

SYSTIMAX 360™ iPatch® PATCHMAX® Modular Panel Instruction Sheet

Material ID 860 489 905
Issue 1, August 2010



The SYSTIMAX 360™ iPatch® PATCHMAX® Modular Panel is a SYSTIMAX approved product. This patch panel can be used in an iPatch System for EIA-T568A or EIA-T568B wiring applications. The 24-port version holds four GS3-DM or GS5-DM 6-pack modules and the 48-port version holds four 12-pack modules. Both versions are two units high and mount in a standard 19-inch rack with a universal hole pattern. Integrated patch cord management and removable rear cable management are included.

Ordering information is listed below.

Material ID	Product Code	Description
760123489	360-iP-PMAX-GS3-24	360 iPatch PATCHMAX 24-port panel equipped with GS3-DM 6-pack modules
760123497	360-iP-PMAX-GS5-24	360 iPatch PATCHMAX 24-port panel equipped with GS5-DM 6-pack modules
760130377	360-iP-PMAX-GS3-48	360 iPatch PATCHMAX 48-port panel equipped with GS3-DM 12-pack modules
760130385	360-iP-PMAX-GS5-48	360 iPatch PATCHMAX 48-port panel equipped with GS5-DM 12-pack modules
760130419	360-iP-UP-KIT-PMAX-24	360 iPatch PATCHMAX 24-port upgrade (for 10 panels)
760130427	360-iP-UP-KIT-PMAX-48	360 iPatch PATCHMAX 48-port upgrade (for 5 panels)
760149096	360-iP-JMPR-PMAX	360 iPatch PATCHMAX Cable Bus Jumpers (10 jumpers)

Note: To use the SYSTIMAX 360 iPatch PATCHMAX Modular Panel in an existing iPatch System, the iPatch Managers must be running software version 7.20N or later. The System Manager software, used to manage the system, must be Version 6.5 or later. *We recommend that you upgrade the System Manager software to Version 6.5 or a later version before you install the SYSTIMAX 360 iPatch PATCHMAX Modular Shelf.* System Manager will automatically upgrade the iPatch Manager software.



Components in this Package

- Modular panel with the following items installed:
 - GS3-DM or GS5-DM 6-pack or 12-pack modules (4)
 - cabling labels for B wiring (4 or 8)
 - iPatch sensor overlay (1 or 2)
 - panel bus jumper (1 or 2)
- Patch cord management
- Front bezel
- Cable support bar
- Cable troughs (4)
- Cable straps (4)
- #12-24 x 1/2 inch screws (4) for mounting the panel in a 19-inch (482.6 mm) rack
- Cabling labels for A wiring (4 or 8)
- Termination Managers (28 or 56) and instruction sheet

Related Components (Ordered Separately)

Material ID	Product Code	Description
760102269	360-PM-GS3-DM	360 PATCHMAX GS3-DM replacement distribution 6-pack module
760111393	360-PM-GS5-DM	360 PATCHMAX GS5-DM replacement distribution 6-pack module
760117382	360-PM-GS3-DM-12P	360 PATCHMAX GS3-DM replacement distribution 12-pack module
760117390	360-PM-GS5-DM-12P	360 PATCHMAX GS5-DM replacement distribution 12-pack module



The iPatch System is covered by U.S. patents 6285293 and 6522737, and other U.S. and foreign patents and patents pending.

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SOLUTIONS

Important Safety Instructions

To reduce the risk of fire, electric shock, and injury to persons, read, understand, and adhere to the following instructions as well as any warnings marked on the product.

CAUTION

Remote risk of electric shock. Never install the product in wet locations or during lightning storms. Never touch uninsulated communication wires or terminals.

Also, follow the precautions below:

- All wiring that connects to this equipment must meet applicable local and national building codes and network wiring standards for communication cable.
- Care should be taken not to compromise the stability of the rack by installation of this equipment.

Important: *SYSTIMAX 360 iPatch PATCHMAX shelves use infrared sensing technology and should be installed where they are not exposed to direct sunlight or other infrared sources.*

Save these instructions.

