COMMSCOPE 360-PM-GS3-2U 360 PATCHMAX Modular Panel Instructions
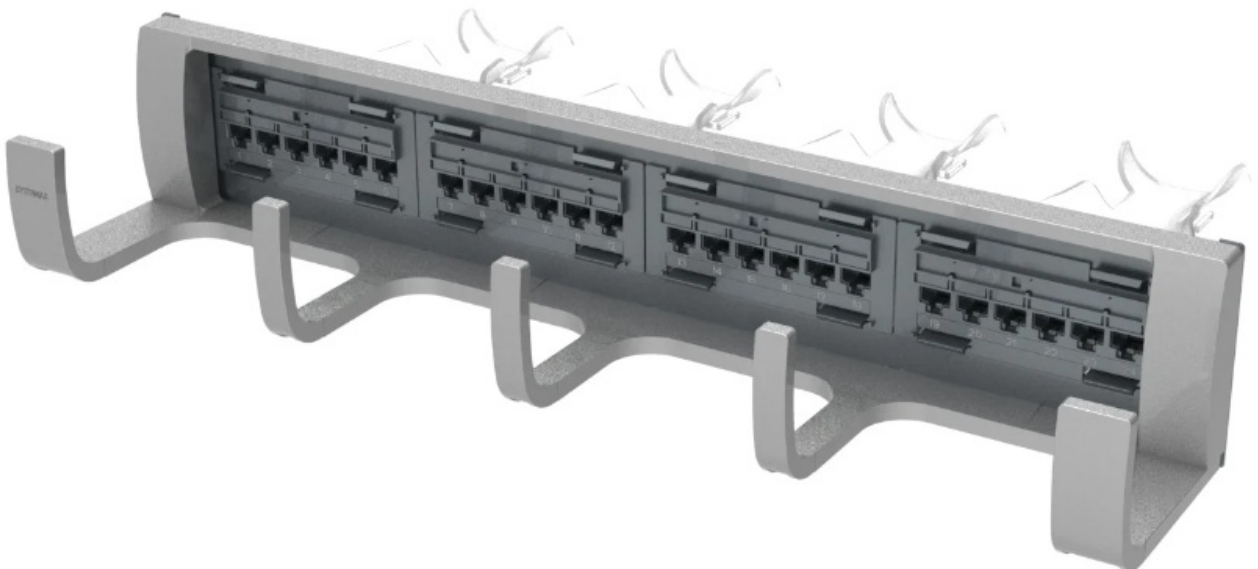
**COMMSCOPE 360-PM-GS3-2U 360 PATCHMAX Modular Panel**

Contents

General

The SYSTIMAX 360™ PATCHMAX modular panel can be used for both EIA-T568A or EIA-T568B wiring applications and is an approved component for use in SYSTIMAX GigaSPEED®, and GigaSPEED X1OD systems. The panel mounts in a standard 19-inch equipment rack and includes integrated front cord management, removable rear cable management, and termination manager kit.

Ordering information is listed below.

Material ID	Part No.	Description
760102244	360-PM-GS3-2l J	**360 PATCHMAX** 2lJ 24-port panel with GS3-DM 6-oack modules
760102251	360-PM-GS6-2U-24	**360 PATCHMAX** 2U 24-port panel with GS6-DM 6-oack modules
760108993	360-PM-KIT-2U-24	**360 PATCHMAX** 2U 24-port panel without modules
760117366	360-PM-GS3-2U-48P	**360 PATCHMAX** 2U 48-port panel with GS3-DM 12-pack modules
760128207	360-PM-GS6-2U-48	**360 PATCHMAX** 2U 48-port panel with GS6-DM 12-oack modules
760117408	360-PM-KIT-2U-48	**360 PATCHMAX** 2U 48-port panel without modules

SYSTIMAX 360™ PATCHMAX® Modular Panel, 24-Port and 48-Port
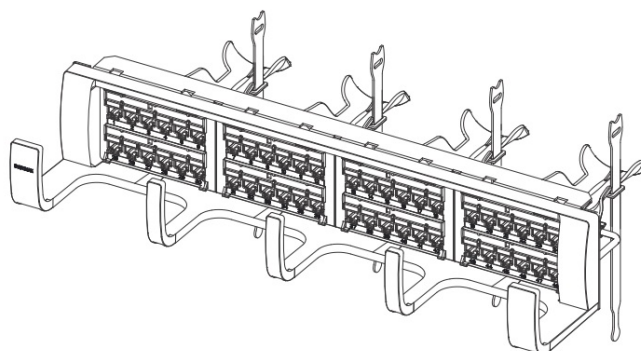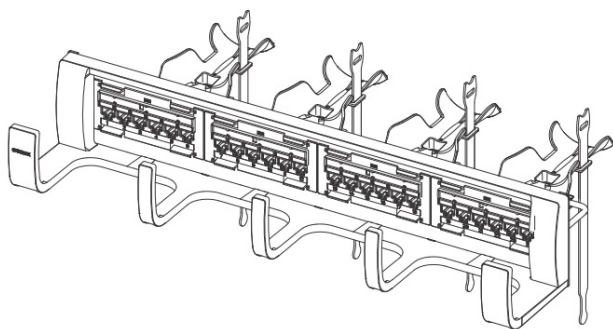
How to Contact Us

- To find out more about CommScope® products, visit us on the web at www.commscope.com/

- For technical assistance:
  - Within the United States, contact your local account representative or technical support at 1-800-344-0223. Outside the United States, contact your local account representative or PartnerPRO™ Network Partner.
  - Within the United States, report any missing/damaged parts or any other issues to CommScope Customer Claims at 1-866-539-2795 or email to **claims@commscope.com**. Outside the United States, contact your local account representative or PartnerPRO Network Partner.

Specifications

Wire Termination

Wire Size:
22-24 AWG (0.64 – 0.51 mm) Solid Copper
22-24 AWG (0.64 – 0.51 mm) Seven Stranded Copper

Insulation Size:
0.042 inch maximum DOD

Insulation Types:
Polyethylene, Polypropylene and FEP

IDC Reterminations:
20 minimum

Modular Jack Mating Cycles:
750 minimum

Environmental Data

Temperature Range:
-40°F (-40°C) to 158°F (70°C) (Storage)
14°F (-10°C) to 140°F (60°C) (Operational)

Humidity:
95% Noncondensing

Tools Required

- Phillips head screwdriver
- Cable jacket scoring tool
- D-914 punch tool with M110 blade

Parts List

Verify parts against parts list below:

Quantity		Description
24-Port	**48-Port**	
1	1	Panel supplied with either GS3-DM or GS6-DM distribution modules
1	1	Rear cable manager
4	8	Rear labels *
4	4	Hook-and-loop straps
4	4	Mounting screws, 12-24 x 1/2″
1	1	Front cord management
1	1	Front bezel
1 kit	2 kits	Termination managers
1	2	Front label card (4 labels per card)
1	2	Label cover card (4 label covers per card)
1	1	Instruction sheet

* Not included if module is preinstalled with combined T568A&B wiring designation label.

Separately Orderable Items

Material ID	Description
760102269	**360 PATCHMAX** GS3-DM 6-pack distribution module
760102277	**360 PATCHMAX** GS6-DM 6-pack distribution module
760117382	**360 PATCHMAX** GS3-DM 12-pack distribution module
760128215	**360 PATCHMAX** GS6-DM 12-pack distribution module
760199760	Spare termination manager kit

⚠️ WARNING – Important Safety Instructions

When using this product, the following basic safety precautions should be followed to reduce the risk of fire, electric shock, and injury to persons:

1. Never install communications wiring in wet locations unless it is designed for wet locations.
2. Never install this product during a lightning storm. There is a remote risk of electric shock.

