



SYSTIMAX 360™ iPatch® Network Manager Module Instructions

General

The **SYSTIMAX 360™ iPatch®** Network Manager module allows a panel manager to be configured to supervise an equipment room and communicate directly with system manager. The network manager module is designed to be installed on the panel manager's mounting bracket, which can be mounted in a standard 19-inch rack with a universal hole pattern. The panel manager with network manager module must be installed on the first rack on the rack manager LAN.

Note: To use the **SYSTIMAX 360 iPatch** Network Manager module in an existing **iPatch** system, the **iPatch** Rack and Panel Managers must be running firmware version 7.2V or later. The system manager software, used to manage the system, must be version 6.6.1 or later. We recommend that you upgrade the system manager software to version 7.0 or a later version before you install the shelf. To obtain the latest version of software, contact your **SYSTIMAX®** local account representative.

To install the panel manager for the rack, see the **SYSTIMAX® iPatch® System Panel Manager Installation Instructions**, 860442573, for installation guidelines.

Ordering information is listed below:

Material ID	Part No.	Description
760105353	360-iP-NET-MGR-MOD	SYSTIMAX 360™ iPatch® network manager module

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 local account representative or Authorized Business Partner.

Tools Required

- Phillips head screwdriver

This product is covered by one or more of the following U.S. patents or their foreign equivalents: 6,285,293 and 6,522,737.

Specifications

Microprocessor

32-bit, 375 MHz ARM9 processor

Power Requirements

12 VDC at 18 W (network manager + panel manager + panels)
12 VDC at 100 mA (network manager module)

Programming

Downloadable software: From host software
Program data retention without power: Minimum 10 years

Connections

Panel connections per rack: Maximum 45
iPatch Manager units per rack manager LAN: Maximum 99

Recommended Mounting Height

Approximately 65 inches (1.7m) above the floor, measured from the top edge of the panel manager (the 34th 1U slot up from the bottom of a rack)

Operational Environment

Temperature range: 32°F to 122°F (0°C to 50°C)
Humidity: 90% noncondensing

Ethernet

Interface: IEEE 802.3 10BASE-T
IEEE 802.3 μ 100BASE-TX
Speed 10 MB/sec or 100 MB/sec (half duplex or full duplex)
Status indicators Green LED for link up
Yellow LED for link speed - ON (100 MB/sec), OFF (10 MB/sec)

Parts List

Verify parts against the parts list below:

Quantity	Description
1	iPatch [®] network manager module
3	Screws for mounting the module on the panel manager mounting bracket
1	Power jumper
1	Strain relief strap
1	6-inch patch cord
1	Instruction sheet

Separately Orderable Components

Material ID	Part No.	Description
760095562	360-iP-PANEL-MGR	SYSTIMAX 360™ iPatch [®] panel manager



Important Safety Cautions

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.

- This product should be operated using only the power supply provided by **CommScope**[®] with the panel manager. Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.
- Remote risk of electric shock. Never install the product in wet locations or during lightning storms. Never touch uninsulated communication wires or terminals.
- Disconnected optical components may emit invisible optical radiation that can damage your eyes. Never look directly into an optical component that may have a laser coupled to it. Serious and permanent retinal damage is possible. If accidental exposure to laser radiation is suspected, consult a physician for an eye examination.
- Wear safety glasses to install the shelf. Although standard safety glasses provide no protection from potential optical radiation, they offer protection from accidental airborne hardware and cleaning solvents.

Precautions

- 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.
- **SYSTIMAX 360 iPatch** shelves use infrared sensing technology and should be installed where they are not exposed to direct sunlight or other infrared sources.
- Prior to installation, clean the jumper connectors per the manufacturer's recommendations.

Overview

To use one panel manager on the rack manager LAN to communicate directly with system manager, you must install a network manager module and connect it to the panel manager. The panel manager with network manager module must be installed on the first rack on the rack manager LAN. We recommend performing this installation before mounting the panel manager on the rack.

