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Omega™ 4K/UHD
Wallplate HDBaseT Transmitter
for HDMI and USB-C with USB Hub
AT-OME-SW21-TX-WPC

The Atlona **AT-OME-SW21-TX-WPC** is a 2×1 switcher and HDBaseT transmitter with HDMI and USB-C inputs. It sends video up to 4K/60 4:2:0, plus embedded audio, control, and USB over distances up to 330 feet (100 meters). The OME-SW21-TX-WPC features a US one-gang, wallplate form factor, and includes interchangeable black and white wallplates and faceplates. Part of the Omega™ Series of integration products for modern AV communications and collaboration, the OME-SW21-TX-WPC is HDCP 2.2 compliant. The USB-C input is ideal for AV interfacing with newer Mac®, Chromebook™, and Windows® PCs, as well as smartphones and tablets. With a matching HDBaseT receiver, 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-SW21-TX-WPC includes USB 2.0 and USB-C PC host interfaces, plus a USB 2.0 interface for a peripheral device such as a speakerphone, microphone, or keyboard and mouse. This transmitter is ideal for use with Omega Series receivers as well as switchers with HDBaseT inputs.

Package Contents

1 x AT-OME-SW21-TX-WPC
1 x White faceplate
1 x White wallplate
1 x Black faceplate
1 x Black wallplate
4 x Mounting Screws (2x course thread, 2x fine thread)

1 x USB-C to USB-C cable, 2 meters
1 x Installation Guide

IMPORTANT: Visit http://www.atlona.com/product/AT-OME-SW21-TX-WPC for the latest firmware updates and User Manual.

Panel Layout
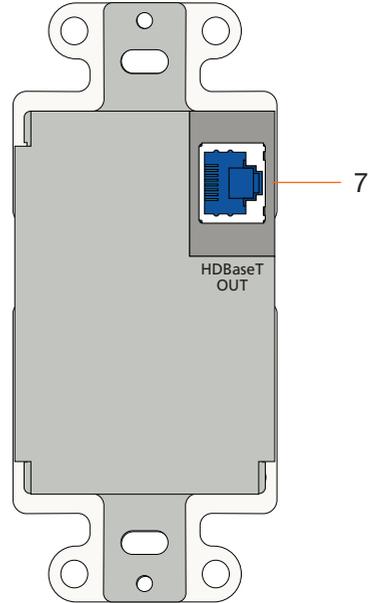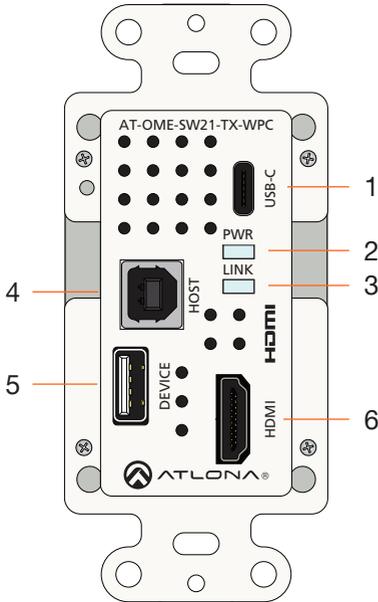
1   **USB-C**
    Connect a USB-C cable from this port to the USB-C port of a source device.

2   **PWR**
    This LED indicator glows solid green when the unit is powered. Refer to LED Indicators (page 5) for more information.

3   **LINK**
    This LED indicator glows solid amber to indicate that the HDBaseT signal integrity is good. Refer to LED Indicators (page 5) for more information.

4   **HOST**
    Connect a USB cable from this port to the host computer.

5   **DEVICE**
    Connect a USB device, such as a speakerphone, to this port. This port provides 5 W of power.

6   **HDMI**
    Connect an HDMI cable from this port to a UHD/HD source.

7   **HDBaseT OUT**
    Connect a category cable from this port to the **HDBaseT IN** port of the AT-OME-EX-RX or other PoE-compatible receiver.

Faceplate Removal and Assembly

Removal of the faceplate requires that the AT-OME-SW21-TX-WPC be disassembled from the electrical box or mud ring. A small Phillips-head screwdriver is required to remove the faceplate.

1.   Unscrew the four Phillips-head screws from the sides of the faceplate, as shown:
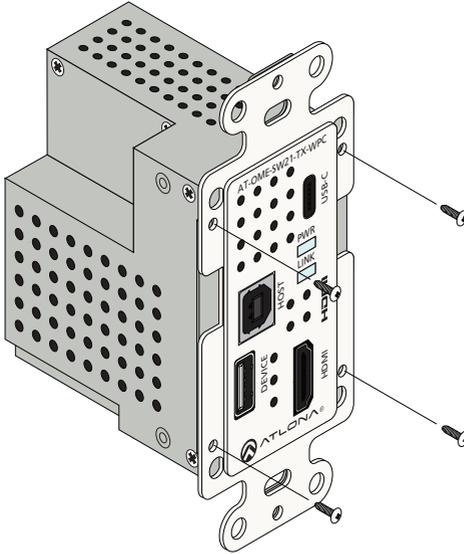
2.   Gently remove the faceplate by pulling it toward you.

