

Instruction Sheet 860488808 Revision E / Dec 2022

SYSTIMAX[®] Solutions

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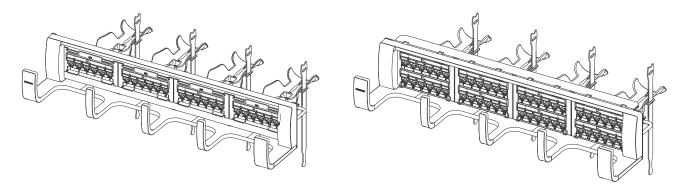
SYSTIMAX 360[™] PATCHMAX[®] Modular Panel Instructions

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-GS3-2U | 360 PATCHMAX 2U 24-port panel with GS3-DM 6-pack modules |
| 760102251 | 360-PM-GS6-2U-24 | 360 PATCHMAX 2U 24-port panel with GS6-DM 6-pack 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-pack 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 http://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 Authorized Business Partner.
 - Within the United States, report any missing/damaged parts or any other issues to CommScope Customer Claims at 1-866-539-2795. Outside the United States, contact your

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For RoHS Inquiries: CommScope Inc. Corke Abbey, Bray Co., Dublin, Ireland Attn: Legal Department local account representative or Authorized Business 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 ٠
- 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 | Description |
| 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 |

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 |
| 760051201 | Spare termination manager kit |

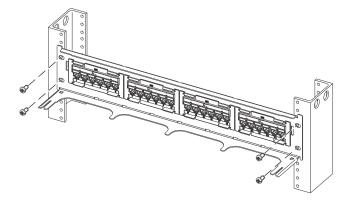
WARNING – Important Safety Instructions

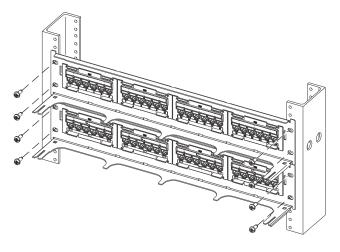
When using this product, the following basic safety precautions should be followed to reduce the risk of fire, electric shock, and injury to persons:

- 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.

Step 1 – Mount Panel to Rack

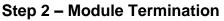


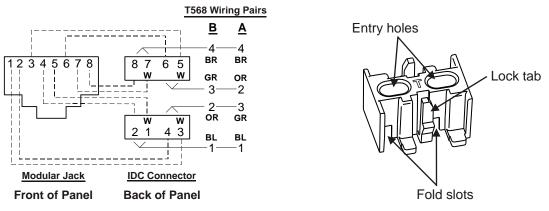


Single Panel Mounting

Multiple Panel Mounting

1. Mount panel(s) to rack or cabinet using the four mounting screws provided.





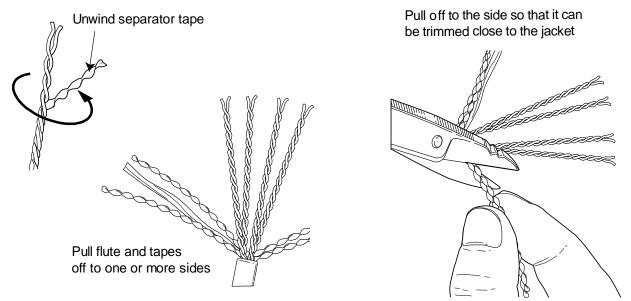
T568 Wiring Diagram

Termination Manager

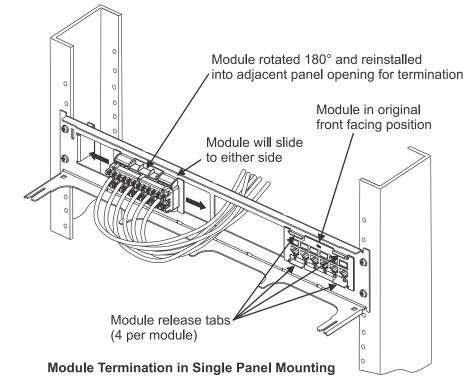
Note: The module comes with a T568B wiring designation label installed. If T568A wiring is desired, first remove the "B" type label and then place the "A" type label. **Do not place the "A" type label on top of the "B" type label.**

- 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.

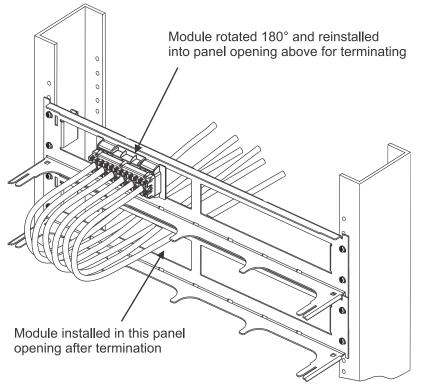
Preparation of X10D 91B Series Cable, 95B Series Cordage, or Xpress 88 Series Cable for Termination



Preparation of the SYSTIMAX GigaSPEED 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 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 180° 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.

