

JUNIPER®

MULTIVERSE

Surface-mount

Remote Installation Guide

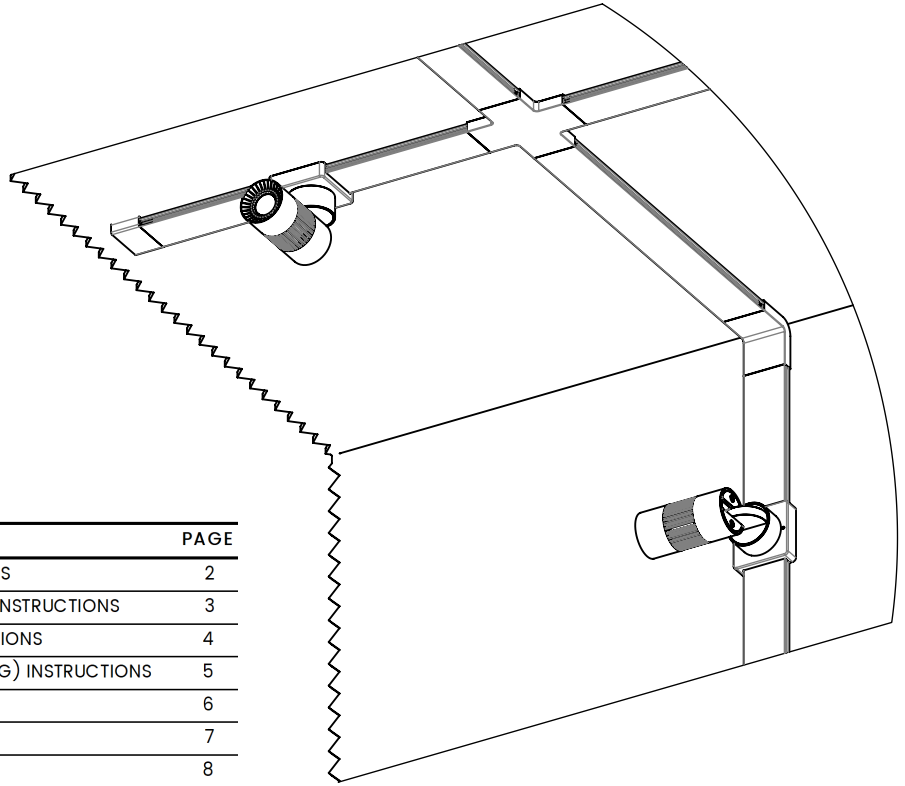


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IMPORTANT SAFETY INSTRUCTIONS

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

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.

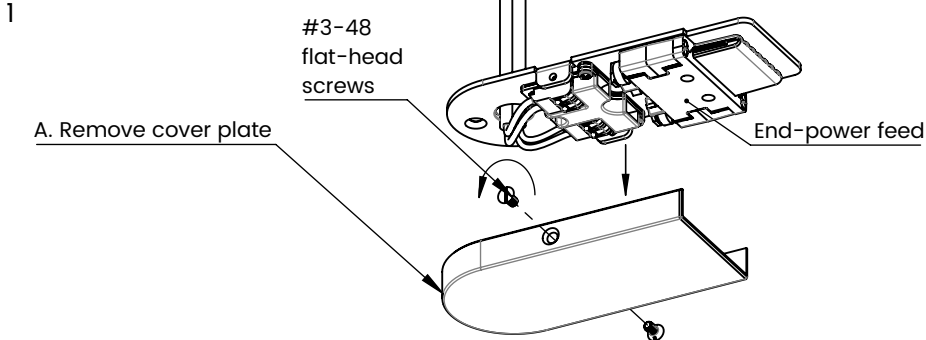
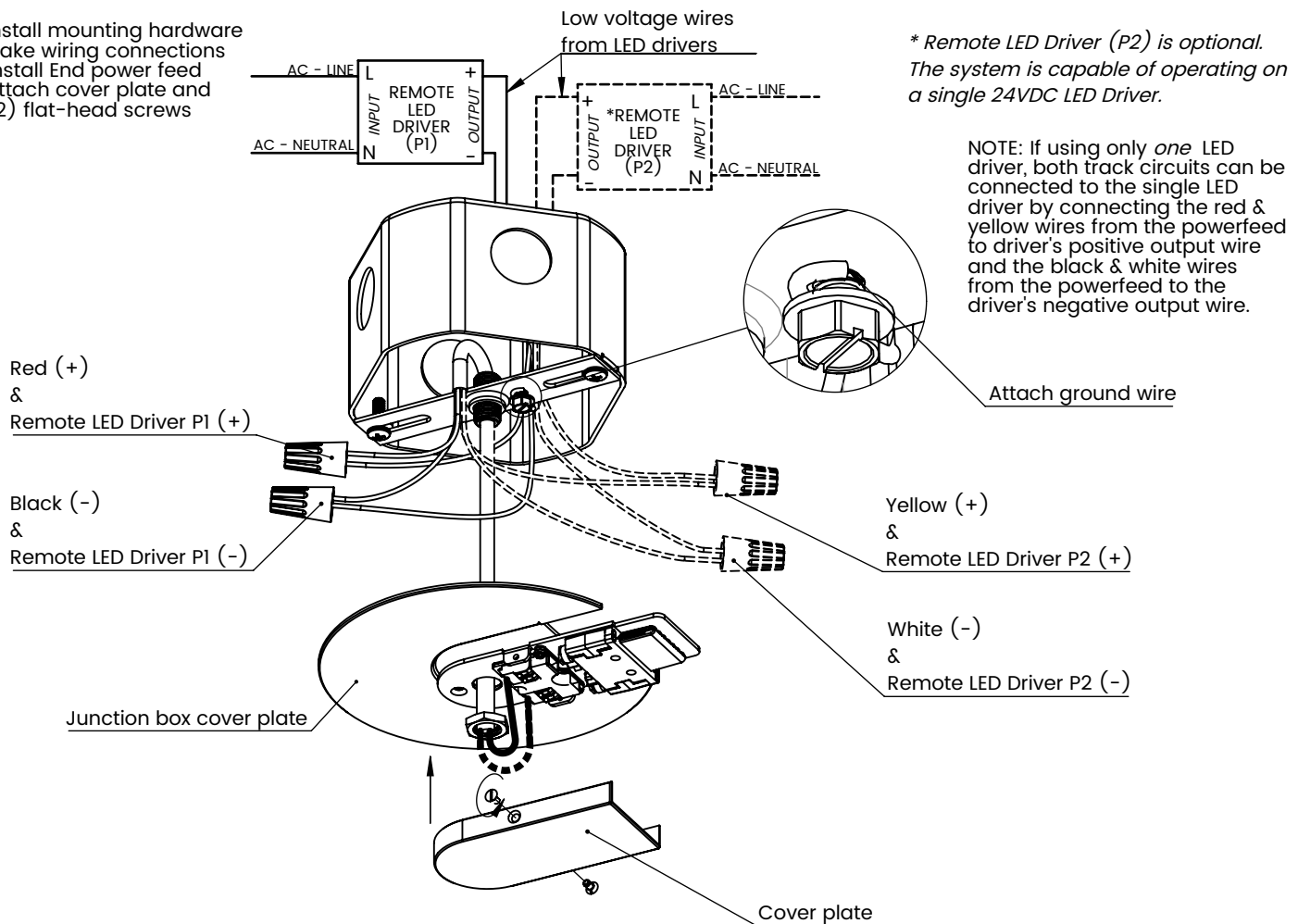
END-POWER FEED - JUNCTION BOX INSTALLATION INSTRUCTIONS

FIGURE 1

2

- A. Install mounting hardware
B. Make wiring connections
C. Install End power feed
D. Attach cover plate and (2) flat-head screws



** 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 the red & yellow wires from the powerfeed to driver's positive output wire and the black & white wires from the powerfeed to the driver's negative output wire.