To install the network manager module on a new **iPatch** rack, perform the following steps:

- Step 1** – Mount the panel bus.
- Step 2** – Install the network manager module onto the panel manager mounting bracket.
- Step 3** – Mount the panel manager.
- Step 4** – Connect the panel manager to the rack manager LAN.
- Step 5** – Install the **iPatch** panels and provide power to the rack.
- Step 6** – Install the other equipment in the rack.
- Step 7** – Cable the **iPatch** panels and other equipment.
- Step 8** – Connect the panel manager to the ethernet network.

To install the network manager module on an existing **iPatch** rack, perform the following tasks:

- Step 2** – Remove panel manager from rack, then install the network manager module.
- Step 3** – Mount the panel manager.
- Step 4** – Connect the panel manager to the rack manager LAN.
- Step 5** – Provide power to the rack.
- Step 8** – Connect the panel manager to the ethernet network.

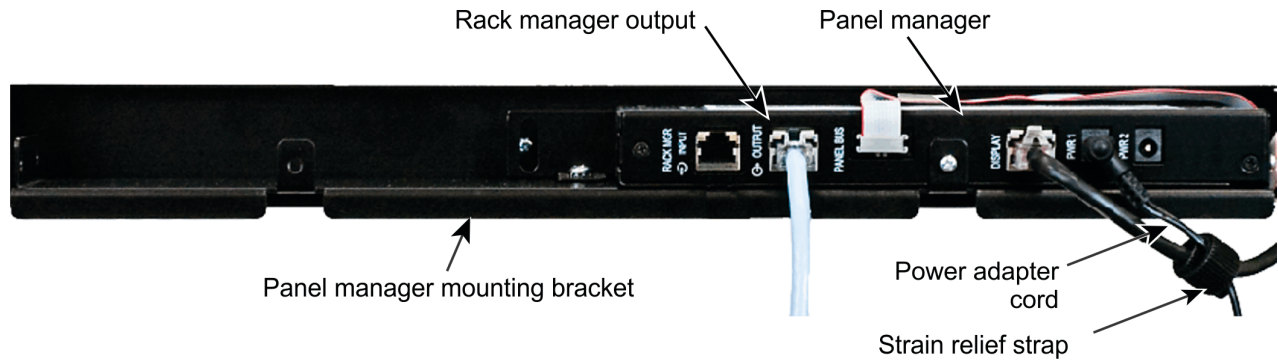
Step 1 – Mount the Panel Bus (for new racks)

The panel bus allows the panel manager and **iPatch** panels to communicate. Also, the panel manager supplies power to the **iPatch** panels through the panel bus. The network manager module is connected to the panel manager, and the panel manager is connected to the rack's panel bus.

The panel manager with network manager module must be installed on the first rack on the rack manager LAN.

To install the panel bus for the rack, see the **SYSTIMAX® iPatch® System Panel Manager Installation Instructions** (860442573).

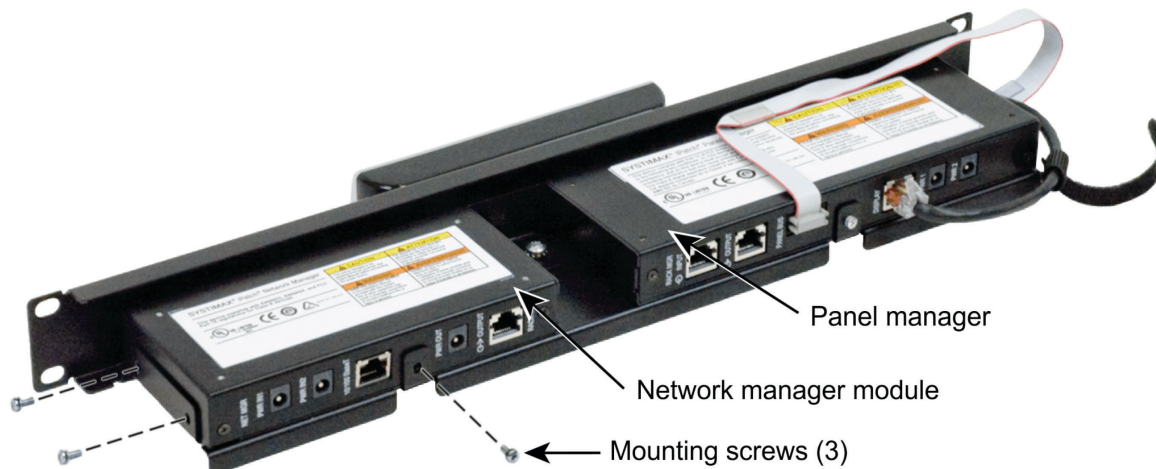
Step 2 – Install the Network Manager Module



