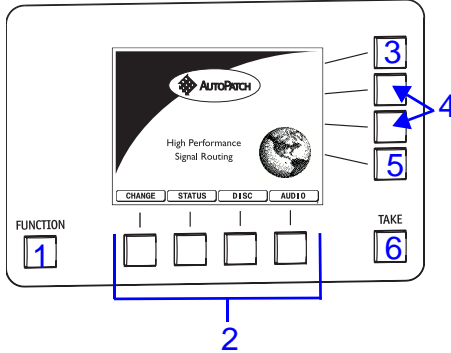


Overview

Both front and remote panel versions of the CP-20A 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.

Keys & Functions



- 1) Function Key:** press to view additional Main Menu options or to return to Main Menu screen from any screen.
- 2) Dynamic Command Keys:** select different commands & settings depending on which screen is active.
- 3) Back Key:** return to previous screen (will not undo a completed operation).
- 4) Navigation Keys:** scroll through lists or adjust sliders in Main Menu. Top key lightens LCD; lower key darkens LCD.
- 5) Select or Mute Key**
- 6) Take Key:** must be pressed to execute an operation.

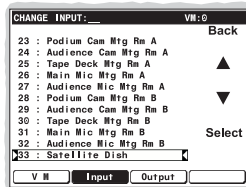
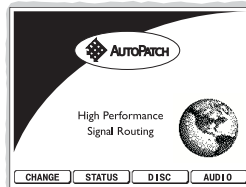
The menu displays different command options across the bottom of the LCD, depending on which screen is active. LCD backlight turns off after 15 minutes of inactivity. Press any key to reactivate light.

Important: To get to Main Menu screen from any other screen, press the Function Key.

Executing / Disconnecting Switches

To execute a switch:

- Press Function Key to view the Main Menu. In Main Menu, choose the Change command.
- In the Change Input screen, locate the desired input using the arrow keys to scroll through list. Press the Select Key. Selected input is highlighted.
- In the Change Output screen, locate the desired output. Press the Select Key. Or, select multiple outputs by scrolling through list and pressing Select Key. The Select Key toggles between selecting and unselecting each time it is pressed. Selected output(s) are highlighted.
- Press the Take Key to execute the switch.



To disconnect a switch:

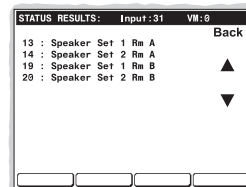
Note: Disconnecting an input disconnects all outputs receiving that signal.

- Press Function Key to view the Main Menu. In Main Menu, choose the Disc (Disconnect) command (bottom of screen).
- To disconnect an input: in the Disconnect Input screen, locate the desired input using the arrow keys to scroll through list. Press the Select Key. To disconnect an output: In the Disconnect Input screen, choose the Output command (bottom of screen). Locate the desired output using the arrow keys to scroll through list. Press the Select Key (additional disconnects can be selected at this time).
- Press the Take Key to disconnect the switch(es).

Verifying Signal Status

To verify signal status:

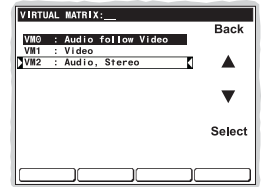
- Press Function Key to view the Main Menu. In Main Menu, choose the Status command.
- To verify an input: In the Status Input screen, locate the desired input. Press the Select Key. The Status Results screen appears listing outputs connected to input being verified. To verify an output: In the Status Input screen, choose the Output command (bottom of screen). Locate the desired output. Press the Select Key. The Status Results screen appears displaying the input routed to the output being verified.
- Press the Back Key to return to the Status Input screen, or press the Function Key to return to the Main Menu.



Changing the Virtual Matrix

To change the virtual matrix:

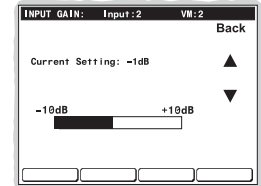
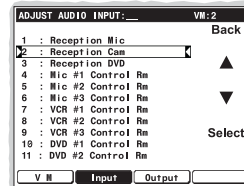
- Press Function Key to view the Main Menu. In Main Menu, choose the Change command.
- In the Change Input screen, press the VM command (bottom of screen).
- Locate desired VM (current VM is highlighted.)
- Press the Select Key.



Audio – Adjusting Digital Input Gain & Volume

Note: Adjustments of volume or digital input gain for a device on one virtual matrix will be in effect for that device on all virtual matrices switching audio signals.

To adjust digital input gain:

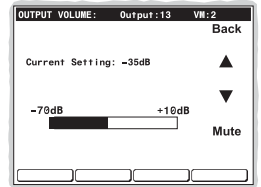
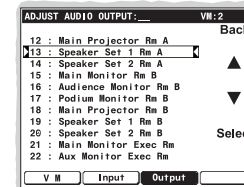


Important: We strongly recommend that only a qualified dealer make digital input gain adjustments.

- Press Function Key to view the Main Menu. In Main Menu, choose the Audio command.
- In the Adjust Audio Output screen, choose the Input command.
- In the Adjust Audio Input screen, locate the desired input.
- Press the Select Key to enter the selection.
- In the Input Gain screen, adjust the input gain to the desired level using the arrow keys.
- Press Back Key to return to the previous screen.
- Repeat for all inputs that will be routed to the same output.

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).

