

HDMI 18Gbps Over HDBaseT 2.0 with ARC

User Manual

VER:1.0

Thank you for purchasing this product

For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lightning strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the service life of your equipment.

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1. Introduction

The HDBaseT extender enables transmission of video resolutions up to 4K2K@60Hz(YUV 4:4:4), along with HD audio, dedicated optical audio pathways, 100BaseT Ethernet, Two-Way IR, RS-232, 24V POC and ARC signals up to 330ft/100m. ARC (Audio Return Channel) function enables audio from a compatible display to be routed back from the receiver unit to the transmitter. Using the latest HDBaseT 2.0 technology can make your home or office set-up more efficient and easy to use.

2. Features

- ✧ HDMI 2.0b, HDCP 2.2 and HDCP 1.4 compliant
- ✧ Video resolutions up to 4K2K@60Hz(4:4:4), 4K2K@30Hz, 1080p@120Hz
- ✧ Audio up to 7.1 channels of High Definition audio pass through (LPCM, Dolby TrueHD, and DTS-HD Master Audio)
- ✧ HDBaseT 2.0 over a single CAT5e/6/7 cable up to 330ft/100m distance
- ✧ 5-Play™ convergence: HD video & audio, IR/RS-232/Ethernet/POC
- ✧ Two-Way POC (Power over Cable) supports either TX or RX powered by 24V@1A, the other one doesn't need power supply.
- ✧ ARC and CEC supported

3. Package Contents

- ✧ 1 x HDMI Extender Transmitter
- ✧ 1 x HDMI Extender Receiver
- ✧ 2 x Wideband IR TX
- ✧ 2 x Wideband IR RX
- ✧ 1 x 24V1A DC Power Supply
- ✧ 4 x Mounting ears
- ✧ 1 x User Manual

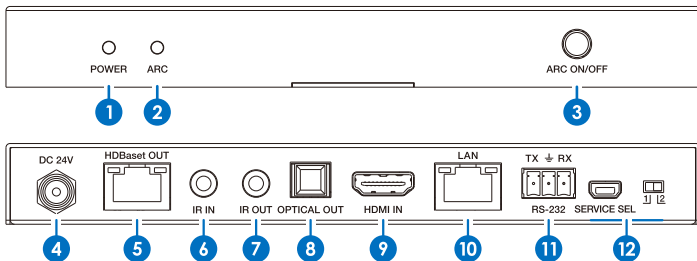
4. Specifications

Technical	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2 and HDCP 1.4
Video Bandwidth	18 Gbps
Video Resolutions	up to 4K2K@50/60Hz(4:4:4),4K2K@30Hz,1080P@120Hz, and 1080P 3D@60Hz
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2
Color Depth	8-bit,10-bit, 12-bit
HDMI Audio Formats (Pass-through)	LPCM 2/5.1/7.1CH, Dolby Digital, DTS 5.1, Dolby Digital+, Dolby TrueHD, DTS-HD Master Audio, Dolby Atmos, DTS:X
ESD Protection	Human body model — ±8kV (air-gap discharge) & ±4kV (contact discharge)
Connections	
Transmitter	
Inputs	1x HDMI Type A [19-pin female] 1x IR In [3.5mm Stereo Mini-jack] 1x LAN [RJ45]
Outputs	1x HDBaseT Out [RJ45] 1x IR Out [3.5mm Stereo Mini-jack] 1x Optical Out [S/PDIF]
Receiver	
Inputs	1x HDBaseT In [RJ45] 1x IR In [3.5mm Stereo Mini-jack] 1x Optical In [S/PDIF]
Outputs	1 x HDMI Type A [19-pin female] 1x IR Out [3.5mm Stereo Mini-jack] 1 x LAN [RJ45]
Mechanical	
Housing	Metal Enclosure
Color	Black