3. Never touch uninsulated communication wiring or terminals unless the communication circuit has been disconnected at the network interface.
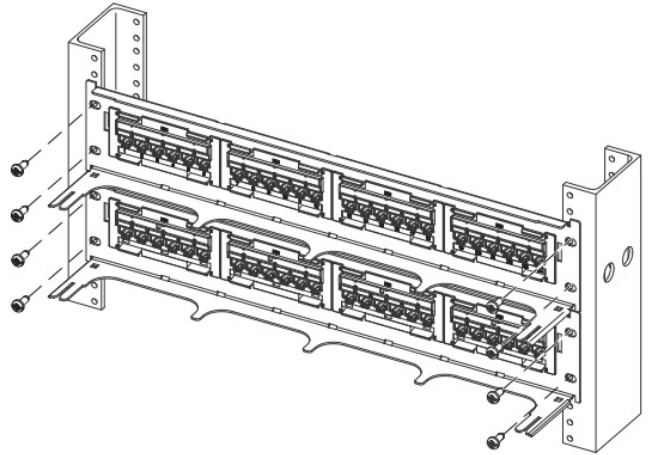
CAUTION: All wiring that connects to this equipment must meet applicable local and national building codes and network wiring standards for communication cable.

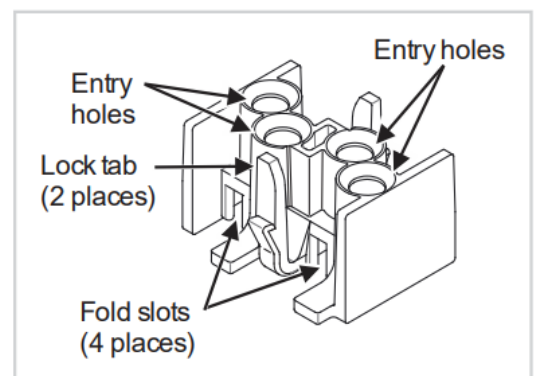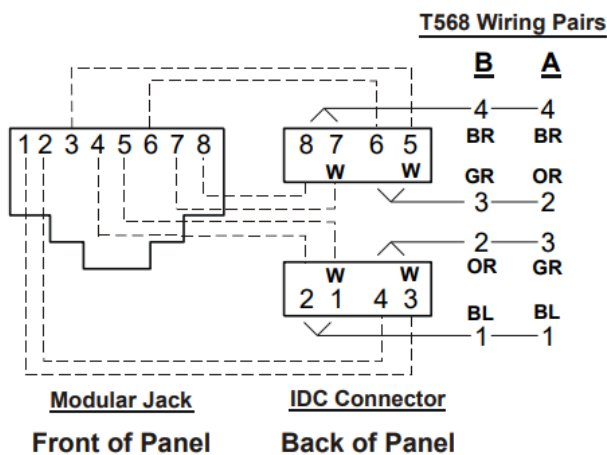## Installation Instructions

Step 1 – Mount Panel to Rack
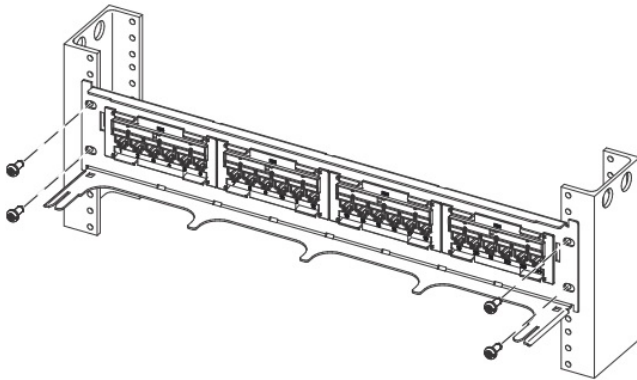
Single Panel Mounting   **Multiple Panel Mounting**

1. Mount panel(s) to rack or cabinet using the four mounting screws provided.
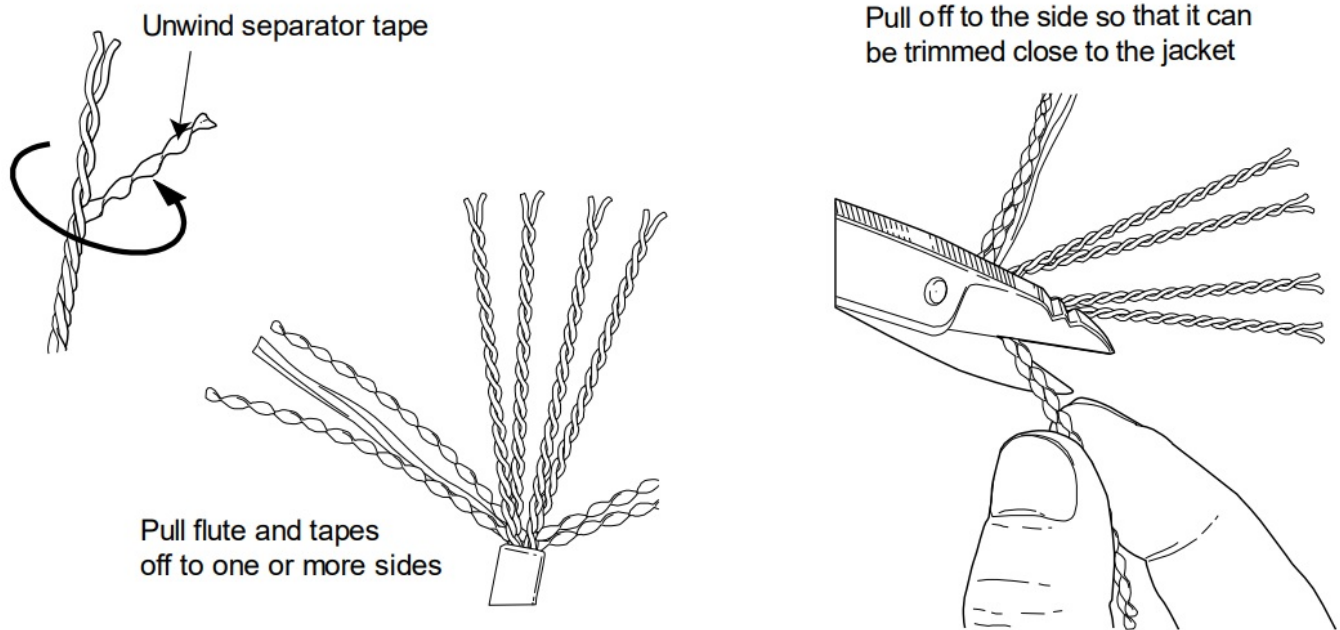
Step 2 – Module Termination

Note: The module comes with a T568B wiring designation label installed. If T568A wiring is desired, first remove the "B" type label and then place the "A" type label. Do not place the "A" type label on top of the "B" type label. If the module comes with a combined T568 A&B wiring designation label installed, choose T568A wiring or T568B wiring according to label designation.

