Omega Multi-format 4x2 matrix switcher with HDMI, USB-C, and DisplayPort inputs, plus HDMI and HDBaseT outputs
AT-OME-MS42

The Atlona AT-OME-MS42 is a 4x2 matrix switcher with HDMI, USB-C, and DisplayPort inputs, plus HDMI and HDBaseT outputs. Part of the Omega™ Series of integration products for modern AV communications and collaboration, the OME-MS42 is HDCP 2.2 compliant and features HDBaseT extension for video up to 4K/60 4:2:0, plus embedded audio, control, Ethernet, and USB over distances up to 330 feet (100 meters). All inputs and the local HDMI output support 4K HDR and 4K/60 4:4:4 at HDMI data rates up to 18 Gbps. Additionally, 4K downscaling to 1080p @ 60, 30, or 24 Hz is available for the HDMI output when connected to an HD sink. The integrated USB extension addresses the challenge of connecting between USB devices at remote locations, and is ideal for software video conferencing and touch or interactive displays. The OME-MS42 includes USB 2.0 and USB-C interfaces for three host PCs, plus two peripheral devices such as a camera, microphone, speakerphone, or keyboard and mouse. It is ideal for video conferencing and many other 4K presentation applications with the OME-EX-RX receiver and OME-SR21 scaling receiver.
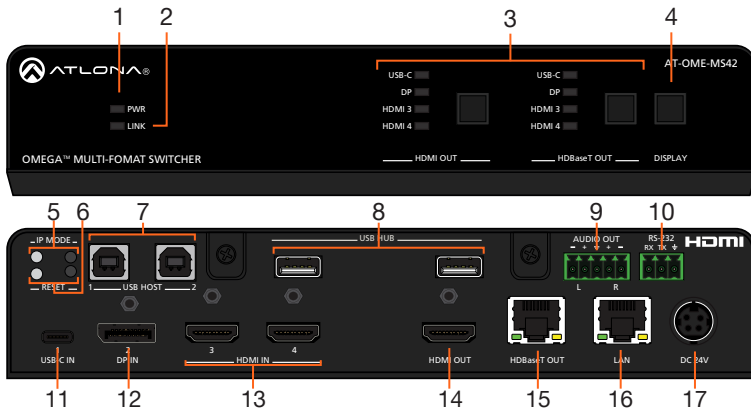
Package Contents

1 x AT-OME-MS42
1 x Captive screw connector, 5-pin
1 x Captive screw connector, 3-pin
1 x USB-C cable
2 x Mounting plate
4 x Mounting screws
4 x Feet w/rubber grips
1 x 24V DC power supply
1 x IEC power cord
1 x Installation Guide

IMPORTANT: Visit https://atlona.com/product/AT-OME-MS42 for the latest firmware updates and User Manual.
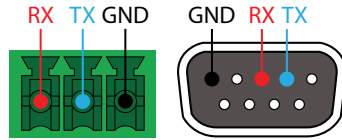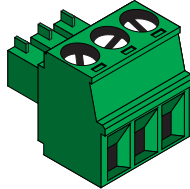
![ATLONA a Panduit company]

Panel Descriptions

1 PWR LED
Illuminates when the unit is receiving power.

2 LINK LED
Lights up when connected and receiving signal over HDBaseT.

3 HDMI OUT/HDBaseT OUT
Button - Press to manually switch between inputs.
LEDs - Will illuminate for the currently selected input.

4 DISPLAY
Press this button to toggle the power state of the desired display.

5 IP MODE LED and button
Press and hold the button for 5 seconds until the LED blinks to switch the IP mode between DHCP and Static IP modes. The LED will blink 4 times for DHCP and 2 times for static IP.

6 RESET LED and button
Press and hold the button for 5 seconds until the unit resets. The LED will blink 3 times as the unit resets to factory default settings

7 HOST USB
Connect to a computer using a USB B to USB A cable. USB 3.0 signal will only pass when using the local USB hub devices.

8 USB HUB
Connect USB devices to these ports.
e.g. USB camera, mouse, etc.

9 AUDIO OUT
Connect to an audio DSP, amplifier, or other audio distribution devices.

10 RS-232
Use for device or display control.

11 USB-C IN
Connect a USB-C source to this port.

12 DP IN
Connect a DisplayPort source to this port.

13 HDMI IN
Connect HDMI cables to these ports from HDMI sources.

14 HDMI Output
Connect an HDMI cable from here to an HDMI display.

15 HDBaseT Output
Connect a CAT5e/6/6a/7 cable from this port to an HDBaseT receiver.

16 LAN
Connect an Ethernet cable to this port for control of the unit or to pass Ethernet to a local device.

17 DC 24V
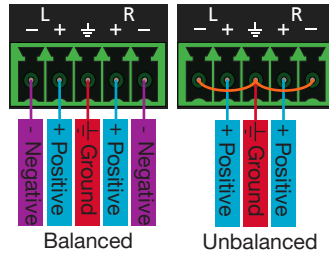Connect the included power supply to this port.
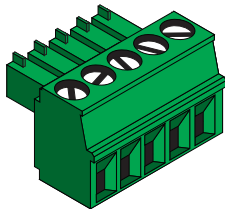
RS-232

A 3-pin captive screw connector has been included for RS-232.

