



PLANET
LIGHTING



AIR MANUAL

LED PUCK AIR CATENARY INSTALLATION

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READ BEFORE START

The following instructions are designed to help you ensure a safe and professional installation.

To ensure continual improvement, we welcome your feedback on this manual sent to info@planetlighting.com

Please observe all the following steps and remember to contact your supplier if you have any questions before proceeding with installation.

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1. WARNINGS (p. 3)
2. GENERAL NOTES (p. 4)
3. MOUNTING HARDWARE (p. 5)
4. INSTALLATION INSTRUCTIONS (pp. 6-16)

WARNINGS

CAUTION!

Please observe all of the following cautions:



Read all safety warnings and instructions. **FAILURE TO FOLLOW INSTRUCTIONS MAY RESULT IN PERSONAL INJURY.**



LED Puck Air installation should be carried out by skilled personnel **ONLY**.



Always use appropriate Personal Protective Equipment (PPE) when installing the product.



Always use ear plugs or ear muffs when drilling to avoid hearing damage.



Drilled metal and swarf (shavings) can be hot enough to burn and injure. Use appropriate Personal Protective Equipment (PPE) such as goggles, gloves and safety boots.



DO NOT connect Air luminaires to the cabling while the power supply is connected or turned ON. Always ensure power is OFF AND DISCONNECTED before relocating or connecting luminaires.



Do NOT attempt to modify the product. Modifications or tampering with the product may result in void product warranty.



It is essential that you contact us at planet lighting prior to installation if you choose to supply your own driver.



Issues arising from a driver not supplied by us will not be covered under warranty.



M5 Connection plugs must be aligned correctly before connecting. **DO NOT FORCE THE PLUG.** Follow the M5 CONNECTION procedure.

GENERAL NOTES

EQUIPMENT CHECKLIST

Some of the items you will need include:

- Cutters / Sharp Knife
- Allen keys

MOUNTING HARDWARE

- Ensure you use the correct mounting hardware for each mounting point. Our mounting hardware is pre-assembled based specifically on your specification for each mounting point end (see below).

CABLE MANAGEMENT

- We supply approximately 10% more cable than required. For example, for a 20m distance between mounting points, we supply you 2 x 22m cables.
- The unneeded cable can be cut on site with a sharp knife or side-cutters, usually after the system has been tensioned to remove any unwanted sag and the length required for the electrical connection has been considered, so there is no need to be accurate.
- At the mounting point end which does NOT have power connected, the cable is provided pre-fixed with no extra cable hanging out at the end.
- At the mounting point end which DOES have power connected, the extra cable is fed through

the fixing block, and this extra cable is then taken to wherever is convenient to make the connection to the power supply, or power feed from the power supply. In the case of a pole mounting point, the neatest approach may be to drill a small hole to the side (or above or below) the mounting plate (with a gland or grommet if preferred) and to run the cables into the hole and down the inside of the pole, to connect with the power supply that is typically housed at the base of the pole.

CABLE TENSIONING

- Turnbuckles should be hand-tightened ONLY. Checking the cable for re-tensioning at a period after installation is strongly recommended.

CONNECTIONS

- To make electrical connection with the catenary cable, you can use any method you would use with a normal cable. Options include use of insulation displacement connectors such as Coolsplice, or you can use connectors that require stripped wire such as screw terminal connectors or wire nuts. To strip the catenary wire, simply strip the outer insulating layer, as you would any other wire.



Do NOT connect Air luminaires to the cabling while the power supply is connected or turned ON. Always ensure power is OFF AND DISCONNECTED before relocating or connecting luminaires.

SUPPLYING YOUR OWN POWER SUPPLY?

It is essential that you contact us at Planet Lighting if you are supplying your own driver. Note, damage arising from supplying your own power supply will not be covered under warranty.



