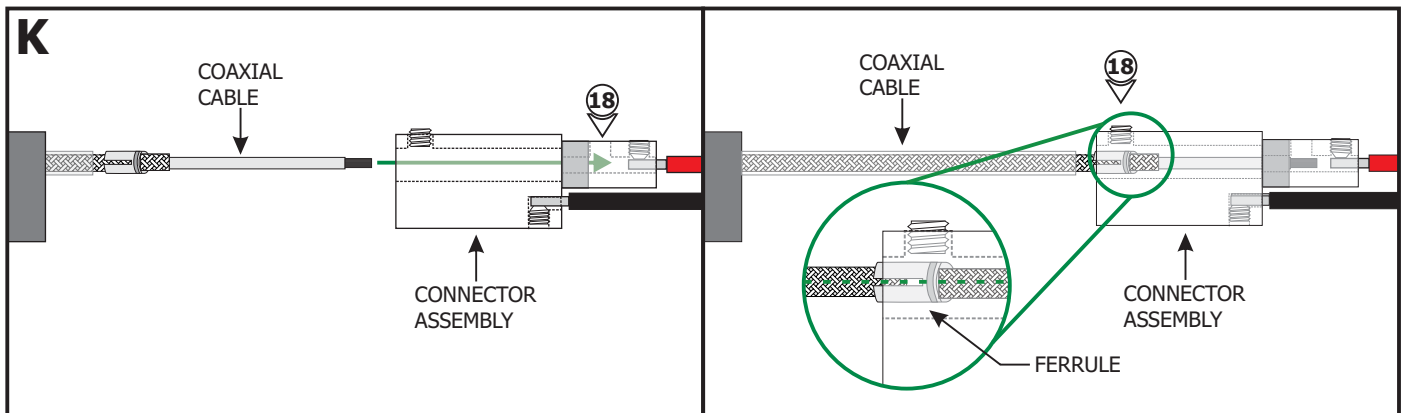
14: Using the provided 1.5mm Allen wrench, remove the M3 set screw from the coaxial connector assembly.

15: Using the provided 2mm Allen wrench to loosen (do not remove) the M4 set screw.



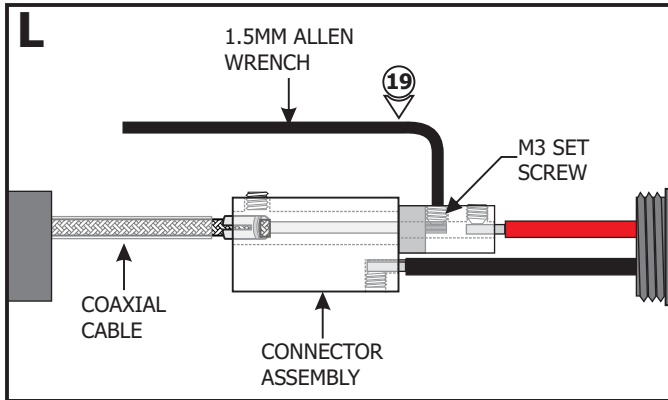
16: Slide the connector cover over the coaxial cable.

17: Place the ferrule over the 3/8" braided wire of the coaxial cable.

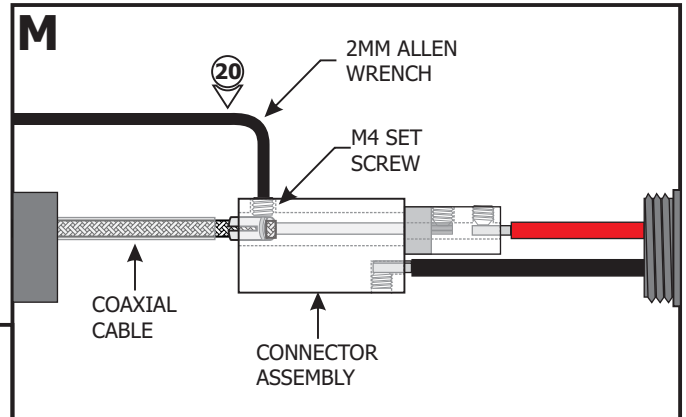


18: Insert the coaxial cable into the coaxial connector until the wires of the center conductor are visible through the M3 set screw hole.

