Omega 4K/UHD Two-Input EU/UK Wallplate Switcher for HDMI and USB-C with HDBaseT Output
AT-OME-TX21-WP-E

The Atlona AT-OME-TX21-WP-E is a 2×1 switcher and HDBaseT transmitter with HDMI and USB-C inputs. It is designed for commercial installations in Europe. The OME-TX21-WP-E includes interchangeable EU and UK faceplates and brackets, with both black and white faceplates for each version. The USB-C input is ideal for AV interfacing with newer Mac®, Chromebook™, and Windows® PCs, as well as smartphones and tablets. Video signals up to 4K/UHD @ 60 Hz with 4:2:0 chroma subsampling, plus embedded audio and control can be transmitted up to 330 feet (100 meters). The OME-TX21-WP-E is HDCP 2.2 compliant. It is designed for use with select HDVS Series receivers and scalers, as well as the AT-UHD-EX-100CE-RX-PSE receiver, and Atlona switchers with HDBaseT inputs. This transmitter can serve as an integral component of a fully automated AV system, with the convenience of automatic input selection and display control. It is remotely powered by the UHD-EX-100CE-RX-PSE or other Atlona HDBaseT-equiped devices through Power over Ethernet (PoE).
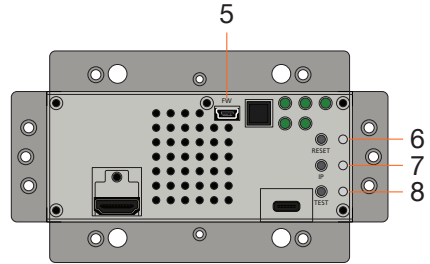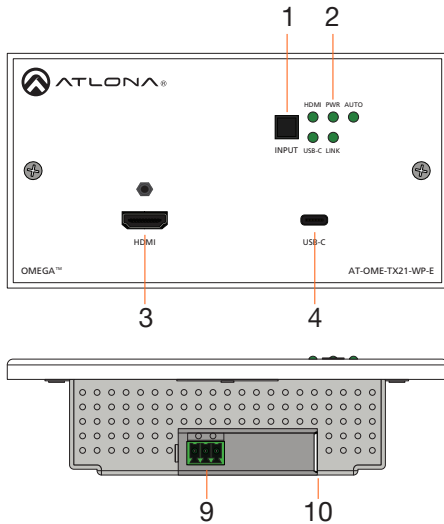
Package Contents

1 x AT-OME-TX21-WP-E w/EU faceplate installed
1 x AT-OME-TX21-WP-UK faceplate
2 x 40mm M3.5 screws
1 x 3-pin captive screw connector
1 x USB-C cable
1 x Installation Guide

IMPORTANT: Visit http://www.atlona.com/product/AT-OME-TX21-WP-E for the latest firmware updates and User Manual.

Panel Descriptions

1   **INPUT button**
Use this button to manually select between the HDMI and USB-C inputs.

2   **LED Indicators**
Indicator lights for power, sources, switching, and link.

     HDMI - This LED indicator glows solid green when a source is connected to the **HDMI** port.

     PWR - Will illuminate green when the unit is powered on.

     AUTO - When illuminated, auto switching is enabled.

     USB-C - This LED indicator glows solid green when a USB-C device is connected to the USB-C port.

     LINK - This will illuminate green to indicate A/V signal.

3   **HDMI**
Connect an HDMI source to this port.

4   **USB-C**
Connect a USB-C cable from this port to a USB-C source.

5   **FW Port**
Connect a mini-USB to USB-A type cable from this port to a computer, to update firmware.

6   **RESET button and LED**
Press and hold this button for 10 seconds to factory reset the unit. LED will flash while the reset processes.

7   **IP button and LED**
Press and hold this button for 10 seconds to switch the unit between DHCP and static IP. LED will blink 4 times when switching to DHCP mode and 2 times for static IP mode.

8   **TEST button and LED**
This button is for future use.

9   **RS-232 port**
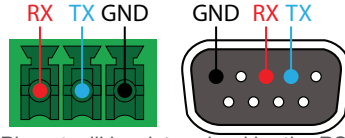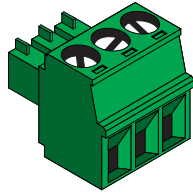Control the unit using a control system or PC connected to this port.

10   **HDBaseT OUT**
Connect an Ethernet cable from this port to a locally-powered HDBaseT receiver such as the AT-HDVS-200-RX or AT-UHD-EX-100CE-RX-PSE.