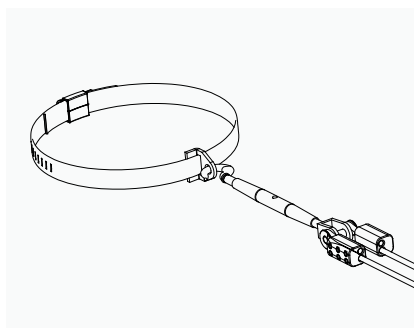
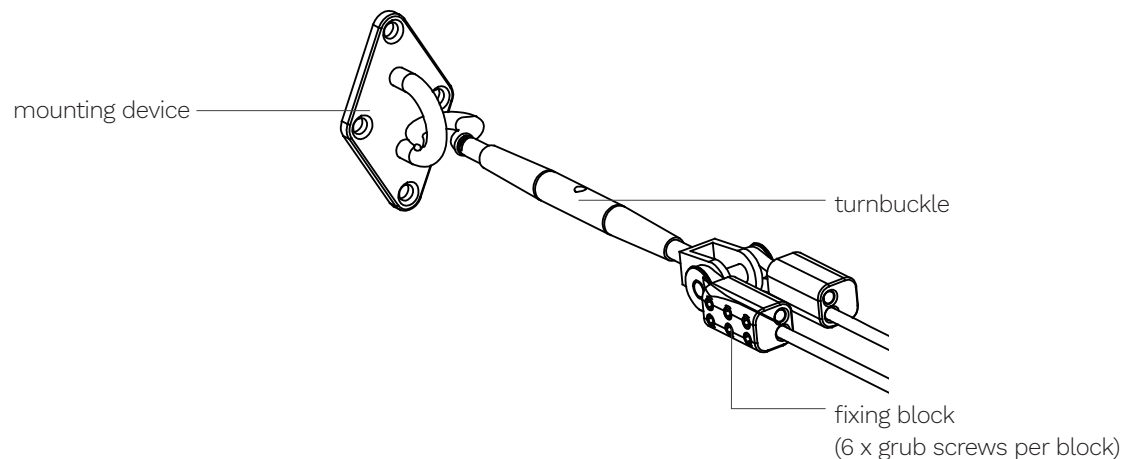
Issues arising from a driver not supplied by us will not be covered under warranty.



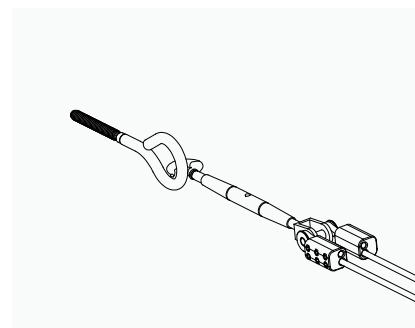
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MOUNTING HARDWARE

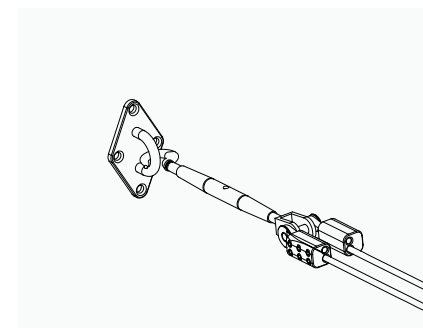
- Pre-assembled mounting hardware sets are supplied to specification, as per requested mounting requirements.
- There are 3 main types of mounting (as pictured): Pole Mount sets, Eyebolt mounting sets, or Universal Plate mount sets
- Eyebolt mount sets are designed specifically for their type of mounting surface and are either timber, masonry or metal mounting specific.
- Each mounting hardware set is supplied pre-configured for either a powered-end, or non-powered end of the cable run. Mounting sets are supplied with fixing blocks pre-fixed and secured *at the non-powered end / mounting point only*. Conversely, *at the powered end*, fixing blocks are supplied with grub screws "loose" to allow for cable feeding, and electrical connection of the cable run.



Pole Mount
Adjustable mount for pole or tree.



Eyebolt Mount:
Timber, Masonry, Metal
Timber, masonry or metal specific sets



Universal Plate Mount
Please contact us for advice.