1. Prepare cable for IDC termination. Terminate conductors on the IDC terminals per the wiring diagram shown above and utilizing the termination manager.
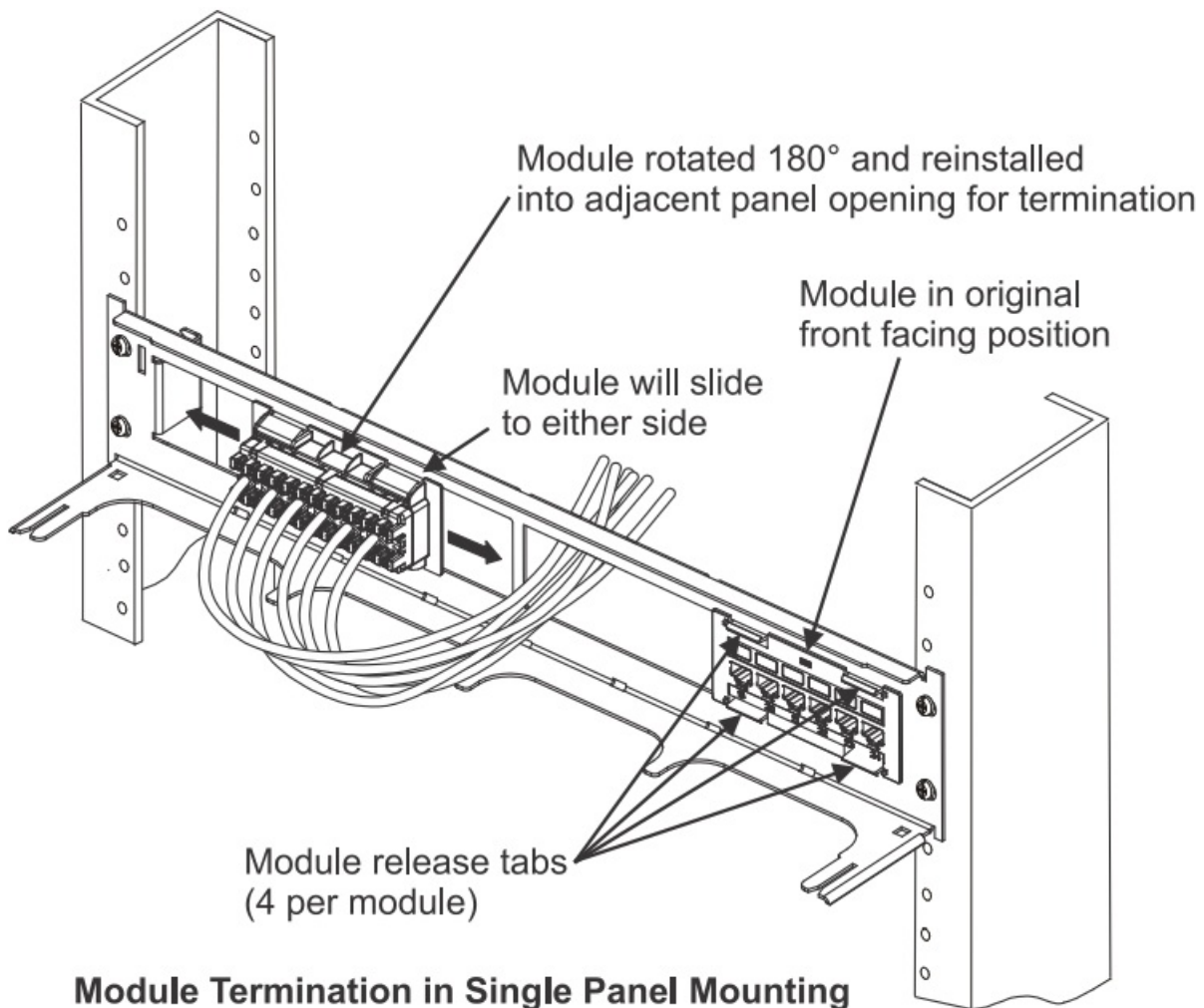
2. See pages 11 and 12 for correct procedure on using the termination managers.

Preparation of X10D 91B Series Cable, 95B Series Cordage, or Xpress 88 Series Cable for Termination

Unwind separator tape

Pull flute and tapes
off to one or more sides

Pull off to the side so that it can
be trimmed close to the jacket

Preparation of the SYSTIMAX Giga SPEED X10D 91B series cable, 95B series cordage, or Xpress® 88 series cable is shown above. For complete instructions on preparing the GigaSPEED X10D 91B series cable, 95B series cordage, or Xpress® 88 series cable for termination, see instruction sheet 860469402.

Front Termination Procedure

Module rotated 180° and reinstalled into adjacent panel opening for termination

Module in original front facing position

Module will slide to either side

Module release tabs (4 per module)

Module Termination in Single Panel Mounting

Module rotated 180° and reinstalled into panel opening above for terminating

Module installed in this panel opening after termination
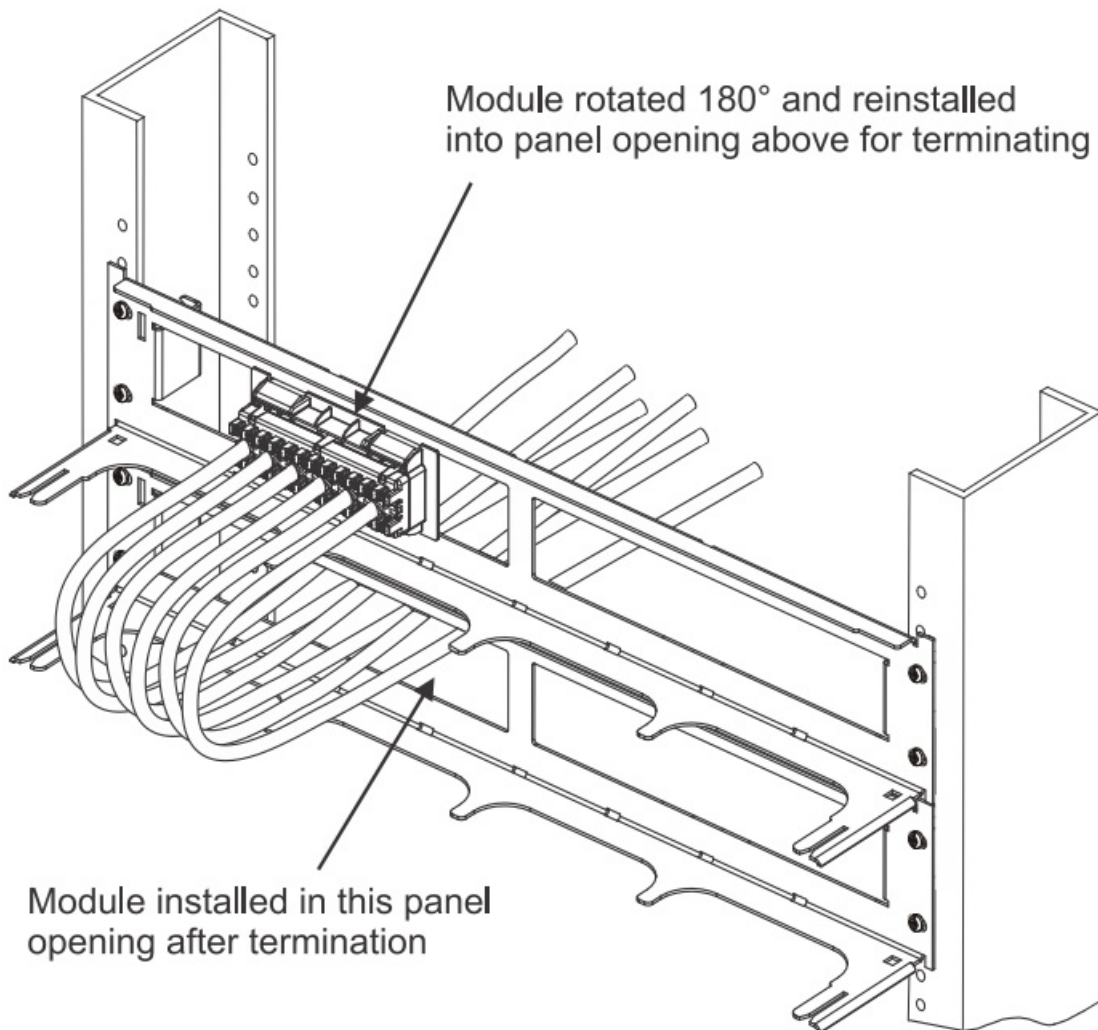
Module Termination in Multiple Panel Mounting

