



USB 3.2 Extender 100M with USB-B input and RX with 4x USB-A Outputs

RL-100USB32B

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Model Number :RL-100USB32B

The 4K60 HDBaseT 3.0 Extender (Model: RL-100USB32B) is a high-performance solution for transmitting uncompressed HDMI video and audio over long distances, supporting features like 4K60 resolution, HDR, and various audio formats. It utilizes HDBaseT 3.0 technology to extend HDMI signals up to 100 meters over a single CAT6/6A/7 cable, ensuring reliable and high-quality AV transmission suitable for both commercial and residential installations .

Video and Audio Performance

This extender supports HDMI 2.0b and HDCP 2.2 compliance, allowing for secure and vibrant video transmissions. It boasts a substantial 18Gbps bandwidth and handles video resolutions up to 4K@60Hz, including HDR formats like HDR, HDR10, HDR10+, Dolby Vision, and HLG. For audio, it delivers LPCM, Dolby Digital, DTS-HD Master Audio, and other advanced formats, ensuring rich sound quality alongside crisp video .



Transmission Distance and Connectivity

The device provides impressive transmission distances, managing up to 100 meters for 4K/1080P signals over CAT6/7 cables, and even up to 150 meters in HDBaseT Long Reach Mode for 1080P content. The transmitter and receiver feature multiple input and output ports, including HDMI, USB, IR, and RS-232, supporting KVM extension and control interfaces ideal for demanding configurations such as boardrooms and control centers

Special Features and Applications



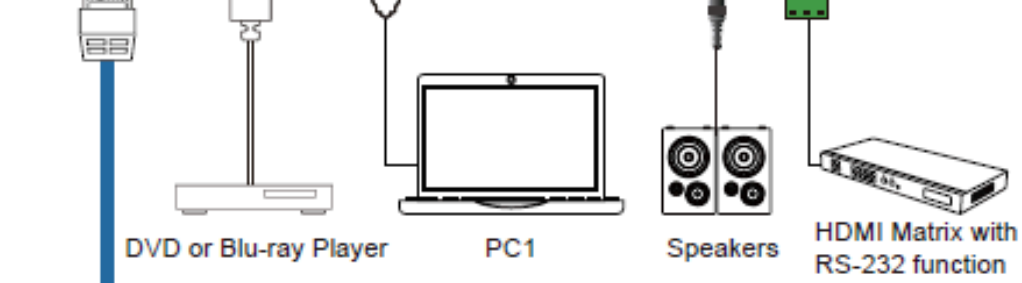
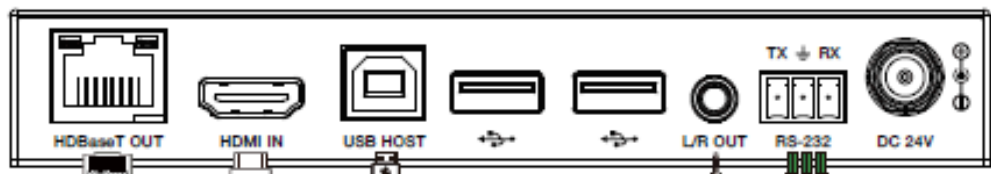
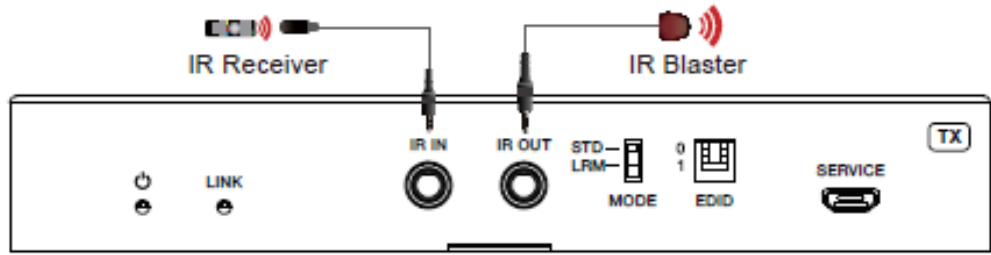
Beyond standard AV extension, the HDBaseT 3.0 Extender supports advanced features such as RS-232 signal transmission, bi-directional IR, USB2.0 signal transfer, and seamless KVM operation. These capabilities make the device highly suitable for environments requiring extensive AV and control linkages—such as auditoriums, educational institutions, and surveillance systems—maximizing both functionality and efficiency .

