



Pro AV/IT Integrator Series™ HDBaseT 3.0 HDMI 4K 60Hz 4:4:4 with USB 2.0, Audio, RS232 Extender Kit up to 330ft

Extend HDMI 4K@60Hz, Audio, LAN, IR and RS232 Signals over a Single UTP Cable up to 330ft Cat6/6A Uncompressed

With the Comprehensive CHE-HDBT3010K, experience the remarkable capabilities of the 18Gbps HDBaseT 3.0 Extender, designed to extend uncompressed HD/UHD video and audio signals, RS-232, bi-directional IR, and USB 2.0 signals up to an impressive distance of 328ft / 100m using a single CAT6A/7 cable. With support for video resolutions up to 4K2K@60Hz YUV 4:4:4, this extender ensures exceptional visual clarity and detail.

The Transmitter unit is equipped with HDMI input and audio de-embedding functionality, while the Receiver unit features HDMI output and audio de-embedding capabilities. This allows for seamless integration of audio and video signals into your setup. Additionally, the extender supports bi-directional RS-232 and IR signal pass-through, enabling convenient control of connected devices. With EDID management, it ensures optimal signal compatibility and stability. The USB 2.0 signal transmission capability further enhances versatility for data transfer.

This extender also features a bi-directional POC (Power over Cable) function, providing power to both the Transmitter and Receiver units through the CAT6A/7 cable, eliminating the need for additional power supplies. The Transmitter unit offers the flexibility to switch between HDBT Standard Mode (default setting) and HDBT Long Reach Mode, allowing for optimized performance based on your specific requirements.

4K/UHD Capability @60Hz 18Gbps with 4:4:4 Chroma Subsampling

The CHE-HDBT3010K extender set complies with the advanced HDCP 2.2 and HDMI 2.0 standards. Using the highly efficient and visually lossless, DSC compression scheme, high bandwidth signals, previously unsupported by HDBaseT, such as 4K@60Hz (4:4:4, 8-bit) or 4K@24Hz (4:4:4, 12-bit, HDR) can be extended without visual compromise or additional latency.

Uncompressed Video

The CHE-HDBT3010K is currently the first product that transmits 4K@60Hz 4:4:4 8-bit signals without compression and can support any HDR format, including Dolby Vision and HDR10+ up to 330ft.

Dual USB 2.0 Ports provide extension for KVM connectivity

The CHE-HDBT3010K has USB ports providing USB hub functionality to make this an ideal KVM solution to transmit HDMI video signal as well as webcams, external drives, touch/interactive displays, keyboard and mouse when the PC is housed in a distant control room.

Bi-Directional PoC

The CHE-HDBT3010K may be powered by a single 12V power supply on either the transmitter or receiver which makes install flexible and clutter free.

Analog Audio De-embedding

The CHE-HDBT3010K is readily equipped with a 3.5mm audio port for de-embedding analog audio from the HDMI output which makes it simpler to connect your audio amplifier or entertainment system.

Bi-Directional RS232 and IR Control Pass-through

The CHE-HDBT3010K extends RS-232 and IR control signals over HDBaseT, offering numerous possibilities for remotely interfacing a source or display with a control system.

Easy to Install Discreetly

The CHE-HDBT3010K can be easily installed on a wall, in furniture, under a table or hidden within a floor box. The Slim and compact design with mounting brackets can be easily concealed behind a wall-mounted display or above a projector.

Peace of Mind in Every Connection and Quality You Can Count On

Since 1974, Comprehensive has been a trusted manufacturer of top-notch commercial-grade solutions for AV and IT professionals. This product upholds that longstanding tradition with its use of premium materials, components, and rigorous quality control measures, guaranteeing years of reliable and hassle-free usage. Additionally, all components are supported by Comprehensive's 3-Year Warranty, providing you with the confidence that this product will continue to perform flawlessly for many years ahead.



