

Installation of MT–RJ Jacks into Adapter Plates, Patch Panels, or Enclosure or Wall Box

FACEPLATE OR WALL OUTLET	AVAILABLE PORTS				
	Jack With Parallel Dress Clip	Jack Without Housing	Copper Cable (Category 3 or 5)	Maximum	NOTES
Angled Faceplate 406185-[] (Single Gang)	0	4	2	4	1, 2, 5, 6, 7
Flush Mount Faceplate 557505-[] (Single Gang)	0	2	1	2	2, 3, 6, 7
Flush Mount Faceplates 558088-[] (Single Gang) and 557502-[] (Staggered Single Gang)	0	4	2	4	1, 2, 6, 7
Flush Mount Faceplate 83935-[] (Double Gang)	0	4	2	4	1, 2, 4, 6, 7
Faceplate 83934-[] (Double Gang)	0	6	2	6	1, 2, 4, 6, 7
HIDEAWAY* Wall Outlet 406186-[] (Single Gang)	0	4	2	4	1, 2, 3, 5, 6, 7, 8
HIDEAWAY Wall Outlet 406187-[] (Single Gang)	2	2	2	4	1, 2, 3, 6, 7, 8
HIDEAWAY Wall Outlet 406188-[] (Double Gang)	4	4	4	8	2, 6, 7, 8
Low Profile HideOut* Wall Outlets 503997-[] and 503999-[] (Single Gang)	4	0	0	4	2, 3, 5, 6, 7
	2	0	2	4	1, 2, 3, 6, 7

NOTES:

- 1 Recommend no more than 2 copper outlets (Category 3 or Category 5) per wall box
- 2 Recommend using double-gang wall box
- 3 Single-gang wall box may be used when fiber management is available in the wall (fiber slack method)
- 4 Single-gang wall box may be used in conjunction with Double-Gang Surface Wall Box 569499-[]
- 5 Recommend that jack be installed into lower port only
- 6 Mud ring may be used when fiber management is available in the wall (fiber slack method)
- 7 If conduit or flexible raceway is used with wall box, recommend using 19-mm [.75-in.] minimum diameter and filling only 50% of diameter
- 8 Use MT-RJ 110Connect Jack Housing 1278568-[] for interior parts (refer to the customer drawing for available housing colors)

Figure 1

1. INTRODUCTION

This instruction sheet covers the installation of MT–RJ jacks described in Instruction Sheets 408–8718 (patch panel and workstation jacks) and 408–4555 (39mm patch panel jacks) into an adapter plate or patch panel for use in a rack– or wall–mount enclosure, an enclosure having an adapter plate or patch panel, or a wall box (using a faceplate or wall outlet). The MT–RJ jacks must be assembled and tested before installing them.



Dimensions in this instruction sheet are in metric units [with U.S. customary units in brackets]. Figures are not drawn to scale.

Reasons for reissue of this instruction sheet are provided in Section 4, REVISION SUMMARY.

2. DESCRIPTION (Figure 1)

The MT–RJ jacks fit into MT–RJ Solarum Enclosure 1206704–4, MT–RJ Patch Panel Mounting

Kit 1278329–1 or MT–RJ Push–Pin Adapter Plate 1278328–3 for use in enclosures.

The workstation jacks can also be installed in the faceplates or wall outlets listed in Figure 1 for use in wall boxes using the SL jack housing (included with the jack) or Parallel Dress Clip 1374206–1 (simplex) or 1374205–1 (duplex).

The 39mm patch panel jacks can also be installed in the wall outlets listed in Figure 1 for use in wall boxes using Parallel Dress Clip 1374206–1 (simplex) or 1374205–1 (duplex).

3. INSTALLATION

3.1. Tools and Materials

The following tools and materials are necessary for installation.

- Patch Panel Label Sheet 1116429-[]
- Cable Tie 603227-1 (152 mm [6 in.], black)
- Cable Tie Mount 608802–1 (19 mm [.75 in.], 4–way square)

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- 200× Microscope 1754767-1
- MT-RJ Plug Microscope Adapter 1754768-1
- .050-in. Ball Driver

3.2. Adapter Plate, Patch Panel, or Enclosure (For Use with All Jacks)

1. If applicable, install the patch panel or adapter plate into the enclosure.

2. From the BACK of the adapter plate or patch panel, insert the terminated jack into the appropriate port until the jack locks into place. An audible "snap" indicates that the jack is secure. See Figure 2.

3. Label the port. For the patch panel jack, remove an icon from the icon wheel (included with this jack only), and insert the icon into the icon hole (located directly above the port) on the adapter plate or patch panel, or label the port using the patch panel label sheet.