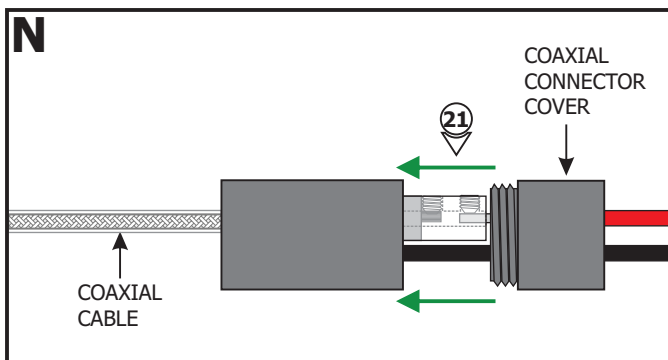
NOTE: Ensure that the split in the ferrule is aligned 90° from the M4 set screw (see inset).



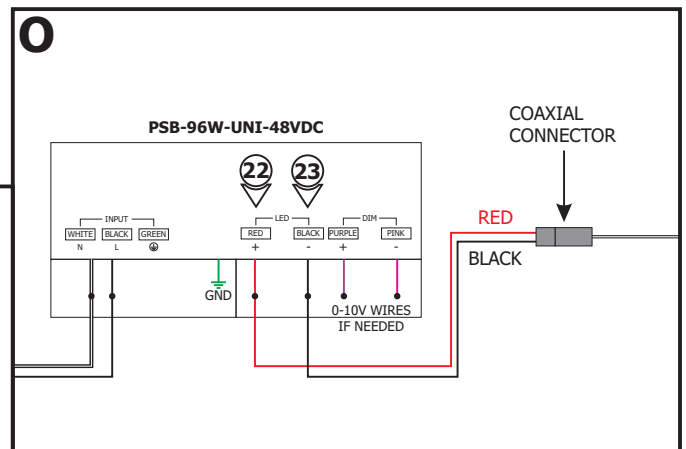
19: Use the provided 1.5mm Allen wrench to replace and securely tighten the M3 set screw.



20: Use the provided 2mm Allen wrench to securely tighten the M4 set screw until it squeezes the wire ferrule tightly to the coaxial cable.



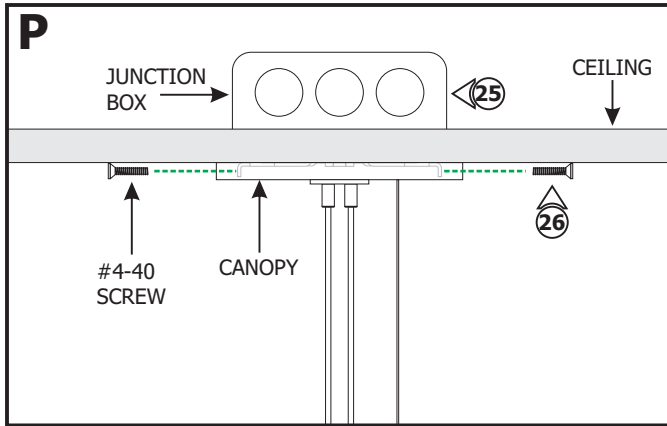
21: Replace the coaxial connector cover and tighten into place.



22: Connect the red wire from the coaxial connector to the red + power supply wire using a wire nut.

23: Connect the black wire from the coaxial connector to the black - power supply wire using a wire nut.

24: For Center Power Dual Feed, repeat steps 10 through 23 to connect the second coaxial connector to the other power supply.