FIGURE 2

END-POWER FEED - DIRECT INSTALLATION (TO WALL/CEILING) INSTRUCTIONS

- 1 A. Create a $\varnothing 1/2$ in (max.) hole 2.36in from the edge of the ribbon/track (to receive power cables)

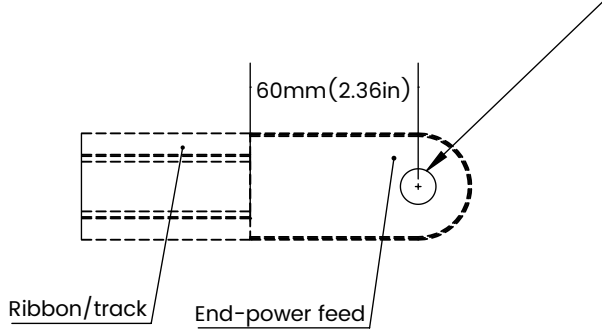


FIGURE 3

- 2 A. Remove cover plate
B. Option 1: Use the pre-installed power cables from power feed (proceed to Step 3)
B. Option 2 (if using wires from LED driver): Remove pre-installed power cable from power feed

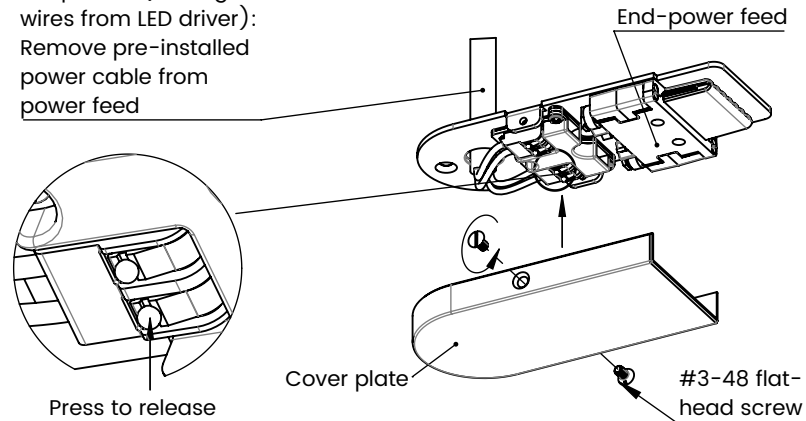


FIGURE 4

- 3 A. Mount the end-power feed to the wall (or ceiling) using the (2) #4 wood screws

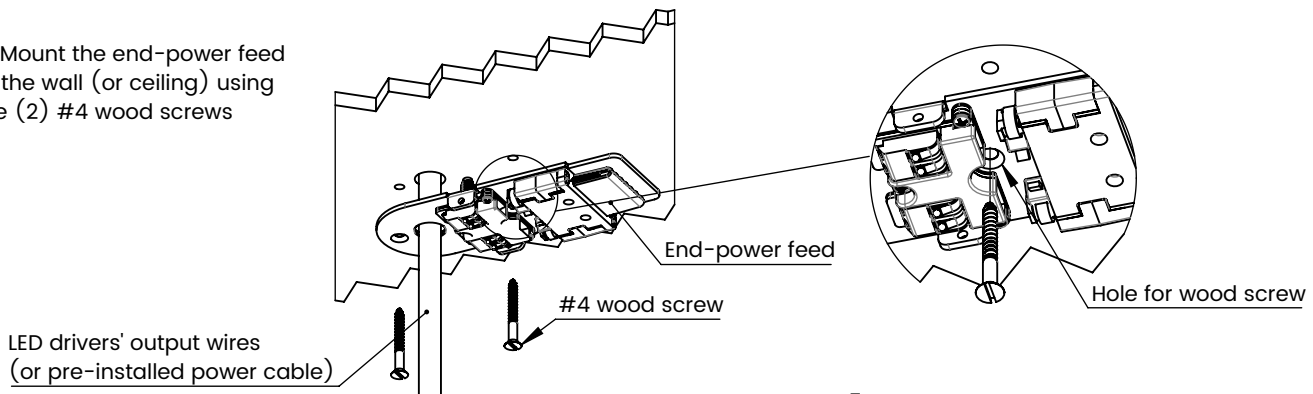


FIGURE 5

- 4 A. Connect '+' and '-' wires from driver P2 according to markings on the connector

