4K/UHD HDMI Over HDBaseT TX with Control and PoE
AT-UHD-EX-70C-TX

The Atlona **AT-UHD-EX-70C-TX** is an HDBaseT transmitter for HDMI transmission up to 230 feet (70 meters) over category cable with RS-232 and IR control pass-through. It transmits video signals up to 4K/UHD @ 60 Hz with 4:2:0 chroma subsampling, plus embedded multi-channel audio. The AT-UHD-EX-70C-TX is HDCP 2.2 compliant and supports EDID communication. This HDBaseT transmitter is externally powered by the included power supply, making it ideal for extending AV and control directly to a projector with an HDBaseT input.

The AT-UHD-EX-70C-TX provides a value-oriented integration solution for simple point-to-point signal extension to a display, or expanding the scope of an AV system design with remote input connectivity. It features a quarter rack width metal enclosure and includes surface mounting brackets for easy under-table, furniture, or on-wall installation.

Package Contents

1 x AT-UHD-EX-70C-TX
2 x Mounting brackets
4 x Mounting screws
1 x 3-pin captive screw connector
1 x 4-pin captive screw connector
1 x 2-pin captive screw connector
1 x 48 V / 0.83 A DC power supply
1 x Installation Guide

⚠ **IMPORTANT**: Visit http://www.atlona.com/product/AT-UHD-EX-70C-TX for the latest firmware updates and Installation Guide.

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Panel Descriptions

1 FW
Connect a mini-USB to USB-A type cable from this port to a computer, to update the firmware.

2 POWER / LINK
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.

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

4 RS-232
Bidirectional control port, used for pass through of commands to or from the receiver.

5 IR IN / IR OUT
Connect an IR receiver to the **IR IN** port. Connect an IR emitter from the **IR OUT** port to the included 4-pin captive screw connector.

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

7 HDMI IN
Connect an HDMI cable from a source to this port.

RS-232

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

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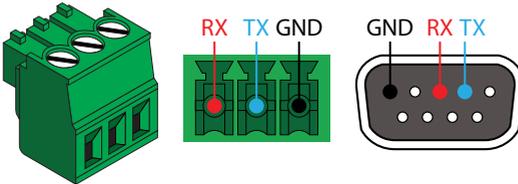
Pin out will be determined by the RS-232 cable and connect as RX (receive), TX (transmit) and ⏚ (Ground).

IR

A 4-pin captive screw connector for IR is included.

S   GND   S
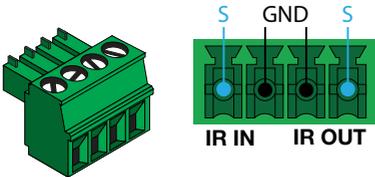
IR IN   **IR OUT**

IR IN is connected by a signal and ground wire. Use a 12V IR receiver with it (**e.g.** AT-IR-CS-RX purchasable through atlona.com).

IR OUT is connected by a ground and signal wire. Use an IR emitter with this port.

POWER

A single 2-pin captive screw connector is provided to connect the power supply to the unit.

+ -
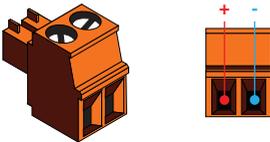
Mounting Instructions

The AT-UHD-EX-70C-TX 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.

Included screws

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.
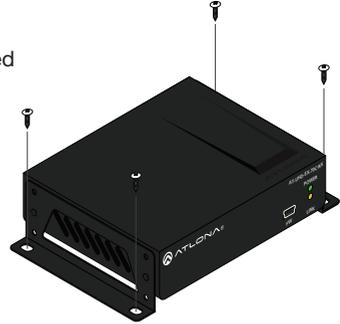
Installation

1. Connect a source to the **HDMI IN** port on the AT-UHD-EX-70C-TX.

2. Connect a display to the **HDMI OUT** port on the receiver.

3. Connect an HDBaseT cable, from the **HDBaseT OUT** port on the AT-UHD-EX-70C-TX to the **HDBaseT IN** port on the receiver.

4. OPTIONAL: Connect a 3rd party controller to the transmitter using either the 3-pin RS-232 or the 2-pin IR IN ports.

5. OPTIONAL: Connect an IR receiver to the **IR IN** port of the transmitter.

6. OPTIONAL: Connect an IR emitter to the **IR OUT** port of the AT-UHD-EX-70C-TX or receiver.

7. Connect the included 48V power supply from an AC outlet to the DC 48V port on the AT-UHD-EX-70C-TX.

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 / CAT6	115 feet (35 meters)	200 feet (60 meters)
CAT6a / CAT7	130 feet (40 meters)	230 feet (70 meters)

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

Updating Firmware

1. Download the firmware .zip file from the firmware tab located at http://www.atlona.com/at-uhd-ex-70c-tx.

2. Unzip the contents of the .zip file to the local PC.

3. Connect a USB to mini-USB cable from the **FW** port on the unit to an available USB port on the computer.

> ⚠️ **IMPORTANT:** Do not disconnect the USB cable during the update process.

> ℹ️ **NOTE:** The AT-UHD-EX Series can be powered over USB during the firmware update procedure. Therefore, connection of an external power supply (or HD-BaseT) is not required.

4. Identify the correct batch (.bat) script for the product that is being updated, from the table below. Note that there are separate scripts for both TX and RX units.

SKU	Batch file
AT-UHD-EX-70C-TX	UpdateVS010TX_[version].bat
AT-UHD-EX-70C-RX	UpdateVS010RX_[version].bat

5. Double-click the batch file to execute it.

6. After the update procedure is complete, the software will go through the verification process and then display the following message:

```
Verification succeeded!!! :-)
```

Notes

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/at-uhd-ex-70c-tx/.

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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