

# User Manual

## TPUH610A

### Ultra-thin HDMI2.0 Extender

131ft/40m 4K UHD



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Version: TPUH610A\_2017V1.0

## Statement

Read this user manual carefully before using this product. Pictures shown in this manual is for reference only, different model and specifications are subject to real product. This manual is only for operation instruction only, not for any maintenance usage. The functions described in this version are updated till June 21, 2017. In the constant effort to improve our 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 insure the best 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 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 not used for a long period of time.
- Refer all servicing to qualified service personnel.

## After-sales Service

We provide limited warranty for the product within **three years**.

## Package List

- |                                  |                               |
|----------------------------------|-------------------------------|
| ▪ 1 x Transmitter                | ▪ 1 x Receiver                |
| ▪ 4 x Mounting Ears & 4 x Screws | ▪ 8 x Plastic Cushions        |
| ▪ 1 x RS232 Cable                | ▪ 1 x 3-pin Phoenix Connector |
| ▪ 1 x Power Adaptor (12VDC, 2A)  | ▪ 1 x User Manual             |

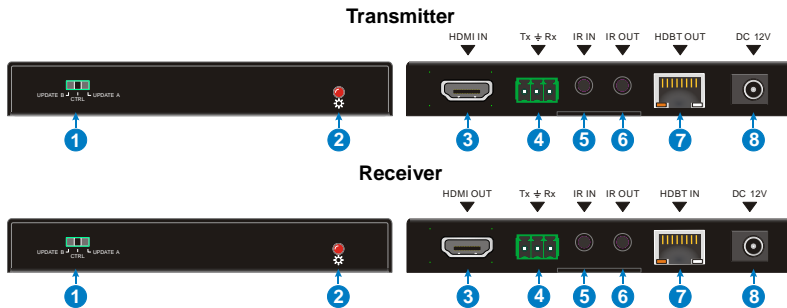
## Introduction

The TPUH610A is an ultra-thin HDMI2.0 Extender consist of transmitter and receiver. It extends 1080p/4K HDMI signal over CAT5e/CAT6a cable up to 70m /40m (PoC), and enables IR and RS232 pass-through to control source or display device remotely. It also adopt a visually lossless video compression technology (VLC) to ensure the HD lossless transmission of HDR and 4K@60Hz/4:4:4 over CAT5e/CAT6a cable.

## Features

- Supports 4K/UHD/60Hz/4:4:4.
- Supports HDMI2.0 & HDCP2.2, and is backward compatible to the previous version.
- Maximum transmission distance is up to 40m for 4Kx2K, and 70m for 1080p.
- Supports CEC, IR and RS232 pass-through for long-distance control.
- Supports bi-directional PoC for simplified wiring.
- Supports HDR.
- Features DIP switch for choosing mode from: Control, Update A, Update B.

## Panel Description



No.	Name	Description
①	MODE Switcher	<ul style="list-style-type: none"> <li>▪ CTRL: RS232 pass-through control mode.</li> <li>▪ UPDATE A: Update Valens IC program, connect a PC to the RS232 port, and then double-click the update file (.bat).</li> <li>▪ UPDATE B: Update compression IC program, the upgrade method is the same as the above UPDATE A.</li> </ul>
②	Power LED	RED: DC power present.
③	HDMI IN (Transmitter)	Connect with HDMI source.
	HDMI OUT(Receiver)	Connect with HDMI display.
④	3-pin Terminal Block	If one is connected with control device (e.g. PC), and the other should be connected with the third-party that need to be controlled.
⑤	IR IN	Work with far-end IR OUT port, connect with IR Receiver (with carrier) to collect IR signal to control far-end display device from local.
⑥	IR OUT	Work with far-end IR IN port, connect with IR Emitter to send IR signal to control input source device from remote.
⑦	HDBT OUT(Transmitter)	Connect to the HDBT IN socket on Receiver via CAT5e/6a cable.
	HDBT IN (Receiver)	Connect to the HDBT OUT socket on Transmitter CAT5e/6a cable.
⑧	DC 12V Power Port	Support bi-directional PoC, either ports should be connected with 12V DC 2A power adaptor.

## Specification

Spec \ Model	Transmitter	Receiver
Input	HDMI IN	HDBT IN
Output	HDBT OUT	HDMI OUT
Control Ports	IR IN, IR OUT, RS232	IR IN, IR OUT, RS232
<b>General</b>		
Transmission Mode & Distance	HDBaseT; 1080p ≤ 70m; 4Kx2K ≤ 40m	
Resolution	Up to 4Kx2K@60Hz 4:4:4	
Bandwidth	18Gbps	
HDMI Standard	HDMI2.0 & HDCP2.2	
Power Consumption	14W (max)	
Operation Temperature	0 ~ +40°C	
Storage Temperature	-10 ~ +50°C	
Relative Humidity	0% ~ 90%	
External Power Supply	Input: 100VAC~240VAC, 50/60Hz; Output: 12VDC 2A	
Dimension (W*H*D)	115mm x 16 mm x 84mm	
Net Weight (g)	Transmitter: 150g; Receiver: 153g	

## System Diagram

