

### Overview

Both front and remote panel versions of the CP-15 operate identically. Instructions for installing a remote are on the reverse side. For complete documentation, see the *AMX AutoPatch Software & Documentation CD* or visit [www.amx.com](http://www.amx.com).

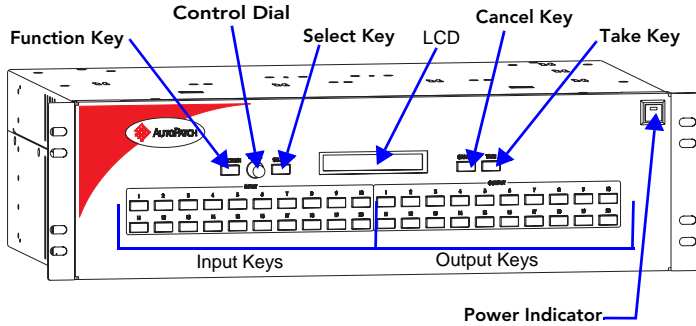


FIG. 1 CP-15 front view (on an Optima enclosure)

### Function Menu & Keys

- **Function Key** – accesses the Function Menu at anytime during operation
- **Control Dial** – scrolls through the menu (menu loops back to the first item after scrolling past the last item)
- **Select Key** – enter selections
- **Cancel Key** – cancels an incomplete operation
- **Take Key** – must be pressed to complete an operation

The color of input and output keys indicate availability or selection:

- Blue key – available for selection
- White or flashing white key – is selected as part of the operation (when verifying Status, the selected key and all keys connected to it are white)
- Non-illuminated key – is not available for the current operation

### Executing / Disconnecting Switches

To execute a switch:

1. Press the Function Key.
2. In the Function Menu, press the Select Key to choose Change (the available Input and Output Keys turn blue).
3. Press the Input Key for the desired input.
4. Press the Output Key(s) for the desired output(s).
5. Press the Take Key to execute the switch.

```
Select a Function:
• Change
```

```
Change:      VM#0
Press I/O then Take
```

To disconnect a switch:

**Important:** Disconnecting an input disconnects all outputs receiving that source signal even if a specific output(s) is selected at the same time.

1. Press the Function Key.
2. In the Function Menu scroll to Disconnect.
3. Press the Select Key (all available Input and Output Keys turn blue).
4. Press the desired Input and/or Output Key(s) (selected keys turn white).
5. Press the Take Key to disconnect the switch (applicable keys turn blue).

```
Select a Function:
• Disconnect
```

```
Disconnect:  VM#0
Press I/O then Take
```

### Verifying Signal Status

To verify signal status:

1. Press the Function Key.
2. In the Function Menu, scroll to Status.
3. Press the Select Key (all available Input and Output Keys turn blue).
4. Press the desired Input or Output Key. The selected key and all keys connected to it turn white.
5. Select another signal to verify or press the Function Key to return to the Main Menu.

```
Select a Function:
• Status
```

```
Select a Function:
• Status
```

### Changing the Virtual Matrix

To change the virtual matrix:

1. Press the Function Key.
2. In the Function Menu, scroll to Virtual Matrix.
3. Press the Select Key.
4. Scroll to the desired virtual matrix.
5. Press the Select Key.
6. Press the Function Key. The system is ready to make changes on the selected Virtual Matrix.

```
Select a Function:
• Virtual Matrix
```

```
V. Matrix    VM#0
• B:Audio/Video
```

### Audio – Adjusting Digital Input Gain & Volume

To adjust digital input gain:

**Important:** We strongly recommend that only a qualified dealer make digital input gain adjustments. Make input gain adjustments before outputs are fine-tuned.

1. Press the Function Key.
2. In the Function Menu, scroll to Adjust Audio.
3. Press the Select Key.
4. In the Adjust Audio Submenu, scroll to Input Gain.
5. Press the Select Key (available Input Keys turn blue; no Output Keys are illuminated).
6. Press the Input Key for the desired input.
7. In the Adjust Input Gain screen, adjust the input gain by turning the Control Dial.
8. Select another input to adjust or press the Function Key.

```
Select a Function:
• Adjust Audio
```

```
Adjust Audio:
• Input Gain
```

```
Gain:      VM#0
Press Input & Dial
```

```
|||||-----
-10dB (< 3dB) 10dB
```

**Note:** The total through-system gain (the amount of input gain plus the amount of output gain) for any input to output routing path will not exceed +10 dB (automatically limited by the router).