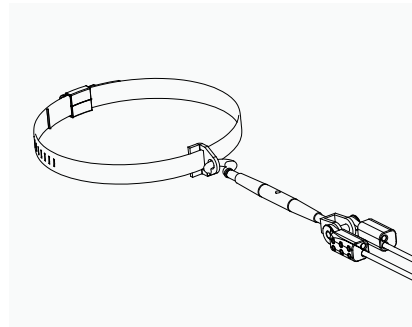
LED PUCK AIR CATENARY INSTALLATION

INSTALLATION INSTRUCTIONS

SECURING MOUNTING POINTS

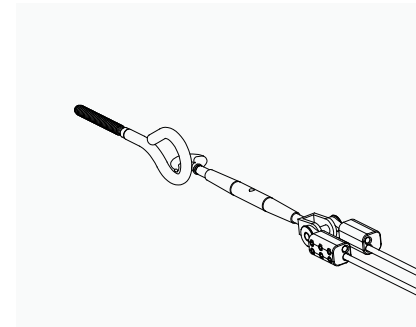
1. Determine the mounting point locations and select the appropriate mounting devices, provided by your supplier, for each surface.

NOTE! In the following instructions we will use the Universal Plate Mount as an example.



Pole Mount

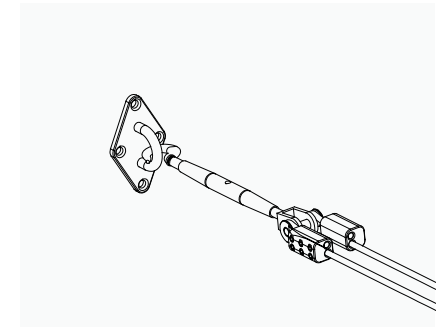
Adjustable mount for pole or tree.



Eyebolt Mount:

Timber, Masonry, Metal

Timber, masonry or metal specific sets



Universal Plate Mount

Please contact us for advice.

INSTALLATION INSTRUCTIONS

SECURING MOUNTING POINTS

2. Fix mounting plates to the locations where the catenary will start and end (Fig 2.1).

NOTE! Universal Plate mount is pictured as an example only.



Fig 2.1 Fix each mounting device to the mounting location at each end.

INSTALLATION INSTRUCTIONS

SECURING MOUNTING POINTS

3. Attach turnbuckles to each mounting device (one at each end) ensuring that turnbuckles are fully extended (in their longest state) when you begin. Turnbuckles are supplied in their extended state (Fig 3.1).



Fig 3.1 Reattach turnbuckles to each mounting device ensuring they are at their fully extended state as pictured.

INSTALLATION INSTRUCTIONS

CABLE FIXING & TENSIONING

4. Pull the extra cable through the powered end (the end with extra cable and loose grub screws in the fixing blocks) and pull each cable until they are both tight and even (Fig 4.1). Once tight, slide the fixing blocks up to the turnbuckle (Fig 4.2).

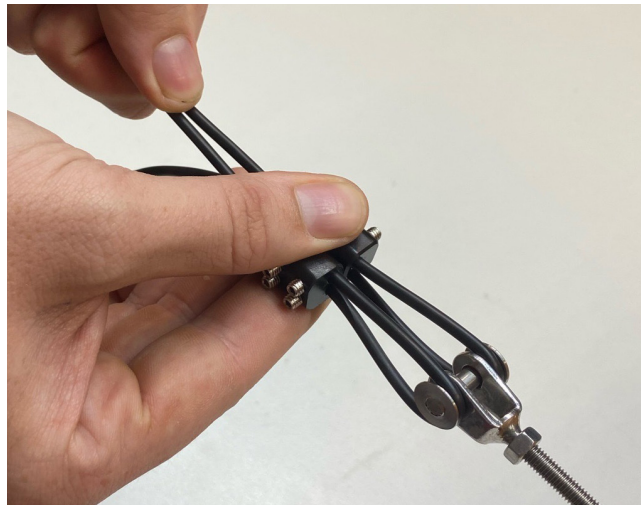


Fig 4.1 Pull extra cabling through the fixing block until they are tight and even in tension (above), then slide the block up to the turnbuckle (above right).