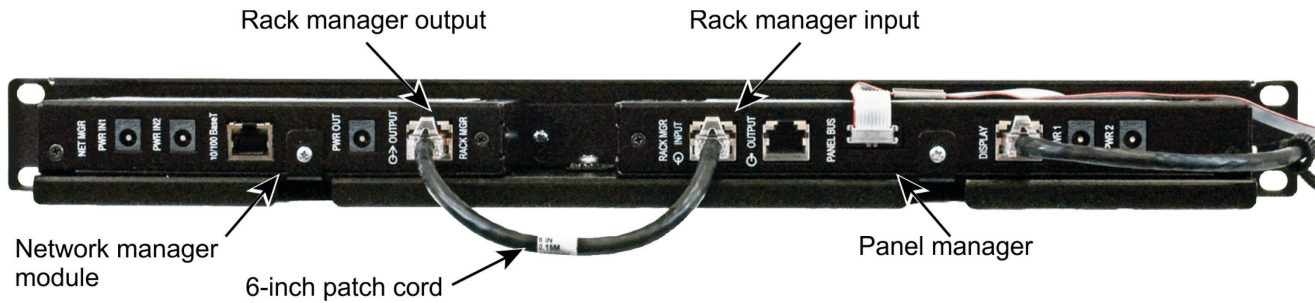
1. If the rack where the network manager is to be installed has an installed panel manager, remove the panel manager assembly from the rack by following this process:
 - Unplug the power adapter from the electrical service outlet.

Note: If a redundant power supply is being used, unplug the power adapter for the redundant supply from the electrical service outlet.
 - Remove the strain relief strap from the power adapter cord and the display patch cord as shown above.
 - Disconnect the power adapter plug from the PWR1 jack on the back of the panel manager.

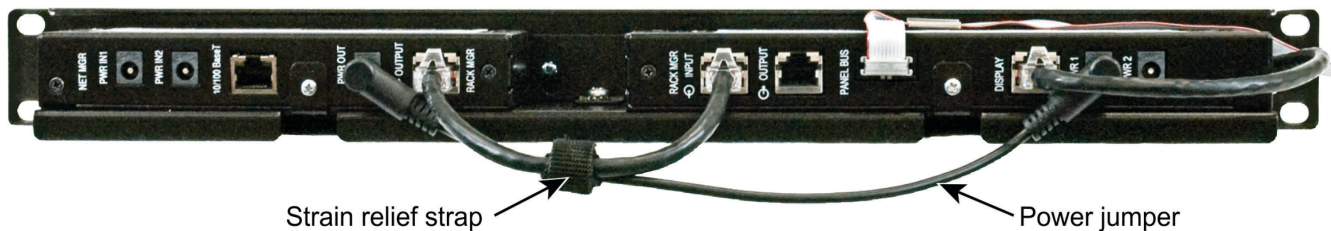
Note: If a redundant power supply is being used, remove the power adapter plug from the PWR2 jack.
 - Disconnect the modular patch cord from the RACK MGR OUTPUT jack on the back of the panel manager.
 - Disconnect the panel bus jumper from the panel bus connector on rack rail.
 - Unscrew the four screws used to mount the panel manager mounting bracket to the rack. Remove and save the screws and star washers, and remove panel manager from rack.



2. On the back of the panel manager mounting bracket, place the network manager module to the left of the panel manager, as shown. Using the three (3) screws provided, attach the module to the mounting bracket.