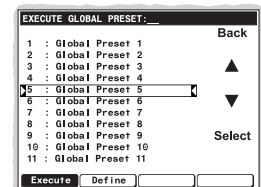
To adjust volume:



- Press Function Key to view the Main Menu. In Main Menu, choose the Audio command.
 - In the Adjust Audio Output screen, locate the desired output.
 - Press the Select Key.
 - In the Output Volume screen, adjust volume using arrow keys.
- Note:** To mute or unmute volume, press Mute or Unmute Key to the right.
- Press Back Key to return to previous screen or press Function Key to return to Main Menu.

Defining / Executing Global Presets

To define a global preset:



- Route the system to the desired state.
- Press Function Key until the Global command is visible (bottom of screen).
- Choose the Global command.
- In the Execute Global Preset screen, choose the Define command.
- In the Define Global Preset screen, scroll to desired number using arrow keys.
- Press the Select Key.
- Press the Take Key to define the current system state as a Global Preset.

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

To execute a global preset:

1. Press Function Key until the Global command is visible (bottom of screen).
2. Choose the Global command.
3. In the Execute Global Preset screen, locate desired (predefined) Global Preset.
4. Press the Select Key.
5. Press the Take Key to execute the global preset.

System Error Codes / Troubleshooting

If error codes appear 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 CD or at www.amx.com.

Checking the Software Version

To check the software version:

1. At the Main Menu screen, press Function Key until Setup command is visible.
2. Choose the Setup command; in the Setup screen, choose the Version command.
The Setup Version screen appears (see following):
 - Host – software version of initial operating system (IOS) for control panel
 - Driver – control panel's firmware version
 - XNet ID – control panel's XNNet device number
 - Bridge – version of communication link from control panel to enclosure's CPU

CP-20A Remote

General Specifications

Specifications	
Cable for XNNet 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	+7 to +9 VDC @ 500 mA
Humidity	0 to 90% non-condensing
Dimensions	0.93 in. (2.36 cm) depth 19.0 in. (48.26 cm) width with mounting ears 5.2 in. (13.21 cm) height, 3 RU
Weight	Approximately 2 lb. (0.91 kg) per panel

Rear View

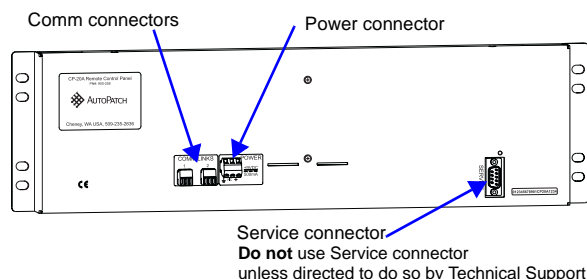


FIG. 1 CP-20A rear view

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

Installing a CP-20A 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.

Communication Cable Requirements

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

Installing the Panel

To Install a CP-20A Remote Panel:

1. Unplug one of the Comm Link connectors (see FIG. 1)
2. Loosen the two outer screws on the connector.
3. Insert XNNet link cable wires; either wire goes in either outside slot (FIG. 2).

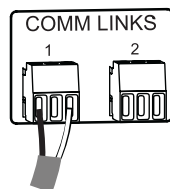


FIG. 2 Insert wires into Comm Link connector

4. Tighten screws and plug the connector back into the Comm Link connector.
5. On router's CPU, unplug XNNet connector (for connector location, see router documentation).
6. Loosen the two outer screws on the connector.
7. Insert the two wires from the CP-20A into two outer slots of the CPU's connector, leaving center slot empty. Either wire goes in either outside slot.
8. Tighten screws and plug connector back into CPU.

Multiple Panels

CP-20A Remote Panels can be linked together in a daisy chain to create multiple control points for a single system. XNNet 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).

Rack Installation

CP-20A Remote Panels are designed to fit in a standard EIA 19 in. (48.26 cm) rack. Optimum viewing angle is at eye level.

To install the CP-20A Remote in a rack:

1. Wire the CP-20A to the enclosure and to a power source.
2. Insert the wired panel through the rear of the rack.
3. Attach panel with front mounting screws.
4. Apply power to the panel (see below).
5. After a brief wait, execute a test switch.

Applying Power

Important: Power requirements: +9 VDC @ 500mA. Always use a UL approved power source. Check the power source's documentation for information specific to that power source.

On 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-20A Remote:

1. Unplug the power connector on the CP-20A Remote.
2. Loosen the two outer screws and insert the power cable wires (FIG. 3).
3. Tighten both screws and plug the connector back into the remote panel.
4. Place CP-20A Remote in rack or other permanent location before applying power.

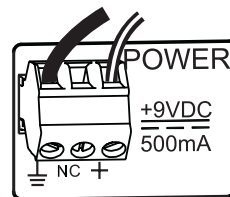


FIG. 3 Power connector

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 to view the Main Menu screen. In the Main Menu, press the Change Key. (If Change Key is not visible, press Function Key until Change Key appears).
2. At the Change Input screen, locate Input 1.
3. Press Select Key.
4. In Change Output screen locate Output 2. Press Select Key.
5. Press Take Key.

Important: If the CP-20A was not part of the original system, the current configuration file must be uploaded to the remote. To upload the current file: in the Main Menu, choose Setup, then Reload. For instructions on loading a new configuration file, see the instruction manual on the CD or at www.amx.com.