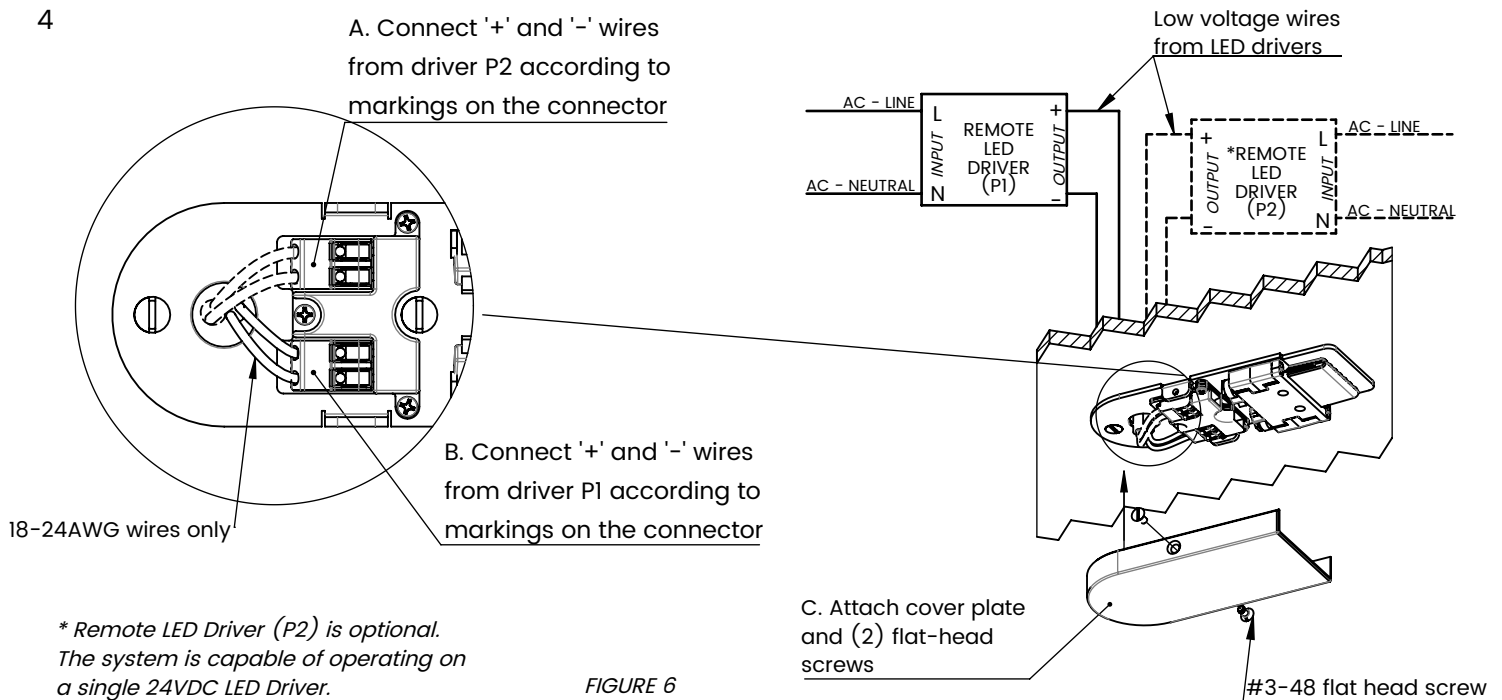


FIGURE 6

CENTER-POWER FEED – JUNCTION BOX INSTALLATION INSTRUCTIONS

1

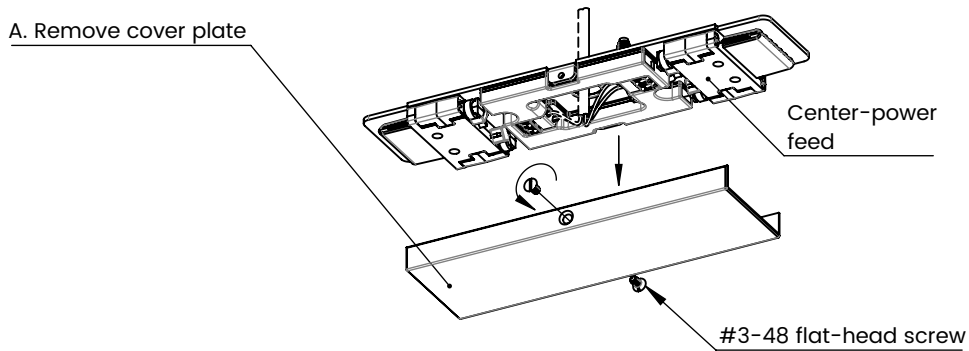


FIGURE 7

2

- A. Install mounting hardware
- B. Make wiring connections
- C. Install Center power feed
- D. Attach cover plate and (2) flat-head screws