Specifications

Wire Termination

Wire Size: 22–24 AWG (0.64–0.51 mm) solid copper
22–24 AWG (0.64–0.51 mm) 7-stranded copper

Insulation Size: 0.042 inch (1.07 mm) maximum DOD

Insulation Type: All plastic insulants (including polyethylene, polypropylene, and FEP)

Reterminations

IDC Contact: 200 minimum

Modular Jack: 750 minimum

Environmental Data

Temperature Range: -40° F to 158° F (-40° C to 70° C) (storage)

23° F to 122° F (-5° C to 50° C) (operational)

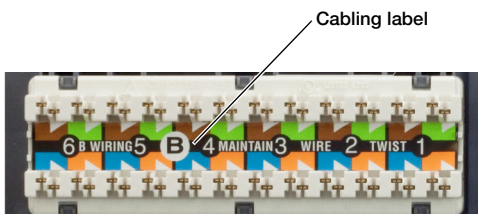
Humidity: Up to 95% noncondensing

Mounting the Panel

To mount the panel:

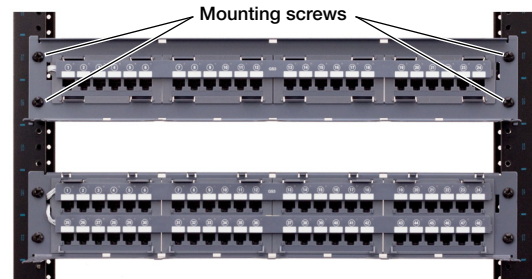
- 1 Remove power from the rack's Panel Manager.
- 2 The panel is shipped with the cabling labels for B wiring already installed. If the installation uses A wiring, insert the cabling labels for A wiring in the slots on the back of the panel. Make sure that the labels are oriented with the right side up (Figure 1).

Figure 1 Inserting the Cabling Label



- 3 Install the panel on the rack using the 4 screws provided (Figure 2). Be careful not to pinch the panel bus jumper(s) between the panel and rack.

Figure 2 Mounting the Panel

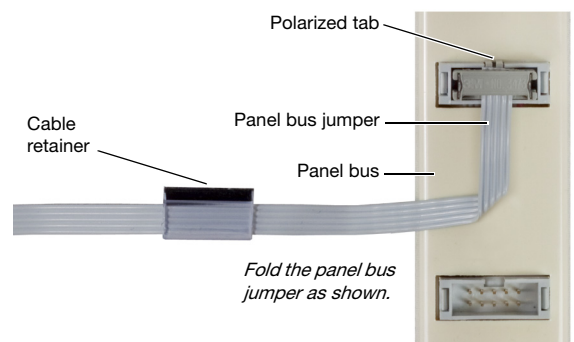
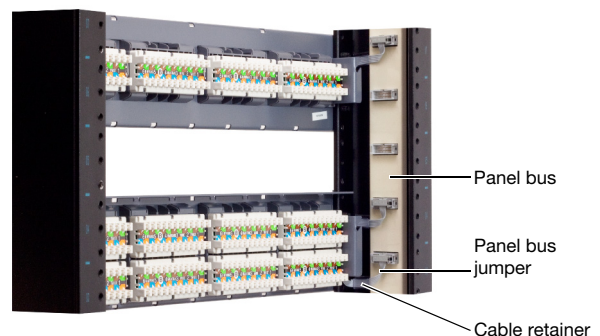


- 4 Connect the panel bus jumper:
 - a Remove the adhesive backing from the cable retainers on the panel bus jumper.
 - b Connect the panel bus connector on the jumper to the nearest connector on the panel bus, folding the jumper as shown (Figure 3). Press the cable retainers against the rack.

Note: The connector is keyed. The polarized tab on the jumper connector fits into the opening in the header connector on the panel bus.

Important: *For 48-port panels, connect both panel bus jumpers.*

Figure 3 Connecting and Routing the Panel Bus Jumper



Cabling Modules

The SYSTIMAX 360™ iPatch® PATCHMAX® Modular Panel is designed to be terminated from either the front or rear of the panel.

Figure 4 identifies the IDC (position) numbers and pair numbers for cabling modules. Table 1 indicates the conductor colors for EIA-T568A and EIA-T568B wiring applications.

