

**WARNING:** Risk of electric shock. Disconnect power to the luminaire before installation. Failure to do so may result in serious injury or death. To prevent wiring damage or abrasion, do not pinch or damage exposed wiring during installation. Keep wiring clear of sheet metal edges and other sharp objects.

## WARNING

Read all instructions before installation.

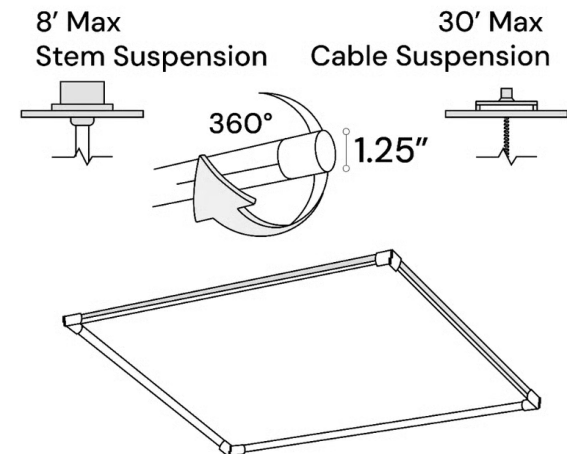
- These products may represent a possible shock or fire hazard if improperly installed.
- Do not look directly into light.
- Power input is 24V DC. Confirm the power supply is compatible.
- Product should be installed in accordance with these instructions and current electrical codes.
- Must be installed with a compatible 24V DC driver.
- Product should be installed by a qualified electrician.
- Disconnect power source prior to installation.

## TOOLS AND MATERIALS REQUIRED

Included in the Box:

|                              |                                                       |
|------------------------------|-------------------------------------------------------|
| Extruded Aluminum Housing(s) | 4 tube sections pre-assembled in square configuration |
| Lens/Diffuser                | Snap-on type                                          |
| Suspension Aircraft Cable(s) | One per mounting point                                |
| Griplock Gripper(s)          | For cable tensioning and height adjustment            |
| Canopy Mounting Bracket(s)   | Ceiling attachment hardware                           |
| Canopy Cover Plate(s)        | Cosmetic cover for ceiling penetration                |
| End Supports                 | One per open tube end                                 |
| Cable Fittings               | Ceiling anchor fitting with rotating cover            |
| Set Screws & Anchor Screws   | For securing canopy, connectors, and end supports     |
| Powerfeed Connector          | Feeds 24V DC from driver lead-in wire to fixture      |

## INSTALLATION INSTRUCTIONS | 12100-R1-SQ | 1-INCH ROTATABLE SQUARE SUSPENDED LINEAR TUBE LIGHT SYSTEM



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## PRE-INSTALLATION

### Suspended Mount

Power input is 24V DC. Confirm the power supply is compatible. Disconnect power source prior to installation.

## STEP-BY-STEP INSTALLATION

### Step 1 — Mark Fixture Position

1. Disconnect power source prior to installation. Verify power is off with a non-contact voltage tester.
2. Using a pencil, mark the ceiling to map out the placement of the fixture.

### Step 2 — Cut Cable Penetration Hole

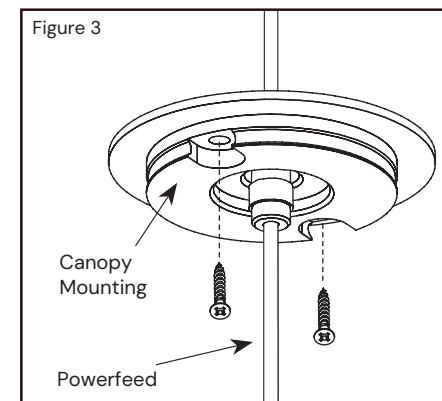
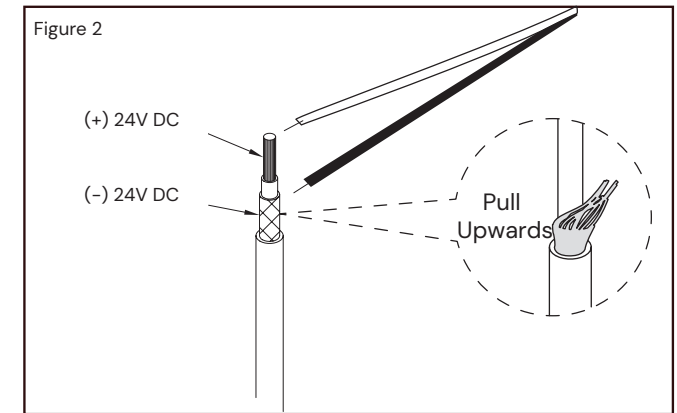
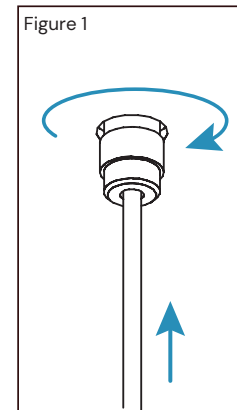
3. Cut a 25 mm (1") hole in the ceiling at the designated lead-in location.
4. Feed the main power wires through the hole.

