

4K/UHD Dual-Distance 8x8 HDMI to HDBaseT Matrix Switcher with PoE

AT-UHD-PRO3-88M Installation Guide



Please check <http://www.atlona.com/product/AT-UHD-PRO3-88M> for the most recent **firmware update** or **manual**.

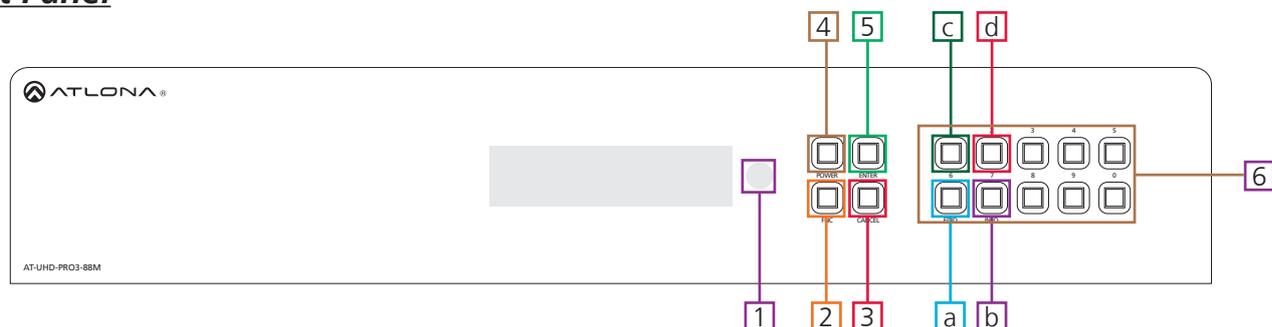
The 4K/UHD Dual-Distance 8x8 HDMI to HDBaseT Matrix Switcher with PoE is a multi zone switcher with long distance and extended distance ports, multiple control options, supports HDCP 2.2, and multichannel audio up to Dolby® Atmos™.

Package Contents

- 1 x AT-UHD-PRO3-88M
- 14 x 4 pin captive screw female connector
(4 x IR IN, 4 x IR OUT, 6 x Audio OUT)
- 1 x 5 pin captive screw female connector
IR: 2 pin, RS-232: 3 pin
- 1 x IEC C13 power cable
- 1 x IR Remote control
- 1 x Pair of rack mount ears
- 1 x User Manual

Panel Descriptions

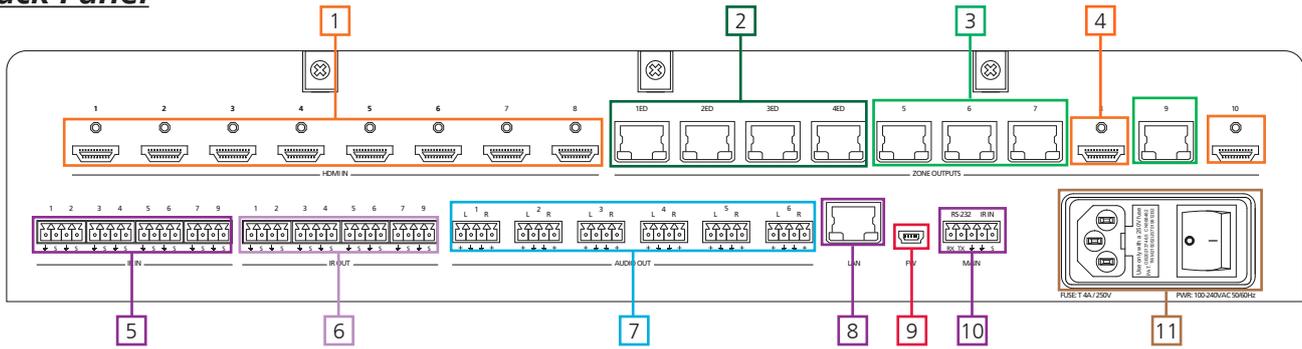
Front Panel



1. IR Receiver Window - Receives the signal from the included IR Hand Held Remote Control or 3rd party controller
2. Function (FNC) Button - Select for command options. (blue backlight when selected)
 - a. **EDID:** Save/Load EDIDs to individual inputs
 - b. **INFO:** Displays the firmware, IP, and MAC address
 - c. **1:** Save a single input to all the outputs with this function
 - d. **2:** View additional matrix and output RS-232 baud information
3. Cancel Button - Within the function menu use this button to go back one screen or to return to the home screen