Technical and Mechanical Specifications

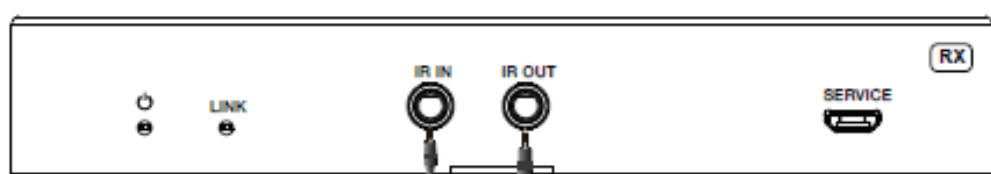
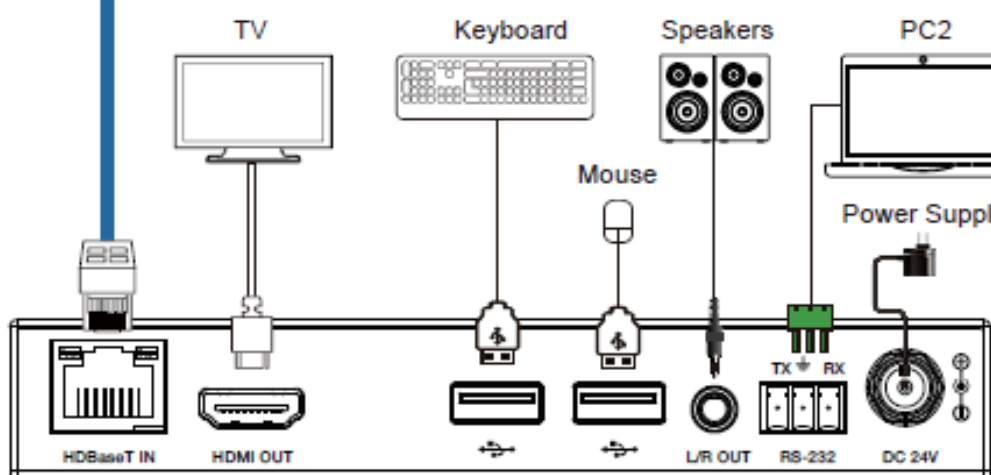
Encased in a robust metal enclosure and finished in black, both the transmitter and receiver units are compact (144mm x 78mm x 23mm) and lightweight. They operate via AC 100-240V/24V power supplies and consume 14.28W on PoC. These physical and electrical specifications make the units durable and suitable for varied installation environments .



Transmitter



CAT6A/7 cable



Receiver



Specifications

Category	Specifications
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2
Video Bandwidth	18Gbps
Video Resolution	Up to 4K@60Hz
HDR	HDR, HDR10, HDR10+, Dolby Vision, HLS
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0
Color Depth	8/10/12-bit
HDMI Audio Formats	LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS.
IR Level	12Vpp
Transmission Distance	HDBT Standard Mode: 4K@100m, 1080P@100m (CAT6/7 cable).
Input (Transmitter)	1x HDMI IN (Type A, 19-pin female)
Output (Transmitter)	1x HDBaseT OUT (RJ45 connector)
TV-IR OUT (Transmitter)	1x TV-IR OUT (3.5mm Stereo Mini-jack)
Controls (Transmitter)	1x IR IN (3.5mm Stereo Mini-jack)
RS-232 (Transmitter)	1x RS-232 (3pin 3.81mm Phoenix jack)
Service (Transmitter)	1x SERVICE (Micro USB, 5pin female)
USB Host (Transmitter)	1x USB HOST (USB Type B)
USB Devices (Transmitter)	2x USB DEVICES (USB Type A)
Input (Receiver)	1x HDBaseT IN (RJ45 connector)
Output (Receiver)	1x HDMI OUT (Type A, 19-pin female)
TV-IR OUT (Receiver)	1x TV-IR OUT (3.5mm Stereo Mini-jack)
Controls (Receiver)	1x IR IN (3.5mm Stereo Mini-jack)
RS-232 (Receiver)	1x RS-232 (3pin 3.81mm Phoenix jack)
Service (Receiver)	1x SERVICE (Micro USB, 5pin female)
USB Host (Receiver)	1x USB HOST (USB Type B)
USB Devices (Receiver)	2x USB DEVICES (USB Type A)
Housing	Metal Enclosure
Color	Black
Dimensions	144mm [W] x 78mm [D] x 23mm [H] (Transmitter / Receiver)
Weight	Transmitter: 323g, Receiver: 319g
Power Supply	Input: AC 100-240V 50/60Hz, Output: DC 24V/1A (US/EU standard, CE/FCC/UL certified)
Power Consumption	14.28W (POC)
Operation Temperature	32°F - 104°F / 0°C - 40°C
Storage temperature	-4°F - 140°F / -20°C - 60°C
Relative Humidity	20 - 90% RH (no condensation)