RS-232

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

RX   TX GND   GND RX TX

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

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)	▮▮	▮▮▮▮	▮▮▮▮▮	▮▮▮▮▮
Performance Rating (MHz)		350	500	600	800

⚠ **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)

Use of a TIA/EIA 568B termination is recommended for optimal performance.

Pair A
Pair B
Pair C
Pair D

568B RJ45 Pairings
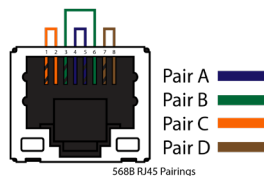
Installation

1. Connect a 568B terminated Ethernet cable, that has been threaded through the mounting hardware, into the HDBaseT OUT port.

2. *Optional* Connect the RS-232 captive screw connector to the RS-232 port.

3. Remove the screws from each end of the OME-TX21-WP faceplate.

4. Remove the locking connector of the HDMI port.

5. Pull the faceplate off the unit and follow the below mounting instructions for securing the unit.

6. Connect a USB-C source to the USB-C port.

7. Connect an HDMI source to the HDMI port.

Mounting

The AT-OME-TX21-WP-E was designed to fit in a UK or EU 2 gang backbox or mudring. Follow the instructions below for mounting.

EU Installation (default)

1. Remove the two screws on the front of the faceplate.

2. Remove the locking connector of the HDMI port.

3. Pull the faceplate off the unit.

4. Place the unit into the already installed back box or mudring, making sure the holes line up with the mounting holes.

5. Use the back box screws to secure the wallplate to the back box.

6. Replace the face plate, securing it with the two faceplate screws and the HDMI locking screw.
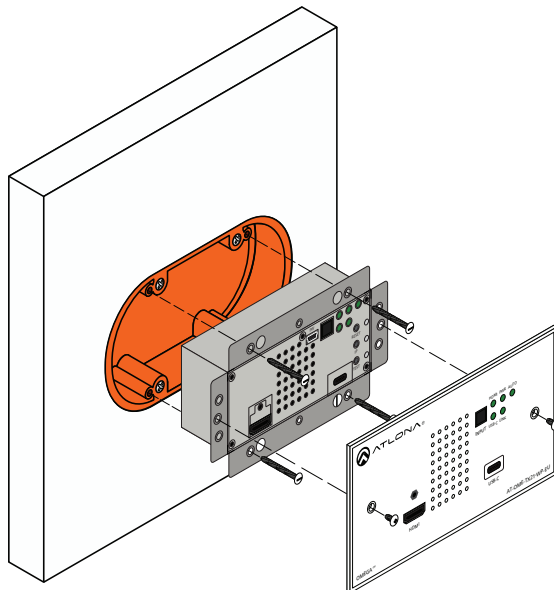
UK Installation

1. Remove the two screws on the front of the faceplate.

2. Remove the locking connector of the HDMI port.

3. Pull the faceplate off the unit.

4. Place the unit into the already installed back box or mudring, making sure the holes line up with the mounting holes.

5. Place the EU faceplate on the front of the unit and use the included two 40mm M3.5 screw to secure the faceplate to the unit and the back box.

6. Replace the HDMI locking screw.
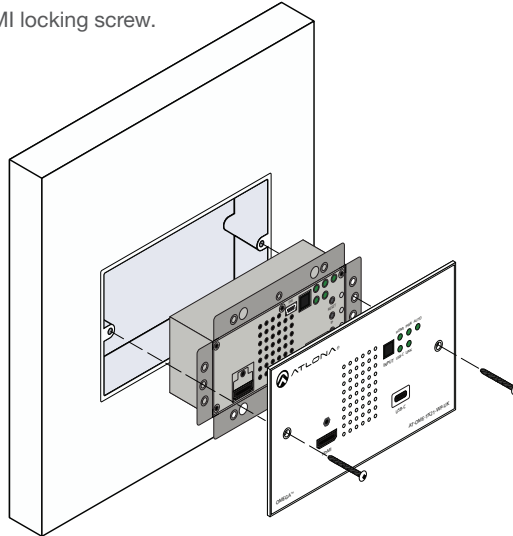
IP

DHCP mode

By default, the AT-OME-TX21-WP-E is set to DHCP mode. In this mode, when the device is connected to the Local Area Network (LAN), it will automatically be assigned an IP address by the DHCP server.

