

User Manual

HDBT-EX2-4K

18G HDMI Extender over HDBaseT

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Version: HDBT-EX2-4K _2024V1.0

Statement

Read this user manual carefully before using the product. Pictures shown in this manual are for reference only. Different models and specifications are subject to real products.

This manual is only for operation instruction, please contact the local distributor for maintenance assistance. The functions described in this version were updated till Mar, 2021. In the constant effort to improve the product, we reserve the right to make functions or parameters changes without notice or obligation. Please refer to the distributor for the latest details.

Safety Precaution

To ensure the best performance from the product, please read all instructions carefully before using the device. Save this manual for further reference.

- Follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- Do not dismantle the housing or modify the module to avoid electrical shock or burn.
- Using supplies or parts not meeting the products' specifications may cause damage, deterioration or malfunction.
- Do not expose the unit to rain, moisture or install this product near water.
- Install the device in a place with fine ventilation.
- Do not twist or pull by force ends of the CAT5e/CAT6a cable. It can cause malfunction.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.
- Unplug the power cord when left unused for a long period of time.
- Refer all servicing to qualified service personnel.

Customer Service

We provide limited warranty for the product within three years. Please contact your distributor for more details.

Introduction

Thanks for choosing the HDBT-EX2-4K extender kit which consists of a transmitter (Tx) and a receiver (Rx). It allows to extend a 4K@60Hz 4:4:4 HDMI signal to distance up to 131ft/40m and 1080P@60Hz up to 230ft/70m over a single CATx Ethernet cable. It supports bi-directional 24V Power over Cable (PoC), which simplifies the wiring to allow only a single AC power adapter usage. It supports bi-directional IR pass-through extension, allowing for control of local video source device or the remote display. Moreover, it supports EDID and CEC pass-through.

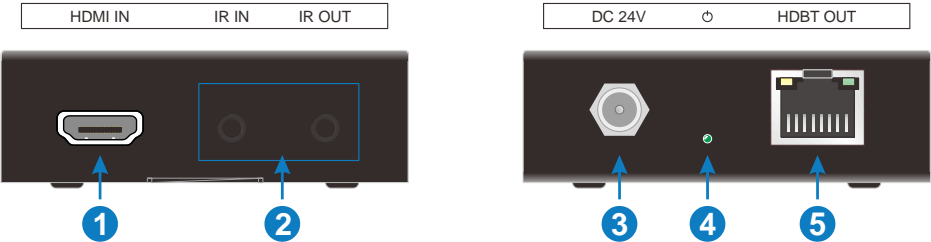
Features

- HDMI V2.0 standard and HDCP 2.2 compliant.
- Supports video resolution up to 4Kx2K@60Hz 4:4:4.
- Transmission distance is up to 131ft/40m for 4Kx2K, and 230ft/70m for 1080P.
- Supports bi-directional IR pass-through for long-distance control.
- Supports bi-directional 24V PoC.
- Supports EDID and CEC pass-through.

Package List

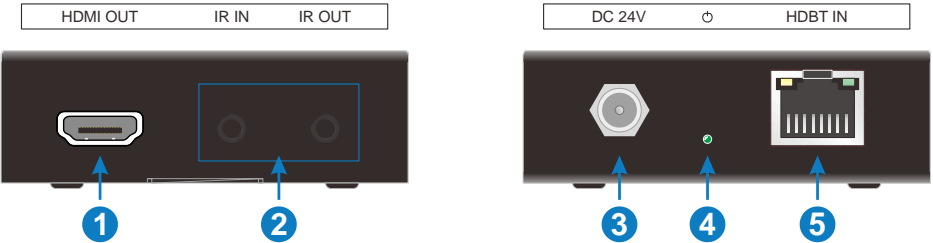
- 1x Transmitter (TX)
- 1x Receiver (RX)
- 1x Power Adaptor (24V DC, 1.25A)
- 1x User Manual

