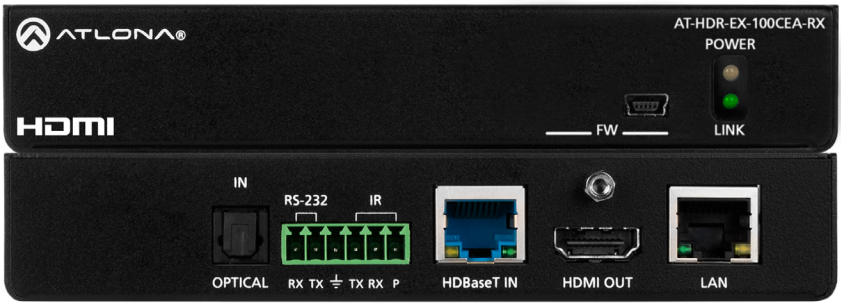
4K HDR HDMI over 100 M HDBaseT™ RX with Ethernet, Control, PoE, and Return Audio

AT-HDR-EX-100CEA-RX



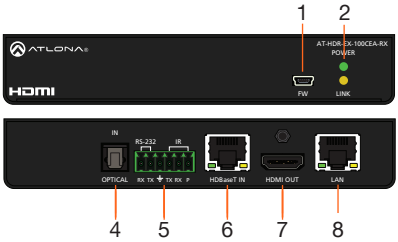
The Atlona AT-HDR-EX-100CEA-RX is a HDBaseT™ receiver for 4K and high dynamic range (HDR) content. It supports extension of 4K/UHD video @ 60 Hz with 4:4:4 chroma sampling plus HDR data, multi-channel audio, Ethernet, control signals, and power up to 330 ft. (100 m) over Category 6/6A cable. The HDR-EX-100CEA-RX is ideal for use with the AT-HDR-CAT-4ED distribution amplifier for passing 4K HDR signals to a display. A compact enclosure and remote power supplied by the transmitter means the receiver can be conveniently mounted in furniture, behind a display, or above a projector.

Package Contents

1 x AT-HDR-EX-100CEA-RX
2 x Mounting brackets
4 x Mounting screws
1 x 6-pin captive screw connector
1 x Installation Guide

IMPORTANT: Visit https://atlona.com/product/at-hdr-ex-100cea-rx for the latest firmware updates and Installation Guide.

Panel Descriptions



1 **FW**
Connect a mini-USB cable from this port to update the firmware.

2 **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.

3 **OPTICAL IN**
Not used at this time.

4 **RS-232 / IR**
Connect the included 6-pin captive screw block to this receptacle.

5 **HDBaseT IN**
Connect an Ethernet cable from this port to the HDBaseT OUT port on the AT-HDR-CAT-4ED.

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

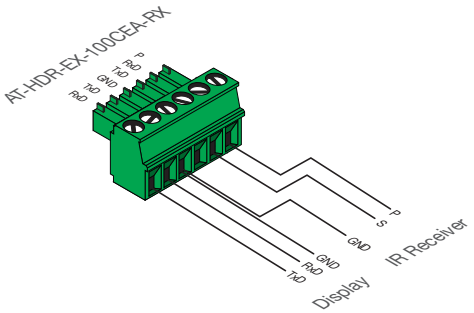
7 **LAN**
Connect an Ethernet cable from this port, on either the AT-HDR-CAT-4ED or receiver, to the network or a display. Do not connect both LAN ports to the same network.

RS-232 / IR Wiring

The AT-HDR-EX-100CEA-RX provides both an **RS-232** and **IR** port. RS-232 pass-through is supported, allowing a control system to be connected to either the transmitter or receiver. Connect the included IR emitter to the transmitter and an IR extender (not included) to the receiver. Both IR and RS-232 connections are optional.

NOTE: Typical DB9 connectors use pin 2 for TX, pin 3 for RX, and pin 5 for ground. On some devices functions of pins 2 and 3 are reversed. Also note, that IR is bidirectional, allowing the IR emitter or IR receiver to be connected to either the transmitter or receiver.

1. Use wire strippers to remove at least 3/16" (5 mm) of the cable jacket for both the RS-232 and IR emitter.
2. Insert the wires as shown into the included 6-pin captive screw connector.



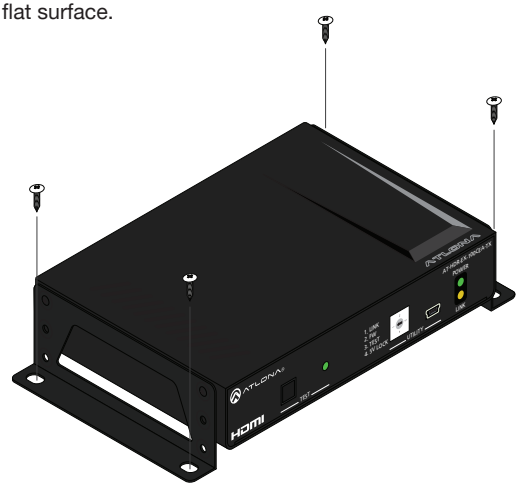
Mounting Instructions

The AT-HDR-EX-100CEA-RX includes two mounting brackets and four mounting screws, 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.



Installation

1. Connect an HDMI display to the **HDMI OUT** port on the receiver.
2. Connect an Ethernet cable from the **LAN** port, on either the transmitter or receiver, to the Local Area Network.
3. ***OPTIONAL*** Connect a control system to the transmitter. Connect the device being controlled to the receiver.
4. ***OPTIONAL*** Connect an IR receiver to the receiver.
5. Connect an Ethernet cable, from the **HDBaseT OUT** port on the AT-HDR-CAT-4ED, to the **HDBaseT IN** port on the receiver.
6. Connect the power supply to an available AC outlet.

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.

Updating the Firmware

1. Download the firmware file from the Firmware tab located at https://atlona.com/at-hdr-ex-100cea-rx.
2. Extract the firmware, from the archive file, to the Windows desktop or other folder.
3. Disconnect the Ethernet cable from the **HDBaseT IN** port on the receiver.
4. Connect a mini-USB to USB-A cable from the **FW** port on the receiver, to the computer with the firmware file.
5. Reconnect the Ethernet cable to the **HDBaseT IN** port on the receiver. The USB Drive folder should be displayed after a few seconds. If the folder is not displayed select the USB drive from Windows Explorer.
4. Delete all files from the USB Drive folder, if any are present.
5. Drag and drop the firmware file to the drive. While the firmware loads to the unit, the green power LED on the front panel will flash.
6. Once the LED is solid green, disconnect the unit from the computer.
   The firmware update process is complete.

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-hdr-ex-100cea-rx/.

Chinese Declaration of Conformity 中国RoHS合格声明

由SKU列出於:
https://atlona.com/about-us/china-rohs/.

US International
atlona.com • 408.962.0515 • 41.43.508.4321

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