Pin out will be determined by the RS-232 cable and connect as RX (receive), TX (transmit) and ⏚ (Ground).

Audio

Connect to an audio DSP, amplifier, or other audio distribution devices.

Balanced   Unbalanced

Use a jumper between the negative and ground pins when using an unbalanced connection.

Mounting Instructions

The AT-OME-MS42 can be mounted under a desk, lectern, or other flat surface.

1 Turn the unit upside down on a flat surface.

2 Position the included mounting plates over the pre-drilled holes on the bottom of the enclosure. Use the included mounting screws to attach the mounting plates. When attaching mounting plates, the countersink bevels on the mounting plates should face upward.

3 Mount the unit using the circular holes, on each mounting plate. Mounting screws are not included.

Cable Recommendation Guidelines

Refer to the tables below for recommended cabling when using Altona products with HDBaseT. The green bars indicate the signal quality when using each type of cable. Higher-quality signals are represented by more bars.
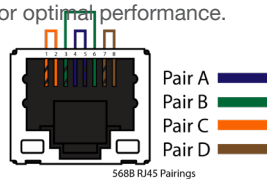
Core	Shielding	CAT5e	CAT6	CAT6a	CAT7
Solid	UTP (unshielded)	■	■■■	■■■■	N/A
	STP (shielded)	■■	■■■■	■■■■■	■■■■■

⚠️ **IMPORTANT:** Stranded or patch cables are not recommended due to performance issues.

Cable	Max. Distance @ 4K	Max. Distance @ 1080p
CAT5e	295 feet (90 meters)	330 feet (100 meters)
CAT6 / CAT6a / CAT7	330 feet (100 meters)	330 feet (100 meters)

*Atlona recommends TIA/EIA 568-B termination for optimal performance.

Pair A
Pair B
Pair C
Pair D

568B RJ45 Pairings

Installation

1 Connect USB-C, DisplayPort, and HDMI sources to the USB-C, DP, and HDMI input ports.

2 *Optional* Connect the 2CH analog AUDIO OUT ports to an audio DSP, amplifier, or other audio distribution devices.

3 *Optional* Connect USB devices (e.g. USB camera) to the USB hub ports.

4 *Optional* Connect the HOST USB port to a computer using a USB B to USB A cable (cable not provided).

5 *Optional* For control, connect to the 3-pin captive screw RS-232 port.

6 *Optional* Connect a network switch to the LAN port, for IP control or system configuration.

7 Connect an HDMI cable from the HDMI output port to a local display.

8 Connect a compatible HDBaseT Receiver (e.g. AT-OME-EX-RX or AT-OME-SR21) to the HDBaseT output port.

9 Connect the included 24V DC power supply to a compatible power outlet.

IP

DHCP

By default, the AT-OME-MS42 is set to DHCP mode. In this mode, when the AT-OME-MS42 is connected to the Local Area Network (LAN), it will automatically be assigned an IP address by the DHCP server (if available). Press the IP MODE button to show the IP address in the top left corner of the display connected to the HDMI output.

Static

If no DHCP server is available, or a static IP is required, the OME-MS42 can be set to static IP mode using the IP mode button.

- Press and hold the **IP MODE** button for 5 seconds to switch to static IP mode, the LED will blink 2 times when it goes into Static IP mode. In this mode, the AT-OME-MS42 will be set to the following:
  IP address: 192.168.1.254
  Subnet mask   255.255.0.0
  Gateway: 192.168.1.1

- To switch back to DHCP, press and hold the IP mode button for 5 seconds. The LED will blink 4 times when successfully put into DHCP mode.

Accessing the webGUI

The AT-OME-MS42 includes a built-in webGUI, which allows easy remote management and control of all features. Follow the instructions below to access the webGUI.

1 Make sure that an Ethernet cable is connected between the **LAN** port on the AT-OME-MS42 and the network.
2 Press the **IP MODE** button on the front panel to display the IP address of the unit in the top left corner of the connected HDMI display.
3 Launch a web browser and enter the IP address in the address bar.
4 The AT-OME-MS42 **Login** page will be displayed.
5 Enter the following information on the **Login** page.

   Login: admin
   Password: Atlona

6 Click the **Login** button.
7 Refer to the user manual for detailed operation of the webGUI.

Velocity™ with Integrated AMS

For easy configuration of Atlona devices, Velocity with Integrated AMS is available from https://atlona.com/ams for free. Two options can be used for installation: The free Linux based software download or the easy to install server hardware (AT-AMS-HW).

Once AMS has been set up:
1 Open a browser on the same network as Velocity with Integrated AMS and go to the IP address of Velocity with Integrated AMS. View the AMS 2.0 installation instructions on how to find the IP address of the software.
2. Enter the login information on the Velocity with Integrated AMS web page, then click the **Login** button.
3 View the AT-OME-MS42 manual for routing and configuration information.

Notes

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/ome-ms42/.

Chinese Declaration of Conformity 中国RoHS合格声明

由SKU列出於:

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

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