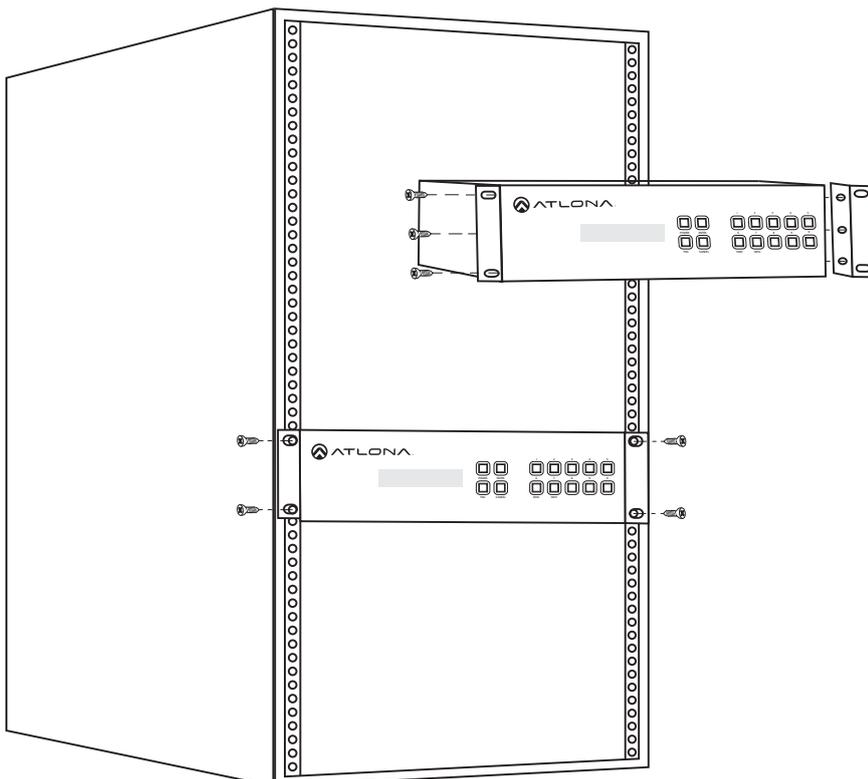
Note: You cannot power off or change functions unless you return to the home screen
4. Power Button - Cycles the power between On (blue backlight) or Standby (red backlight) mode
5. Enter Button - Use to view current status for inputs and outputs or to confirm a command
6. Number buttons - Use these buttons to select input and output paths or use with the function button to change matrix settings

Back Panel



1. HDMI Input - Connect HDMI sources to these ports
Ex. DVD players, Blu-ray players, computers, game consoles, etc
2. Extended distance HDBaseT ports - Connect to extended distance EX receivers for pass through of PoE, control, and A/V signals. **e.g.** AT-UHD-EX-100CE-RX
3. Long distance HDBaseT ports - Connect to long distance EX receivers for pass through of PoE, control, and A/V signals. **e.g.** AT-UHD-EX-70C-RX
4. HDMI outputs - Mirror to provide a local output for HD audio routing to an AVR, or matrix the ports to provide a local video output for in room displays or an HDBaseT extender set **e.g.** AT-UHD-EX-100CE-KIT
5. IR IN - Use with a 3rd party IR control box to extend IR control commands to video displays over category cable
6. IR OUT - Connect IR emitter here for controlling sources
7. Audio out - Captive screw analog audio loop outs for use with a sound system or multi-channel zone amplifier - Audio outputs follow the corresponding HDBaseT outputs **e.g.** Audio out 1 follows HDBaseT 1
8. LAN port - Connect to a network for TCP/IP, WebGUI and firmware updates
9. FW port - USB not enabled at this time for future functionality
10. Main control - Connect IR or RS-232 control system to the matrix
11. Internal power supply - Connect included IEC C13 power cable from here to a power outlet.