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

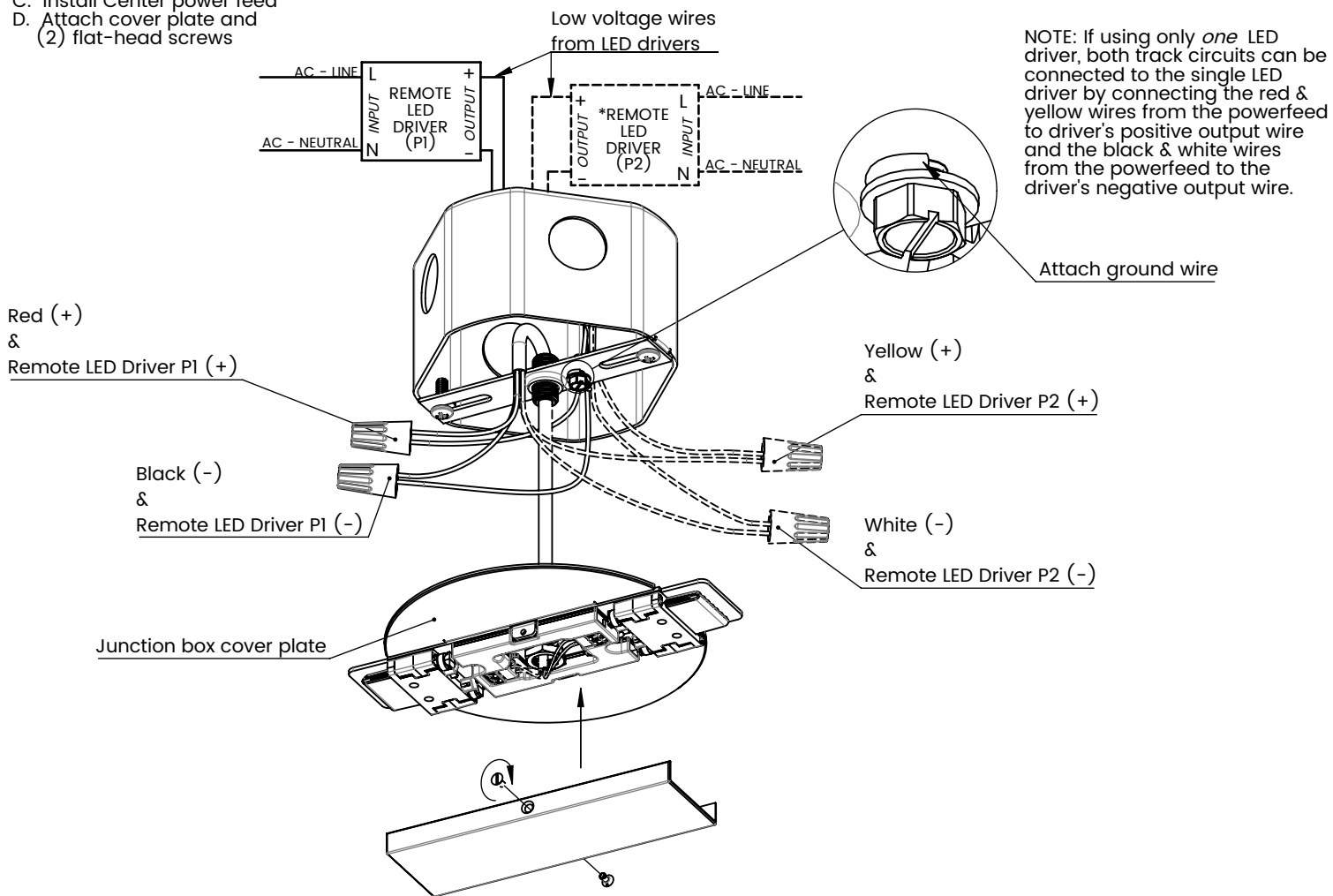


FIGURE 8

CENTER-POWER FEED - DIRECT INSTALLATION (TO WALL/CEILING) INSTRUCTIONS

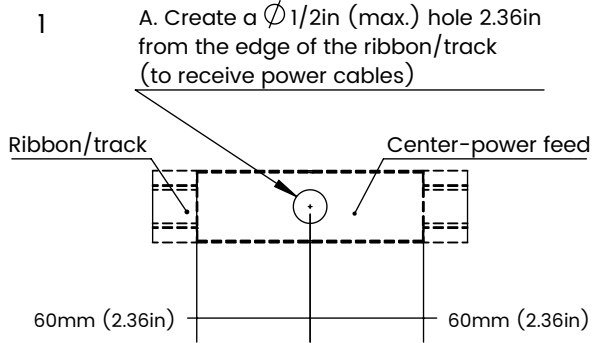


FIGURE 9

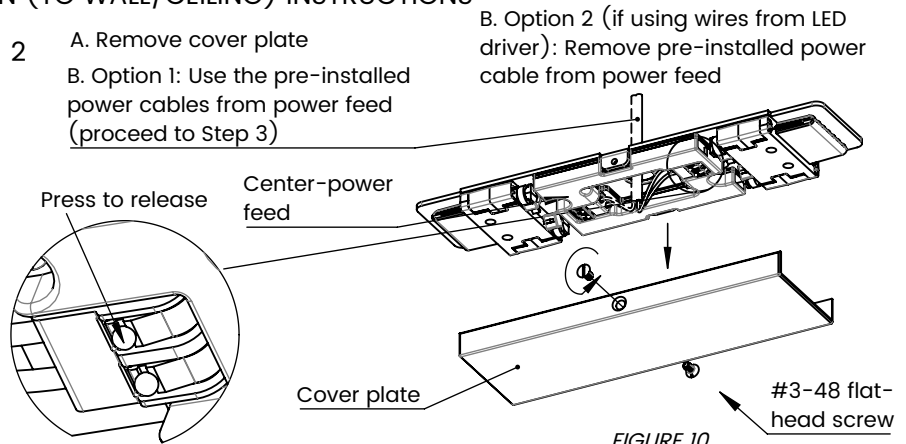


FIGURE 10

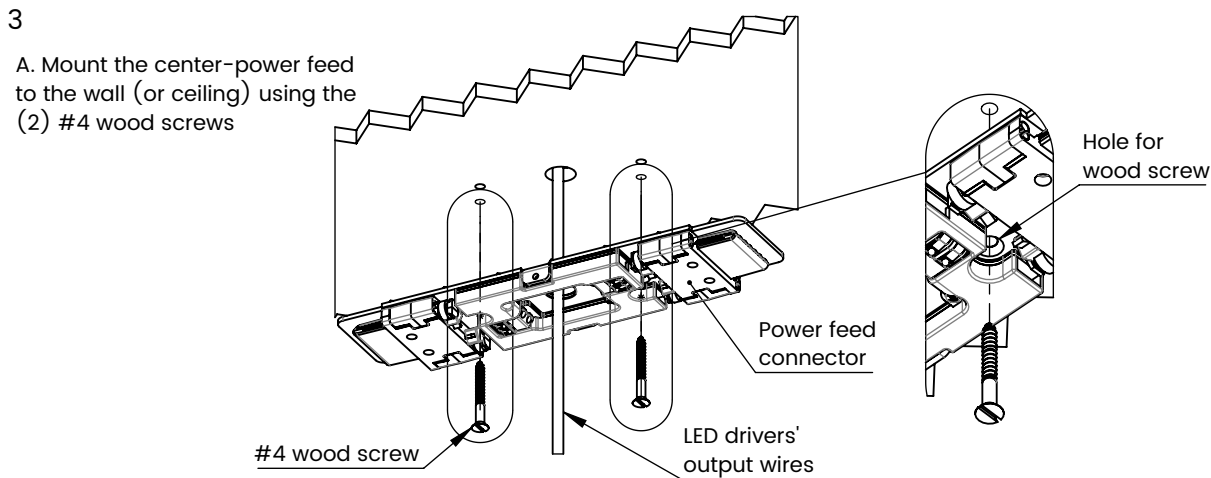


FIGURE 11

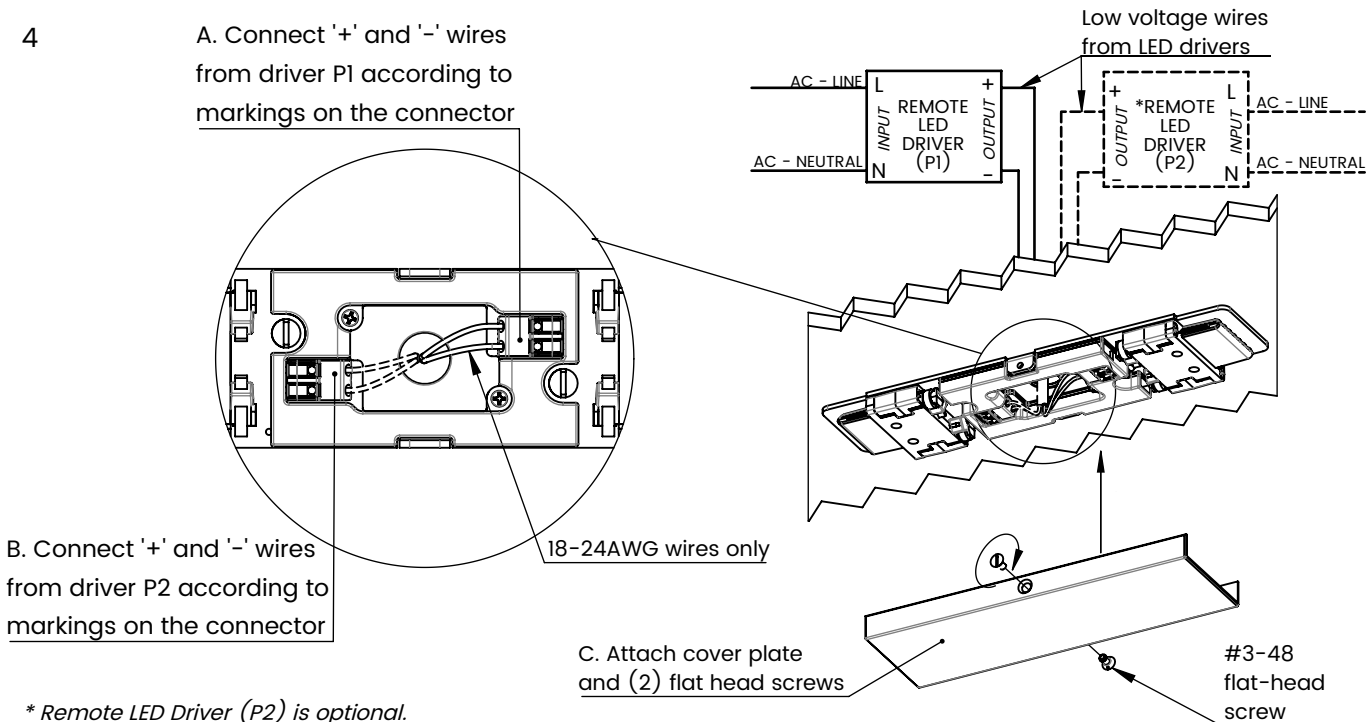


FIGURE 12

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

CONDUIT POWER FEED - INSTALLATION INSTRUCTIONS

- 1 A. Verify proper distance between track and conduit coupling

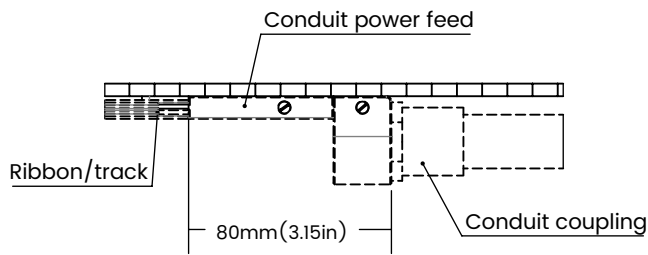


FIGURE 13

- 2

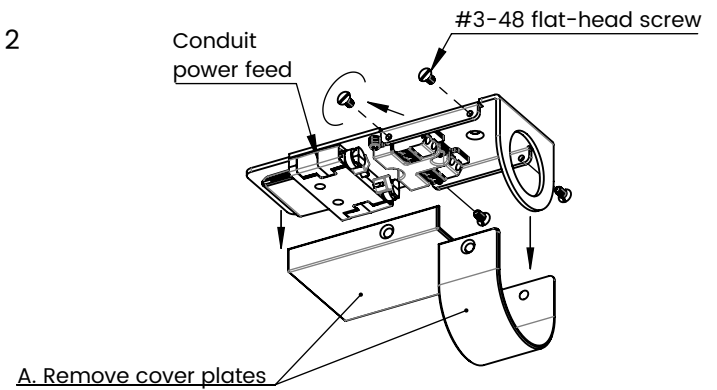


FIGURE 14

- 3 A. Mount the conduit power feed to the wall (or ceiling) using the (2) #4 wood screws