1. Preinstall rear cable manager as outlined in Step 3 and loosely secure the tie wraps so that cables can be pulled out and pushed in during front termination.
2. Depress four tabs on a 6-pack module (two tabs on a 12-pack module) and remove module from panel opening and rotate 180º so that rear of module is facing forward. Temporarily snap module backwards into an adjacent empty panel opening for terminating as shown on previous figures.
   Note: It is necessary to temporarily remove modules from opposite panel opening of module being terminated to facilitate the front cabling procedure. If adjacent module is already terminated, pull module out and push cables to one side to allow space to temporarily install module being terminated into opening.
3. Pull an adequate length of cables through panel opening for the terminated module and mark the jacket ring points. Verify that the cables can be pushed back into final position without snagging.
4. Prepare cables and punch down to module using punch-down tool with M110 blade on HI setting and termination managers per the instructions on page 4.
   Note: Hold module with one hand to secure it from sliding during punch down.
5. After all cables are terminated, remove module and rotate 180º so that front of module is again facing forward. Position module back into panel opening that cables were pulled through and snap into place.
6. After modules are terminated, check to verify proper cable positioning. If access to rear is available, proceed to Step 3.

Rear Termination Procedure
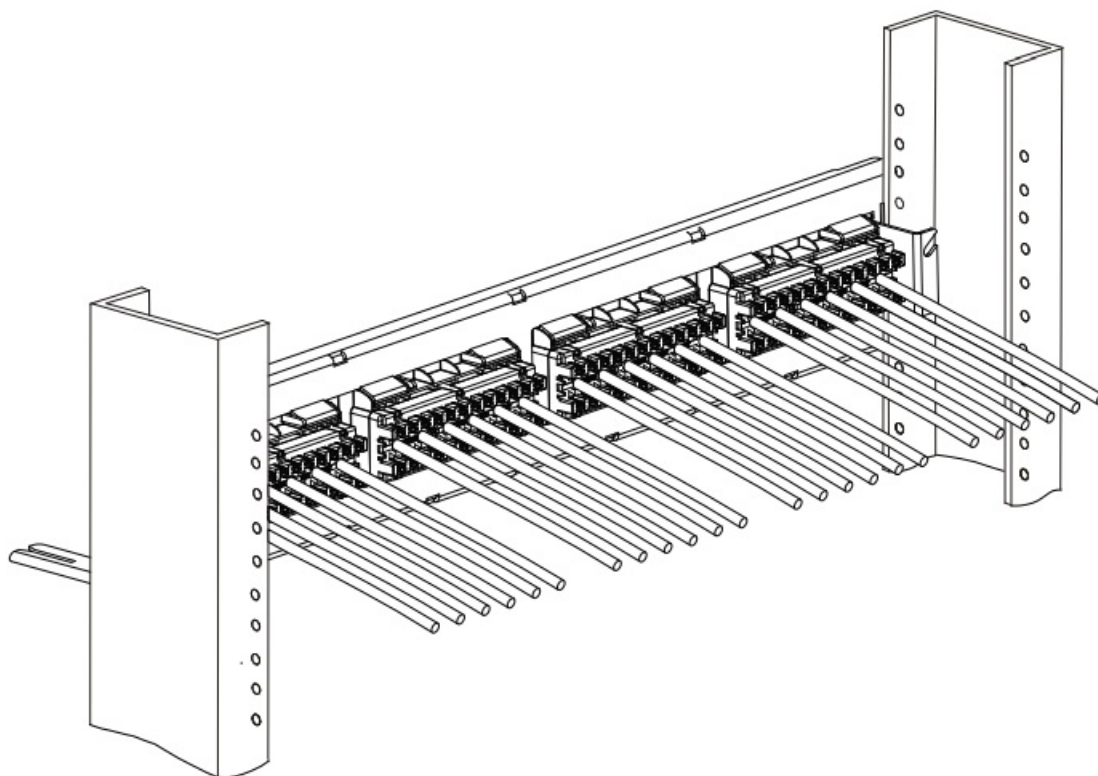
Note: Do not remove module from panel opening.

1. Establish proper lengths of cables to the modules so they can be positioned in the rear cable troughs after installation in Step 3 and mark the jacket ring points.
2. Prepare cables and punch down to module using the punch-down tool with M110 blade on HI setting and the termination managers per the instructions on page 4.
3. After the modules are terminated, proceed to Step 3.