### Step 3 — Thread Aircraft Cable Through Griplock Gripper

5. Feed the aircraft cable through the griplock gripper by rotating the collar clockwise to loosen.
6. Continue to feed the cable through until the desired suspension length is reached.
7. Rotate the collar counter-clockwise to secure the cable in place. (Figure 1)

### Step 4 — Connect Powerfeed to Main Power Wire

8. Connect the powerfeed connector to the main power wire. The powerfeed has two conductors: (+) 24V DC and (-) 24V DC. Match polarity carefully. (Figure 2)



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## STEP-BY-STEP INSTALLATION

### Step 5 — Secure Canopy Mounting to Ceiling

9. Position the canopy mounting bracket at the ceiling and align with the marked location.

10. Using screws, secure the canopy mounting firmly to the ceiling.

11. If necessary, adjust the cable length by repeating Step 3. (Figure 3)

### Step 6 — Install Canopy Cover Plate

12. Slide the canopy cover plate up the suspension cable towards the ceiling.

13. Once flush against the ceiling face, secure it in place using the set screws along the sides of the cover plate. (Figure 4)

### Step 7 — Link Multiple Fixtures (If Applicable)

*If only installing one fixture, skip to Step 8.*

14. To connect multiple fixtures, screw the light fixture into your connector of choice. Secure in place with set screws.

15. Repeat on the opposite side. (Figure 5)

### Step 8 — Attach End Support

16. Connect the end support to the open end of the fixture.

17. Secure in place with set screws. (Figure 6)

### Step 9 — Mount Cable Fitting to Ceiling

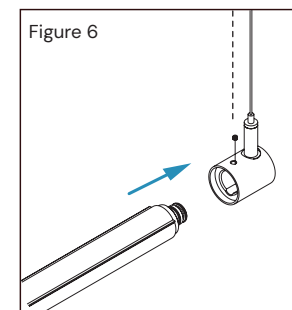
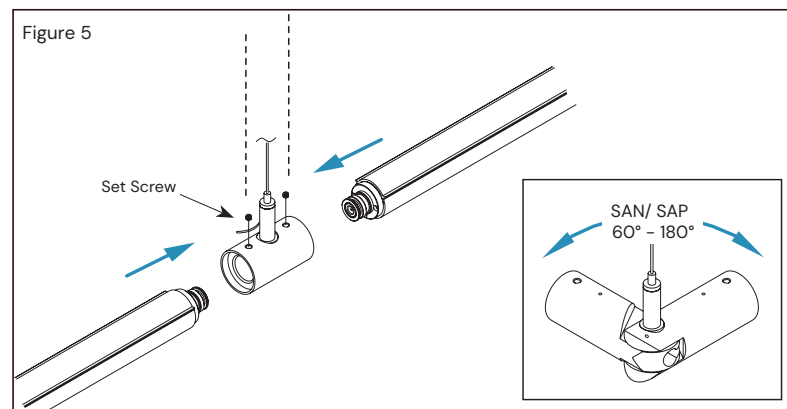
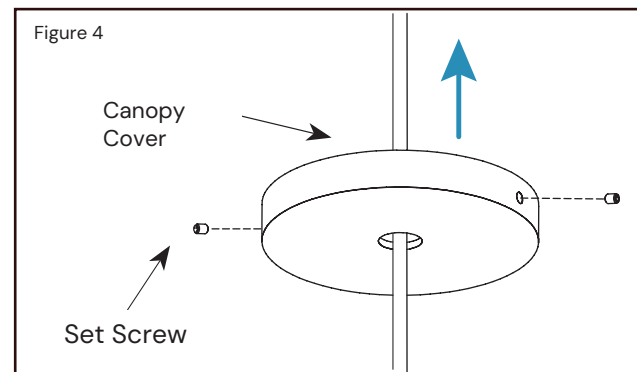
18. At each suspension point, position the ceiling cable fitting against the ceiling surface.