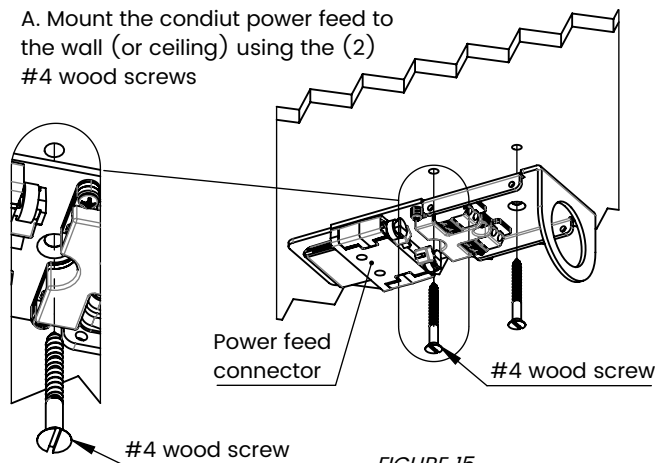


FIGURE 15

- 4 A. Align the locknut for the conduit coupling provided by others

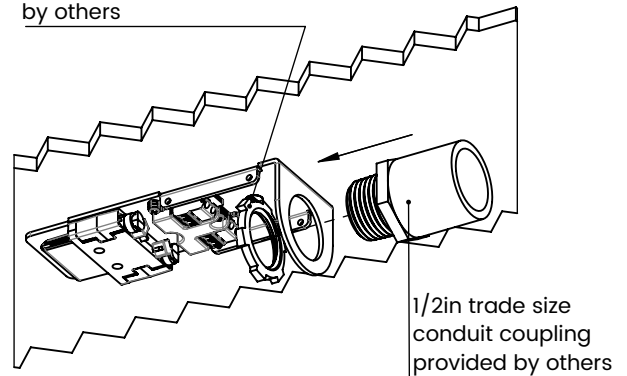


FIGURE 16

- 5

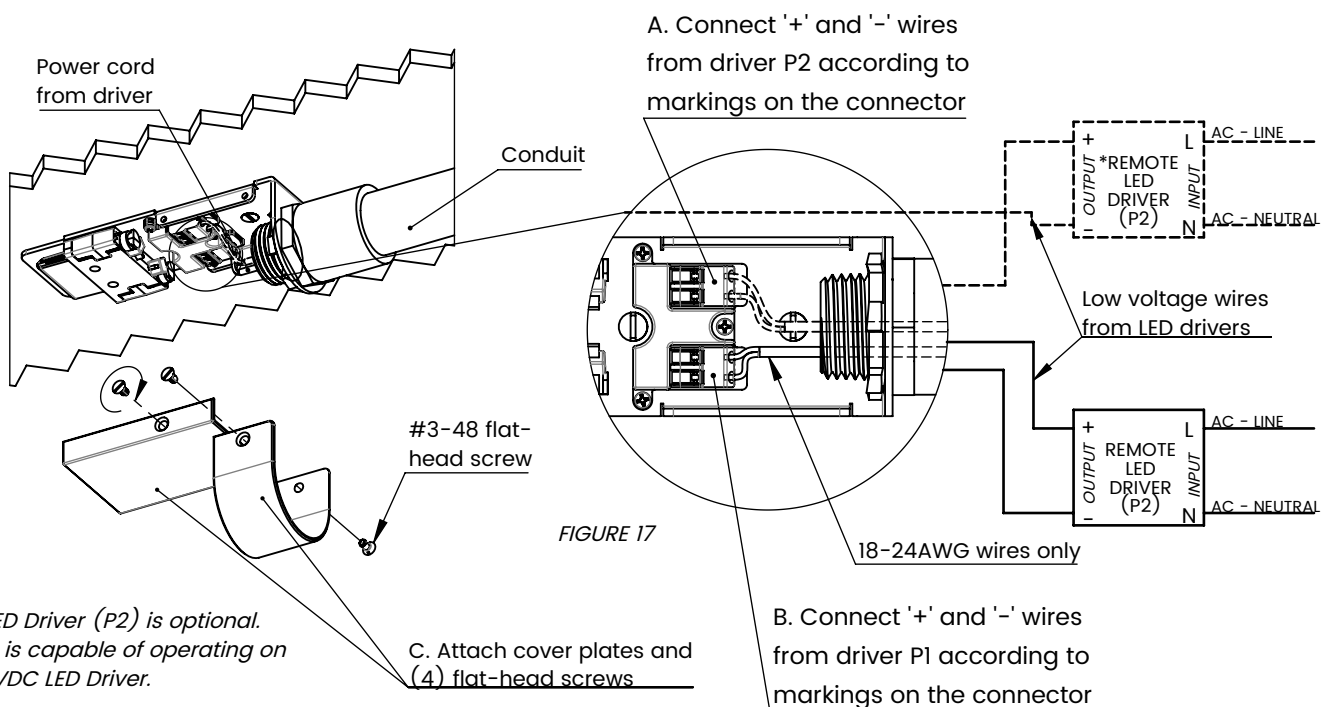


FIGURE 17

CUTTING THE RIBBON/TRACK

- 1 A. Remove cover from track

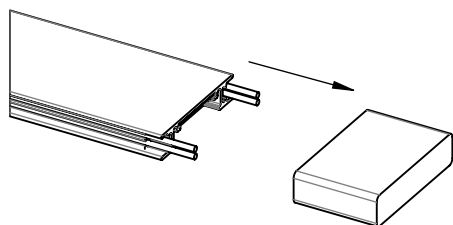


FIGURE 18

- 2 A. Loosen the two set screw on the back side of the track and slide out the insulated conductors toward the non-cutting end*

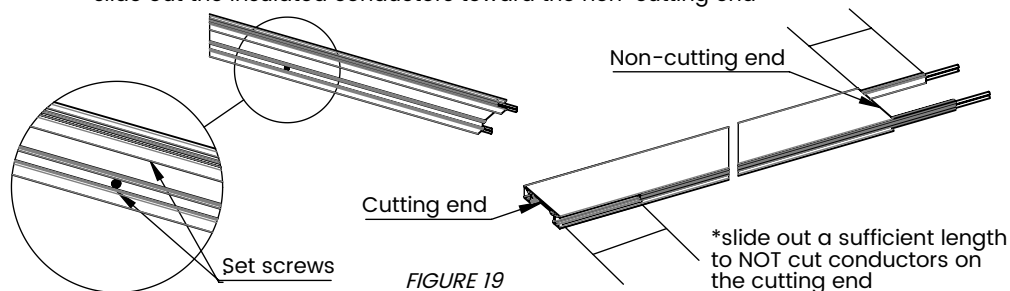


FIGURE 19

- 3 A. 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

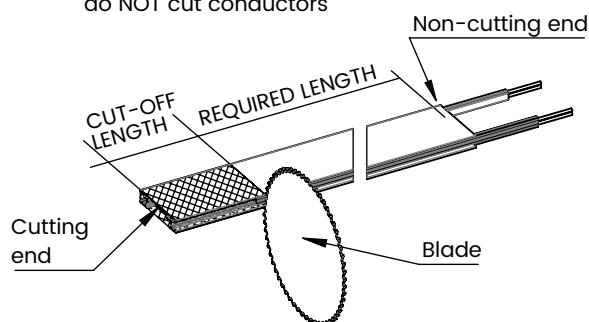


FIGURE 20

- 4 A. Push the conductors back into the track (toward the cutting end)

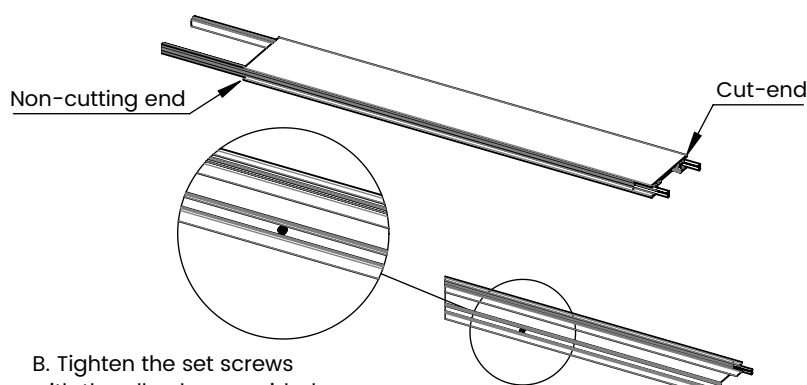


FIGURE 21

- B. Tighten the set screws with the allen key provided to keep the insulated conductors in place.