4. Dress the fibers through the fiber management rings provided in the enclosure. Refer to Figure 2.



DO NOT exceed minimum bend radii for the cable or fiber. ALWAYS avoid placing optical fiber under tension or torsion.





3.3. Wall Box



The wall box must be at least 50.8 mm [2 in.] deep.

Refer to Figure 1 for specifications on available faceplates and wall outlets. The faceplates have a wall protrusion clearance range (including cable connection) of 76 to 152 mm [3 to 6 in.], and

the wall outlets have a wall protrusion clearance of 12.7 mm [.50 in.]. Proceed with the following.

A. Using a Faceplate (For Use with Workstation SL Jack Housing Only)

1. Position approximately 381 to 508 mm [15 to 20 in.] of the copper cable out of the wall box. Make sure that approximately 127 to 152 mm [5 to 6 in.] of the jacket of the optical fiber is inside the wall box.

2. Terminate the data communications connector to the copper cable according to the instructions packaged with the connector.

3. Install the connector into the appropriate port in the faceplate.

4. Dress the cable and fiber around the inside of the wall box, wrapping the copper cable in the opposite direction from the optical fibers. Each wrap must end "UP." Refer to Figure 3.



If possible, feed excess cable and fiber through the wall box and into the wall. If a mud ring is used, feed excess cable and fiber into the wall.

CAUTION

DO NOT exceed minimum bend radii for the cable or fiber. ALWAYS avoid placing optical fiber under tension or torsion.

5. Segregate the cable and optical fiber (as much as possible) using the cable ties and cable tie mount, or similar method. Be careful not to deform or damage the cable or fiber with the cable ties. See Figure 3.





To prevent fiber breakage, it is important to segregate the copper cable and optical fiber.

6. Install the jack housing onto the terminated jack.

7. Carefully position the faceplate over the opening in the mounting surface, and secure the faceplate with the mounting screws.

B. Using a Wall Outlet

(For Use with Workstation Jack Housing or Jack Housing and Parallel Dress Clip or 39mm and Parallel Dress Clip)

1. Position approximately 381 to 508 mm [15 to 20 in.] of the copper cable out of the wall box. Make sure that approximately 178 to 203 mm [7 to 8 in.] of the jacket of the optical fiber is inside the wall box.

2. If using the HideOut wall outlet, terminate the data communications connector to the copper cable according to the instructions packaged with the connector. Install the connector into the appropriate port in the outlet base.

If using the HIDEAWAY wall outlet, feed the cable through the appropriate slot in the outlet base, then terminate the data communications connector to the cable according to the instructions packaged with the connector. Install the connector into the appropriate port in the outlet base.

3. Carefully position the outlet base over the opening in the mounting surface, and secure the base with the mounting screws. Make sure that the jacket of the fiber optic cable is exposed through the front of the base. See Figure 4.

4. Dress the optical fibers around the inside of the outlet base. For parallel dress, the fibers must exit the fiber optic connector slot adjacent to the jack. See Figure 4.

5. Install the jack housing or parallel dress clip onto the terminated jack. Then install the jack and housing or clip assembly into the appropriate fiber optic connector slot in the outlet base. If using the parallel dress clip, make sure that the open end faces the base. Refer to Figure 5.

6. Install the cover onto the base according to the instructions packaged with the wall outlet. Take care not to pinch optical fibers with the cover.

3.4. Connection

1. Remove the dust cover from the jack (retain and keep dust cover clean).

Using a HIDEAWAY or HideOut Wall Outlet With Jack Housing



Figure 4



Figure 5

2. Visually, or using the microscope fitted with the MT–RJ plug microscope adapter, inspect the ferrule end face. For requirements of a quality fiber finish, refer to Publication 410–5650–2.



TO AVOID DAMAGE to the ferrule end face, the end face must be inspected before connecting the jack.

Using a HIDEAWAY or HideOut Wall Outlet With Parallel Dress Clip

3.5. Removal

To remove the jack from the adapter plate or patch panel, refer to Figure 6, and proceed as follows:

1. Insert the tip of the ball driver into the release slot (located at the bottom front) of the jack to be removed.

2. Using slight pressure, push the ball driver straight into the slot until the jack is released from the port. Pull the jack out from the back of the port.



DO NOT push the front (or dust cover) of the jack or pull the fibers to remove the jack from the port.

Removing Jack or Jack Housing



Figure 6

4. REVISION SUMMARY

Revisions to this instruction sheet include:

- Updated document to corporate requirements
- · Replaced microscope and adapter in Paragraph 3.1