4K/UHD HDMI Extender Kit with Remote Power

AT-AVA-EX70-KIT

The Atlona AT-AVA-EX70-KIT is an Avance™ Series HDBaseT extender kit with remote power for transmitting 4K/UHD 60Hz 4:2:0 video up to 130 feet (40 meters) or 1080p 60Hz video up to 230 feet (70 meters). In addition to video with embedded multi-channel audio signals, remote power is provided from the transmitter to the receiver on the single CAT6A/7 cable. Integrated HDBaseT link status testing allows quick verification of cable, termination, and link quality. HDMI clock stretching and EDID filtering are included to ensure the integrity of video transmission as well as compatibility with the widest array of sources and display devices. The AT-AVA-EX70-KIT includes both transmitter and receiver endpoints. Compact enclosures and included brackets allow the devices to be surface mounted in furniture or behind a display. The AT-AVA-EX70-KIT delivers a cost-effective solution for extension of video, audio, and receiver power at resolutions up to 4K/UHD.

Package Contents

1 x AT-AVA-EX70-TX
1 x AT-AVA-EX70-RX
1 x 2-pin captive screw connector
4 x Mounting brackets
8 x Mounting screws
1 x 48V DC power supply
1 x IEC cable
1 x Installation Guide

IMPORTANT: Visit https://atlona.com/product/AT-AVA-EX70-KIT for the latest firmware updates and Installation Guide.

Panel Descriptions

1 **TEST**
Quick and easy test for category cables. Use the button to start the test and the LED to determine pass or fail.

2 **FW**
Connect a micro-USB to USB-A type cable from this port to a computer, to update the firmware.

3 **POWER and LINK LEDs**
The power LED will illuminate green when receiving power. The link LED will glow yellow when signal is being sent/received between the transmitter and the receiver.

4 **DC 48V**
Connect the included power supply to this port.

5 **HDBaseT OUT**
Connect an HDBaseT cable from this port to the **HDBaseT IN** port on the receiver.

6 **HDMI IN**
Connect an HDMI cable from a source to this port. e.g. HDR BluRay Player

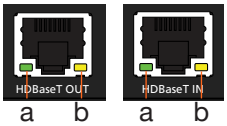
7 **FW**
Not used at this time.

8 **POWER and LINK LEDs**
The power LED will illuminate green when receiving power. The link LED will glow yellow when signal is being sent/received between the transmitter and the receiver.

9 **HDBaseT IN**
Connect an HDBaseT cable from this port to the **HDBaseT OUT** port on the transmitter.

10 **HDMI OUT**
Connect an HDMI cable from this port to an HDMI display.

HDBaseT LED Descriptions

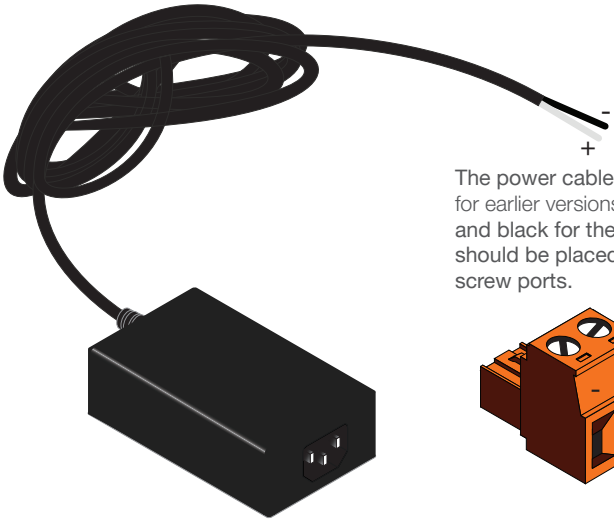


a **Green LED**
When a category cable is connected and receiving signal this LED will be illuminated. If no cable or signal is being received, the LED will be off.

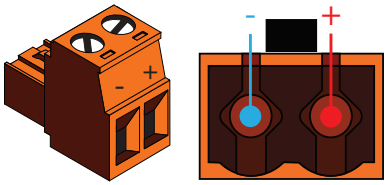
b **Yellow LED**
This LED displays the status of the HDBaseT firmware. When the LED is blinking slowly, the firmware is good. If the LED is blinking rapidly or off, there is no firmware or the firmware has been corrupted.

Power

A 2-pin captive screw connector for the power supply has been included.



The power cable will be white (or grey striped for earlier versions) for the positive connection and black for the negative connection. These should be placed in the corresponding captive screw ports.



Installation

1. Connect a source to the **HDMI IN** port on the transmitter.
2. Connect a display to the **HDMI OUT** port on the receiver.
3. Connect an category cable, from the **HDBaseT OUT** port on the transmitter, to the **HDBaseT IN** port on the receiver.
4. Connect the included 48V power supplies into the transmitter.
5. Connect power supply to an AC outlet.

Mounting Instructions

The AT-AVA-EX70-KIT includes two mounting brackets and four mounting screws each, which can be used to attach the units to any flat surface.

1. Position one of the mounting brackets, as shown below, aligning the holes on the side of the enclosure with one set of holes on the mounting bracket.
2. Use the enclosure screws to secure the mounting bracket to the enclosure.
3. Repeat the above steps to attach the second mounting bracket to the opposite side of the unit.