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

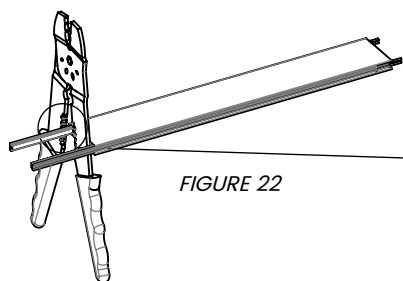


FIGURE 22

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

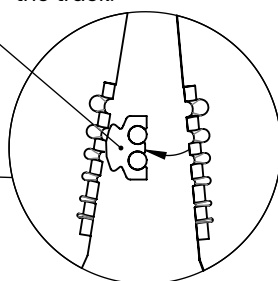


FIGURE 22-A

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

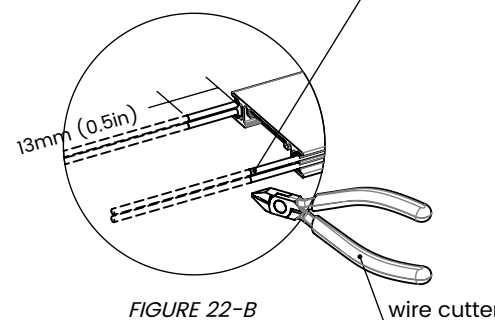


FIGURE 22-B

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

CUTTING LENGTH EXAMPLE

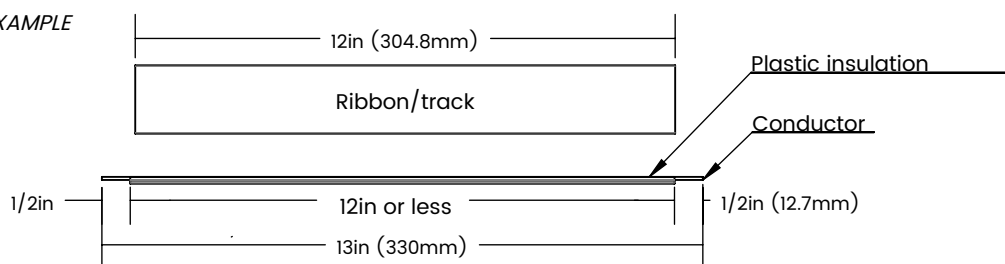
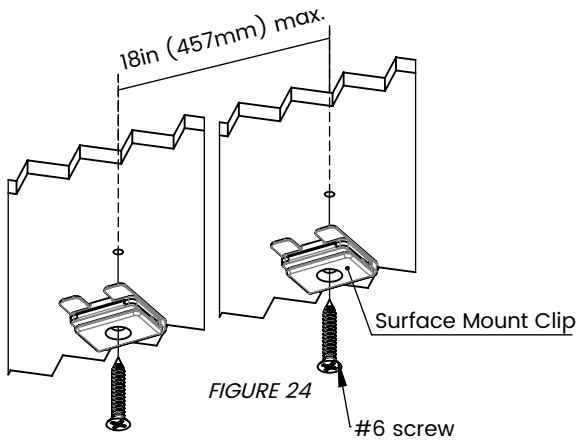


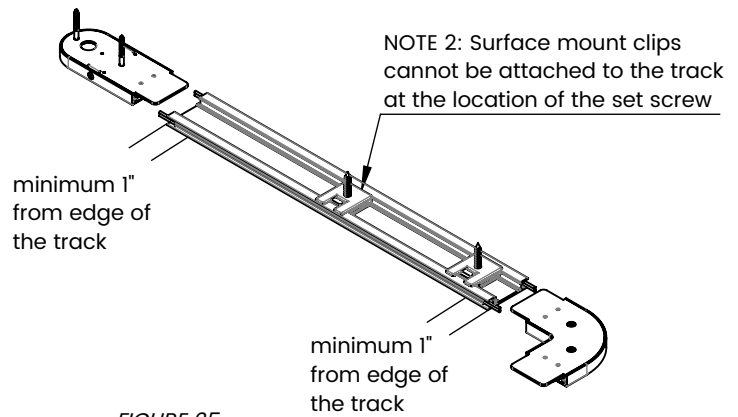
FIGURE 23

RIBBON/TRACK INSTALLATION

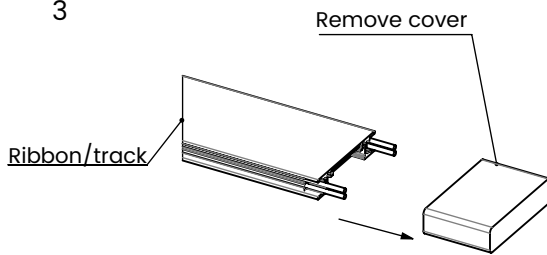
- 1 NOTE 1: USE APPROPRIATE ANCHOR FOR WALL/CEILING SUBSTRATE BEING INSTALLED ON.



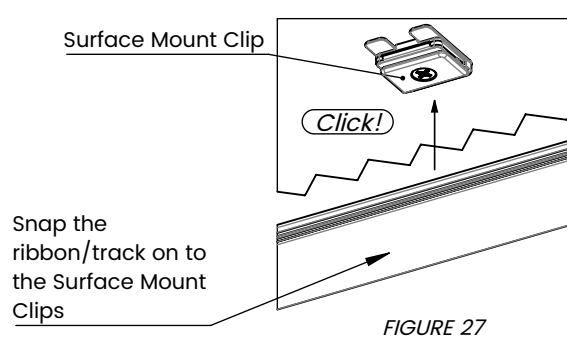
- 2 NOTE 1: Surface mount clips must be mounted at least 1 inch from the edge of the ribbon/track



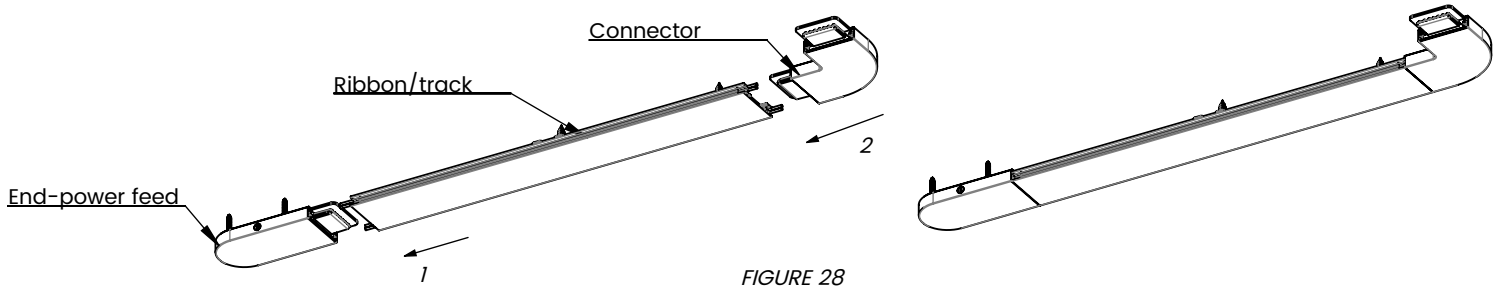
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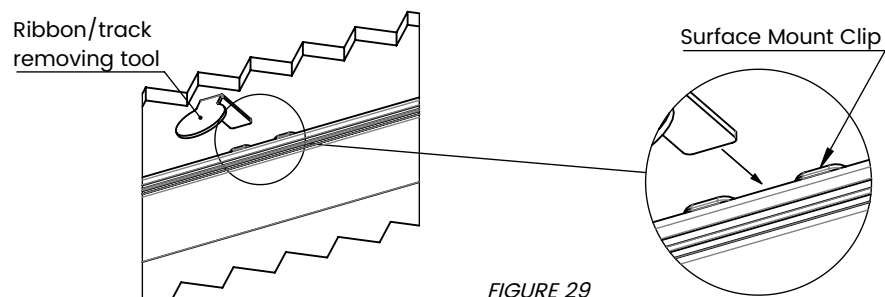


CONNECTING POWER FEED AND CONNECTORS TO RIBBON/TRACK



All connectors and power feeds are connected to the Ribbon/track in the same way. Simply, insert the exposed conductors on the ribbon/track into the connector (or power feed) to make electrical contact.

RIBBON/TRACK REMOVAL



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.

