



IP Network STP Cable Termination Bracket (FP1044) Installation Instructions

General Description

The VIGILANT IP Network STP Cable Termination Bracket (FP1044) provides a method of terminating two shielded twisted pair (STP) Cat 5e/Cat 6 field cables (typically solid core) into AMP TWIST 6S SL connectors. These provide a single-action, insulation displacement connection to all 8 wires (4 pairs) and an RJ45 socket, into which an Ethernet patch cord may be plugged.

Refer to the PIB User's Manual (LT0519) for detail for inter-connection of a Panel-Link IP Network.

Field Wiring Gauge & AMP-TWIST-6S SL Termination

The connectors have a clamp that connects the shield of the STP cable to the metal body, which, in turn, connects to the metal of the bracket. If desired, the shield can be left covered by the sheath so that it remains isolated from the body and thus the shield is not earthed. See LT0519 for more details.

Accepted Cable Jacket: 5mm – 9mm outer diameter (will accept UTP or STP)

Accepted Wire Gauge: 24-22AWG solid core (0.50-0.65mm diameter)
26-24AWG stranded

The AMP-TWIST connector comes with a pamphlet that describes the termination process. A colour document (ID 411-93014) is available on the TE Connectivity web site. The connector uses insulation displacement, with positions to lay the wires, and has the wire-press and guillotine built in.

The recommended tool is effectively a clamp that squeezes both halves together, pushing the wires into place, causing them to be mated, and the wire tails cut off. If you are using a different tool, e.g., a small hand vice, ensure that both halves are pressed fully home, but not forced beyond that.

The particular connection format, T568A or T568B, should be chosen to correspond to what is used in the particular building/area, and should match the patch leads used.

The positioning of wires by colour is shown on the side of the connector for each format, with the particular colour, e.g. blue, shown as a solid colour in the rectangle below the wire exit point, and the corresponding white (or striped white), shown in the adjacent rectangle as half colour, half white.

The important thing is that each wire terminates to the same pin number at each end of the cable, and that the wire pairs are maintained.

Bracket Installation Process

1. Install the field wiring of type and gauge as per above. Maintain a minimum bend radius of 40mm, and secure the cable.
2. Terminate the cables in the AMP-TWIST-6S SL connectors supplied, as per the instructions above.
3. Mount the mounting bracket to an appropriate place on the gearplate or cabinet wall. It can be directly mounted in an *MX* Loop Card bracket position. Other positions may require mounting holes to be drilled. Ensure that it is earthed (attach with screws, nuts and star washers, or use an earth wire and stud). See Figures 1 to 3 overleaf for installation locations on *MX1* gear plates, a Slimline *MX1*, or in a Responder box. It will also fit the "RS485 Board" mounting studs on the inside wall of F3200 / MX4428 19" rack cabinets.
4. Clip the connectors into the holes in the mounting bracket, fitting the lip over the lower edge. Depress the spring clip, then push it home.
5. Fix the cable near the bracket so that cable strain is not applied to the connector.
6. Use standard UTP patch cables to connect the RJ45 sockets on the bracket to the appropriate ports on the Moxa switch.

Kit contents

The FP1044 kit includes the following items (in addition to these instructions):

Qty	Part No.	Description	Use
2	CN0651	CAT6-RJ45 SKT AMP-TWIST 6S SL	Terminates cables.
2	FA2016	HEX BARREL NUT M3 BRASS	Mount bracket to RAC cabinet wall.
1	FA2610	2 X CONNECTOR MTG BRKT	The bracket.
3	NT0009	NUT HEX MACHINE M4 ZP	2 mount brkt to gearplate, 1 earth stud, if req'd.
2	SC0176	SCREW PH M4 X 10 WITH WASHERS	Mount bracket to gear plate
2	WA0005	WASHER FLAT M3 ZP 7MM OD	Inner wall mounting with barrel nuts.
2	WA0006	WASHER FLAT M4 ZP 9MM OD	Mount bracket to gear plate (on gear plate rear)
2	WA0010	WASHER SHAKEPROOF M3	Inner wall mounting with barrel nuts.
3	WA0011	WASHER SHAKEPROOF M4	2 mount brkt to gearplate, 1 earth stud if req'd.