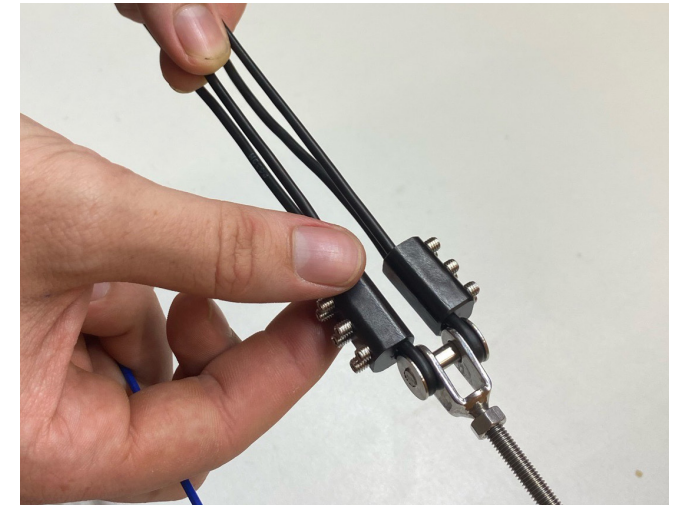


Fig 4.2 Slide the blocks up to the turnbuckle.

INSTALLATION INSTRUCTIONS

CABLE FIXING & TENSIONING

5. Starting with the middle grub screws, screw down the grub screws in the fixing blocks to secure cables in position (Fig 5.1).

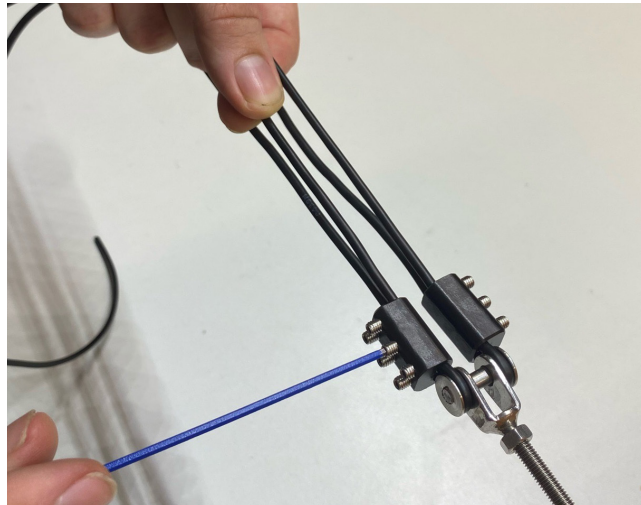


Fig 5.1 Hand tighten grub screws on each fixing block to secure the cabling.



Above: Tighten and secure grubs screws until they are flush with the fixing blocks.



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INSTALLATION INSTRUCTIONS

CABLE FIXING & TENSIONING

6. Once both ends are fixed off, tension the cable by tightening the turnbuckles at each end. Hand tighten turnbuckles ONLY (use a clockwise motion when facing the mounting device) (Fig 6.1). Lock off the turnbuckles with the lock nuts (Fig 6.2).

NOTE! Each turnbuckle offers approximately 50mm of adjustment, so a turnbuckle at both ends will provide maximum 100mm of tensioning, which is more than needed – typically you might need 10 or 20mm of adjustment to remove any sag out of the cables once the lights have been hung.

Turnbuckles should be hand tightened ONLY



Fig 6.1 Tension the cable by tightening the turnbuckles at each end. Hand Tighten ONLY!

