

4K HDR HDMI Matrix Switcher with SDVoE Extension Outputs

AT-PRO5-MX810



The Atlona **AT-PRO5-MX810** is an 8x10 matrix switcher with eight HDMI® inputs, two HDMI outputs, and eight AV extension outputs with SDVoE® 10GbE connectivity for ultra-high definition video and audio delivery to an Atlona AT-PRO5-101-SC-RX or AT-PRO5-101-RX receiver. Part of the PRO5 Series, this matrix switcher is HDCP 2.3 compliant, and supports 4K/60 4:4:4 and HDR at HDMI data rates up to 18 Gbps. Each SDVoE extension output includes an RJ45 port, and an SFP+ cage for copper or fiber-optic connectivity to transmit video, embedded audio, Gigabit Ethernet, and RS-232 and IR control signals to the receiver. The RJ45 port allows extension up to 330 feet (100 meters) over CAT6a UTP cable, along with PoE for powering the receiver, while the SFP+ cage can be used with a compatible fiber optic module to extend from 38 meters up to 10 kilometers over fiber optic cable. Video processing is available in the PRO5-101-SC-RX scaling receivers, including 4K video upscaling and downscaling with frame rate conversion, and video wall processing. This HDMI to SDVoE matrix switcher is equipped with a comprehensive host of audio and control system integration features, making it ideal for a wide range of commercial applications requiring multi-zone AV distribution with long-distance signal extension.

Package Contents

- 1 x AT-PRO5-MX810
- 1 x 3-pin captive screw connector
- 8 x 5-pin captive screw connectors
- 1 x AC power cord
- 1 x Insert w/ QR code



IMPORTANT: Visit <https://www.atlona.com/product/at-pro5-mx810> for the latest firmware updates and User Manual.

Front Panel Descriptions



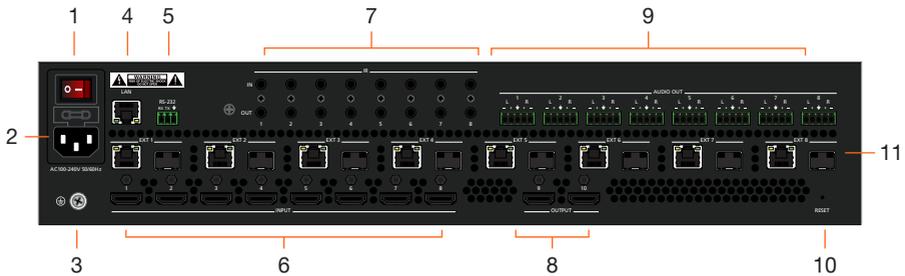
1 PWR

LED will be red while the unit is booting and blue when operating normally. Refer to [Front Panel LED Indicators \(page 5\)](#) for more information.

2 STATUS

LED will be blue when the unit is operating normally. Refer to [Front Panel LED Indicators \(page 5\)](#) for more information.

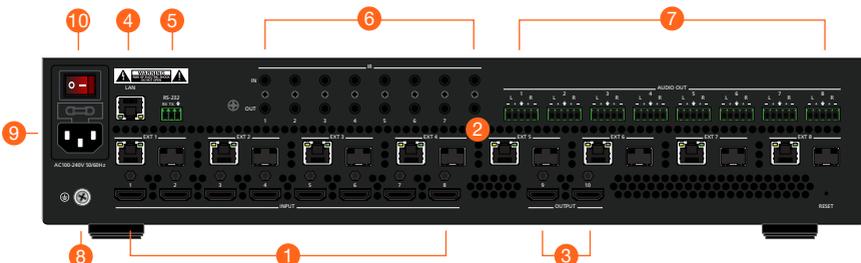
Rear Panel Descriptions



- 1 Power Switch**
 Turns the AT-PRO5-MX810 on or off. Press the side of the switch labeled “I” to power-on the unit. Press the side of the switch labeled “O” to power-off the unit.
- 2 IEC Connector**
 Connect the included power cord from this power receptacle to an available grounded wall outlet.
- 3 Chassis Ground**
 Provides a common return path for electric current and a safety feature to prevent electric shock.
- 4 LAN**
 Connect an Ethernet cable from this port to the network.
- 5 RS-232**
 Connect the included 3-pin captive screw connector to this port.
- 6 INPUT**
 Connect an HDMI cable from each of these ports to a HD/UHD source.
- 7 IR**
 This bank of ports provide both IR inputs and outputs. Connect 3.5 mm jacks to these ports.
- 8 OUTPUT**
 Connect an HDMI cable from each of these ports to a display, such as a confidence monitor.
- 9 AUDIO OUT**
 Connect the included 5-pin captive screw connectors from these port to an amplifier.
- 10 RESET**
 Press this button to perform a factory-reset of the AT-PRO5-MX810.
- 11 EXT 1 - EXT 8**
 Connect these outputs to the AT-PRO5-101-SC-RX scaling receiver or AT-PRO5-101-RX receiver. RJ45 ports provide extension up to 330 feet (100 meters) over CAT6A/7 cable along with Power over Ethernet (PoE). SFP+ cage can be used with compatible fiber optic transceiver modules to extend from 38 meters up to 10 kilometers over fiber optic cable.

