

10/100BASE-T PATCH PANEL		10/100/1000BASE-T PATCH PANEL			
Unshielded		Unshielded		Shielded	
AMPTRAC	Standard	AMPTRAC	Standard	AMPTRAC	Standard
1777042-1	1435965-1	1777041-1	1435971-1	1777105-1	1777098-1

Figure 1

1. INTRODUCTION

MRJ21 48-port straight patch panels are designed to be mounted onto a standard 483-mm [19-in.] Electronic Industries Alliance (EIA) rack or equipment cabinet as shown in Figure 1. AMPTRAC patch panels are designed for use with the AMP NETCONNECT AMPTRAC system. Read these instructions thoroughly before starting installation.

NOTE



For the AMPTRAC patch panel, these instructions assume that the reader understands the operation of equipment and software used with the AMPTRAC system.

AMPTRAC Retrofit Kit 1479951-1 can be installed onto the standard patch panel to enable the patch panel to be connected to the AMP NETCONNECT AMPTRAC system. Back Cable Manager Kits 1933352-[] must be used to support the cable.

NOTE



All numerical values in this instruction sheet are in metric units [with U.S. customary units in brackets]. Dimensions are in millimeters [and inches]. Figures are not drawn to scale.

Reasons for reissue of this instruction sheet are provided in Section 6, REVISION SUMMARY.

To obtain information on AMP NETCONNECT products, call PRODUCT INFORMATION at the number at the bottom of this page, or visit the AMP NETCONNECT website at www.ampnetconnect.com.

2. DESCRIPTION

Each 10/100BASE-T patch panel contains four MRJ21 receptacles (one per 2x6 RJ45 connector assembly), and each 10/100/1000BASE-T patch panel contains eight MR21 receptacles (two per 2x6 RJ45 connector assembly). The ports are identified by numbers printed on the front and on the back of the patch panel. Four 12-24 screws are included to mount the patch panel to the rack. In addition, AMPTRAC patch panels have a sensor pc board subassembly and two HDP-22 connectors to enable the patch panel to connect to the AMP NETCONNECT AMPTRAC system.

Shielded patch panels are designed to protect the internal electronic components from electromagnetic interference (EMI).

3. INSTALLATION

- Using the screws, mount the patch panel onto the rack. Refer to Figure 1.
- Plug a connector (from the trunk cable) into each MRJ21 receptacle (at the back of the patch panel). Refer to Figure 2. Make sure to align the keying features of the connector and receptacle. Ensure that the connector is fully seated, *then* using a small cross-recessed tipped screwdriver, turn the jack screws of the connector *clockwise* and tighten to a maximum torque of 0.23 Nm [2 lbf-in.].

CAUTION



To avoid damage to the connector, DO NOT over-tighten the jack screws. DO NOT use an automatic screwdriver.

- For AMPTRAC patch panels, plug the connector of an I/O cable assembly (PN 1499507-[]) from the analyzer into each HDP-22 connector (at the back of the patch panel). See Figure 2.
- Install the retro-fit kit onto the rack according to Instruction Sheet 408-10170. Using cable ties or similar fasteners, attach the cables to the tie-down bar. It is recommended to maintain a minimum bend radius of 50.8 mm [2 in.] when securing and routing cables. See Figure 2.

4. TROUBLESHOOTING

For port-to-cable pair cross-reference, refer to Figure 3.

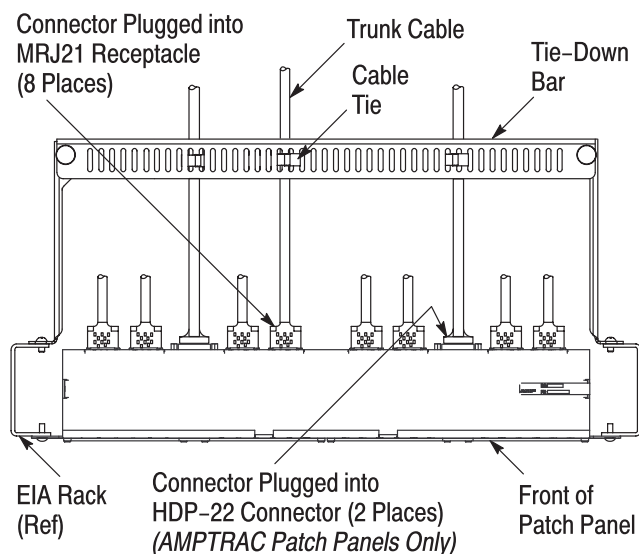
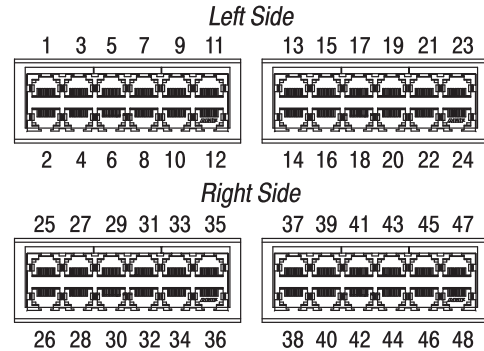


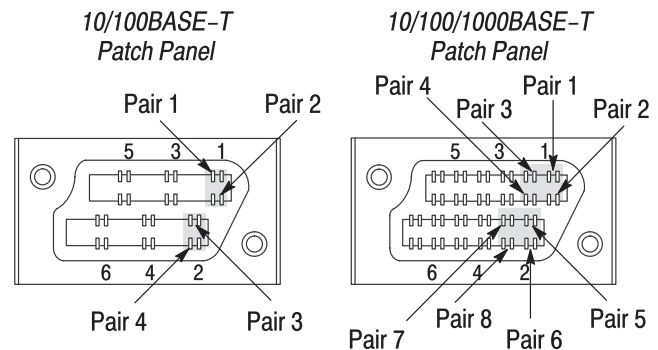
Figure 2

2×6 RJ45 Connector Assembly (Front of Patch Panel)



MRJ21 Receptacle (Back of Patch Panel)

Note: For reference, Ports Labeled 1 – 6 Are Shown



PORT				CABLE PAIRS	
				2 Pairs Per Port	4 Pairs Per Port
1	13	25	37	1, 2	1, 2, 3, 4
2	14	26	38	3, 4	5, 6, 7, 8
3	15	27	39	5, 6	9, 10, 11, 12
4	16	28	40	7, 8	13, 14, 15, 16
5	17	29	41	9, 10	17, 18, 19, 20
6	18	30	42	11, 12	21, 22, 23, 24
7	19	31	43	13, 14	1, 2, 3, 4
8	20	32	44	15, 16	5, 6, 7, 8
9	21	33	45	17, 18	9, 10, 11, 12
10	22	34	46	19, 20	13, 14, 15, 16
11	23	35	47	21, 22	17, 18, 19, 20
12	24	36	48	23, 24	21, 22, 23, 24

Figure 3

5. REPLACEMENT AND REPAIR

Patch panels are not repairable. DO NOT use a damaged patch panel or one with damaged or defective connectors.

6. REVISION SUMMARY

Revisions to this instruction sheet include:

- Added shielded patch panels
- Removed wiring distribution bracket kit, and modified Figure 2