3.   Attach the new faceplate, then secure it using the four Phillips-head screws. Do not over-tighten or apply high-torque devices to the screws. Doing so may damage the faceplate and/or the screws.

4.   Install the AT-OME-SW21-TX-WPC into the electrical box or mud ring.

5.   Reattach the wallplate.

Installation

1. Connect a USB-C cable from the source to the **USB-C** port.

2. Connect an HDMI cable from a UHD/HD source to the **HDMI** port.

3. Connect a USB cable from the host computer to the **HOST** port.

4. Connect a USB device, such as a speakerphone to the **DEVICE** port. This port provides 5 W of power.

5. Connect a category cable, from the **HDBaseT OUT** port on the rear of the transmitter, to the **HDBaseT IN** port on the receiver.
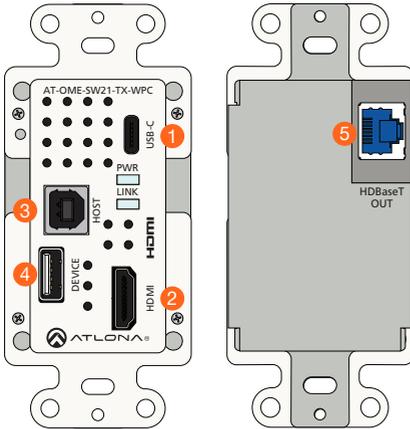
Cable Recommendation Guidelines

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.

LED Indicators

The **PWR** and **LINK** LED indicator on both the transmitter and receiver unit provides basic information on the current status of the AT-OME-SW21-TX-WPC.

PWR	Description
Solid green	Unit is powered. Normal operating mode.
Off	Unit is not powered. • Make sure that the category cable between the **HDBaseT IN** port on the transmitter and the **HDBaseT OUT** port on the receiver is secure. • Make sure that the power supply, at the receiver, is connected to an active AC outlet.

LINK	Description
Solid amber	The link integrity between the transmitter and the receiver is good.
Blinking amber	Poor signal integrity between the transmitter and the receiver. • Make sure that the category cable between the **HDBaseT IN** port on the transmitter and the **HDBaseT OUT** port on the receiver is secure. • The category cable may be compromised. Try using a different category cable. Make sure that the cable is solid core. Stranded or patch cables are not recommended.
Off	The link integrity between the transmitter and the receiver is compromised. • Check the category cable between the **HDBaseT IN** port on the transmitter and the **HDBaseT OUT** port on the receiver.

Auto IP (APIPA) Mode

If the AT-OME-SW21-TX-WPC is unable to detect a DHCP server within 15 seconds, then the unit will use a self-assigned IP address within the range of `169.254.xxx.xxx`. If this occurs, connect the AT-OME-SW21-TX-WPC to a computer running Microsoft Windows® and follow the procedure below.

1. Click **Start** > **Settings** > **Control Panel** > **Network and Sharing Center**.

2. Click **Change adapter settings**.

3. Right-click on the adapter that is used to establish a wired connection to the network, and select **Properties** from the context menu.

4. Under the **Ethernet Properties** dialog box, select **Internet Protocol Version 4** and then click the **Properties** button.

5. Click the **Use the following IP address** radio button.

> **IMPORTANT:** Before continuing, write down the current IP settings in order to restore them, later. If **Obtain an IP address automatically** and **Obtain DNS server automatically** are selected, then this step is not required.

6. Enter the desired static IP address or the IP address provided by the network administrator.

7. Set the subnet mask to `255.255.0.0`.

8. Click the **OK** button then close all **Control Panel** windows.

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Web Server

The AT-OME-SW21-TX-WPC includes a built-in web server, which allows easy management and control of all features. Follow the instructions below to access the web server.

1. Power the AT-OME-SW21-TX-WPC by connecting a category cable (CAT-5e or better) from the **HDBaseT OUT** port to a compatible receiver unit.
2. Connect an Ethernet cable from the network to the **LAN** port on the receiver unit.
3. Launch a web browser and enter the IP address of the AT-OME-SW21-TX-WPC.
4. The AT-OME-SW21-TX-WPC Registration page will be displayed.
5. Enter the username, password, and confirm the password on the registration page to register the device. The password must contain a minimum of 8 characters, including 1 uppercase, 1 lowercase, and 1 numeric character.
6. Click on **Register** button.
7. The AT-OME-SW21-TX-WPC Login page will be displayed.
8. Enter the username and password login credentials that were entered during the registration process.
9. Click the **Login** button.