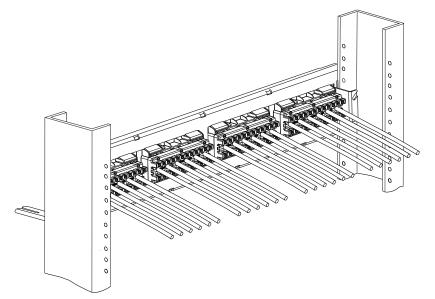
Note: It is necessary to temporarily remove modules from opposite panel opening of module being terminated to facilitate the front cabling procedure. If adjacent module is already terminated, pull module out and push cables to one side to allow space to temporarily install module being terminated into 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 180° 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.

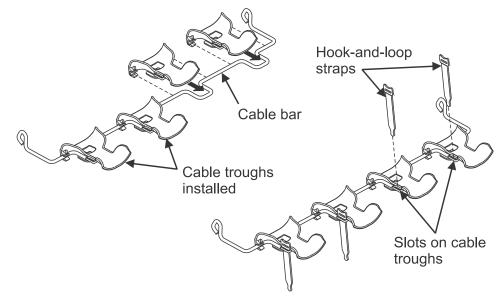
Rear Termination Procedure



Note: Do not remove module from panel opening.

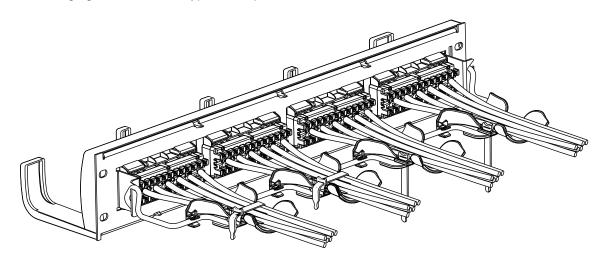
- 1. Establish proper lengths of cables to the modules so they can be positioned in the rear cable troughs after installation in Step 3 and mark the jacket ring points.
- 2. Prepare cables and punch down to module using the punch-down tool with M110 blade on HI setting and the termination managers per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

Step 3 – Assemble and Install Rear Cable Manager

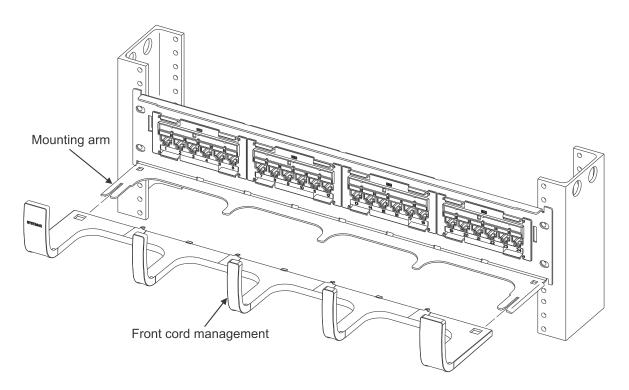


1. Attach the four cable troughs onto bar as shown and insert four hook-and-loop straps into slots in cable troughs.

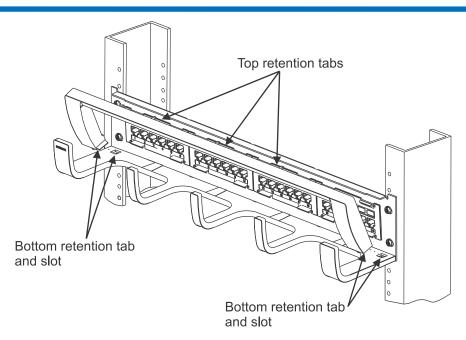
- 2. Attach cable bar to rear of panel.
- 3. Lay cables evenly in cable troughs and secure using hook-and-loop straps as shown. For front termination leave straps loose to allow for access of modules.
- 4. The following figure illustrates a typical completed installation.



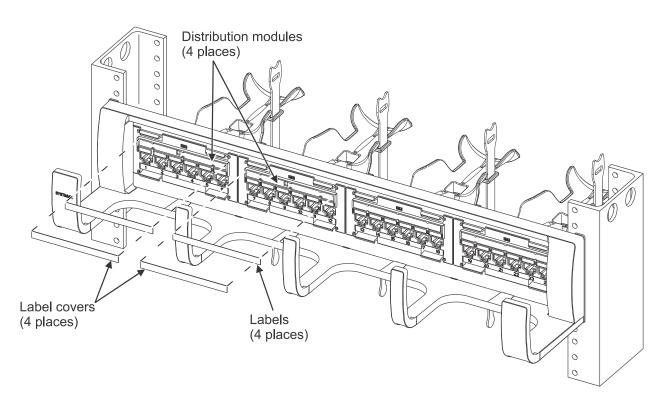
Step 4 – Install Front Cord Management, Front Bezel, Labels and Label Covers



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



- 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.