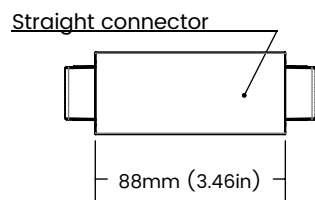


FIGURE 30

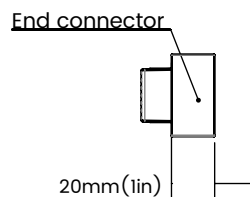


FIGURE 31

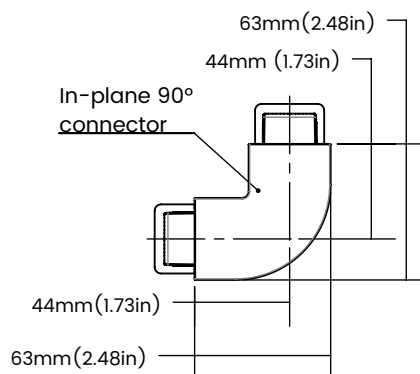


FIGURE 32

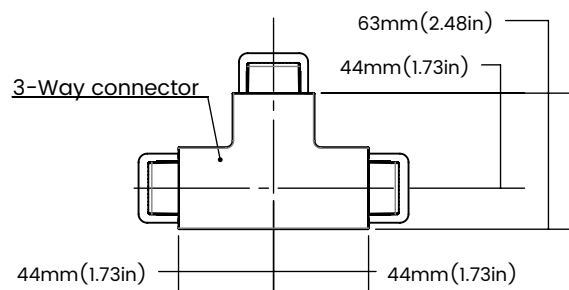


FIGURE 33

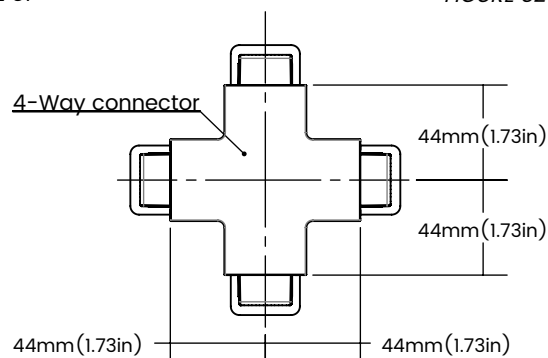


FIGURE 34

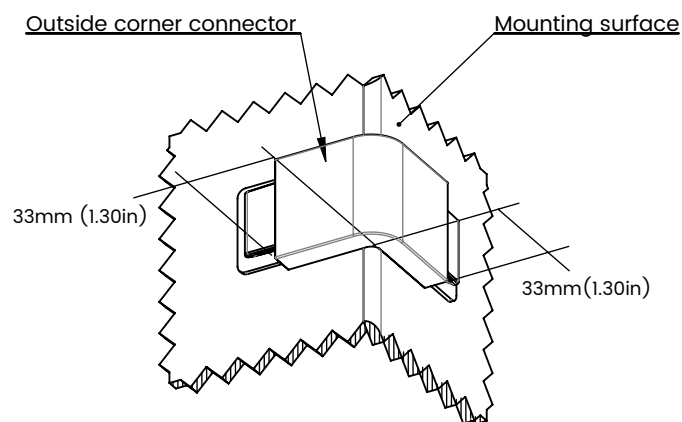


FIGURE 35

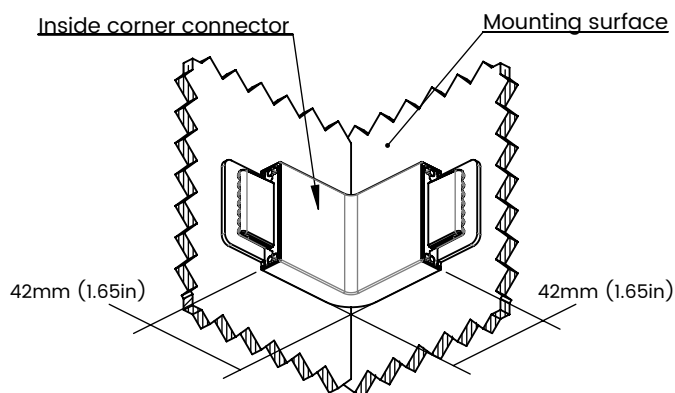


FIGURE 36

SPOTLIGHT INSTALLATION

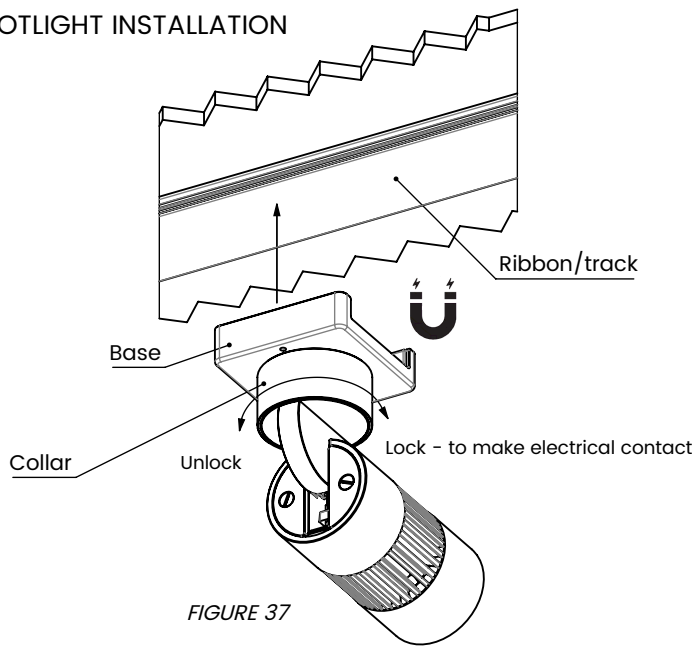


FIGURE 37

- A. Rotate the collar to unlock the spotlight.
- B. Attach the spotlight to the ribbon/track; the magnet in the spotlight will help locate it on the ribbon/track.
- C. "Lock" the spotlight to make electrical contact with ribbon/track.

ADJUSTING THE SPOTLIGHT

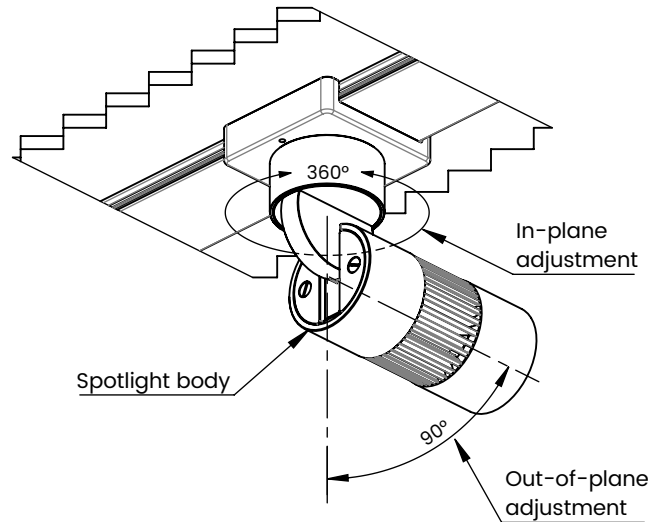


FIGURE 38

BRIGHTNESS & DIMMING CALIBRATION - FIRST-USE

Due to voltage drop for long runs on the ribbon/track, the spotlights closer to the driver may be brighter during first-use. To balance the brightness of the spotlights, perform the following steps.

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 calibration process.
3. Next, set the dimmer to maximum brightness again in under three seconds.
4. Dim the system down to minimum brightness in under three seconds.

After three seconds, all spotlights will flash two times (to indicate the completion of calibration) and will be equally bright.

CHANGING SPOTLIGHT'S POWER CIRCUIT

Remove the spotlight from the track and rotate the base 180°. The marking on the spotlight is to help identify which power channel the spotlight is connected to on the ribbon/track.