Some Mounting Examples

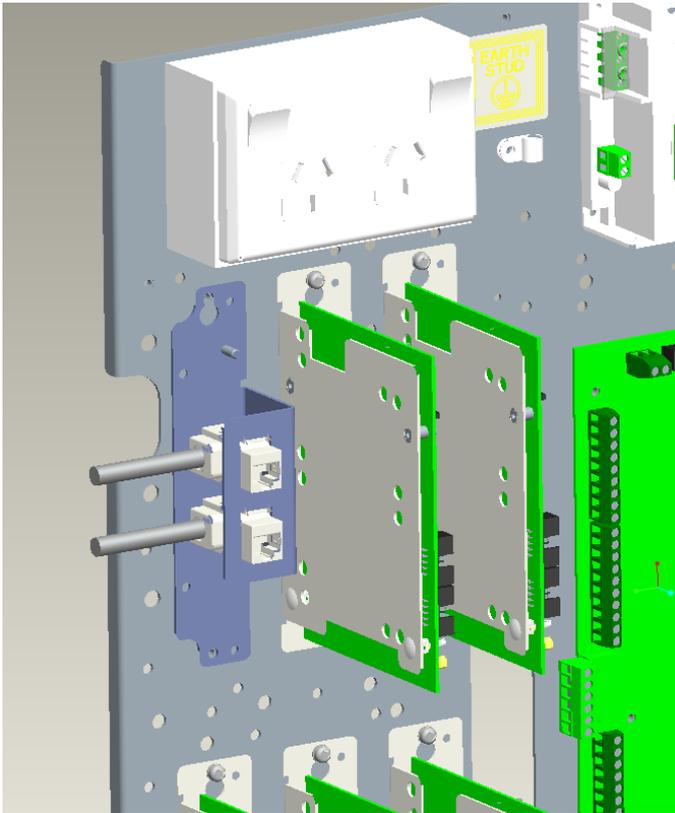
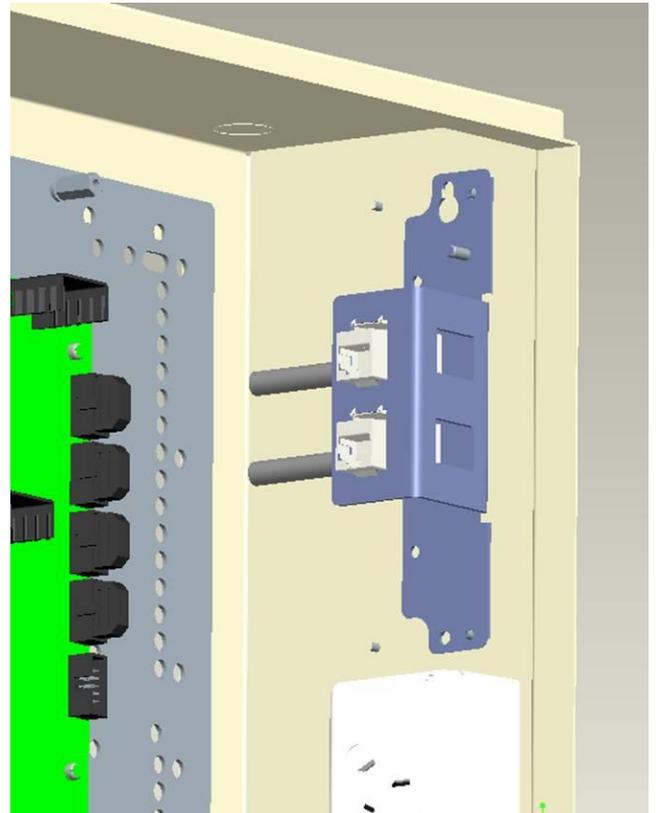


Fig 1 – MX1 Gear Plate Mounting



**Fig 2 – MX1 Slimline Inner Wall Mounting
(similar mounting in F3200 and MX4428 cabinets)**

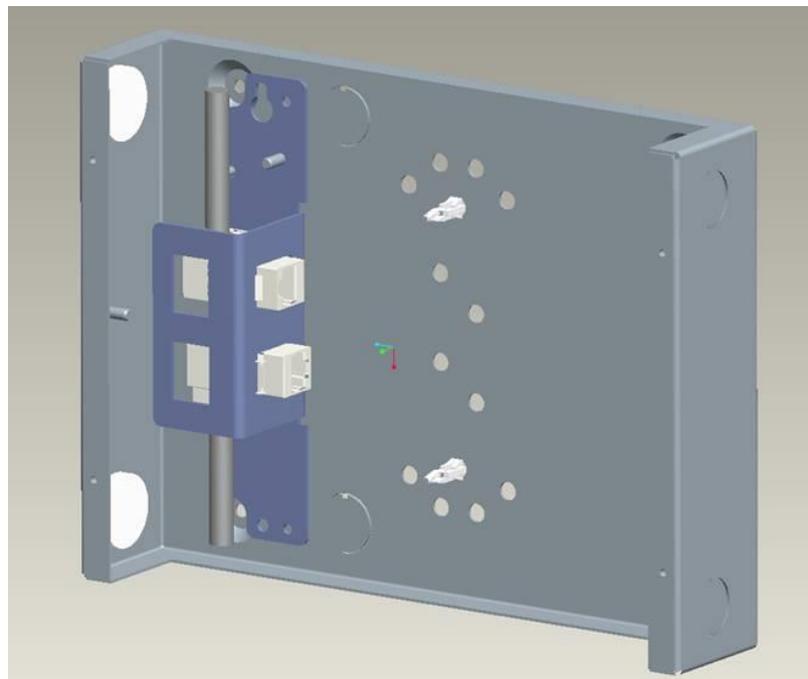


Fig 3 – Responder Box Mounting

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