Rack Mounting



To rack mount the UHD-PRO3-88M unit: use the rack mount ears, the 6 screws from the sides of the UHD-PRO3-88M, and 4 rack screws.

To affix the rack mount ears, remove the three screws on each side of the UHD-PRO3-88M and affix the rack ears to the UHD-PRO3-88M (as shown in the picture to the left).

Place the UHD-PRO3-88M in the rack, lining the holes in the rack ears with the holes in the rack. Once placed, use the rack screws to keep the unit in place. (as shown in the picture to the left).

Note: Increase the air flow as needed to maintain the recommended temperature inside the rack.

Note: Do not exceed maximum weight loads for the rack. Install heavier equipment in the lower part of the rack for stability.

Category Cable and Connector

For the category cables used in the installation of these products, please be sure to use a 568B termination as pictured below:

Important! 4K (UHD) signals are sensitive to cable quality and installation technique. It is recommended to use CAT6a/7 solid core cables for best results.

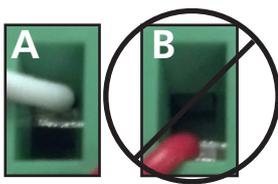
Connector type and size is very important to ensure extenders work correctly. Please use the matching cable type with the correct RJ45 connector. (e.g. CAT 7 cable should use a CAT 7 connector)

Captive Screw

The captive screw connectors allow you to cut cables to a suitable length, reducing cable clutter while providing a more reliable connection.

Connecting

When connecting the cables to the female captive screw connector it is important that the wires be terminated correctly. The female captive screw connector has a contact plate at the top and must have the wires touching it for signal to pass. When wired correctly (see picture A) the signal will pass, incorrectly (see picture B) no signal will pass.



The captive screw connectors have a contact bar that is adjusted to compress the wire against the top contact plate. Use the screws at the top of the connector to compress the wire against the contact plate.

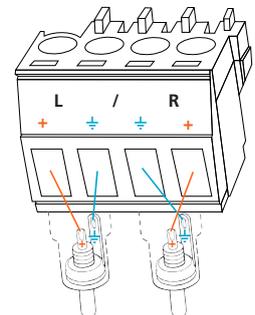
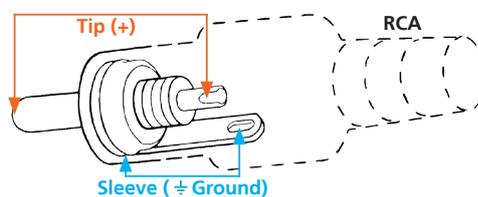
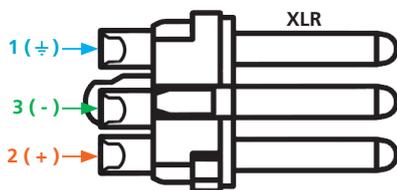
 Clockwise
Turn the screws clockwise to raise the contact bar to the upper contact plate and hold the wires in place.

 Counter Clockwise
Turn the screws counter clockwise to lower the contact bar to release the wires.

Analog Audio

A captive screw analog audio connector is provided to ensure a more reliable and secure connection. The captive screw connector supports unbalanced audio output.

Unbalanced audio connections use one signal wire and a ground and are used if other system components don't support balanced signals.

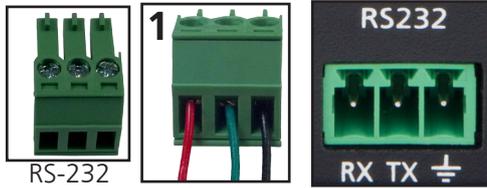


Note: Pin outs may vary, please refer to the audio device's manual to ensure a correct connection.

