



## 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.

## 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.

## Specifications

Video		
Signal	HDMI and HDBaseT	
Copy Protection	HDCP 2.2	
Pixel Clock	600MHz	
UHD/HD/SD	4096x2160@60/50/30/25/24Hz 3840x2160@60/50/30/25/24Hz 1920x1080p@60/59.9/50/30/29.97/25/ 24/23.98Hz 1920x1080i@30/29.97/25Hz	720p@60/59.94/50Hz 576p@50Hz 576i@25Hz 480p@60/59.96Hz 480i@30Hz
VESA All resolutions are 60Hz	2560x1600 2048x1536 1920x1200 1680x1050 1600x1200 1440x900 1400x1050 1280x1024	1280x800 1366x768 1360x768 1152x864 1024x768 800x600 640x480
VESA 21:9 <sup>(1)</sup>	2560x1080 @ 30 Hz 4:4:4 2560x1080 @ 60 Hz 4:4:4 3440x1440 @ 30 Hz 4:4:4	3440x1440 @ 50 Hz 4:4:4 3840x1600 @ 30 Hz 4:4:4
Color Space	YUV, RGB	
Chroma Subsampling	4:4:4, 4:2:2, 4:2:0	
Color Depth	8-bit, 10-bit, 12-bit	
HDR	Up to 4K HDR10 @ 60 Hz, 4K Hybrid-Log Gamma (HLG) @ 60 Hz, and 4K Dolby® Vision™ @ 60 Hz <sup>(2)</sup>	

Audio			
HDMI / HDBaseT Pass-Through Formats	PCM 2.0 LPCM 5.1 LPCM 7.1	Dolby® Digital Dolby Digital Plus™ Dolby TrueHD Dolby Atmos®	DTS® Digital Surround™ DTS-HD Master Audio™ DTS:X®
Bit Depth	up to 24-bit		
Sample Rate	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz		

Resolution / Distance	4K/UHD - Feet / Meters		1080p - Feet / Meters	
HDMI IN/OUT	15	5	30	10
CAT5e	115	35	200	60
CAT6/6a/7	130	40	230	70

Control	
RS-232	Pass through, up to 115200 baud
IR	Pass through, 30kHz to 60kHz
CEC	Pass through

Buttons and Indicators	
TEST button	1 - momentary, tact-type
<b>Function Indicators:</b>	
Power	1 - LED, green
Link	1 - LED, yellow
Test	1 - LED, multi-colored

Connectors	
HDMI IN (TX)	1 - Type A, 19-pin female
HDBaseT OUT (TX)	1 - RJ45, female
HDMI OUT (RX)	1 - Type A, 19-pin female
HDBaseT IN (RX)	1 - RJ45, female
FW - Firmware (RX and TX)	1 - Micro-A USB
PWR (TX)	1 - 2-pin 48V captive screw connector
RS-232 (RX and TX)	1 - 3-pin captive screw connector
IR (RX and TX)	1 - 4-pin captive screw connector (TX) 1 - 5-pin captive screw connector (RX)

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
BTU/h	44.33
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

Compliance	
NDAA-889	Yes
TAA	Yes

Warranty	
3 years	View the full warranty information here: <a href="https://atlon.com/warranty">https://atlon.com/warranty</a>

## Footnotes

(1) The following UltraWide Quad HD resolutions are NOT supported:

- 3440x1440P@50 10 bit 4:4:4
- 3440x1440P@60 10 bit 4:4:4
- 3840x1600P@60 8 bit 4:4:4.

(2) 4K Dolby® Vision™ @ 60 Hz is supported on systems capable of Low Latency Dolby Vision (LLDV) mode. All other 4K modes limited to 30 Hz.

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