Velocity with Integrated AMS™

For easy configuration of Atlona devices, Velocity / AMS is available from https://atlona.com/AMS, for free. Once Velocity / AMS has been setup, following the instructions below.

1. Launch a browser on a computer that is on the same network as Velocity / AMS.
2. Enter the IP address of Velocity / AMS. View the Velocity / AMS installation instructions on how to find the IP address of the software, if necessary.
3. Enter the login credentials, then click the **Login** button.

Updating the Firmware

Requirements:

- AT-OME-SW21-TX-WPC
- Firmware file
- Computer running Windows
- USB-A to micro-USB cable

⚠️ **IMPORTANT:** Do not disconnect power from unit during the firmware update process. Doing so may damage the unit.

1. Disconnect power from the AT-OME-SW21-TX-WPC, which can be done by disconnecting the category cable from the HDBaseT port on the receiver.

2. Remove the faceplate to access the hidden "firmware update" button, located above the PWR LED indicator. Refer to Faceplate Removal and Assembly (page 3) for more information.
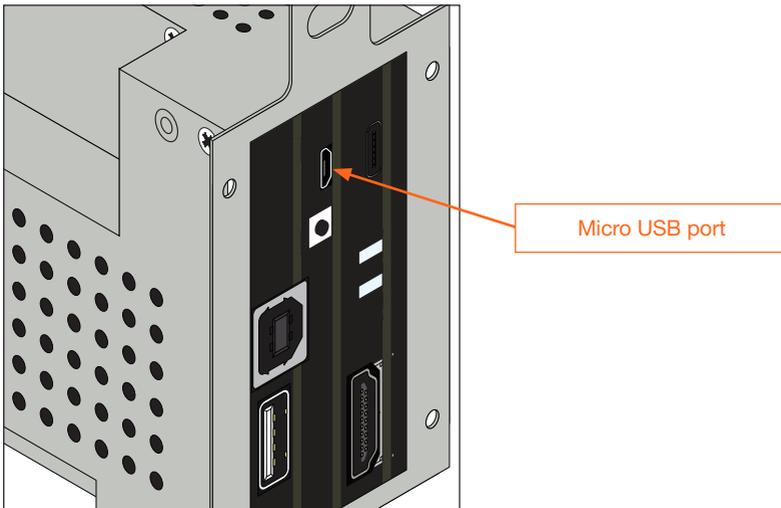
Micro USB port

3. Connect a USB cable from the micro USB port on the AT-OME-SW21-TX-WPC to a PC, using a USB-A to micro-USB cable.

4. Power the AT-OME-SW21-TX-WPC by reconnecting the HDBaseT cable on the receiver.

5. The USB UPDATE folder will be displayed. If this folder is not displayed, automatically, select the USB UPDATE drive from Windows Explorer. Refer to the next page for an illustration.

6. Drag and drop the firmware file into the USB drive folder.

7. After the firmware file has been placed in the folder, the firmware update process will begin. During the update process, the **PWR** LED indicator will flash green.
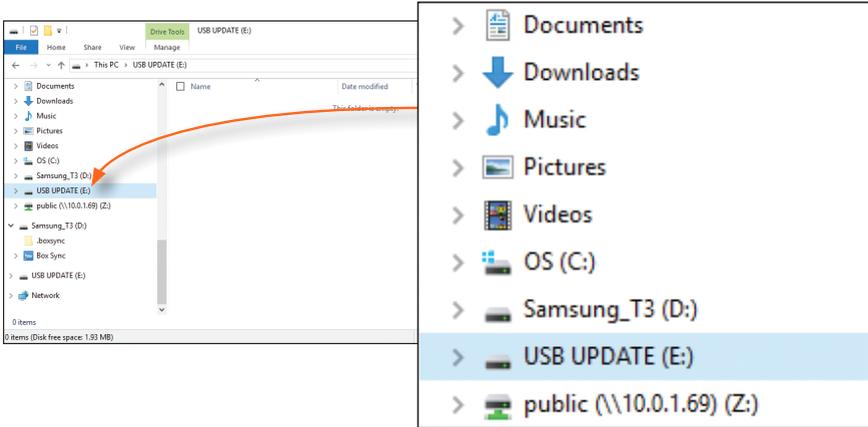
8. Once the update process is complete, the AT-OME-SW21-TX-WPC will automatically reboot.

9. Once the **PWR** LED returns to solid green, the firmware update process is complete. The firmware update process takes approximately 10 to 15 seconds to complete.

Notes

Notes

Version 1

English Declaration of Conformity

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

https://atlona.com/product/AT-OME-SW21-TX-WPC/.

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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