3. Connect the 6-inch patch cord provided with the network manager to the RACK MGR OUTPUT jack on the back of the network manager as shown.
4. Connect the other end of the patch cord to the RACK MGR INPUT jack on the back of the panel manager.



5. On the back of the network manager, connect one end of the power jumper to the PWR OUT jack as shown.
6. On the back of the panel manager, connect the other end of the power jumper to the PWR1 jack. Use the strain relief strap provided with the network manager module to secure the power jumper to the patch cord connected to the panel manager shown above.

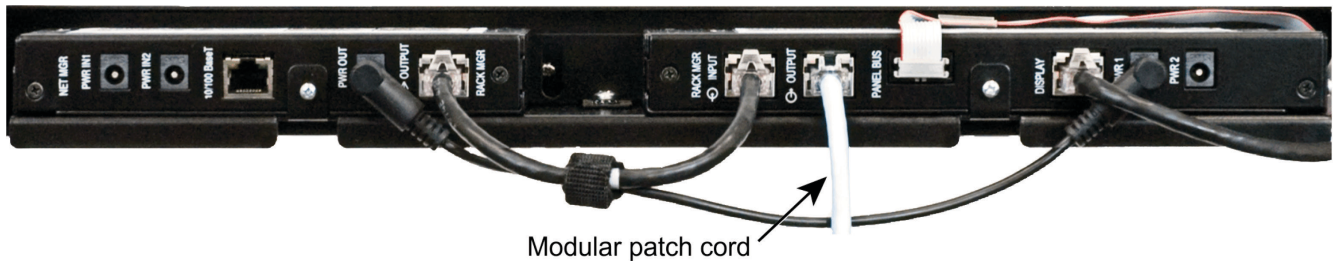
Step 3 – Mount the Panel Manager

To install the panel manager for the rack, see the **SYSTIMAX® iPatch® System Panel Manager Installation Instructions** (860442573).

Step 4 – Connect the Panel Manager to the Rack Manager LAN

The **iPatch** Manager units in an equipment room communicate with each other using the rack manager LAN. Modular patch cords can be used to make the rack manager LAN connections. A 7-foot patch cord is provided with the panel manager for this purpose. You can use a longer modular patch cord if necessary. The **iPatch** panel manager units are connected to each other in series using the RACK MGR INPUT and OUTPUT jacks on the back of the panel manager units.

Important: The panel manager with a network manager module installed must be the first unit connected to the rack manager LAN.



1. Connect a modular patch cord to the RACK MGR OUTPUT jack on the back of the panel manager as shown.
2. Run the patch cord to the next **iPatch** Manager. Connect the patch cord to the RACK MGR INPUT jack on the back of that **iPatch** Manager.

Step 5 – Install the iPatch Panels (for New Racks) and Provide Power to the Rack

1. Install the **iPatch** panels on the rack. For instructions, see the installation instructions provided with the panel.

Note: Make sure that each **iPatch** panel is securely connected to the panel bus. The most common problems that occur with equipment installation are due to improper panel bus jumper connections at the panel or at the panel bus.



2. Using the power adapter provided with the panel manager, connect the power adapter plug to the PWR IN1 jack on the back of the network manager. Route the power adapter cord along the patch cord connected to the panel manager as shown.

Note: Remove the strain relief strap from the panel manager display patch cord. It will be used later to provide strain relief for the power adapter cord.



Press the latch to the open position.
Remove the plastic protector.



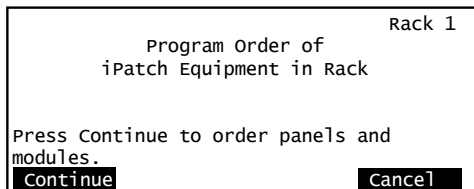
Insert the edge of the plug into the adapter.
Then press on the plug until it snaps into place.