Transmitter Panel Description



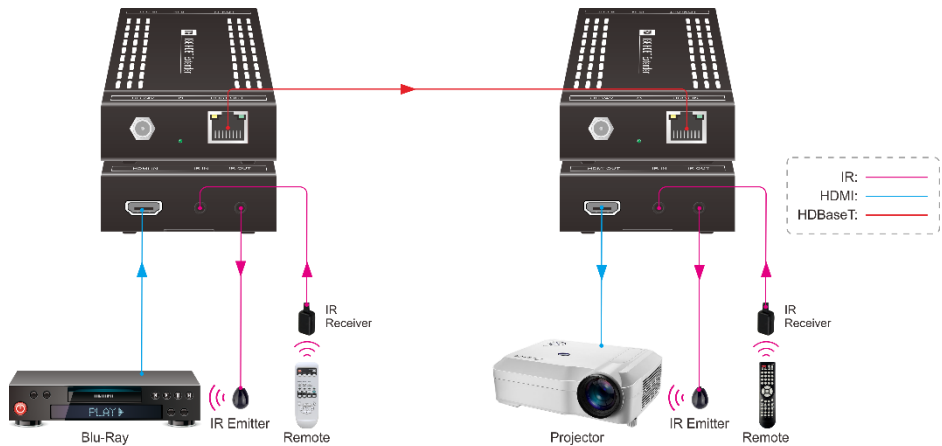
No.	Name	Description
①	HDMI IN	Type-A HDMI port to connect the source device (e.g. Blu-ray DVD).
②	IR IN	3.5mm jack to connect an IR receiver (not included).
	IR OUT	3.5mm jack to connect an IR emitter (not included).
③	DC 24V	DC barrel connector to connect the AC power adapter.
④	Power LED	Illuminates green when the unit is powered on.
⑤	HDBT OUT	RJ45 connector for a CATx Ethernet cable to connect the transmitter and the receiver. The LINK LED illuminates when there is a valid HDBaseT™ link between the transmitter and the receiver. The HDCP LED illuminates when the video contains HDCP content.

Receiver Panel Description



No.	Name	Description
①	HDMI OUT	Type-A HDMI port to connect an HDMI display.
②	IR IN	3.5mm jack to connect an IR receiver (not included).
	IR OUT	3.5mm jack to connect an IR emitter (not included).
③	DC 24V	DC barrel connector to connect the AC power adapter.
④	Power LED	Illuminates green when the unit is powered on.
⑤	HDBT IN	RJ45 connector for a CATx Ethernet cable to connect the transmitter and the receiver. The LINK LED illuminates when there is a valid HDBaseT™ link between the transmitter and the receiver. The HDCP LED illuminates when the video contains HDCP content.

System Diagram



Note: This picture is for reference only. The specific scheme is subject to real devices.

Specification

Transmitter (Tx)	
Input	(1) HDMI
Input Connector	(1) Female type-A HDMI
Output	(1) HDBT
Output Connector	(1) RJ45
Control	(1) IR IN, (1) IR OUT
Control Connector	(2) 3.5mm mini jacks
Receiver (Rx)	
Input	(1) HDBT
Input Connector	(1) RJ45
Output	(1) HDMI
Output Connector	(1) Female type-A HDMI
Control	(1) IR IN, (1) IR OUT
Control Connector	(2) 3.5mm mini jacks
General	
Video Resolution	Up to 4Kx2K@60Hz 4:4:4
Transmission Mode	HDBaseT
Transmission Distance	1080P@60Hz ≤ 230ft/70m, 4K@60Hz ≤ 131ft/40m
HDMI Version	2.0
HDCP Version	2.2
Bandwidth	18Gbps
Power Consumption	11.2W (Max)
Operating Temperature	-10°C ~ +55°C
Storage Temperature	-25°C ~ +70°C
Relative Humidity	10%-90%
Power Supply	Input Power: 24V DC 1.25A or Power over Cable (PoC), AC Adaptor Input Power: 100~240VAC, 50/60Hz
Dimension (W*H*D)	74mm x 24mm x 120mm
Net Weight (g)	Tx: 200g, Rx:210g