Figure 4 Cable IDC Numbers and Pair Numbers—Rear View of Module

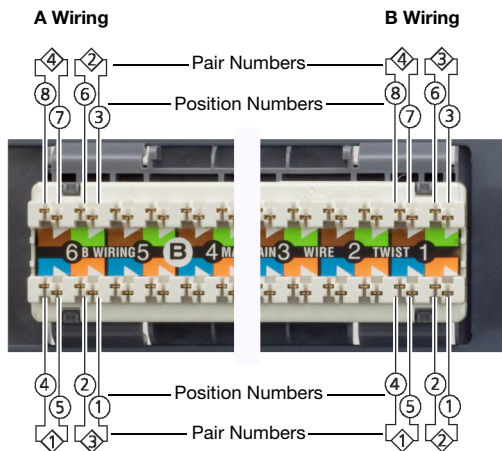


Table 1 Cable Terminations

IDC#	A Wiring	B Wiring
1	W/BL	W/BL
2	BL/W	BL/W
3	W/G	W/O
4	G/W	O/W
5	W/O	W/G
6	O/W	G/W
7	W/BR	W/BR
8	BR/W	BR/W

Cabling from the Rear

To cable modules from the rear of the panel:

Important: Power must be removed from the rack's Panel Manager when cabling modules for the panel.

- 1 Determine the appropriate length of the cables to each module so that the cables can be positioned in the rear cable troughs after connection. Mark the cables for termination.
- 2 Without removing the modules from the panel, cable each module (Figure 5). Use a Termination Manager to terminate each 4-pair cable, following the Termination Manager installation instructions provided with the panel.

Note: The Termination Manager provides pair-twist control and strain relief features to the rear termination area of the module.

Figure 5 Cabling Modules from the Rear of the Panel



- 3 After all modules have been cabled, install the rear cable support, following the instructions in "Installing the Rear Cable Support (Optional)" on page 5.

Cabling from the Front

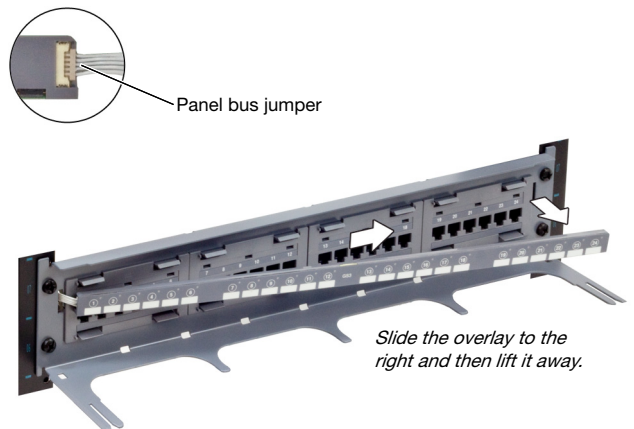
To cable modules from the front of the panel:

Important: Power must be removed from the rack's Panel Manager when cabling modules for the panel.

- 1 Install the rear cable support, following the instructions in "Installing the Rear Cable Support (Optional)" on page 5.
 - Note:** Loosely secure the cable straps so the cables can slide through the straps during connection.
- 2 Remove the iPatch sensor overlay from the front of the panel (Figure 6):
 - a Slide the overlay to the right to disengage the hooks on the back of the overlay from the front of the panel.
 - b Gently lift the overlay away from the panel.
 - c Disconnect the panel bus jumper from the overlay.
 - d Set aside the overlay.

Important: For 48-port panels, remove both iPatch sensor overlays.

Figure 6 Removing the iPatch Sensor Overlay



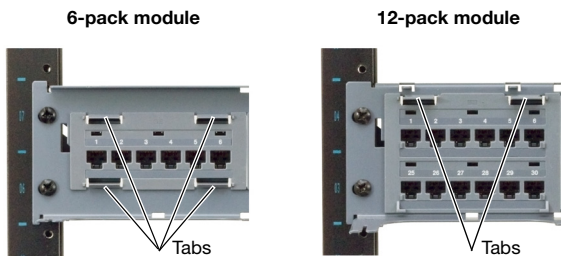
- 3 Select the location where you want to temporarily install the module to be cabled. Then temporarily remove the module from the selected location (Figure 7). Generally it is convenient to remove an adjacent module. However, Figure 9 illustrates several alternatives for positioning a module for cabling from the front of the panel.

To remove a 6-pack module, use your fingers to press the 2 tabs at the top and the 2 tabs at the bottom of the module. Then pull the module out from the front of the panel.