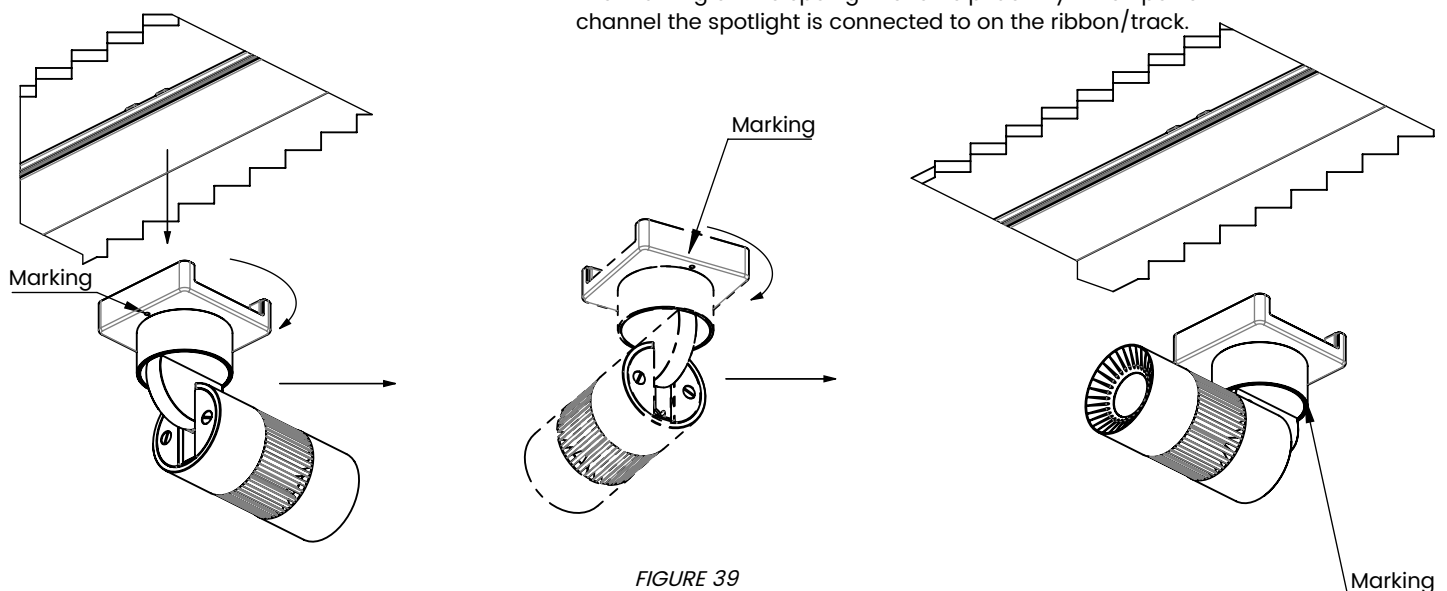
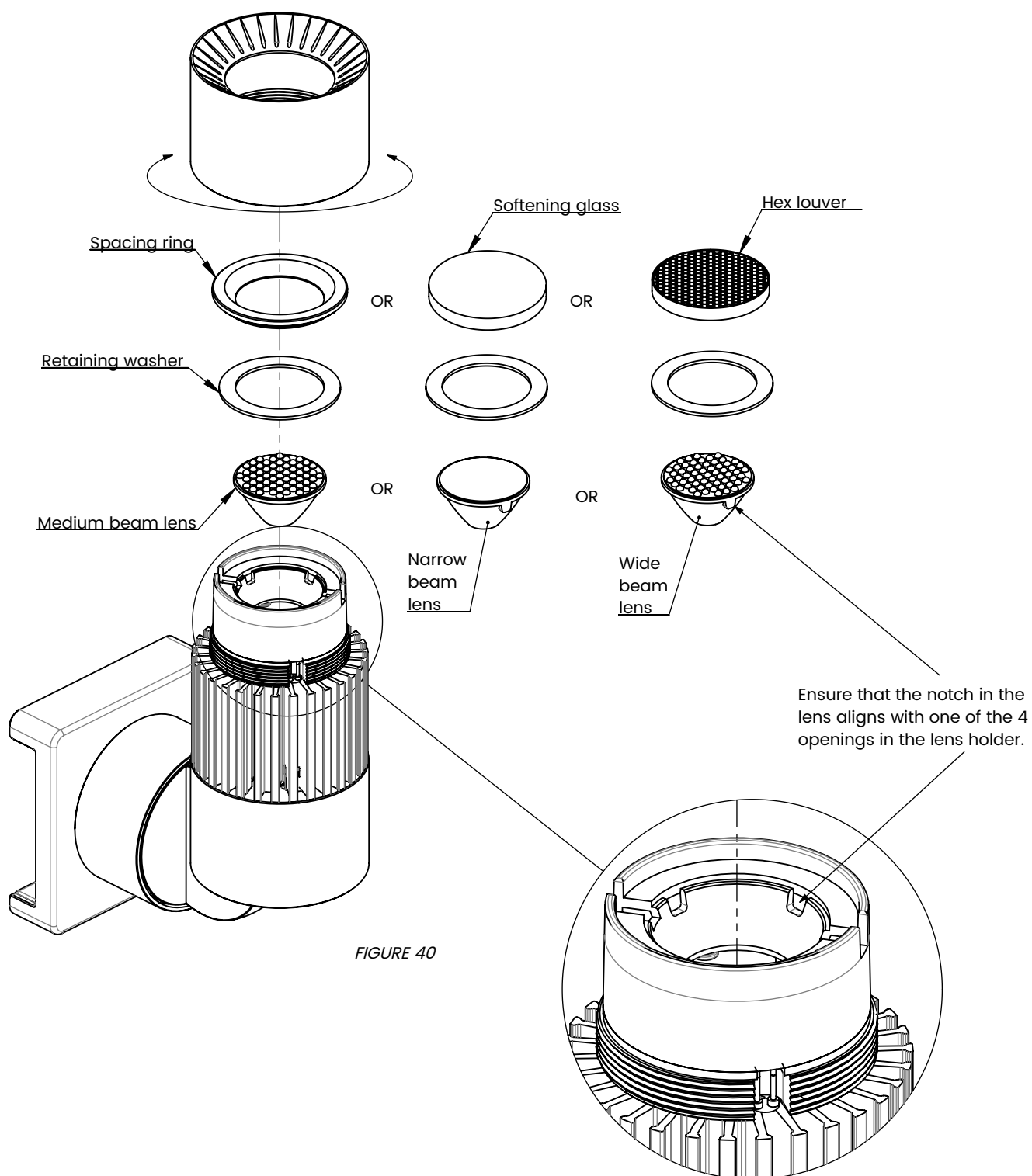


FIGURE 39

CHANGING THE LENS AND OPTICAL ACCESSORY



APPENDIX

ELECTRICAL POWER INFORMATION

NOMINAL DRIVER WATTAGE	LENGTH OF POWER FEED + RIBBON (M)	LENGTH OF POWER FEED + RIBBON (FT)	POWER AVAILABLE (W)	500LM SPOTLIGHTS @5.3W	800LM SPOTLIGHTS @9.3W
40	5	16	35.7	6	3
	25	82	34.6		
	50	164	33.2		
60	5	16	53.4	9 or	5
	25	82	51.2		
	50	164	48.3		
96	5	16	84.9	15	9
	25	82	78.9	14	8
	50	164	71.5	13	7

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 $\pm 10\%$. 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:

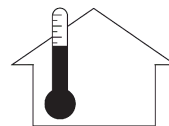
INFO@JUNIPER-DESIGN.COM



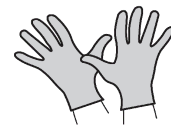
DO NOT TOUCH!
The lamp is hot
when on.



Don't
touch
the LED



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



Use gloves.

TROUBLESHOOTING GUIDE

One of the spotlights does not light up:

Make sure the spotlight is locked with the ribbon/track. See SPOTLIGHT INSTALLATION on page 10.

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 driver wiring (see Juniper Power Supply Guide for details) and check wiring to fixture.
4. 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 12.