To adjust volume:

1. Press the Function Key.
2. In the Function Menu, scroll to Adjust Audio.
3. Press the Select Key.
4. In the Adjust Audio Submenu, press the Select Key again to select Output Volume.
5. Press the Output Key for the desired output.
6. In the Adjust Volume Screen, adjust the output volume by turning the Control Dial. If the selected output is muted, "muted" displays as the current setting. Turning the Control Dial will un-mute a muted output and adjust its volume.
7. Select another output to adjust or press the Function Key.

```
Select a Function:
• Adjust Audio
```

```
Adjust Audio:
• Output Volume
```

```
Volume:    VM#0
Press Output & Dial
```

```
|||||-----
-70dB (<-26dB) 10dB
```

### Muting & Un-Muting Outputs

**Note:** The mute / un-mute option applies to output volume only and is not available for input gain.

To mute an output:

1. Press the Function Key.
2. In the Function Menu, scroll to Adjust Audio and press the Select Key.
3. In the Adjust Audio Submenu, scroll to Mute/Unmute.
4. Press the Select Key (no Input Keys are illuminated; available Output Keys are blue; muted Output Keys are white).
5. Press the Output Key of the output to be muted (selected key turns white).
6. Select another output to mute or press the Function Key.

```
Select a Function:
• Adjust Audio
```

```
Adjust Audio:
• Mute/Unmute
```

To un-mute an output:

1. Complete Steps 1 through 4 of the previous procedure.
2. Press the Output Key of the output to be un-muted (selected key turns blue). The output volume is un-muted (restored to its previous level).

### Defining / Executing Global Preset

To define a global preset:

1. Route the entire system to the desired state.
2. Press the Function Key.
3. In the Function Menu, scroll to Global Preset.
4. Press the Select Key.
5. In the Global Preset Submenu, press the Select Key again to select Define Global.
6. In the Define Global list, scroll to desired number.
7. Press either the Select Key or the Take Key.
8. Wait approximately ten seconds for the system to store the global preset setting. The system returns to the Global Preset Submenu.
9. Press the Function Key to return to the Function Menu.

```
Select a Function:
• Global Preset
```

```
Global Preset:
• Define Global
```

**Caution:** If the system is reconfigured, global presets may be lost.

To execute a global preset:

1. Press the Function Key.
2. In the Function Menu, scroll to Global Preset
3. Press the Select Key.
4. In the Global Preset Submenu, scroll to Execute Global. Press the Select Key.
5. In the Execute Global Preset list, scroll to the desired Global Preset.
6. Press either Select Key or Take Key to execute the pre-defined Global Preset.
7. Press the Function Key to return to the Function Menu.

```
Global Preset:
• Execute Global
```

**Note:** Status is not invalidated by global presets.

## Checking the Software Version

To check the software version information:

1. Press the Function Key.
2. In the Function Menu, scroll to Setup Options. Press the Select Key.
3. In Setup Options Submenu, press Select Key again to choose Software Version.  
The Software Version Screen lists the following (scroll to see all information):
  - Driver – control panel's firmware version
  - Built – date the control panel's software was built
  - Host – software version of the initial operating system (IOS) for the control panel
  - XNet ID – control panel's XNet device number
  - FP Link baud 115200 – indicates a front control panel and the baud rate**Or**  
Bridge – indicates a remote control panel and the version of its communication link to the enclosure's CPU

## System Error Codes / Troubleshooting

If an error code appears in the LCD (e.g., E01000A), a common troubleshooting strategy is resending the command to see if the error was simply a timeout error. Other things to check: link connections, power cables, and power source. If the system still displays an error code, refer to the instruction manual on the *AMX AutoPatch CD* or at [www.amx.com](http://www.amx.com).