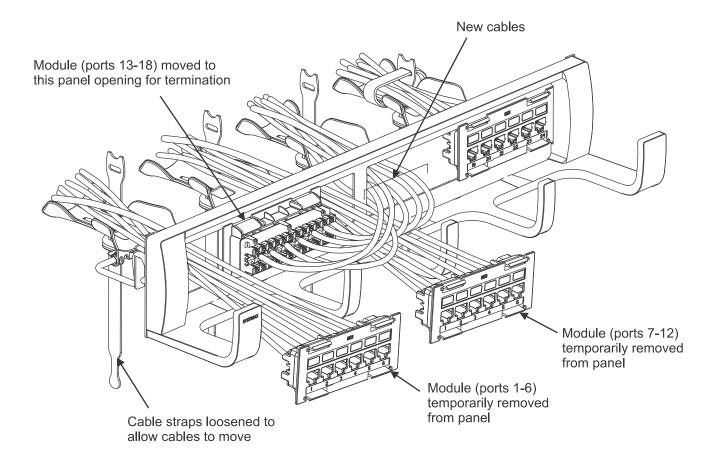
- 4. Print the port designations on the white label cards provided. Slide labels and label covers into the label holders from either end. Each label holder will accommodate labels up to .265 inches (6.7mm) high x 3.50 inches (89mm) wide.
- 5. Blank, voice, and data icons can be ordered separately in 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.

- 6. To print a designation label, go to <u>http://www.commscope.com/Resources/Labeling-Templates</u> 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



- 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.

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.

Feed Pairs into Termination Manager (Figure 2)

- 1. Trim jacket back at least 3 inches (76 mm) to expose twisted-pairs.
- 2. Without rearrangement 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 held pairs through holes on top surface of termination manager, two pairs per hole as shown. (The TOP surface is identified with a "T", which can be oriented either right side up or upside down).
- 4. Continue to feed pairs through termination manager until resistance is encountered at the jacket. This will usually be about 1/4 inch (6 mm) from the jacket.

Fold Pairs Back into Slots (Figure 3)

5. Fold each pair over into adjoining slots on bottom end of termination manager. To ease item 8, it is recommended that conductor colors be viewed 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

6. Ensure that pairs are in slots completely without being pinched over bottom end surface. It may be necessary to add twist to align pairs with slots.

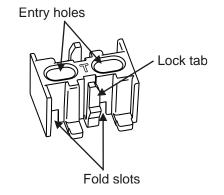


Figure 1. Termination Manager

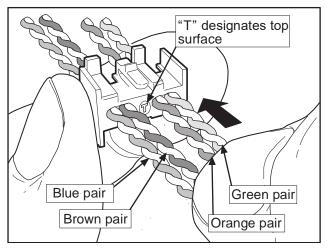


Figure 2. Feed Pairs into Termination Manager

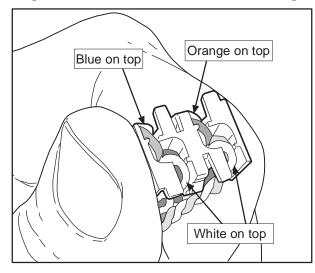


Figure 3. Fold Pairs Back into Slots

Snap Termination Manager onto Rear Housing (Figure 4)

- Snap assembled termination manager onto rear housing with pair colors in proper position. Push on using the termination manager, not by pushing with the cable. (Ensure that both snaps 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. (The white conductor is always on the right).

Seat Wires into IDC Terminal Slots (Figure 5)

- 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, 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. Remove up to 5 inches (127 mm) of cable jacket to aid in seating conductors into IDC slots.
- 2. 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.
- 3. Flex cables down for easier access, then seat and punch down the entire top row of the panel.
- 4. Flex cables up for easier access, then seat and punch down the entire bottom row.

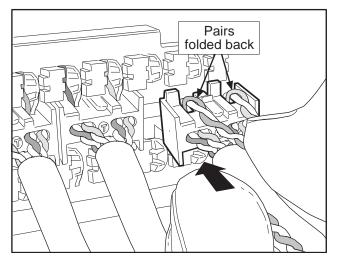


Figure 4. Snap Termination Manager onto Rear Housing

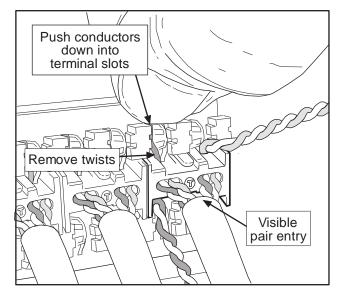


Figure 5. Seat Untwisted Pairs into IDC Terminal Slots