4. Mount the unit using the oval-shaped holes, on each mounting bracket. If using a drywall surface, a #6 drywall screw is recommended.

NOTE: Mounting brackets can also be inverted to mount the unit under a table or other flat surface.

Power Chaining

Multiple kits can be powered by one power supply. The included power supply can support up to 3 kits. To power four kits use the optional power supply AT-PS-483125-C (purchase through atlona.com).

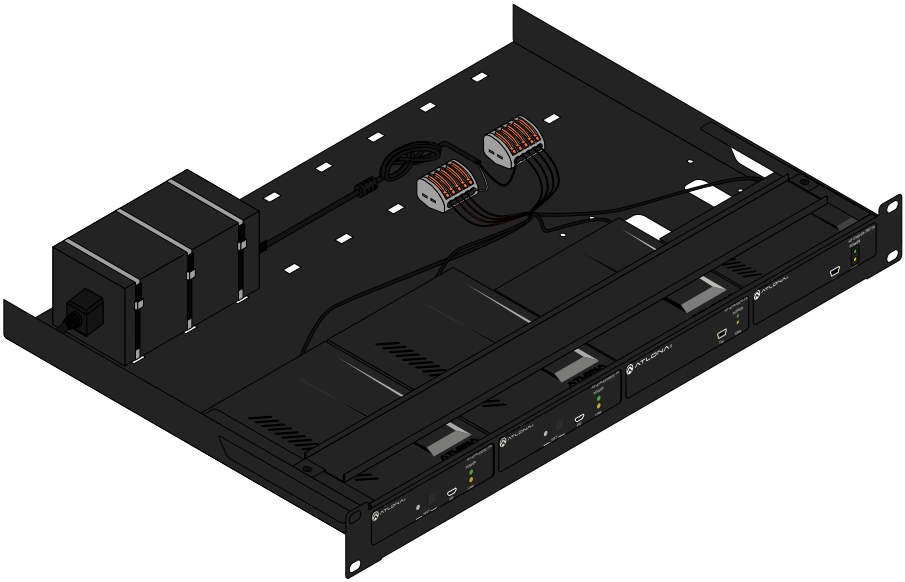
Requirements:

- Up to 4 AVA, UHD, or HDR extenders
- AT-RACK-1RU-ME
- AT-PS-483125-C (if powering 4 extenders)
- 2 x Wago Splicing Connectors
- Up to 4 18/2 AWG Stranded Wire
- Zip Ties

1. Secure up to 4 extenders to the AT-RACK-1RU-ME (purchased separately).
2. Secure the power supply to the shelf using zip ties and the holes at the back of the shelf. If powering 3 extenders then use the included power supply, if powering 4 then use AT-PS-483125-C (purchased separately).
3. Connect the wires from the power supply cable to the wago splicers (suggested splicers are model #: 222-415). Connect the white wire (power/+) to one splicer and the black wire (ground/-) to the second splicer.

NOTE: Connect only one wire to each port of the splicer.

4. Use the 18/2 AWG stranded wires to connect each extender into the wago splicers, ensuring that the same wire color is connected to each wago splicer. The colors are generally black/red, so it is best to connect the black wire to the ground/- port and splicer with the black wire from the power supply and use the red to connect to the power/+ port and the splicer with the white wire from the power supply.



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: It is recommended to use UTP6A (https://atlona.com/product/utp6a/) and STP6X (https://atlona.com/product/stp6x/) if a stranded/patch cable is needed. These cables have been tested and approved to work with these extenders for full functionality.

Cable*	Max. Distance @ 4K	Max. Distance @ 1080p
CAT5e/6	115 feet (35 meters)	200 feet (60 meters)
CAT6a/7	130 feet (40 meters)	230 feet (70 meters)

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

TEST

The transmitter has the ability to test the HDBaseT cable quality through the front panel. Press the test button on the front panel of the transmitter to start the test, the LED will display the testing results.

Button:

- Blue Blinking: The test is running properly and the button will blink 10 times during the testing process.
- Red Light: There is no signal for the test to check.

LED:

- No Light: There is no HDBaseT cable plugged in.
- Blinking: There is no HDBaseT signal coming through.
- Solid Green: The HDBaseT cable is good.
- Solid Yellow: One or two HDBaseT pairs are not working, reterminate the cable.
- Solid Red: Multiple pairs are not working. Reterminate the cable and if the LED turns yellow or red again, replace the cable.

Updating Firmware

1. Download the firmware .zip file from the firmware tab located at https://atlona.com/product/AT-AVA-EX70-KIT.
2. Unzip the .bin file to an easy to locate area of the local PC.
3. Connect the transmitter's FW micro USB port to a PC using a micro USB to USB A cable (purchased separately).
4. The PC should automatically detect the unit and display the autorun options. Select the view files in folder option. A new window will open.
5. If there are any files inside the folder, delete them, otherwise drag and drop the .bin file into the folder. While the firmware loads to the unit, the green power LED on the front panel will flash. This process can take up to 5 minutes to complete.
6. Once the green LED goes solid, disconnect the unit from the PC. The firmware update is finished.

NOTE: Only the transmitter will be used for updating firmware. The receiver will be updated once it has been connected to the transmitter if it is not connected at the time of the firmware update.

Notes

Version 4

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-ava-ex70-kit/.

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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