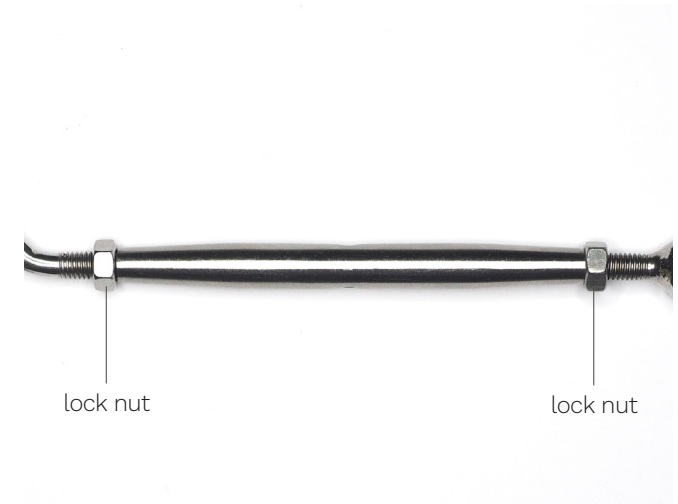


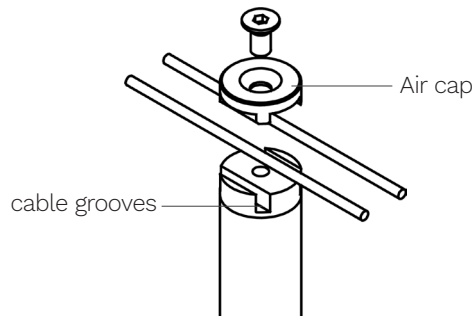
Fig 6.2 Lock off the turnbuckles with the lock nuts.



INSTALLATION INSTRUCTIONS

CONNECTIONS

7. Air's cap comes supplied with its screw undone (Fig 7-1) to allow easy alignment and connection with catenary cabling. Simply lift the cap then align the two cables within the two grooves on the luminaire (Fig 7, 2-6). Secure the cap with an Allen key (Fig 7-5) and confirm the connection is secure (Fig 7-6).



Above: Air's connection is made instantly via its screw-on cap.