If the unit has been placed into static IP mode, press and hold the IP button (located beneath the faceplate) for 10 seconds. The LED next to the IP button will flash 4 times as it switches to DHCP mode.
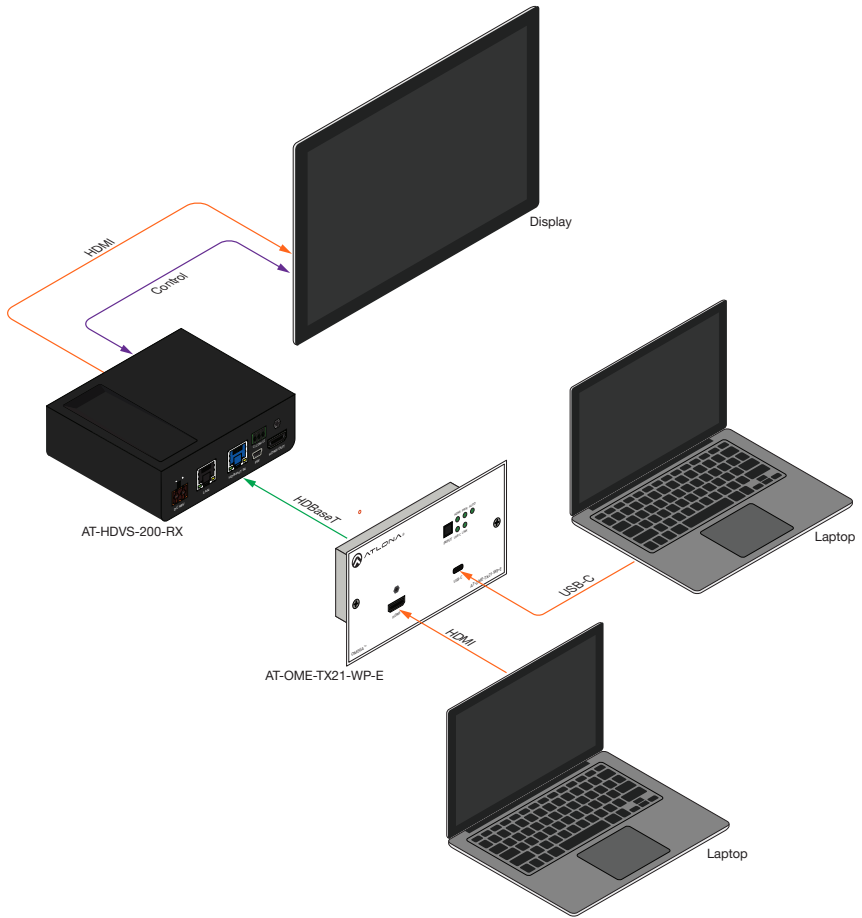
Static IP mode

If the unit is connected to a non-DHCP network, press and hold the IP button (located beneath the faceplate) for 10 seconds. The LED next to the IP button will flash 2 times when switching to static IP mode. The default static IP address and netmask is 192.168.1.254 255.255.0.0.

Auto IP mode

If no DHCP server is detected after 30 seconds, then the transmitter will be placed in *Auto IP mode* and will be assigned a link-local IP address of 169.254.XXX.XXX 255.255.0.0.

Connection Diagram

Display

AT-HDVS-200-RX

AT-OME-TX21-WP-E

Laptop

Laptop

HDMI

Control

HDBaseT

USB-C

HDMI

Troubleshooting

Problem	Solution
The AT-OME-TX21-WP-E is not detecting the source device.	• If an adapter is being used, then try a different one. • Check the cable for possible damage or loose connections.
How do I switch inputs?	• Press the INPUT button to manually switch between sources. • The input can be switched using the webGUI, TCP/IP, or RS-232. View the user manual or API for instructions and commands.
The AT-OME-TX21-WP-E is not powering.	• The AT-OME-TX21-WP-E receives power from the receiver through HDBaseT. Make sure that the receiver (such as the AT-HDVS-200-RX or the AT-UHD-EX-100CE-RX-PSE) is PoE compatible and is connected to the **HDBaseT OUT** port using an Ethernet cable. Both the **PWR** and **LINK** LEDs will be illuminated on the front of the AT-HDVS-210U-TX-WP when operating correctly. • Check the Ethernet cable for possible damage or loose connections.
The USB-C port is not charging the connected USB-C device.	• The **USB-C** port is used as an input and does not supply the required amount of voltage for charging USB-C devices.