EXTENDERS

CHE-HDBT3010K



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Features

- HDMI 2.0b and HDCP 2.2 compliant
- Supports 18Gbps video bandwidth
- Supports video resolution up to 4K2K@60Hz (YUV 4:4:4)
- HDR, HDR10, HDR10+, Dolby Vision LLM and HLG pass through
- LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD pass through
- 4K transmission distance up to 328ft/100m via a single CAT6A/7 cable (HDBT standard mode)
- 1080P transmission distance up to 492ft/150m via a single CAT6/6A/7 cable (HDBT long reach mode)
- Supports bidirectional POC (Power over Cable), when TX or RX gets power, the other end does not need an external power supply
- Supports 3.5mm analog audio de-embedding at TX and RX
- EDID management
- Supports bi-directional RS-232 signal pass-through, bi-directional IR signal control, USB2.0 signal transmission
- Compact design for easy and flexible installation
- 3 Year Warranty

Specifications

I/O Connections

Transmitter Input:

1x HDMI IN [Type A, 19-pin female]

Outputs:

1x HDBaseT OUT [RJ45 connector]

1x L/R OUT [3.5mm Stereo Mini-jack]

Controls:

1x IR IN [3.5mm Stereo Mini-jack]

1x IR OUT [3.5mm Stereo Mini-jack]

1x RS-232 [3pin-3.81mm Phoenix jack]

1x SERVICE [Micro USB, 5-pin female]

1x USB HOST [USB Type B]

2x USB DEVICES [USB Type A]

Receiver Input:

1x HDBaseT IN [RJ45, 8-pin female]

Outputs:

1x HDMI OUT [Type A, 19-pin female]

1x L/R OUT [3.5mm Stereo Mini-jack]

Controls:

1x IR IN [3.5mm Stereo Mini-jack]

1x IR OUT [3.5mm Stereo Mini-jack]

1x RS-232 [3pin-3.81mm Phoenix jack]

1x SERVICE [Micro USB, 5-pin female]

2x USB DEVICES [USB Type A]

Supported Audio, Video Formats

Video Bandwidth: 18Gbps

Maximum Pixel Clock: 600MHz

Max Video Resolution & Distances: 4K 60Hz 4:4:4 = 330ft/100m

1080p 60Hz 4:4:4 = 330ft/100m or long reach mode: 492ft/150m

Color Bit Depth: 8/10/12-bit (1080P60Hz, 4K30Hz, 4K60Hz

YCbCr 4:2:2/4:2:0)8-bit (4K60Hz 4:4:4)

Color Space Formats: RGB / YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0

Supported Resolutions: 4K2K 50/60Hz 4:4:4, 4K2K 50/60Hz 4:2:2

4K2K 50/60Hz 4:2:0, 4K2K 30Hz 4:4:4, 1080p, 1080i, 720p, 720i, 480p, 480i

All HDMI 3D TV formats

All PC resolutions including 1920 x 1200

Video Compliance: HDMI 2.0b and HDCP v1.4/v2.2

HDMI Audio Formats: LPCM 2.0/2.1/5.1/6.1/7.1, Dolby Digital, Dolby TrueHD,

Dolby Digital Plus (DD+), DTS-ES, DTS HD Master, DTS HD-HRA, DTS-X

Analog L/R Audio Formats: PCM 2.0

SPDIF Audio Formats: LPCM2.0, Dolby Digital, Dolby Digital Plus, DTS

Power & Regulatory

Power Input

Input: AC 100 - 240V 50/60Hz, Output: DC 12V/1A (Locking connector)

Power Consumption: 14.28W

Regulatory: FCC, CE, RoHS

Prop 65 Compliant: No

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Specifications

Chassis and Environmental

Construction: Metal (Black)
Dimensions (W x H x D)
Transmitter / Receiver: 144mm/5.7in [W] x 78mm/3.1in [D] x 23mm/1in [H]
Operating Temperature: 32 - 104°F / 0 - 40°C
Operating Humidity: 20 - 90% RH (no condensation)
Storage Temperature: -4 - 140°F / -20 - 60°C
Product Weight: Transmitter: 323g, Receiver: 319g

Package Contents

1x CHE-HDBT3010K (Tx & Rx Kit)
1x IR Blaster Cable (1.5 meters)
1x IR Receiver Cable (1.5 meters)
2x 3pin-3.81mm Phoenix Connectors (Male)
4x Mounting Ears
8x Machine Screws (KM3*4)
1x 24V/1A Locking Power Adapter
1x User Manual

Other

Diagnostic Indicators: Power and Status
UPC: 808447085976
Product Part Number: CHE-HDBT3010K
Warranty: 3 years

EXTENDERS

CHE-HDBT3010K