

HDMI over HDBaseT[™] TX/RX

with Control and PoE





Introduction

The Atlona **AT-HDR-EX-70C-KIT** is an HDBaseT transmitter/receiver kit for high dynamic range (HDR) formats. The kit is HDCP 2.2 compliant and supports 4K/UHD video @ 60 Hz with 4:4:4 chroma sampling, as well as HDMI data rates up to 18 Gbps. The HDR-EX-70C-KIT provides transmission of HDMI, as well as bidirectional IR and RS-232 control signals up to 230 feet (70 meters) for 1080p video, and up to 130 feet (40 meters) for 4K HDR over CAT6a/7 cable. This extender kit features visually lossless compression with no latency to enable HDR and 4K/60 4:4:4 video signal extension over HDBaseT. For additional integration convenience, the transmitter remotely powers the receiver through Power over Ethernet (PoE). The HDR-EX-70C-KIT delivers a cost-effective solution for HDMI and control signal extension, and includes surface mounting hardware for discreet installation.

The HDR-EX-70C-KIT is ideal for residential and commercial applications with the latest as well as emerging 4K/UHD and HDR sources and displays. It is compatible with all video resolutions, audio formats, and color space formats supported in the HDMI 2.0b specification, plus the ability to pass metadata for HDR content. The HDR-EX-70C-KIT includes Atlona's award-winning 10 year limited product warranty and customer support services, so that integrators can specify, purchase, and install with confidence.

Applications

Residential installations

The HDR-EX-70C-KIT is designed for AV systems with the latest UHD and HDR sources such as Ultra HD Blu-ray players, plus compatible televisions and projectors.

TV showrooms

The HDR-EX-70C-KIT can be used for reliable content transmission to televisions, to properly demonstrate the quality and appeal of 4K and HDR programming.

Professional AV applications

Atlona 4K HDR products are ideal for full-motion, highly detailed 4K graphics presentations for visualization, 3D renderings, simulations, and more.

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Key Features

4K/UHD capability @ 60 Hz with 4:4:4 chroma sampling, plus support for HDR formats

- Compatibility with new and emerging 4K/UHD and HDR-capable sources and displays.
- Compatible with 4K HDR10 @ 60 Hz and Dolby® Vision™ @ 30 Hz
- Fully supports video resolutions, audio formats, and color space formats in the HDMI 2.0b specification.

HDCP 2.2 compliant

- Adheres to latest specification for High-bandwidth Digital Content Protection.
- Allows protected content stream to pass between devices.

HDBaseT extender kit for HDMI up to 230 feet (70 meters)

- Extends HDMI, power, and control up to 230 feet (70 meters) @ 1080p and 130 feet (40 meters) @ 4K HDR using CAT6a/7 cable.
- Uses easy-to-integrate category cable for low-cost, reliable system installation.

Receiver powered by transmitter via PoE (Power over Ethernet)

- Power for receiver is supplied by transmitter over HDBaseT.
- Allows convenient receiver installation at a display or projector without the need for local AC power.

Extends RS-232, IR, and CEC control signals over HDBaseT

- Bidirectional extension of RS-232 and IR control signals.
- Eliminates multiple cable runs between source, control system, and display.

Visually lossless compression

• Enables HDBaseT transmission of HDMI up to 18 Gbps using extremely light video compression with no latency. Innovative signal extension solution delivers very high, pristine image quality.

Multi-channel audio compliant

- Supports PCM, Dolby® Digital, Dolby Digital Plus™, Dolby TrueHD, Dolby Atmos®, DTS® Digital Surround™, DTS-HD Master Audio™, and DTS:X®.
- Allows any multi-channel audio stream to be used within a residential or professional audio system.

HDBaseT link status testing

- Free software utility available for testing integrity of the HDBaseT cable link between the transmitter and the receiver.
- Provides real-time link status, plus detailed HDBaseT and HDMI signal information.
- Quick, easy verification or troubleshooting of RJ-45 termination or twisted pair cable quality.
- Test button and LED also available on the transmitter for checking HDBaseT link integrity.

Award-winning 10 year limited product warranty

- Ensures long-term product reliability and performance in residential and commercial systems.
- Specify, purchase, and install with confidence.

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Specifications

Video					
UHD/HD/SD	4096×2160@24/25/30/50/60Hz, 3840×2160@24/25/30/50/60Hz, 2048x1080p, 1080p@23.98/24/25/29. 97/30/50/59.94/60Hz, 1080i@50/59.94/60Hz, 720p@50/59.94/60Hz, 576p, 576i, 480p, 480i				
VESA	2560×2048, 2560×1600, 2048×1536, 1920×1200, 1680×1050, 1600×1200, 1600×900, 1440×900, 1400×1050, 1366×768, 1360×768, 1280×1024, 1280×800 1280×768, 1152×768, 1024×768, 800×600, 640×480				
Color Space	YUV, RGB				
Chroma Subsampling	4:4:4, 4:2:2, 4:2:0				
Color Depth	8-bit, 10-bit, 12-bit				
HDR	4K HDR10 @ 60 Hz and Dolby® Vision™ @ 30 Hz				
Audio					
Formats	PCM 2Ch, LPCM 5.1, LPCM 7.1, Dolby® Digital, DTS 5.1, Dolby Digital Plus™, Dolby TrueHD, DTS-HD Master Audio™, Dolby Atmos®, DTS:X®				
Sample Rate	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz				
Bit Rate	24-bit (max.)				
Resolution / Distance	4K/UHD - Feet / Meters		1080p - Feet / Meters		
HDMI	15	5	30	10	
CAT5e/6	115	35	200	60	
CAT-6a / CAT-7	130	40	230	70	
Signal					
Bandwidth	18 Gbps				
CEC	Compliant				
HDCP	2.2				
Temperature	Fahrenheit Celsius				
Operating	32 to 122		0 to 50		
Storage	-4 to 140		-20 to 60		
Humidity (RH)	20% to 90%, non-condensing				
Power					
Consumption	13 W				
Input	100 - 240 V AC, 50/60 Hz				
Supply	48 V DC, 0.83 A				
Dimensions (H x W x D)	Inches		Millimeters		
TX / RX	1.02 x 4.29 x 5.00		26 x 109 x 127		
Power Supply (AT-PS-48083-C)	1.42 x 1.81 x 4.41		36 x 46 x 112		
Weight	Pounds		Kilograms		
TX / RX	0.85		0.39		
Certification					
Device	CE, FCC				
Power Supply		CE, FCC, cULus, RoHS, CCC, RCM			
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