Step 3 – Assemble and Install Rear Cable Manager

Hook-and-loop straps

Cable bar

Cable troughs installed

Slots on cable troughs
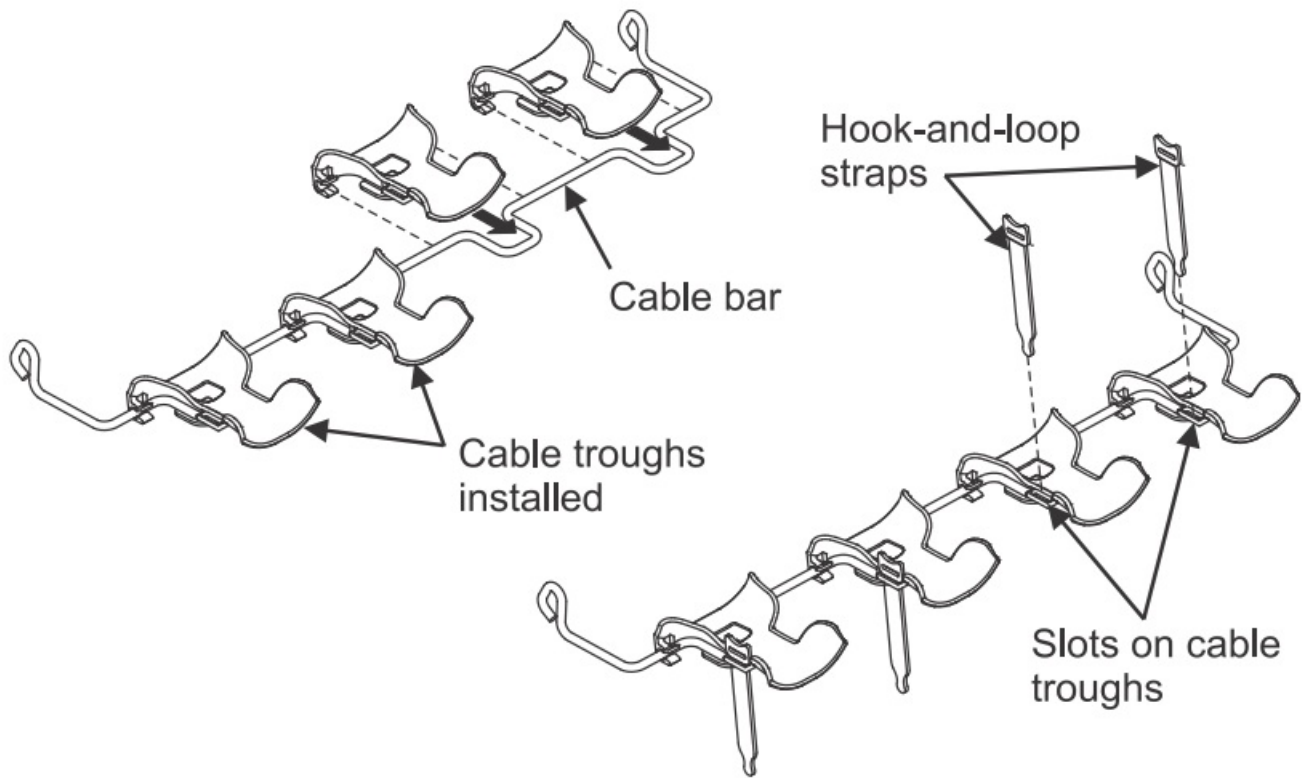
1. Attach the four cable troughs onto bar as shown and insert four hook-and-loop straps into slots in cable troughs.
2. Attach cable bar to rear of panel.
3. Lay cables evenly in cable troughs and secure using hook-and-loop straps as shown. For front termination leave straps loose to allow for access of modules.
4. The following figure illustrates a typical completed installation.
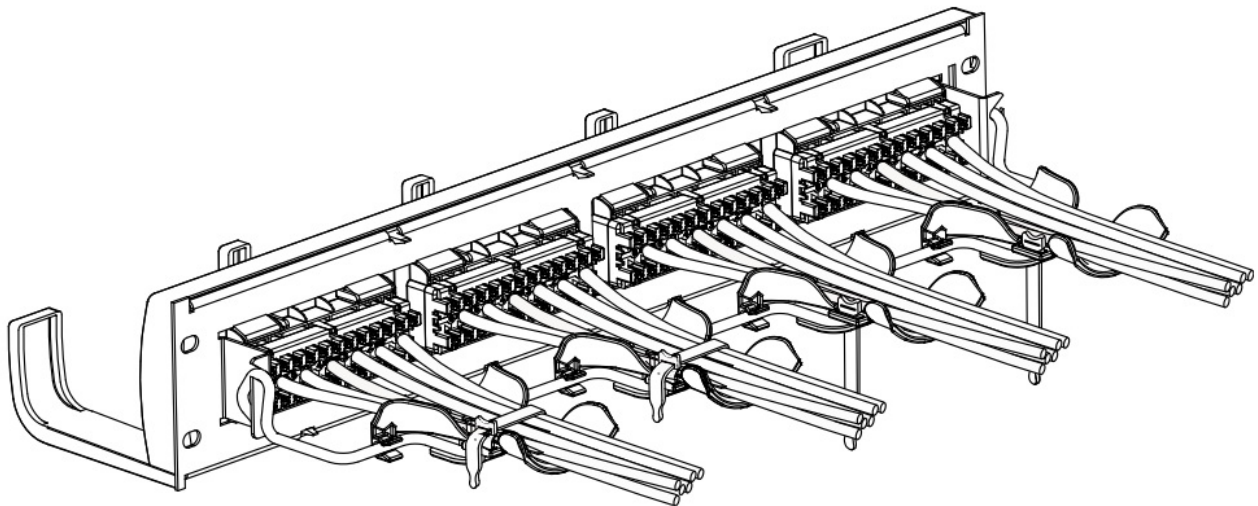
Step 4 – Install Front Cord Management, Front Bezel, Labels and Label Covers

Mounting arm

Front cord management
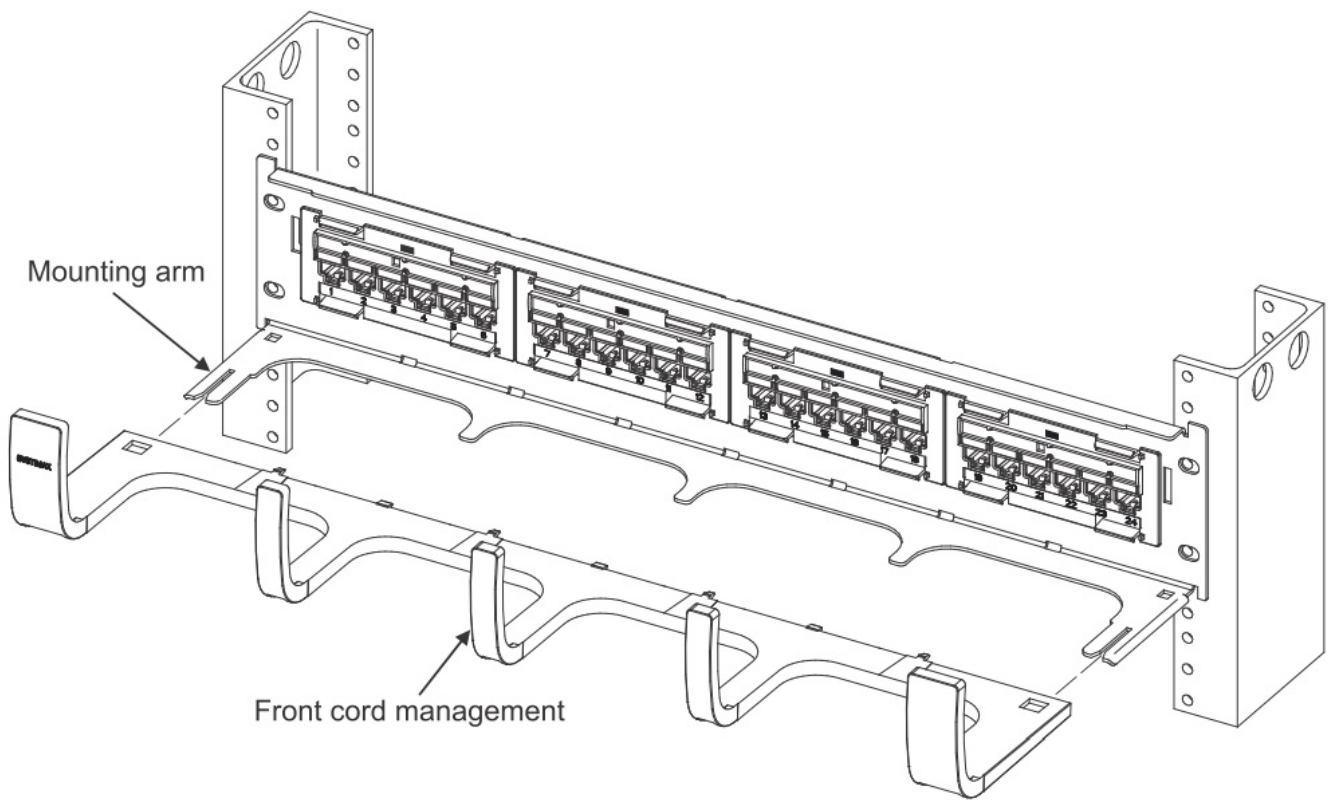
1. Position front cord management as shown and slide onto mounting arms until it is seated.