To remove a 12-pack module, use your fingers to press the 2 tabs at the top of the module. Then pull the module out from the front of the panel.

Note: If the module you are removing is already cabled, slide the cables to one side of the opening in the panel to make room for the module to be cabled.

Figure 7 Removing the Module

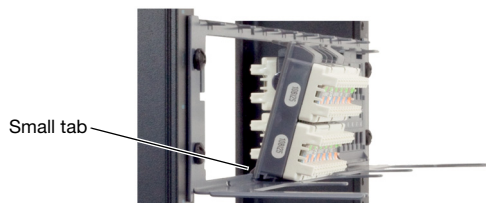


- 4 Remove the module to be cabled and temporarily install it backwards (with the rear facing front) in the vacant panel opening.

To install a 6-pack module backwards, gently press the module straight into the panel opening until the module snaps into place.

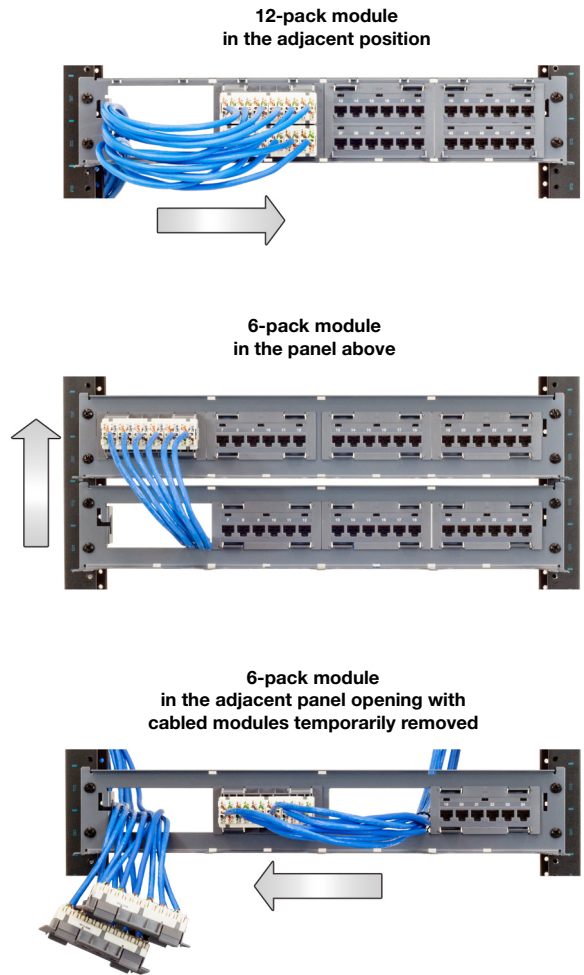
To install a 12-pack module backwards, position the lower edge of the module into the panel opening so the small tabs hook onto the edge of the opening (Figure 8). Then gently press the top of the module until the module snaps into place.

Figure 8 Installing the 12-pack Module Backwards



- 5 Pull the cables through the panel opening where the module will be installed and mark the cables for termination, leaving an adequate length of cables to reach the module. Make sure that the cables can be pushed back into their final position without interference or snagging.

Figure 9 Cabling the Module from the Front of the Panel—Options



- 6 Cable each module (Figure 9). Use a Termination Manager to terminate each 4-pair cable, following the Termination Manager installation instructions provided with the panel. Hold the module in place with one hand while you punch it down.

Note: The Termination Manager provides pair-twist control and strain relief features to the rear termination area of the module.

Important: When re-cabling a module, remove each Termination Manager by squeezing the lock tabs. Use new Termination Managers to re-cable the module.

- 7 After all cables have been connected to the module, remove the module and rotate it so the front of the module is facing forward. Then install the module in its intended location (where the cables were pulled through).

To install a 6-pack module, gently press the module straight into the panel opening until the module snaps into place.

To install a 12-pack module, position the lower edge of the module into the panel opening so the edge of the opening rests in the slot along the bottom of the module (Figure 10). Then gently press the top of the module until the module snaps into place.