## CP-15 Remote Panel

### General Specifications

Specifications	
Cable for XNet Communications	Two-conductor, 20 AWG, 7/28 strand cable with drain wire or shield (such as Alpha 2412C) Distance 1000 ft. (304.8 m) total, including linked panels
Power	24 VDC @ $\geq$ 600 mA
Operational Temperature	32° - 110° F (0° - 43° C)
Humidity	0 to 90% non-condensing
Dimensions	0.97 in. (2.46 cm) depth 19.0 in. (48.26 cm) width with rack ears 3.5 in. (8.89 cm) height, 2 RU
Weight	Approximately 1 lb. 10 oz. (0.74 kg) per panel

### Rear View

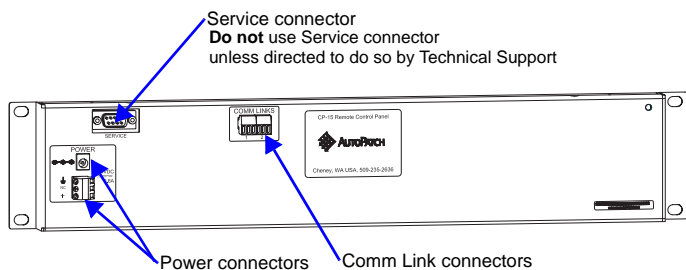


FIG. 2 CP-15 Remote rear view

**Caution:** Do not use the Service connector as a point of control.

## Installing a CP-15 Remote Panel

**ESD Warning:** Avoid ESD (Electrostatic Discharge) damage to sensitive components; be sure you and the control panel(s) are properly grounded before touching any internal materials.

### Rack Installation

CP-15 Remote Panels are designed to fit in a standard EIA 19 in. (48.26 cm) rack. Rack ears are built on to the case.

To install the CP-15 Remote in a rack:

1. Place the CP-15 in the rack. Optimum viewing angle is at eye level.
2. Attach panel with front mounting screws.

### Linking Multiple Panels

CP-15 Remote Panels can be linked together in a daisy chain to create multiple control points for a single system. XNet link cables can be attached to either Comm Link. The total distance of the cable runs cannot exceed 1,000 ft. (304.8 m).

On large control networks, termination may be required on the last linked control panel (or device); for termination information, see the control panel instruction manual (or device documentation).

## Attaching Cables

### Communication Cable Requirements

- Two-conductor, 20 AWG, 7/28 strand cable with a drain wire or shield, such as Alpha 2412C (customer supplied)
- Maximum length of cable: 1,000 ft. (304.8 m) total, including linked panels

To Connect a CP-15 to a router:

1. Unplug one of the Comm Link connectors on the CP-15 (see FIG. 2).
2. Loosen the two outer screws on the connector.
3. Insert XNet link cable wires according to FIG. 3 (either wire goes into either outside slot).
4. Tighten screws and plug connector back into the Comm Link.
5. On the router's CPU, unplug XNet connector (for connector location, see router documentation).
6. Loosen the two outer screws on the connector.
7. Insert the two wires from the CP-15 into the two outer slots of the CPU's connector, leaving center slot empty. Either wire goes into either outside slot.
8. Tighten the screws and plug the connector back into the CPU.

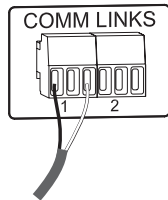


FIG. 3 Insert wires into the comm connector

### Applying Power

**Important:** Power requirements: +24 VDC @ 600 mA per panel. Always use a UL approved power source. Check the power source's documentation for information specific to that power source.

If you use the (optional) AutoPatch wall transformer, the side of the wire with the white stripe is positive and the other side is ground.

To apply power to the CP-15 Remote:

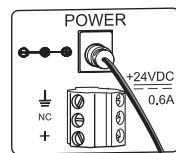


FIG. 4 Insert transformer power plug into power jack

**AutoPatch wall transformer** – insert power jack from transformer into power connector on the panel. Place CP-15 in a rack or other permanent location before plugging the transformer into the power source.

### Completing the Installation

We recommend completing the installation by executing a test switch routing Input 1 to Output 2.

To execute a test switch:

1. Press the Function Key.
2. Press the Select Key.
3. Press Input Key 1. Input Key 1 flashes white.
4. Press Output Key 2. Output Key 2 illuminates white.
5. Press the Take Key. Input Key 1 and Output Key 2 turn blue.

**Important:** If the CP-15 was not part of the original system, the current configuration file may need to be uploaded from the system's CPU to the control panel. See the instruction manual on the CD or at [www.amx.com](http://www.amx.com) for instructions on reloading a configuration file to the panel.

### Additional Information Covered in the CP-15 Instruction Manual

- Reloading configuration files
- Executing (pre-defined) local presets
- Locking/unlocking
- Setting a password