Top retention tabs

Bottom retention tab and slot

Bottom retention tab and slot
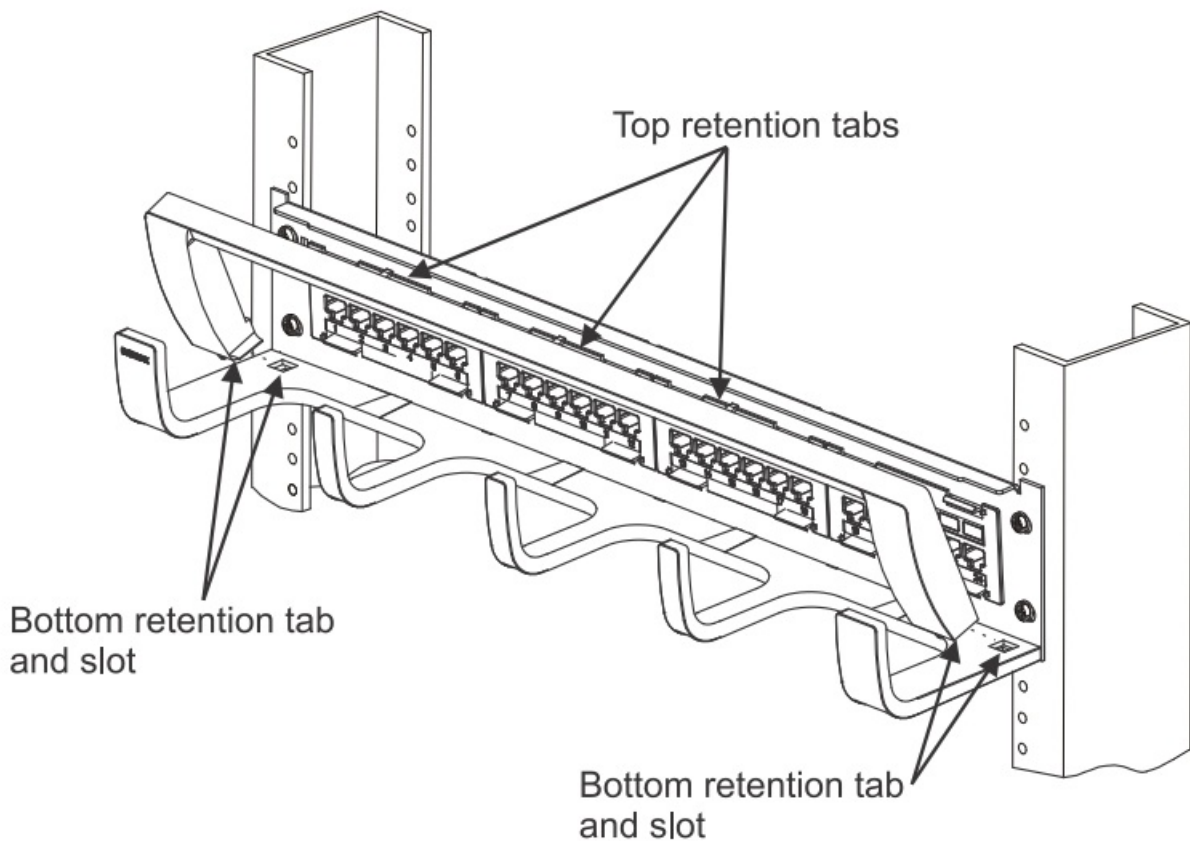
2. Position front bezel at an angle as shown and insert two bottom retention tabs into slots in cord management.
3. Pivot top of bezel towards panel and insert three tabs on top of bezel into slots in panel until an audible click is heard.

Distribution modules (4 places)

Label covers (4 places)

Labels (4 places)
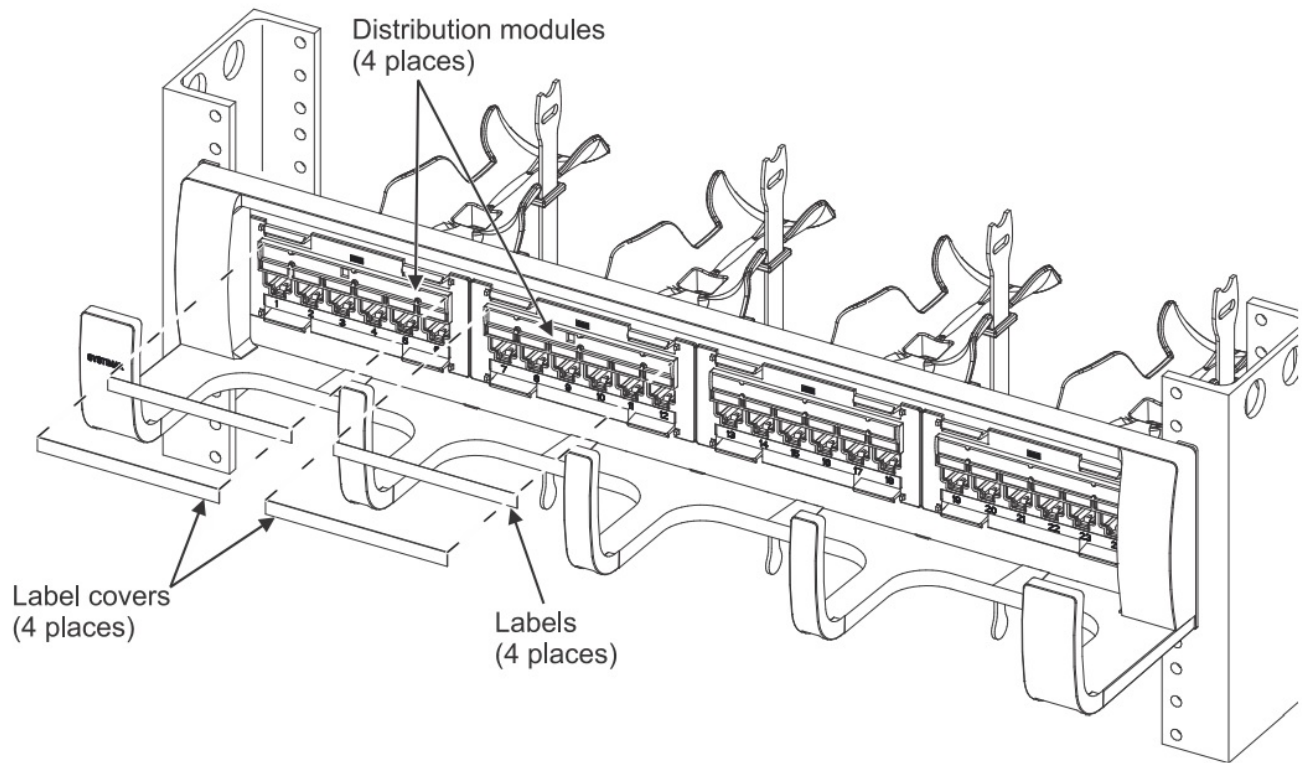
Print the port designations on the white label cards provided. Slide labels and label covers into the label holders from either end. Each label holder will accommodate labels up to .265 inches (6.7mm) high x 3.50 inches (89mm) wide.