Installation

1. Connect an HDMI cable from each source to these **INPUT** ports.
2. Connect an **AT-PRO5-101-RX** or **AT-PRO5-101-SC-RX** receiver to the **EXT 1 - EXT 8** ports. Note that the **RJ45** and **SFP+** ports cannot be used at the same time to extend AV sources.
 - RJ45 ports: connect CAT6a/7 cabling up to 330 feet (100 meters) to AT-PRO5-101-SC-RX scaling receivers or AT-PRO5-101-RX receivers.
 - SFP+ cage: connect compatible fiber optic transceiver modules to extend from 38 meters (125 feet) up to 10 kilometers (6.2 miles) over fiber optic cable. Refer to [Compatible Transceivers \(page 9\)](#) for more information.
3. Connect an HDMI cable from the **OUTPUT** ports to displays, such as a confidence monitors.
4. Connect an Ethernet cable from the **LAN** port to the Local Area Network (LAN). This step will be required in order to access the built-in web server.
5. Connect the included 3-pin captive screw connector from the **RS-232** port to a control system. Refer to [RS-232 \(page 6\)](#) for more information.
6. Connect a 3.5 mm jack from the control system to the **IR IN** ports. Connect IR emitters, such as the AT-VCC-IR-EMT, from the **IR OUT** ports to controlled devices.
7. Connect the included 5-pin captive screw connectors from these **AUDIO OUT** ports to an amplifier. Refer to [AUDIO OUT \(page 6\)](#) for more information.
8. Connect the chassis ground to a stable and reliable grounding point that safely conducts stray or fault currents away from the device.
9. Connect the included AC power cord from the **AC 100-240V 50/60 Hz** power receptacle to an available AC electrical outlet.
10. Press the side of the switch labeled "I" to power-on the AT-PRO5-MX810.



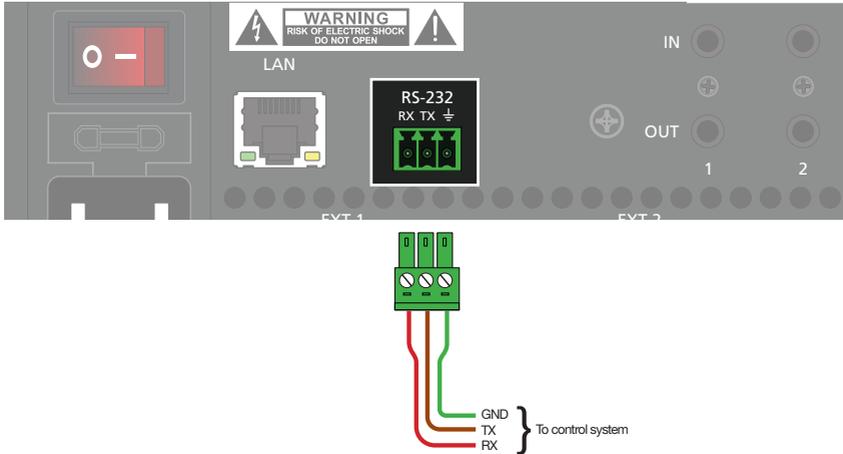
Front Panel LED Indicators

The LED indicators on both the front and rear of the unit provide basic information on the current status of the unit.

| LED | State | Description |
|---------------|---|---|
| PWR | Solid blue  | Matrix is powered and in normal operating mode. |
| | Solid red  | The matrix is in <i>standby mode</i> . Note that when the AT-PRO5-MX810 is placed in <i>standby mode</i> , the PWR LED indicator will be red. |
| | Off  | Matrix is not powered. <ul style="list-style-type: none"> • Check the power supply and make sure it is securely fastened to the captive screw connector on the rear of the unit. • Make sure that the power supply is connected to an available electrical outlet and that the outlet is “live” (some outlets are controlled by a wall switch). |
| STATUS | Solid red  | The matrix is booting or is in the process of rebooting. |
| | Blinking blue  | The matrix is in the process of resetting to factory defaults. |
| | Blinking red  | The matrix is updating the firmware. |