19. Secure the fitting base to the ceiling using anchor screws.

20. Rotate the fitting cover clockwise to secure the suspension cable in place. (Figure 7)

### Step 10 — Adjust Fixture Height

21. Press the gripper nozzle on the griplock fitting to release the cable lock.



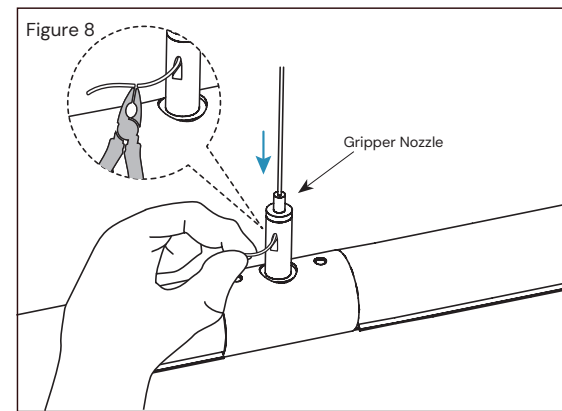
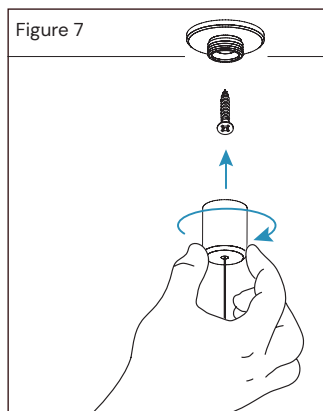
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## STEP-BY-STEP INSTALLATION

22. Pull the cable to the desired fixture height.
23. Release the gripper nozzle — the cable locks automatically.
24. Cut any excess cable above the ceiling fitting using cable cutters. (Figure 8)

### Step 11 — Turn On Power

25. Restore power at the circuit breaker.
26. Turn on power to test luminaire functionality. Verify all tube segments illuminate uniformly. If any segment is dark, refer to the Troubleshooting & Care section below.

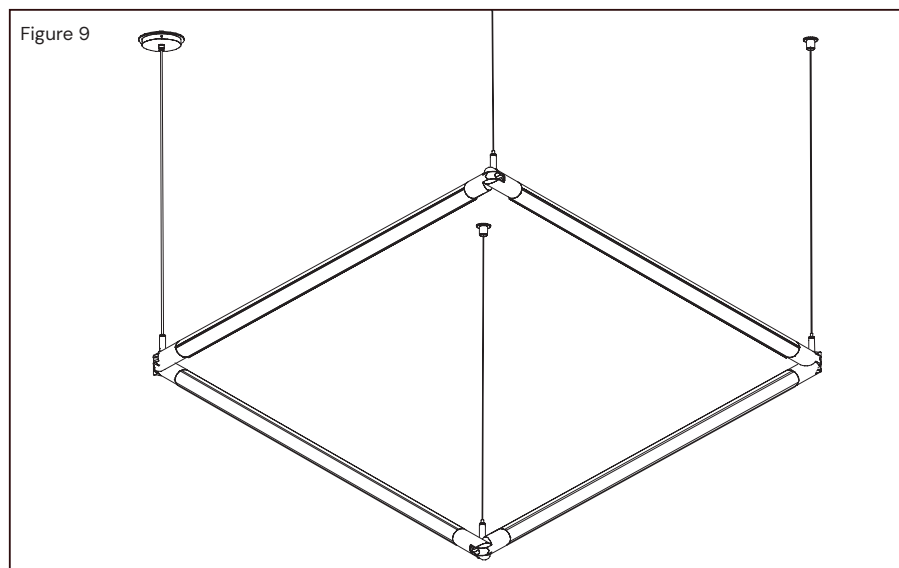


## POWER CONNECTIONS

This fixture uses a remote 24V DC driver installed separately. All high-voltage AC wiring to the driver must be completed by a licensed electrician per applicable electrical codes prior to fixture installation.

| Power Source                       | Component                           | Connection                                                   |
|------------------------------------|-------------------------------------|--------------------------------------------------------------|
| 120–277V AC branch circuit         | Remote 24V DC driver (input side)   | Line + Neutral + Ground, per NEC                             |
| Remote 24V DC driver (output side) | 24V DC low-voltage leads            | Positive (+) to Positive (+)<br>Negative (-) to Negative (-) |
| Powerfeed connector (at canopy)    | Fixture LED assembly                | Match polarity — reversed polarity prevents operation        |
| Dimming control (optional)         | 0–10V / ELV / TRIAC input on driver | Wire per driver dimming instructions                         |

**Never connect the fixture directly to line voltage. Always use a compatible 24V DC driver.**



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## TROUBLESHOOTING & CARE

### If the Fixture Does Not Illuminate

1. Verify power is on at the circuit breaker.
2. Confirm 24V DC output is present at the driver output terminals.
3. Check polarity at the powerfeed connector — (+) and (–) must match driver leads. Reversed polarity is the most common cause.
4. Inspect all connector set screws and joints for firm seating.
5. On linked runs, confirm a powered connector is installed within each 20 ft. segment.

### If Sections Are Dim or Flickering

- Confirm the dimmer protocol (ELV, 0–10V, or TRIAC) matches the driver's specified dimming input.
- Verify the dimmer load is within the minimum and maximum wattage range of the dimmer.
- Check all wiring connections for loose terminals.

### General Care

- Clean the lens and housing exterior with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- Periodically inspect suspension cable connections, gripper fittings, and set screws to confirm all joints remain secure.
- Do not attempt to open the housing or replace internal LED components. Contact Alcon Lighting for warranty support.
- Always disconnect power at the breaker before servicing.