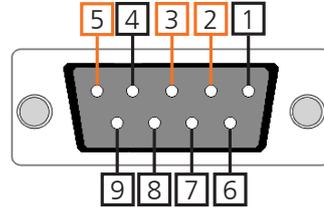
Important! When terminating cables, please ensure exposed adjacent wires do not touch. This may result in a short that can damage connected devices.

RS-232

RS-232 captive screw connector is included. RS-232 pin out will be determined by the RS-232 cable and will connect as Rx (receiver), Tx (transmitter), and \perp (ground). (See picture 1)



Pin out color will differ per RS-232 cable.



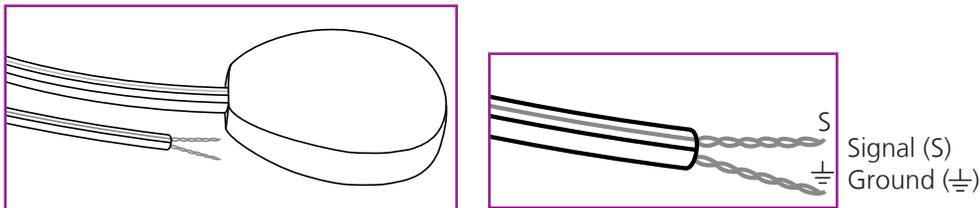
Typical pin out:
2 - TX - Transmitter
3 - RX - Receiver
5 - GND - Ground

IR



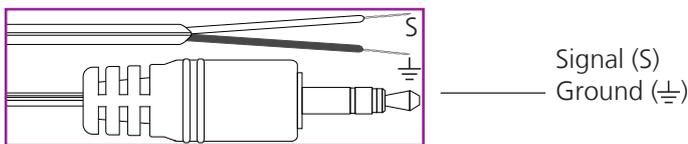
Two types of female captive screw connectors have been included: 4 pin (IR) and 5 pin (RS-232/IR).

The wires of the emitter is marked to differentiate pin outs.



The IR emitter (AT-IR-CS-TX sold separately) has two wires: signal and ground. Signal will have a solid line and ground will be blank. The IR emitter will plug into the IR OUT ports.

Note: One AT-IR-CS-TX is included with the AT-UHD-EX-70C-RX (receiver) and AT-UHD-EX-100CE-RX (receiver).



There are two wires on the IR captive screw ready cable (AT-LC-CS-IR-2M sold separately): signal and ground. The signal wire is red and ground wire is black. The IR cable will plug into the IR IN ports and connect to third party control systems.

Ethernet

For convenience, the UHD-PRO3-88M comes with DHCP on. This enables the matrix to be connected to a network without knowing available IP addresses. If your network does not allow dynamic IP addresses or if you are using the matrix with a TCP/IP control system, this feature may be turned off and the IP address set using RS-232 commands, or webGUI.

To disable DHCP, use the following command: IPDHCP off. Once disabled, set the IP address using the IPStatic command (e.g. IPStatic 192.168.1.56).