Dimensions	172mm [W] x 97.5mm [D] x 20mm [H]
Weight	Tx:420g, Rx:425g
Power Supply	Input: AC100 - 240V 50/60Hz Output: DC 24V/1A (US/EU standards, CE/FCC/UL certified)
Power Consumption	11W (Max)
Operation Temperature	32 - 104°F / 0 - 40°C
Storage temperature	-4 - 140°F / -20 - 60°C
Relative Humidity	20 - 90% RH (no condensation)

5. Operation Controls and Functions

5.1 Front Panel



- 1 POWER LED:** System power indicator.
- 2 ARC LED:** ARC status indicator.
- 3 ARC Button:** Press the button will enable or disable the ARC function.
Enable ARC: LED ON
Disable ARC: LED OFF

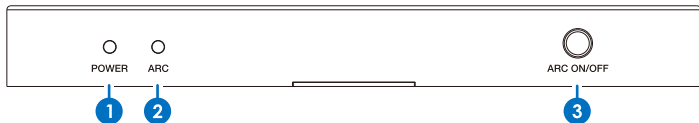
ARC function: If you need use ARC, your HDTV must support this function, when you open the ARC function, the transmitter optical out port will output the HDTV current display content audio signal, otherwise the transmitter optical out port signal comes from Receiver's Optical In.

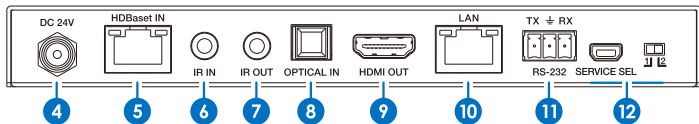
- 4 **DC 24V:** Connects 24V/1A adaptor to AC wall outlet for power supply.
- 5 **HDBaseT OUT:** Connects to HDBaseT Receiver with a Cat5e/6/7 cable.
- 6 **IR IN:** Connects to a Wideband IR RX cable.
- 7 **IR OUT:** Connects to a Wideband IR TX cable.
- 8 **OPTICAL OUT:** Connects to speaker with coaxial input for audio signal output from Receiver's Optical In or ARC.
- 9 **HDMI IN:** Connects to HDMI source device.
- 10 **LAN:** Connects to an active network for LAN sharing of a total transmission rate up to 100Mbps. Or when a compatible LAN equipped Transmitter is connected to an active network, this allows the network access (including internet access if available) to be shared between the Transmitter and Receiver.

Note: Does not connect this RJ45 port to any of the HDBaseT port. Such behavior may damage this port or whole device.

- 11 **RS-232:** Connects to any devices with RS-232 port for RS-232 commands transmission.
- 12 **SERVICE SEL 1/2:** Reserved for manufacturer use only.

5.2 Receiver Front and Rear Panel





- 1 **POWER LED:** System power indicator.
- 2 **ARC LED:** ARC status indicator.
- 3 **ARC Button:** Press the button will enable or disable the ARC function.
Enable ARC: LED ON
Disable ARC: LED OFF
- 4 **DC 24V:** Connects 24V/1A adaptor to AC wall outlet for power supply.
- 5 **HDBaset IN:** Connects to HDBaset Transmitter with a Cat5e/6/7 cable.
- 6 **IR IN:** Connects to a Wideband IR RX cable.
- 7 **IR OUT:** Connects to a Wideband IR TX cable.
- 8 **OPTICAL IN:** Connects to audio source device such as DVD or Blu-ray player for sending audio signal to Transmitter.
- 9 **HDMI OUT:** Connects to a HDMI display device.
- 10 **LAN:** Connects to an active network for LAN sharing of a total transmission rate up to 100Mbps. Or when a compatible LAN equipped Transmitter is connected to an active network, this allows the network access (including internet access if available) to be shared between the Transmitter and Receiver.
Note: Does not connect this RJ45 port to any of the HDBaset port. Such behavior may damage this port or whole device.
- 11 **RS-232:** Connects to any devices with RS-232 port for RS-232 commands transmission.
- 12 **SERVICE SEL 1/2:** Reserved for manufacturer use only.

6.Connection Diagram

