

D6145R D6145C

HDMI Ultra HD HDBaseT Extender (100m)



D6145R Transmitter



D6145C Receiver

Description

The HDBaseT 3.0 Extender extends high-definition/ultra-high-definition audio and video signals, eARC/ARC, RS-232, bidirectional IR control signals, 1GbE Ethernet, and USB 2.0 signals up to 100 m over a CAT6A/7 cable. It enables zero-latency and uncompressed long-distance transmission between the signal source and display device, supporting resolutions up to 4K@60Hz 4:4:4.

The transmitter supports audio embedding and de-embedding, while the receiver supports audio de-embedding. This product supports eARC/ARC functionality, allowing audio from the receiver's HDMI OUT port to be returned to the transmitter's HDMI IN port, HDMI OUT (Audio Only) port, and SPDIF OUT port. It also supports USB 2.0 transmission (Host/Device configurable) and bidirectional POC functionality.

By utilizing CAT cables, this product provides a convenient solution for HDMI extension applications and is widely applicable to video conference systems, multimedia signal distribution, HDMI signal extension, and other fields.

Features

- Compliant with HDMI 2.0b, HDCP 2.2, and HDBaseT 3.0 standards.
- Supports 18Gbps video bandwidth.
- Supports video resolutions up to 4K@60Hz (YUV 4:4:4).
- Supports pass-through of HDR, HDR10, HDR10+, Dolby Vision, and HLG signals.
- Supports HDMI audio formats including LPCM, Dolby Digital/Plus/EX, Dolby TrueHD, DTS, DTS-EX, DTS-96/24, DTS High Resolution, DTS-HD Master Audio, and DSD.
- Enables uncompressed and zero-latency transmission over a single CAT6A/7 cable with a transmission distance of up to 100 m.
- Supports ARC/eARC audio return to the transmitter's HDMI IN port, HDMI OUT (Audio Only) port, and SPDIF OUT port.
- Supports one-way SPDIF audio reverse transmission.
- Supports bidirectional transmission of IR control signals, RS-232 control signals, and 1GbE network signals.

- Supports USB 2.0 transmission with configurable Host/Device modes.
- Supports bidirectional 24V PoC, allowing either the transmitter or receiver to be powered by a single 24V/1A power adapter.
- Compact design for easy installation

Specifications

Model	D6145R / D6145C
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2
Video Bandwidth	18Gbps
Video Resolution	Up to 4K@60Hz 4:4:4
HDBaseT Bandwidth	Main Link: 16Gbps; Return Link: 2Gbps
HDR	HDR, HDR10, HDR10+, Dolby Vision, HLG
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, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
L/R Audio Formats	PCM 2.0
SPDIF Audio Formats	LPCM2.0, AC3 5.1, DTS 5.1
IR Level	12Vp-p
IR Frequency	20K - 60KHz
USB Bandwidth	Up to 350Mbps
Ethernet	1000Mbps
RS-232	Up to 921600bps
Transmission Distance	100 m (via a single CAT6A/7 cable)
ESD Protection	Human Body Model: +8kV (Air Discharge), ±4kV (Contact Discharge)

Connections

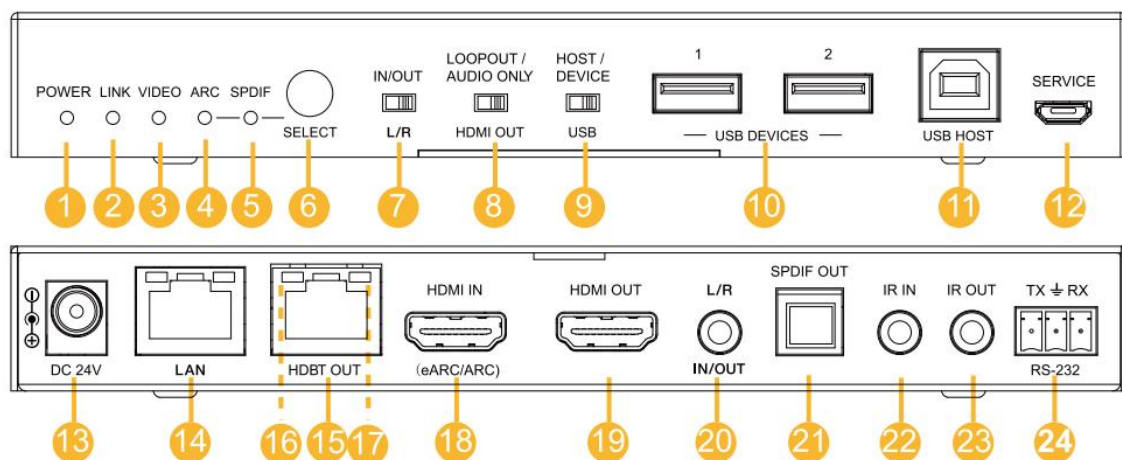
Transmitter	Input Port: 1×HDMI IN [Type A, 19-pin Female] Output Ports: 1×HDMI OUT [Type A, 19-pin Female] 1×HDBaseT OUT [RJ45, 8-pin Female] 1×SPDIF OUT [S/PDIF] 1×L/R OUT [3.5 mm Stereo Mini Jack] Control Ports: 1×IR IN [3.5 mm Stereo Mini Jack] 1×IR OUT [3.5 mm Stereo Mini Jack] 1×RS-232 [Phoenix Connector] 1×SERVICE [Mini USB, Firmware Upgrade Port] 1×USB HOST [USB Type B] 2×USB DEVICES [USB Type A] 1×LAN [RJ45]
Receiver	Input Ports: 1×HDBT IN [RJ45, 8-pin Female] 1×SPDIF IN [S/PDIF] Output Ports: 1×HDMI OUT [Type A, 19-pin Female] 1×L/R OUT [3.5 mm Stereo Mini Jack] Control Ports: 1×IR IN [3.5 mm Stereo Mini Jack] 1×IR OUT [3.5 mm Stereo Mini Jack] 1×RS-232 [3-pin 3.81 mm Phoenix Connector] 1×SERVICE [Mini USB, Firmware Upgrade Port]