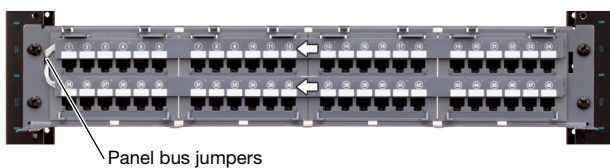
Figure 10 Reinstalling the Module



- 8 Reinstall the module(s) that you temporarily removed in Step 3.
- 9 Repeat Step 1 through Step 8 to cable each module for the panel.
- 10 When all modules have been cabled, reinstall the iPatch sensor overlay on the front of the panel (Figure 11):
- Connect the overlay to the panel bus jumper.
 - Position the overlay on the panel so the hooks on the back of the overlay fit into the front of the panel.
 - Slide the overlay to the left so the hooks engage with the panel and the buttons align with the ports.

Important: For 48-port panels, reinstall both iPatch sensor overlays.

Figure 11 Reinstalling the iPatch Sensor Overlay



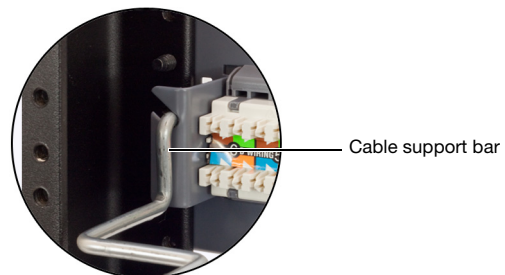
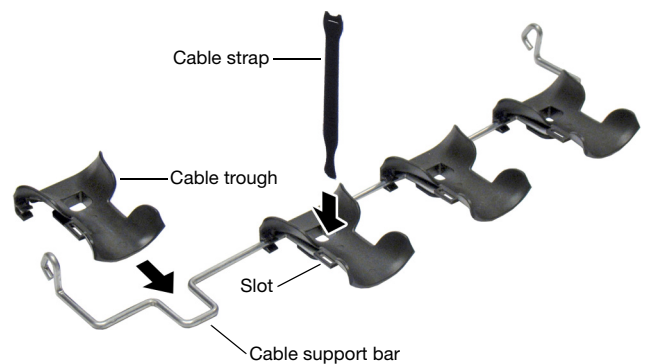
Installing the Rear Cable Support (Optional)

The SYSTIMAX 360™ iPatch® PATCHMAX® Modular Panel includes rear cable management. When cabling the panel from the front, install the cable support first. When cabling the panel from the rear, install the cable support after completing cabling.

To assemble and install the rear cable support:

- 1 Snap the 4 cable troughs onto the cable support bar.
- 2 Insert the 4 cable straps into the slots in the cable troughs.
- 3 Hook the cable support bar onto the rear of the panel as shown in Figure 12.

Figure 12 Installing the Cable Support



- 4 Route the cables into the cable troughs. Use the cable straps to loosely retain the cables (Figure 13).

Figure 13 Routing and Retaining the Cables



Installing the Patch Cord Management and Front Bezel

To complete the installation of the SYSTIMAX 360™ iPatch® PATCHMAX® Modular Panel, install the patch cord management and bezel on the front of the panel.

To install the patch cord management and front bezel:

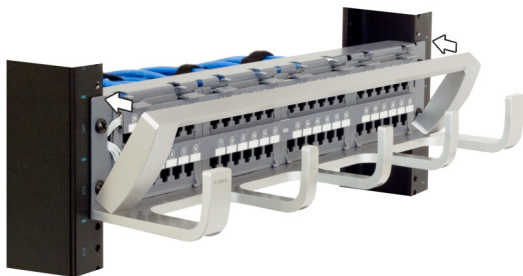
- 1 Align the patch cord management as shown in Figure 14 and slide it onto the mounting arms until fully seated.

Figure 14 Installing the Patch Cord Management



- 2 Position the front bezel at an angle as shown in Figure 15 and insert the 2 bottom retention tabs into the slots on the patch cord management.
- 3 Pivot the top of the bezel towards the panel until the 3 tabs on the top of the bezel snap into the panel (Figure 15).

Figure 15 Installing the Front Bezel



- 4 Restore power to the rack's Panel Manager.

How To Contact Us

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For technical assistance regarding SYSTIMAX products:

- Within the United States, contact your local account representative or CommScope Technical Support at 1-800-344-0223.
- From outside the United States, contact your local account representative or Authorized BusinessPartner.