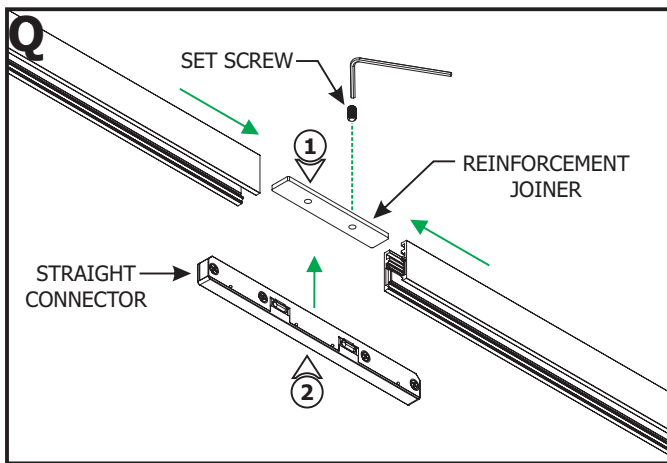


25: Place all wires and wire nut connections inside the junction box.

26: Align the canopy with the crossbar and secure it with the two #4-40 screws using a 1/16" Allen wrench.

NOTE: Ensure the tension is on the aircraft cable and not the power cable.

Section Four: Connecting Sections



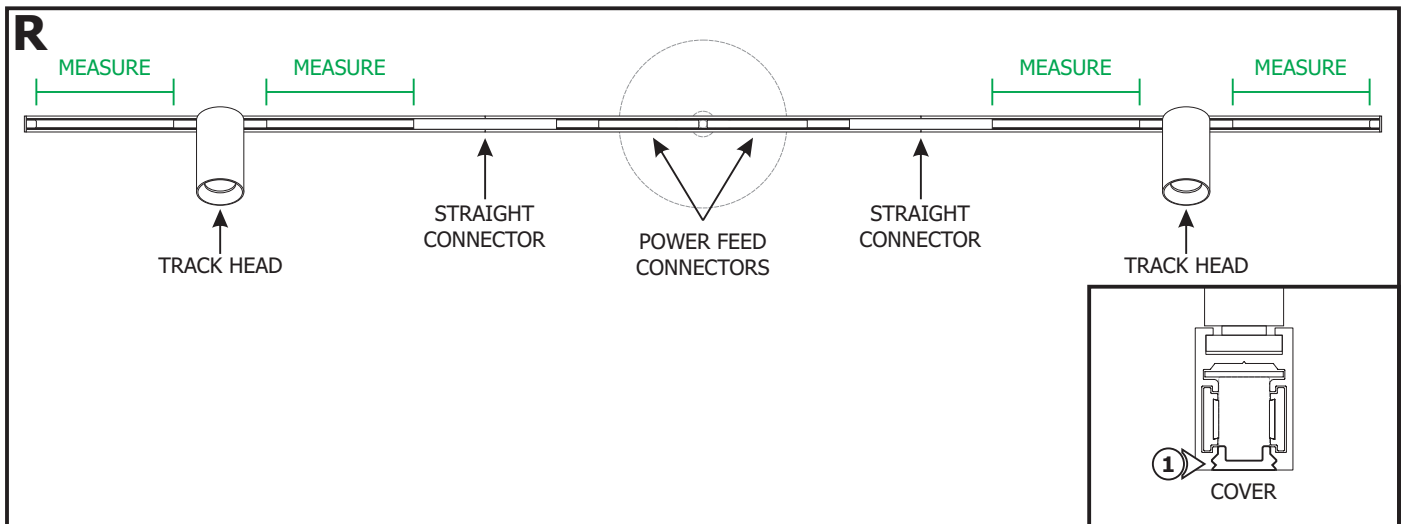
NOTE: Ensure that additional channels are properly supported using Micro Track Suspension supports.

1: Insert the joiner halfway into the track. Tighten the set screw on the joiner using an Allen wrench. Slide the other section of track over the joiner and tighten the remaining set screw.

2: Place the Straight Connector inside the tracks. Ensure the connector is in the middle where the tracks are joined.

NOTE: Refer to the instructions provided with the Micro Track Suspension 48V to complete the installation.