4. Blank, voice, and data icons can be ordered separately in a wide variety of colors and placed into the pockets in the lower portion of the label holders.
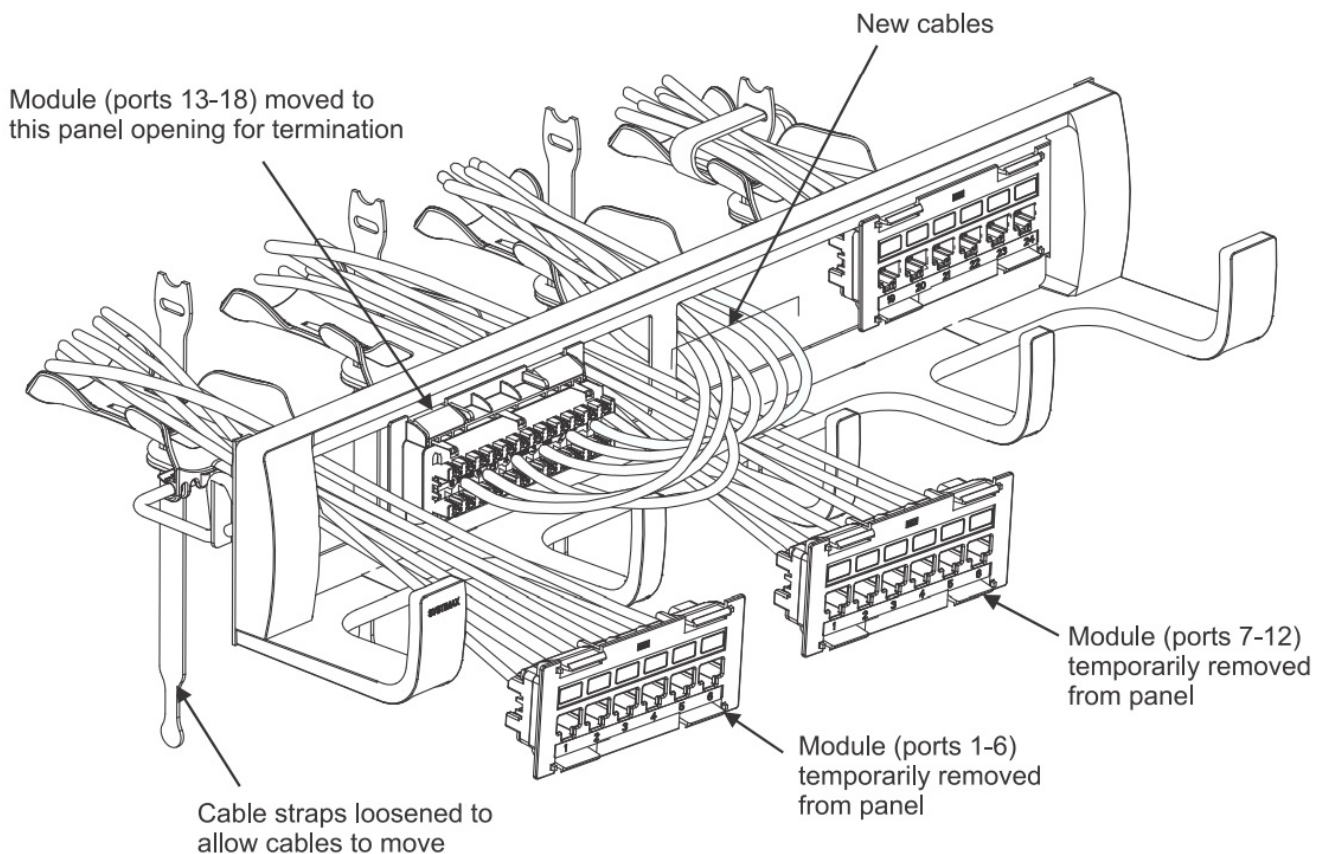
   Note: Product code M61K-XX (blank, voice, and data icons) to be ordered separately. XX denotes the color abbreviation.

5. To print a designation label, go to **http://www.commscope.com/Resources/Labeling-Templates** and scroll down to 360 Panels and Shelves. Select the proper label template:

   - 360 Evolve-360 PATCHMAX UNP Label Sheet A4 (760186502)
   - 360 Evolve 360 PATCHMAX UNP Label Sheet US LTR (760183244)

     Note: Labeling website has two options for printing labels: letter size and A4 size.

Additional Front Termination Access Instructions

New cables

Module (ports 13-18) moved to
this panel opening for termination

Module (ports 7-12)
temporarily removed
from panel

Module (ports 1-6)
temporarily removed
from panel

Cable straps loosened to
allow cables to move

1. Remove two terminated or un-terminated modules (ports 1-6 and ports 7-12) from panel opening to free up space for new termination sequence. Leave modules out of panel.

2. Remove module to be terminated (ports 13-18) from panel, rotate 180° and temporarily reinstall in adjacent panel opening.

3. Pull termination manager off by squeezing lock tabs and re-terminate with a replacement termination manager as previously described in Step 2.

4. Remove newly terminated module, rotate 180° so that front of module again faces forward and reinstall in proper panel opening.

5. Replace modules removed for this sequence back into place in panel.

Patch Panel Termination Manager Instructions

The termination managers provide pair positioning, control, and strain relief features to the rear termination area of the panel. See **Figure 1.** Instructions for using the termination manager are listed below.
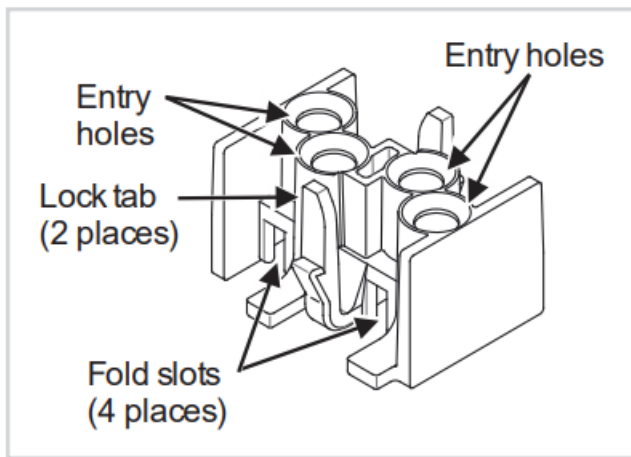
Figure 1. Termination Manager

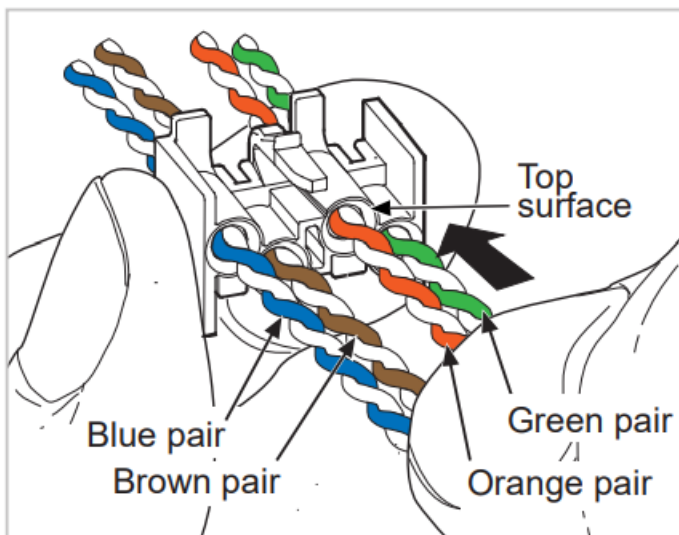**Feed Pairs into Termination Manager (Figure 2)**