webGUI

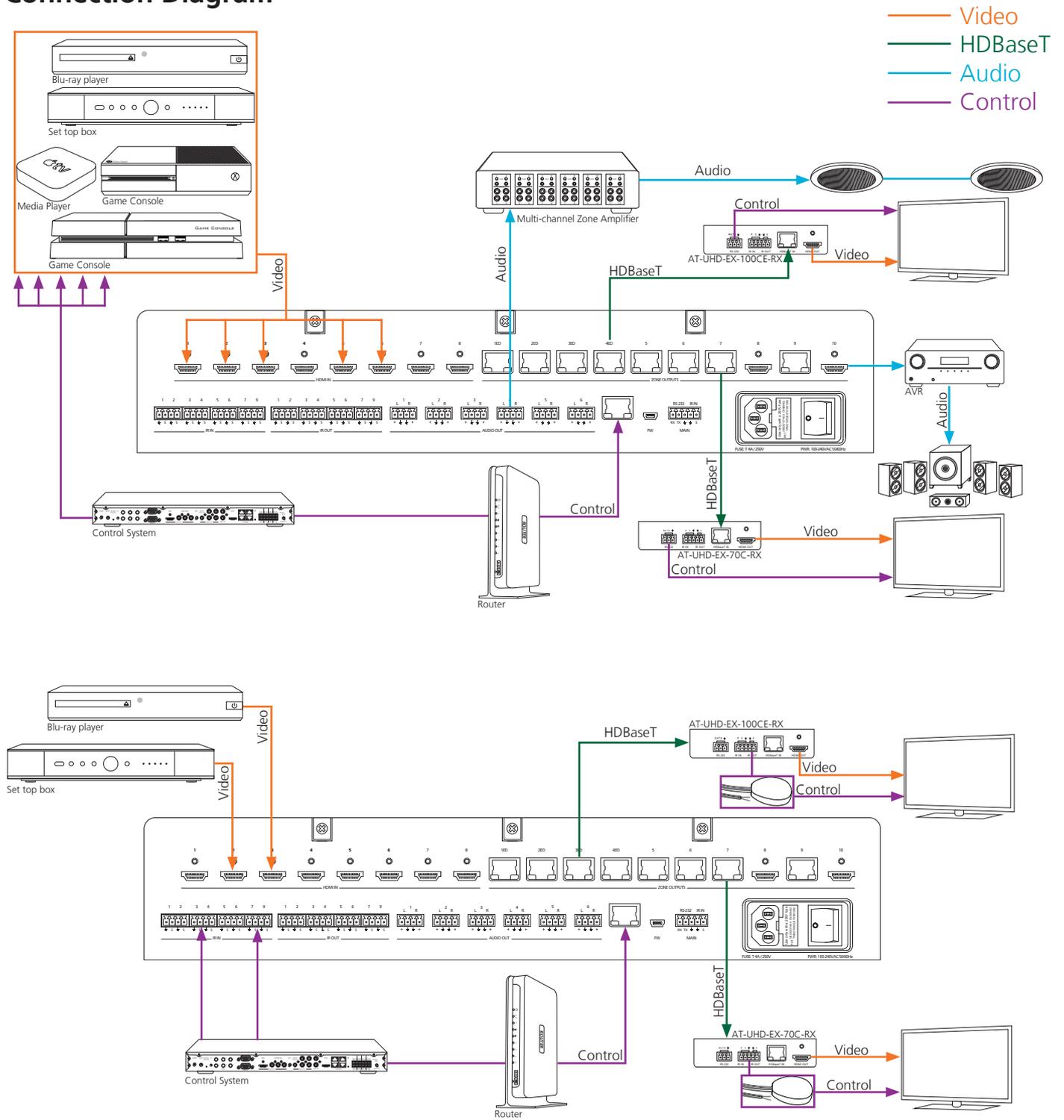
The webGUI provides a simple solution for setup and control. To access the webGUI, enter the IP address of the matrix in the address bar of a web browser.

GUI IP Address: press the FNC button on the front panel, then consecutively press the INFO button until the IP address is shown on the front panel display. Enter the IP address in the web browser.



A login screen will appear (this is the same log in for admin and general users). The default login for the webGUI will be username "root" and password "Atlona".

Connection Diagram



Troubleshooting

1. When I switch to Output 7 it is also switching Output 8.

By default, Output 8 mirrors Output 7, and Output 10 mirrors Output 9. These settings can be changed in the Web GUI.

2. I am unable to reach the Web GUI of the 88 and the IP address reads 192.168.0.150.

The UHD-PRO3-88M is set to DHCP by default. If the unit is not receiving a DHCP address from the router, then it will use an IP address of 192.168.0.150. Check your setup to verify the connection to the network, as well as the router's DHCP addressing.

3. I am unable to get a 4K Blu-ray player to output a 4K signal.

Make sure that the input, to which the Blu-ray player is connected, is using one of the internal 4K EDID settings. The EDID can be assigned using the front panel buttons or in Web GUI. Refer to the User Manual for more information.

4. When I raise or lower the volume of the zone, the TV audio is not affected.

The volume control only raises, lowers, and mutes the analog audio outputs for each zone.