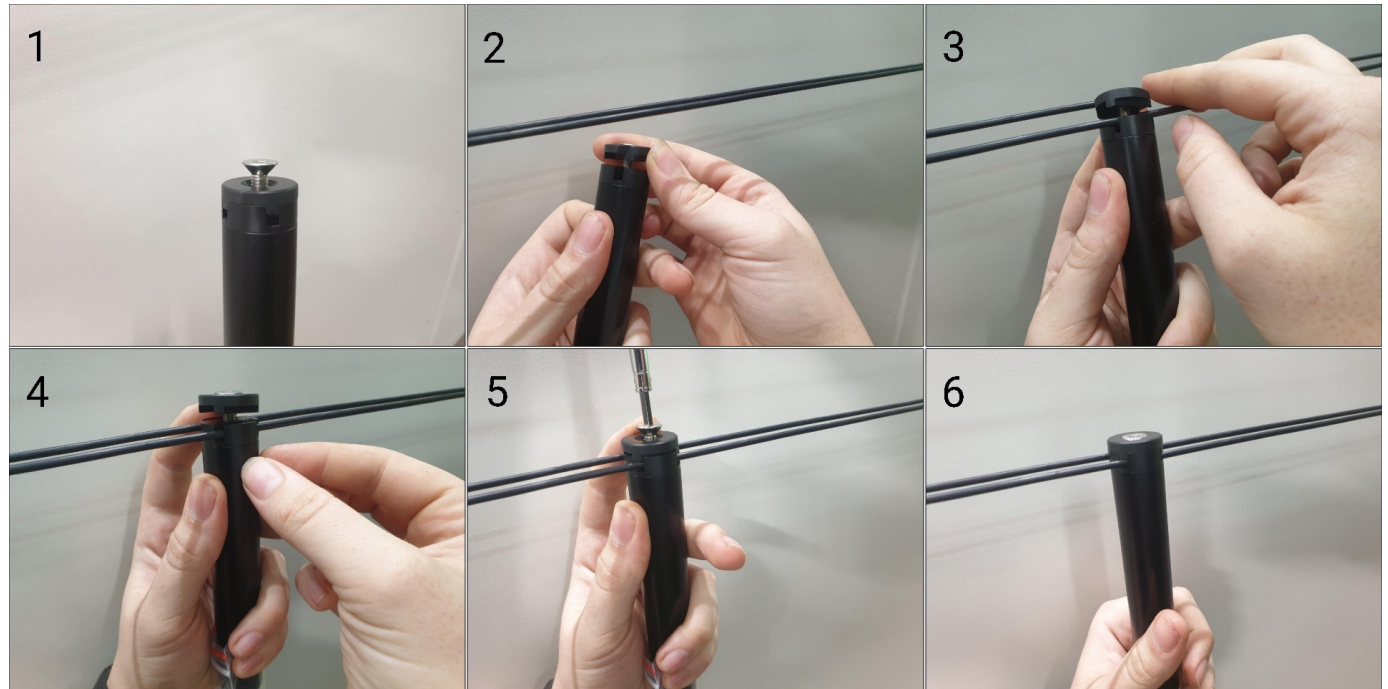


Fig 7, 1-6. Align both catenary cables within the two grooves at the top of the Air luminaire, securing the cap with the screw.



Do NOT connect Air luminaires to the cabling while the power supply is connected or turned ON. Always ensure power is OFF AND DISCONNECTED before relocating or connecting luminaires.



INSTALLATION INSTRUCTIONS

CONNECTIONS

8. Run power cables to power supply (Fig 8.1).

Note! Power Connection Hub(s) (See Fig 8.2 on following page) are available to help route power between runs. They can also provide a neater finish at power entry.

Note! To make electrical connection with the catenary cable, you can use any method you would use with a normal cable. Options include use of insulation displacement connectors such as Coolsplice, or you can use connectors that require stripped wire such as screw terminal connectors or wire nuts. To strip the catenary wire, simply strip the outer insulating layer, as you would any other wire.



Fig 8.1 Run power cables to power supply.



LED Puck Air installation should be carried out by skilled personnel ONLY.

INSTALLATION INSTRUCTIONS

CONNECTIONS

Power Connection Hub(s) are available to help route power between runs. They can also provide a neater finish at power entry.

