AMP NETCONNECT® MRJ21™
24–Port 10/100/1000BASE–T
Straight Patch Panels 1777029–[ ]

Instruction Sheet
408–8974
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COMMSCOPE®

Figure 1

1. INTRODUCTION

MRJ21™ 24–Port 10/100/1000BASE–T Straight Patch Panels 1777029–[ ] 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. Patch Panel –2 is designed for use with the AMP NETCONNECT® AMPTRAC™ system. Read these instructions thoroughly before starting installation.

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.*

NOTE *For Patch Panel –2, these instructions assume that the reader understands the operation of equipment and software used with the AMPTRAC system.*

AMPTRAC Retrofit Kit 1479894–1 can be installed onto Patch Panel –1 to enable the patch panel to be connected to the AMP NETCONNECT AMPTRAC system. Back Cable Manager Kits 1933352–[ ] or Wiring Distribution Bracket Kit 557548–1 must be used to support the cable.

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

2. DESCRIPTION

Each patch panel contains four MRJ21 receptacles (one per 1×6 RJ45 connector assembly). The ports are identified by numbers printed on the front and on the back of the patch panel, and blank label pads are provided on the front for identifying connecting ports. Four 12–24 screws are included to mount the patch panel to the rack.

In addition, Patch Panel –2 has a pc board subassembly and HDP–22 connector to enable the patch panel to connect to the AMP NETCONNECT AMPTRAC system.

3. INSTALLATION

1. Using the screws, mount the patch panel onto the rack. Refer to Figure 1.

2. 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

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

3. Using the blank label pads, identify the connecting ports.

4. For Patch Panel –2, plug the connector of the I/O cable assembly (PN 1499507–[ ]) from the analyzer into the HDP–22 connector (at the back of the patch panel). See Figure 2.

5. Install the bracket onto the rack. Using cable ties or similar fasteners, attach the cables to the bracket. It is recommended to maintain a minimum bend radius of 50.8 mm [2 in.] when securing and routing cables. See Figure 2.

NOTE

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For installation procedure for the wiring distribution bracket, refer to Figure 2; for the back cable manager, refer to Instruction Sheet 408–10170.

4. TROUBLESHOOTING

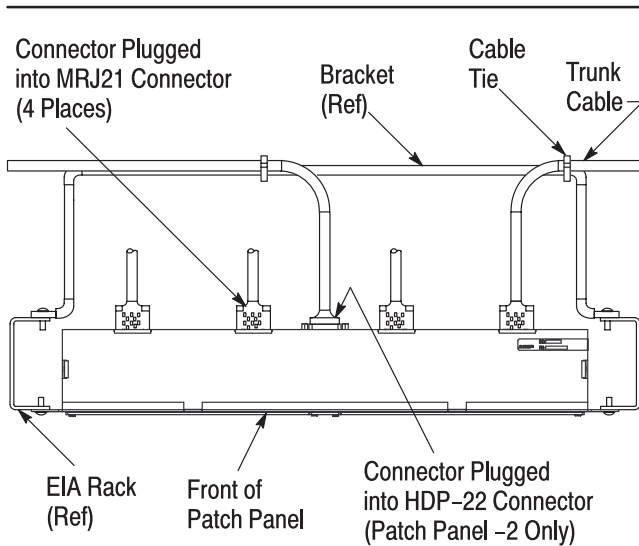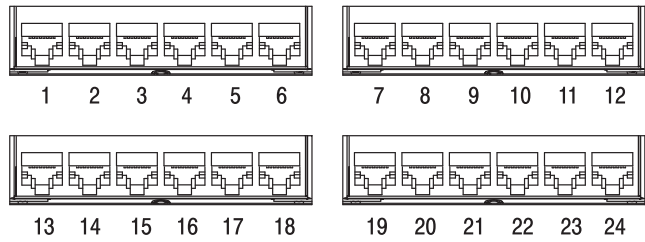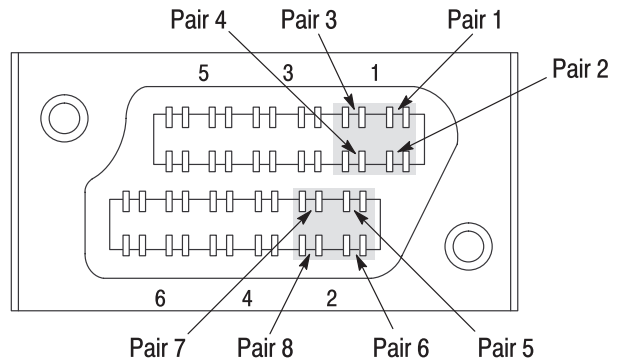For port–to–cable pair cross–reference, refer to Figure 3.

Connector Plugged into MRJ21 Connector (4 Places)

Bracket (Ref)

Cable Tie

Trunk Cable

EIA Rack (Ref)

Front of Patch Panel

Connector Plugged into HDP–22 Connector (Patch Panel –2 Only)

Figure 2

1 × 6 RJ45 Connector Assembly (Front of Patch Panel)

1 2 3 4 5 6   7 8 9 10 11 12

13 14 15 16 17 18   19 20 21 22 23 24

MRJ21 Receptacle (Back of Patch Panel)

Note: For Reference, Ports Labeled 1 Through 6 Are Shown

Pair 4   Pair 3   Pair 1   Pair 2

5   3   1

6   4   2

Pair 7   Pair 8   Pair 6   Pair 5

PORT		CABLE PAIRS (4 Pairs Per Port)
1	13	1, 2, 3, 4
2	14	5, 6, 7, 8
3	15	9, 10, 11, 12
4	16	13, 14, 15, 16
5	17	17, 18, 19, 20
6	18	21, 22, 23, 24
7	19	1, 2, 3, 4
8	20	5, 6, 7, 8
9	21	9, 10, 11, 12
10	22	13, 14, 15, 16
11	23	17, 18, 19, 20
12	24	21, 22, 23, 24

Figure 3

5. REPLACEMENT AND REPAIR

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

6. REVISION SUMMARY

Revisions to this instruction sheet include:
- Rebranded to CommScope