User Manual

# **TPUH-BYE20** 4K HDMI Extender





# **All Rights Reserved**

Version: TPUH-BYE20\_2019V1.1

#### 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 product.

This manual is only for operation instruction, please contact the local distributor for maintenance assistance. The functions described in this version were updated till January, 2019. 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 dealers 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 TPUH-BYE20 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 131ff/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 CEC pass-through. It also adopts a visually lossless video compression technology (VLC) to ensure the HD lossless transmission of 4K@60Hz 4:4:4.

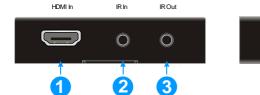
#### Features

- HDMI 2.0 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 CEC.
- Visually Lossless Compression (VLC) technology.

#### Package List

- 1x Transmitter (TX)
- 2x TX Mounting Ears with 2 Screws
- 1x Power Adaptor (24V DC, 1.25A)
- 1x Receiver (RX)
- 2x RX Mounting Ears with 2 Screws
- 1x User Manual

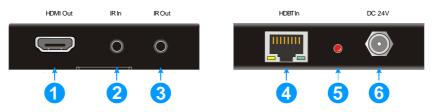
#### **Transmitter Panel Description**





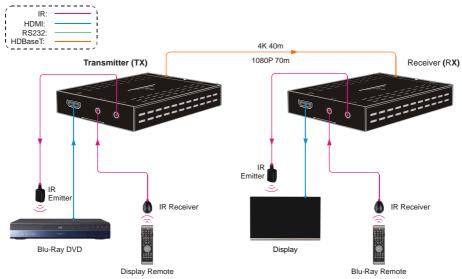
No.	Name	Description
1	HDMI In	Type-A HDMI port to connect the source device (e.g. Blu-ray DVD).
2	IR IN	3.5mm jack to connect an IR receiver (not included).
3	IR OUT	3.5mm jack to connect an IR emitter (not included).
4	HDBT Out	RJ45 connector for a CATx Ethernet cable to connect the transmitter and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

# **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).
3	IR OUT	3.5mm jack to connect an IR emitter (not included).
4	HDBT In	RJ45 connector for a CATx Ethernet cable to connect the transmitter and the receiver. The <b>LINK LED</b> illuminates when there is a valid HDBaseT <sup>™</sup> link between the transmitter and the receiver. The <b>HDCP LED</b> illuminates when the video contains HDCP content.
5	Power LED	Illuminates red when power is applied.
6	DC 24V	DC barrel connector to connect the AC power adapter.

# 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	9.5W (Max)			
Operating Temperature	-10℃ ~ +55℃			
Storage Temperature	-25℃ ~ +70℃			
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 18mm x 120mm			
Net Weight (g)	Tx/Rx:235g			