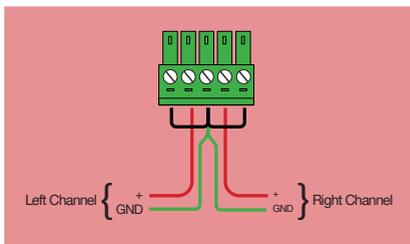
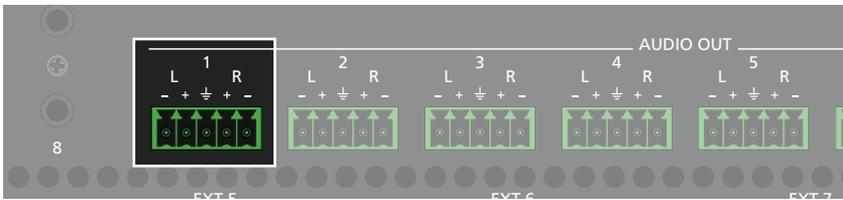
RS-232

Connect the RS-232 cable between the control system and the **RS-232** port on the AT-PRO5-MX810. Use the included 3-pin captive screw connector to wire the RS-232 cable as shown.

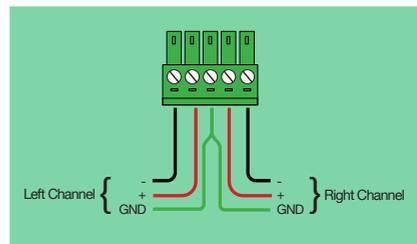


AUDIO OUT

Each **AUDIO OUT** port can be wired for either unbalanced or balanced output. For unbalanced audio connections, both negative terminals should be connected to ground. Wire the included 5-pin captive screw connectors as shown.



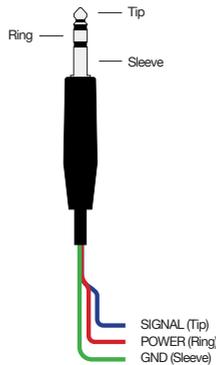
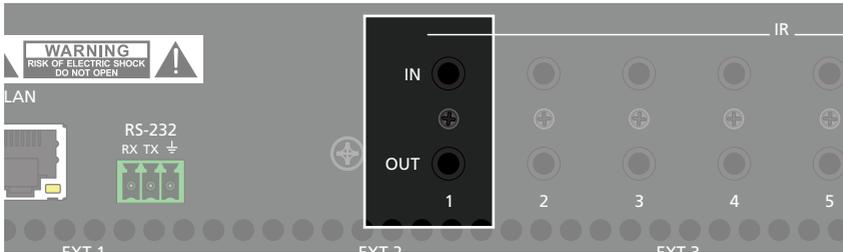
Unbalanced Audio



Balanced Audio

IR IN / IR OUT

Connect the IR emitter or receiver wires to the appropriate contacts on the 3.5mm plug according to the device's specification. Note that wire colors within a 3.5 mm cable will vary depending upon the manufacturer. A multimeter can be used to verify each wire's function by checking the contacts on the 3.5 mm jack.



Controlling Headend Devices

Connect an IR emitter to the desired **OUT** port on the AT-PRO5-MX810. Make sure the source device is within range of the IR emitter. Refer to the user manual for more information.

Controlling a Display

Connect the IR output of the control system to the desired **IN** port on the AT-PRO5-MX810. Refer to the user manual for more information.

Accessing the built-in Web Server

The AT-PRO5-MX810 includes a built-in web server, which allows easy management and control of all features. Before using the web server, a password must be created.

The AT-PRO5-MX810 is set to DHCP by default and will receive an IP address from the network's DHCP pool if a DHCP server is available. If no DHCP server is detected, the AT-PRO5-MX810 will automatically assign itself an APIPA address in the range 169.254.0.1 to 169.254.255.254, with a subnet mask of 255.255.0.0.

1. Make sure that an Ethernet cable is connected between one of the **LAN** ports on the AT-PRO5-MX810 and the network.
2. Launch a web browser and enter the IP address of the unit. By default, the AT-PRO5-MX810 is set to DHCP mode and will be assigned an IP address, if a DHCP server is present on the network.
3. The **Login** page will be displayed.
4. Enter `Atlona` in the **Password** field.
5. Click **Login**.
6. The **Change Password** screen will be displayed.
7. Enter the desired password in the **Password** field.
8. Click **Apply**.

Compatible Transceivers

| Manufacturer | Product |
|--------------|-----------------------|
| Atlona | AT-SFP-PLUS-10GE-SR |
| FS | FS SFP+ 10GB 859nm LC |
| Ubiquiti | UACC-OM-MM-10G-D-2 |
| Proline | EW3D0000710-PRO |
| StarTech | 455883B21ST |

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Warranty

To view the product warranty, use the following link or QR code:

<https://atlona.com/warranty/>.



English Declaration of Conformity

The English version can be found under the resources tab at:

<https://atlona.com/product/at-pro5-mx810/>.



Chinese Declaration of Conformity 中国RoHS合格声明

由SKU列出於:

<https://atlona.com/about-us/china-rohs/>.



HIGH-DEFINITION MULTIMEDIA INTERFACE

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