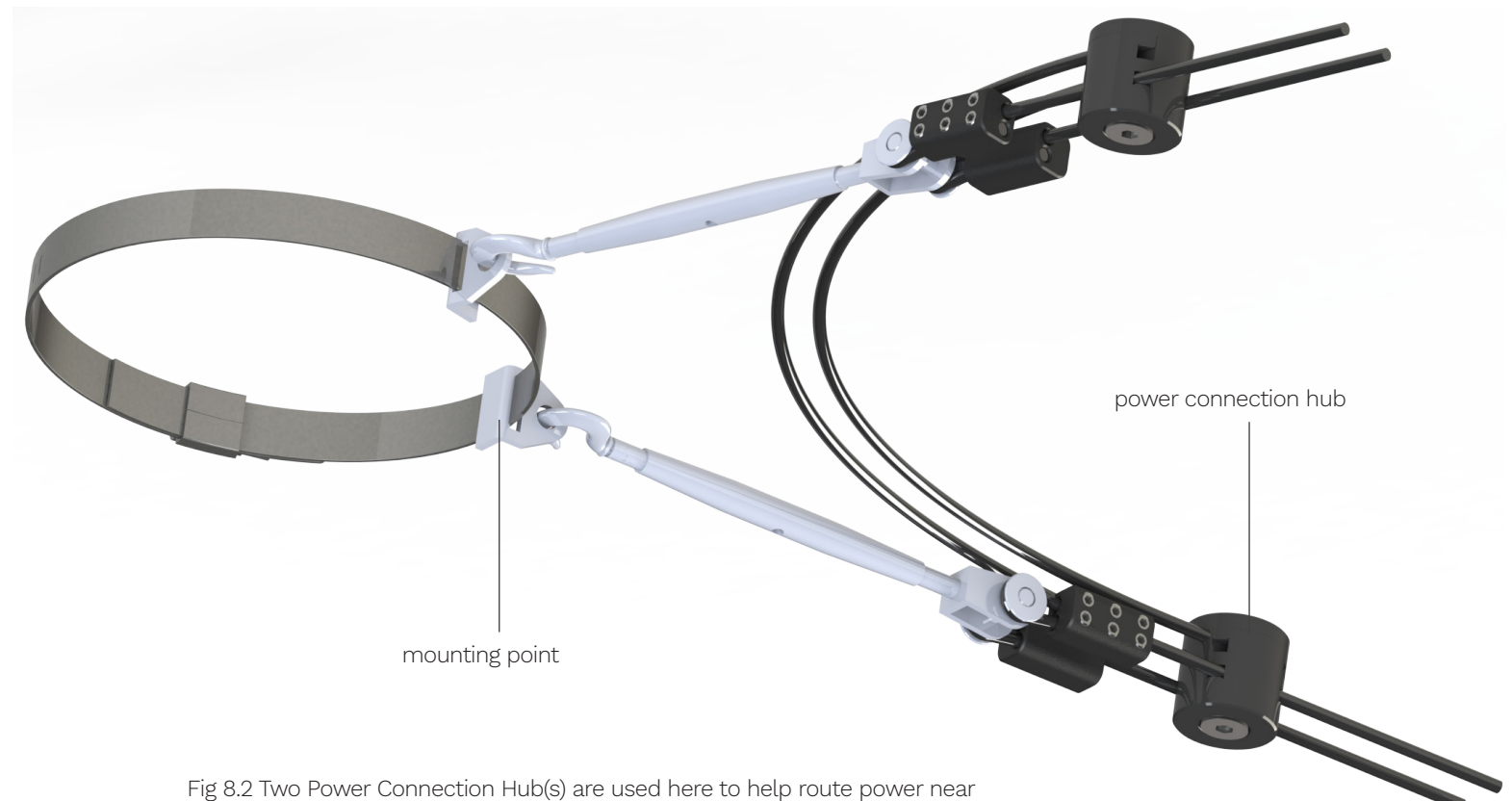


Fig 8.2 Two Power Connection Hub(s) are used here to help route power near a mounting point. Power Connection Hubs are available to order from your supplier.

INSTALLATION INSTRUCTIONS

CONNECTIONS

CORRECT M5 CONNECTING PROCEDURE:

1. Align the arrows as shown.
2. Gently connect the connectors with light finger pressure only, if there is any resistance, check arrow alignment – do not force!
3. Gently screw together the threaded sleeve with light finger pressure only.
4. Test that the connection is screwed in place by gently pulling the connectors apart.

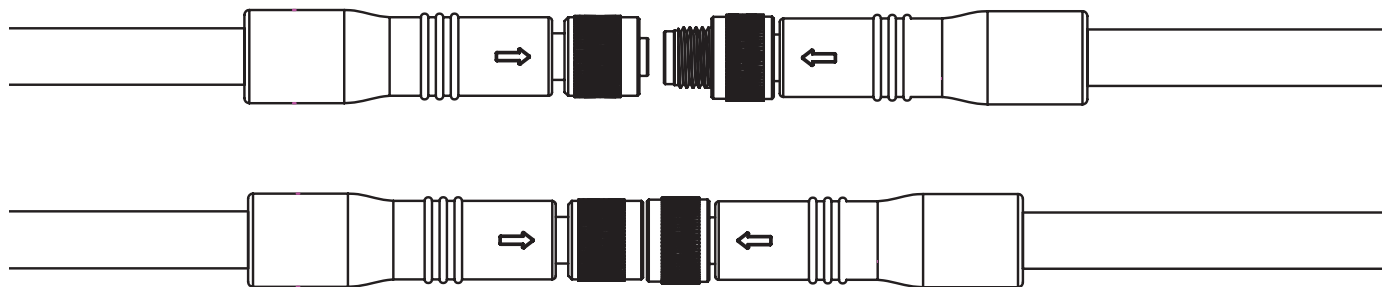


Fig 8.3 M5 Connectors must be aligned properly before connecting.



M5 Connection plugs must be aligned correctly before connecting. DO NOT FORCE THE PLUG. Follow the M5 CONNECTION procedure.



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INSTALLATION INSTRUCTIONS

REVIEW

9. Review the installation periodically checking to ensure cable remains taught and the fixing points remain secure. Some installations may require further tensioning.





END OF DOCUMENT