Figure 2. Feed Pairs into Termination Manager

1. Trim jacket back at least 3 inches (76mm) to expose twisted pairs.
2. Without crossing over or rearranging pairs out of the jacket, position pairs in-line per pair colors below: T568B Wiring Application (Shown) Blue, Brown, Orange, Green T568A Wiring Application Blue, Brown, Green, Orange
3. Insert pairs through 4 holes on top surface of termination manager, one pair per hole, as shown.
4. Continue to feed pairs through termination manager until resistance is encountered at the jacket. This will usually be about 1/4 inch (6mm) from the jacket.
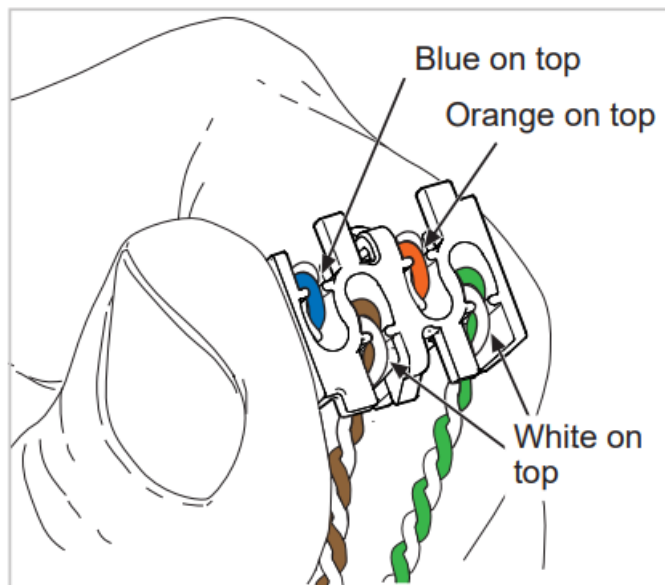
   Fold Pairs into Slots (Figure 3)

Figure 3. Fold Pairs Back into Slots

5. Fold each pair over into adjoining slots on bottom end of termination manager. Conductor colors must be arranged in the slots as listed below:

T568B Wiring Application (Shown)

BL/OR Pairs – Blue/Orange conductors on top

BR/GR Pairs – both White conductors on top

T568A Wiring Application

BL/GR Pairs – Blue/Green conductors on top

BR/OR Pairs – both White conductors on top

Important: Add twist as needed to align pairs with slots. Never remove twist for any pair. Do not allow pairs to untwist inside termination manager or inside cable jacket.

6. Ensure that both conductors of each pair are in slots completely without being pinched over bottom end surface.

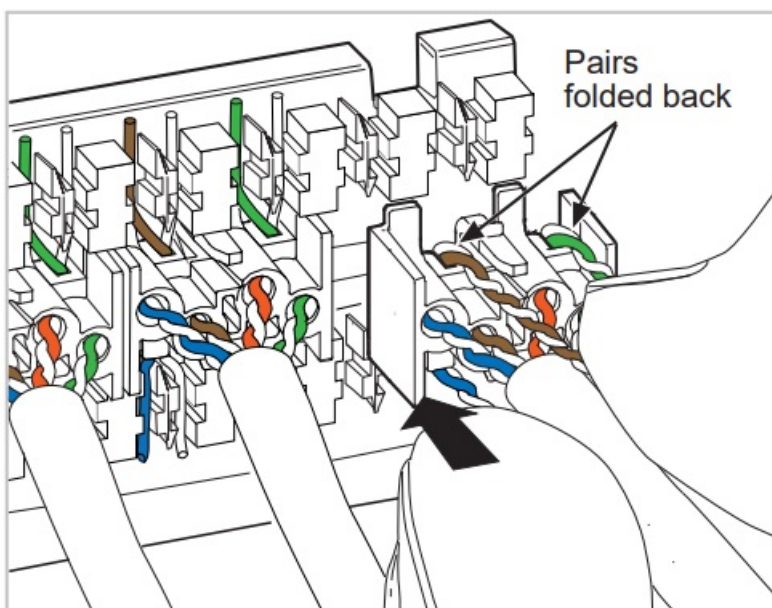**Snap Termination Manager onto Rear Housing (Figure 4)**

Figure 4. Snap Termination Manager onto Rear Housing

7. Snap assembled termination manager onto rear housing with pair colors in proper position. Push on using the termination manager housing, not by pushing with the cable. (Ensure that both lock tabs on manager fully seat into rear housing).

8. After termination manager is snapped onto rear housing, untwist individual pairs fully and line up correct color conductor and white conductor with the label on the rear housing.

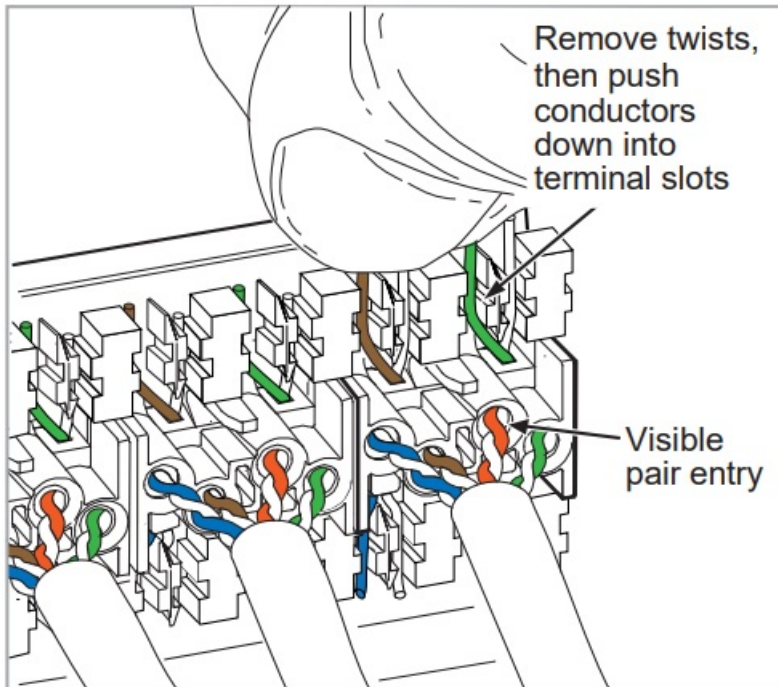**Seat Wires into IDC Terminal Slots (Figure 5)**

Figure 5. Seat Untwisted Pairs into IDC Terminal Slots

9. Grasping each untwisted pair, push the conductors down into IDC terminal slots to seat them before punching down. Seat down into slots as far as possible. (It may be easier to use needle nose pliers to perform this task).

10. Using the D-914 punch tool with M110 blade on HI impact setting, punch down conductors making sure the tool is straight and that conductors fully engage in the IDC terminals. Stagger the punch-down tool up and down, so that it stays in alignment with the staggered terminal slots.

Recommendations to Aid Assembly

1. The termination manager should be snapped onto the rear housing immediately after the pairs have been fed and folded over into the slots. All termination managers should be installed on the panel before proceeding to seat and punch down conductors.

2. Flex cables down for easier access, then seat and punch down the entire top row of the panel.

3. Flex cables up for easier access, then seat and punch down the entire bottom row.
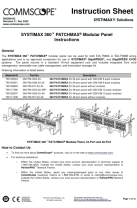
Customer Support

For RoHS Inquiries:
CommScope Inc.

Corke Abbey, Bray
Co. Dublin, Ireland
Attn: Legal Department

This product is covered by one or more U.S. patents or their foreign equivalents. For patents, see www.commscope.com/ProductPatent/ProductPatent.aspx

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Documents / Resources

	[**COMMSCOPE 360-PM-GS3-2U 360 PATCHMAX Modular Panel**](#) [pdf] Instructions 360-PM-GS3-2U 360 PATCHMAX Modular Panel, 360-PM-GS3-2U, 360 PATCHMAX Modular Panel, PATCHMAX Modular Panel, Modular Panel, Panel