1×USB HOST [USB Type B]
 2×USB DEVICES [USB Type A]
 1×LAN [RJ45]

Chassis			
Enclosure	Metal Enclosure		
Color	Black		
Dimensions	Transmitter / Receiver: 170mm(L)× 102mm(W)× 22mm(H)		
Weight	Transmitter: 425g, Receiver: 437g		
Power Supply	Input: AC100~240V 50 / 60Hz Output: DC24V / 1A (US/EU Standard, CE/FCC/UL Certified)		
Power Consumption	Transmitter / Receiver: 15.36W (POC)		
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F		
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F		
Relative Humidity	20~90% RH (Non-Condensing)		
Resolution / Cable Length	4K60-Meter	4K30-Meter	1080P60-Meter
HDMI IN / OUT	5m	10m	15m
Note: For optimal performance, it is recommended to use a premium high-speed HDMI cable.			

Front / Rear Panel

D6145R Transmitter

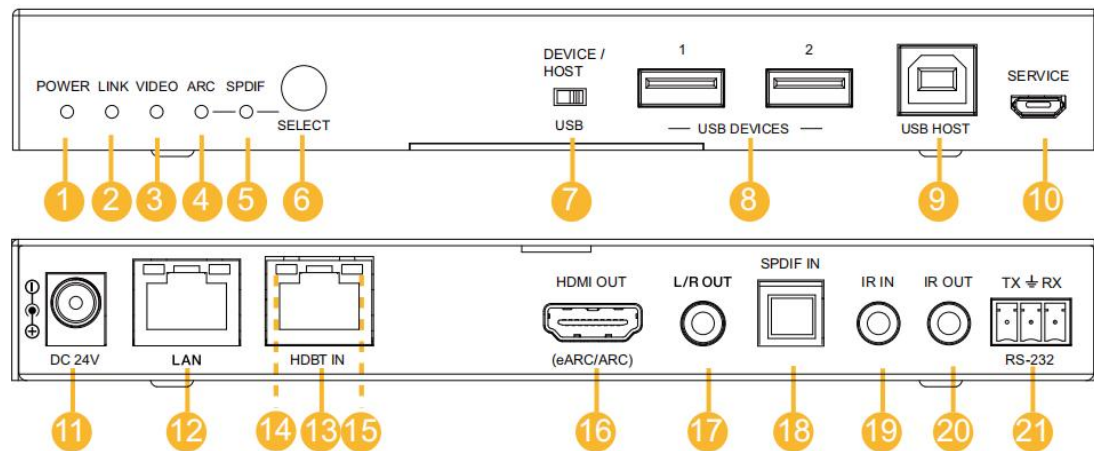


No.	Name	Function Description
1	Power Indicator Light	When the transmitter is powered on, the red power indicator lights up.
2	LINK Indicator Light	- Light on: The transmitter and receiver are connected normally. - Light flashing: The transmitter and receiver are in low-power mode. - Light off: The transmitter and receiver are not connected.
3	VIDEO Indicator Light	- Light on: The video is encrypted. - Light flashing: The video is not encrypted. - Light off: No HDMI signal input.
4	ARC Indicator Light	- Light on: The transmitter switches to ARC mode. - Light off: The transmitter switches to SPDIF mode.