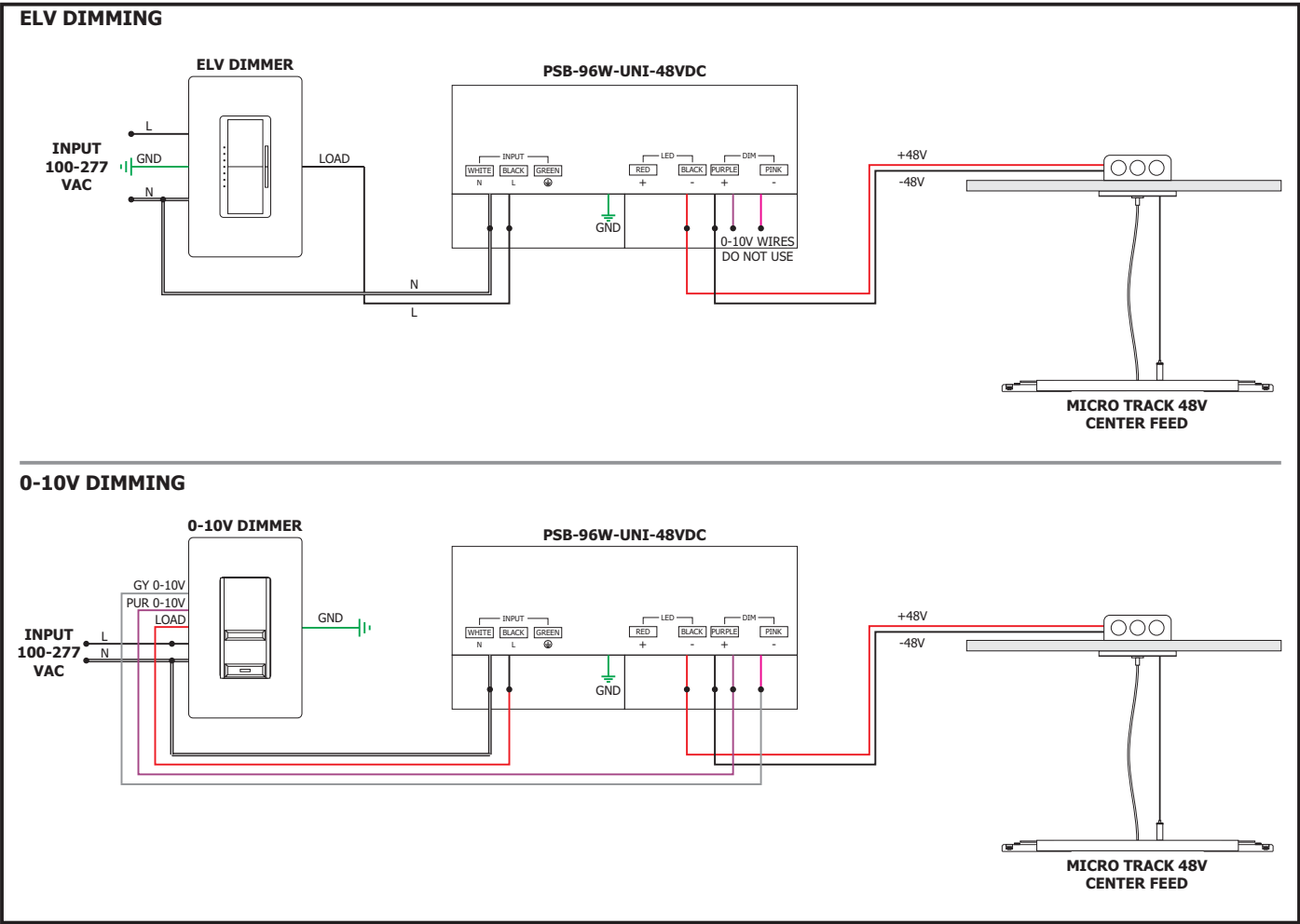
Section Five: Install the Covers



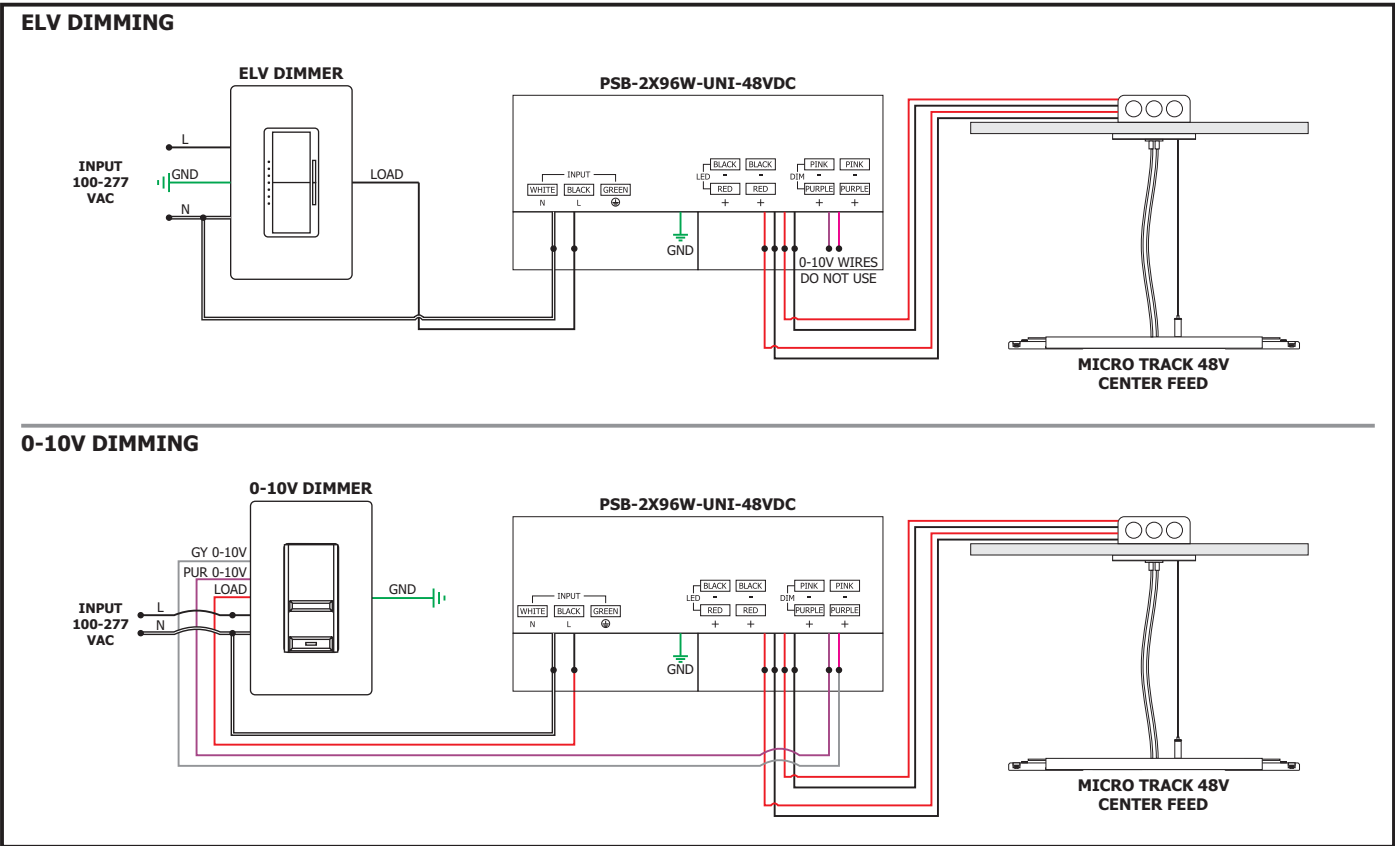
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1: For a nice and uniform look, if desired, measure the distance among the track heads, light bars, and connectors or from the ends and cut the track cover to those lengths. Snap the covers onto the unused portions of the tracks.

General Wiring Diagram - Single Feed



General Wiring Diagram - Dual Feed



Section Six: Calculate Cable Length