3. Modify the power adapter for use with the local configuration for electrical service outlets.
 - Select the appropriate AC plug.
 - Holding the power adapter in one hand, use your thumb to press the spring-loaded latch on the back of the adapter to the open position as shown.
 - Use your forefinger and thumb on your other hand to grasp the bottom edge of the plastic protector. Then remove the plastic protector, exposing the mating prongs. Release the spring-loaded latch.
 - Insert the tabbed edge of the AC plug into the top of the opening in the power adapter. Then press on the plug until it snaps into place.

4. Plug the power adapter into an electrical service outlet.

Note: A redundant power supply can be attached to the NET MGR PWR2 jack on the back of the network manager module. When using a redundant power supply, use the strain relief strap to secure both power adapter cords to the patch cord connecting the network manager module and the panel manager.

5. Wait until the Panel Manager display shows:



6. Please go to the **CommScope** e-Catalog to download the **SYSTIMAX® iPatch® System Panel Manager User Guide** (860561125) for operating information.
7. Please go to the **CommScope** e-Catalog to download the **iPatch® 96F-LC Shelves and Panels Programming Instructions** (860568435) for panel ordering information.

Step 6 – Install the Other Equipment in the Rack (for new racks)

Install any other equipment on the rack, such as non-iPatch panels, network equipment, and patch cord organizers. Follow the instructions provided with the equipment.

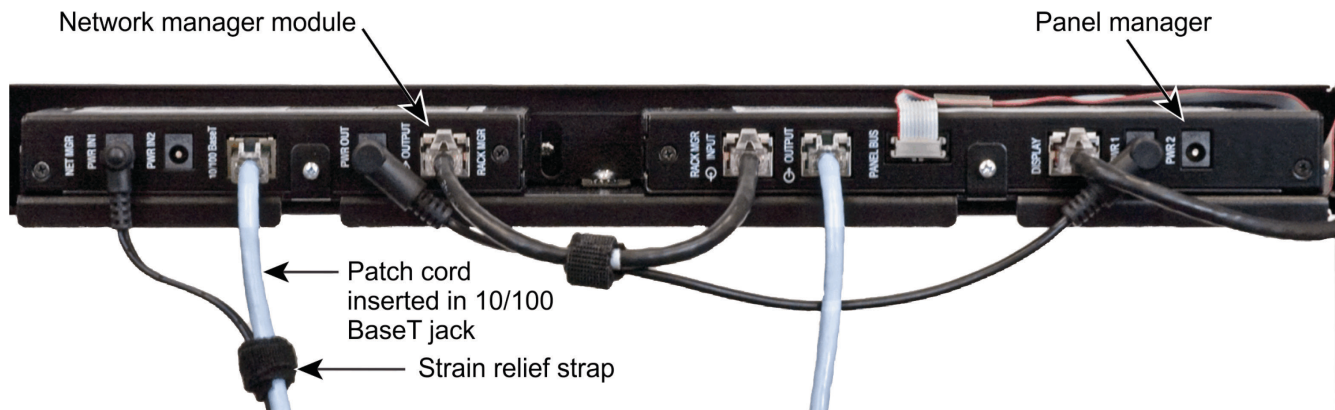
Step 7 – Cable the iPatch Panels and Other Equipment in the Equipment Room (for new racks)

Make the cable connections to the back of the iPatch panels and other equipment in the equipment room. For instructions for cabling iPatch panels, see the installation instructions provided with the panel.

Note: Cables are easily connected the equipment when the power adapter plugs from the PWR jacks on the back of the network manager module are disconnected first. When finished cabling the equipment, restore power connections and secure the power adapter cord to the patch cord inserted in the network manager's 10/100 Base T jack using the strain relief strap.

Step 8 – Connect the Panel Manager to the Ethernet Network

1. Connect a modular patch cord to the 10/100 BaseT jack on the back of the network manager module.
2. Connect the other end of the patch cord to the port providing the data network service.
3. Use the strain relief strap from the panel manager display patch cord to secure the power adapter cord to the patch cord inserted in the 10/100 BaseT jack as shown.



Troubleshooting Problems

To troubleshoot problems, see the **SYSTIMAX® iPatch® System Panel Manager Installation Instructions** (860442573) and the **SYSTIMAX® iPatch® System Panel Manager User Guide** (860561125).