5	SPDIF Indicator Light	▪Light on: The transmitter switches to SPDIF mode. ▪Light off: The transmitter switches to ARC mode.
6	SELECT Key	Used to switch between ARC mode and SPDIF mode
7	L/R IN / OUT Switch	When the switch is turned to the left, the L/R IN/OUT port is an audio embedding port; when the switch is turned to the right, the L/R IN/OUT port is an audio de-embedding port.
8	LOOP OUT / AUDIO ONLY Switch	When the switch is turned to the left (LOOP OUT), the HDMI OUT port is the loop-out port of the HDMI IN interface; when the switch is turned to the right (AUDIO ONLY), the HDMI OUT port outputs a 720P black screen, and the audio comes from ARC or SPDIF.
9	HOST/DEVICE USB Switch	Set the switch to the left (HOST) to enable USB HOST mode on the transmitter. Set the switch to the right (DEVICE) to enable USB DEVICE mode on the transmitter.
10	USB DEVICES	Two USB device ports: Connect USB flash drives, mice, or keyboards.
11	USB HOST	USB extension host port: Connect to a computer.
12	SERVICE	Firmware upgrade port.
13	DC24V	DC 24V/1A power input port. (Note: This extender supports POC power supply. If either the transmitter or receiver is already connected to a 24V/1A power supply, the other one does not need to be connected to a power supply.)
14	LAN	1G Ethernet port. The green indicator light is on, indicating that it has switched to the Gigabit Ethernet port; the yellow indicator light is on, indicating that it has switched to the 100 Mbps Ethernet port.
15	HDBT OUT	10G Ethernet port. Connects to the HDBT OUT port of the transmitter through a CAT6A/7 cable. Used for pass-through transmission of various signals.
16	Data Signal Indicator (Yellow)	▪Steady on: HDMI signal with HDCP. ▪Blinking: HDMI signal without HDCP. ▪Off: No HDMI signal.
17	Link Signal Indicator (Green)	▪Steady on: Transmitter and receiver connected. ▪Blinking: Poor connection between transmitter and receiver. ▪Off: Transmitter and receiver disconnected
18	HDMI IN	HDMI signal input port: Connect to an HDMI signal source device via an HDMI cable. Supports eARC/ARC amplifiers.
19	HDMI OUT	HDMI signal loop-out port: Use the LOOP OUT/AUDIO ONLY switch to select between HDMI loop-out mode and audio output mode.
20	L/R IN/OUT	Audio embedding/de-embedding port: Use the L/R IN/OUT switch to select audio embedding or audio de-embedding mode.
21	SPDIF OUT	Optical audio signal output port.
22	IR IN	Connect an IR receiver cable to receive IR remote control signals. The IR signal will be transmitted to the receiver's IR OUT port.
23	IR OUT	Connect an IR emitter cable to transmit IR remote control

		signals. The IR signal is transmitted from the receiver's IR IN port.
24	RS-232	RS-232 serial port: Used for serial command transmission.

D6145C Receiver



No.	Name	Function Description
1	Power Indicator Light	When the transmitter is powered on, the red power indicator lights up.
2	LINK Indicator Light	- Light on: The transmitter and receiver are connected normally. - Light flashing: The transmitter and receiver are in low-power mode. - Light off: The transmitter and receiver are not connected.
3	VIDEO Indicator Light	- Light on: The video is encrypted. - Light flashing: The video is not encrypted. - Light off: No HDMI signal input.
4	ARC Indicator Light	- Light on: The transmitter switches to ARC mode. - Light off: The transmitter switches to SPDIF mode.
5	SPIDIF Indicator Light	- Light on: The transmitter switches to SPDIF mode. - Light off: The transmitter switches to ARC mode.
6	SELECT Key	Used to switch between ARC mode and SPDIF mode
7	DEVICE/HOST USB Switch	Set the switch to the right (HOST) to enable USB HOST mode on the transmitter. Set the switch to the left (DEVICE) to enable USB DEVICE mode on the transmitter.
8	USB DEVICES	Two USB device ports: Connect USB flash drives, mice, or keyboards.
9	USB HOST	USB extension host port: Connect to a computer.
10	SERVICE	Firmware upgrade port.
11	DC24V	DC 24V/1A power input port. (Note: This extender supports POC power supply. If either the transmitter or receiver is already connected to a 24V/1A power supply, the other one does not need to be connected to a power supply.)
12	LAN	1G Ethernet port. The green indicator light is on, indicating that it has switched to the Gigabit Ethernet port; the yellow

		indicator light is on, indicating that it has switched to the 100 Mbps Ethernet port.
13	HDBT IN	10G Ethernet port. Connects to the HDBT OUT port of the transmitter through a CAT6A/7 cable. Used for pass-through transmission of various signals
14	Data Signal Indicator (Yellow)	▪Steady on: HDMI signal with HDCP. ▪Blinking: HDMI signal without HDCP. ▪Off: No HDMI signal.
15	Link Signal Indicator (Green)	▪Steady on: Transmitter and receiver connected. ▪Blinking: Poor connection between transmitter and receiver. ▪Off: Transmitter and receiver disconnected
16	HDMI OUT	HDMI signal output port. Connects to HDMI display devices through an HDMI cable. Supports eARC/ARC TVs.
17	L/R OUT	Audio de-embedding output port
18	SPDIF IN	Optical audio signal input port.
19	IR IN	Connects to the IR receiver cable to receive IR remote control signals. The IR signal will be sent to the IR OUT port of the transmitter.
20	IR OUT	Connect an IR emitter cable to transmit IR remote control signals. The IR signal is transmitted from the transmitter's IR IN port.
21	RS-232	RS-232 serial port: Used for serial command transmission.