USER MANUAL

4K HDBase-T Decora Wall Plate Transmitter - THBD-210

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Contents

Pairing this Transmitter with a Receiver

	4K60	4K30	IR Pass Through	RS232 Pass Through	Audio Extractor
RBH-200	NO	Yes	Yes	Yes	NO
RBH-220	Yes	Yes	NO	Yes	Yes
H-HD-1R H-HD-DR	NO	Yes	NO	NO	NO

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Introduction

The THBD-210 combines the high bandwidth of HDMI 2.0 with the far transmission distances of HDBaseT, in a customizable wall plate design compact enough to fit on a decora plate. Utilizing a special HDMI-to-HD-baseT conversion processor, the THBD-210 is capable of transmitting up to 40 meters, 4K60 signals - far exceeding the 10.2Gbs limitation of standard HDBaseT hardware. In addition, the THBD-210 features RS232 pass-through and Power over Cable (POC) to match performance with convenience.

Features

- HDMI 2.0b: 18Gbps and HDCP 2.2 compliant
- Up to 4K2K@60Hz (4:4:4)
- Up to 7.1 channels HD audio
- HDBaseT™ over a single CAT 6/6a cable up to 230ft/70m distance 1080p
  or 131ft/40m at 4K@60Hz
- Fits on a decora wall plate
- Two-way IR and RS-232
- PWR/LINK/HDCP indicators
- POC (Power Over Cable) function is supported, either TX or RX is powered by 24V1A power supply, and the other does not need a separate supply. POC Power consumption is less than 10W.
- Transfer Bidirectional Infrared control signal together with the HDMI signal.
- Transfer Bidirectional RS-232 control signal together with the HDMI signal.

Package Contents

- THBD-210 - 1PC
- User Manual - 1PC
- Phoenix connector (2 holes) - 1PC
- Phoenix connector (3 holes) - 2PC

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Technical Specifications

Technical	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 1.4 and HDCP 2.2
Video Bandwidth	18 Gbps
Video Resolution	up to 4K2K@50/60Hz(YUV4:4:4), 4K2K@30Hz, 1080P@120Hz, and 1080P 3D@60Hz
Color Space	RGB/YCbCr 4:4:4, YCbCr 4:2:2
Color Depth	10-bit, 12-bit
HDMI Audio Formats	LPCM 2/5.1/7.1CH, Dolby Digital, DTS 5.1, Dolby Digital+, Dolby TrueHD, DTS-HD Master Audio, Dolby Atmos, DTS:X
Optical Audio Formats	LPCM 2CH, LPCM 5.1, Dolby Digital 2/5.1CH, DTS 2/5.1CH
ESD Protection	Human body model—±8kV (Air-gap discharge) &±4kV (Contact discharge)
Connectors	
Transmitter	Inputs: 1x HDMI Type A [19-pin female] 1x IR INPUT [Phoenix jack] 1x RS-232 [Phoenix jack] Outputs: 1x HDBaseT Out [RJ45] 1x IR OUTPUT [Phoenix jack] 1x 5v OUTPUT [Phoenix jack]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	103.5mm [W] x 46mm [D] x 30mm [H]
Weight	163g
Power Supply	Input: AC100 - 240V 50/60Hz Output: DC 24V/1A (US/EU standards, CE/FCC/UL certified)
Power Consumption	9W (Max)
Operating Temperature	32 - 104°F / 0 - 40°C
Storage Temperature	-4 - 140°F / -20 - 60°C
Relative Humidity	20 - 90% RH (no condensation)

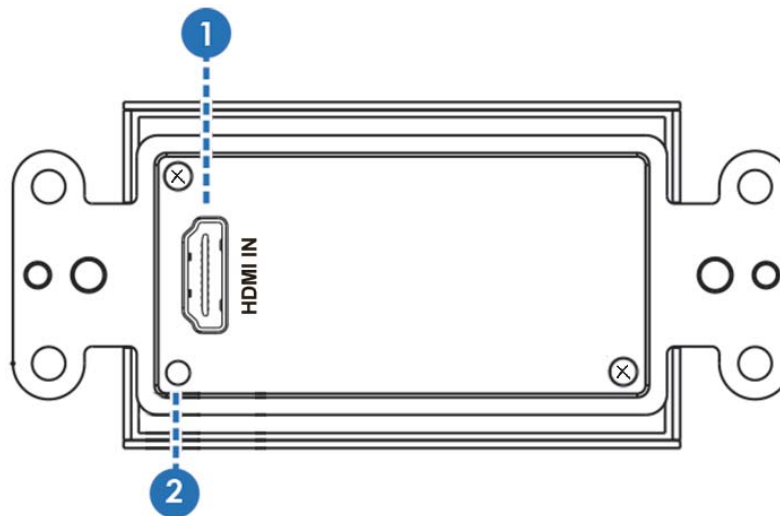## 4K HDBase-T Decora Wall Plate Transmitter - THBD-210

Operation Controls and Functions

Front panel

Number	Name	Function Description
1	HDMI IN	Connect to HDMI source devices.
2	ACTIVE	Green LED input signal indicator.

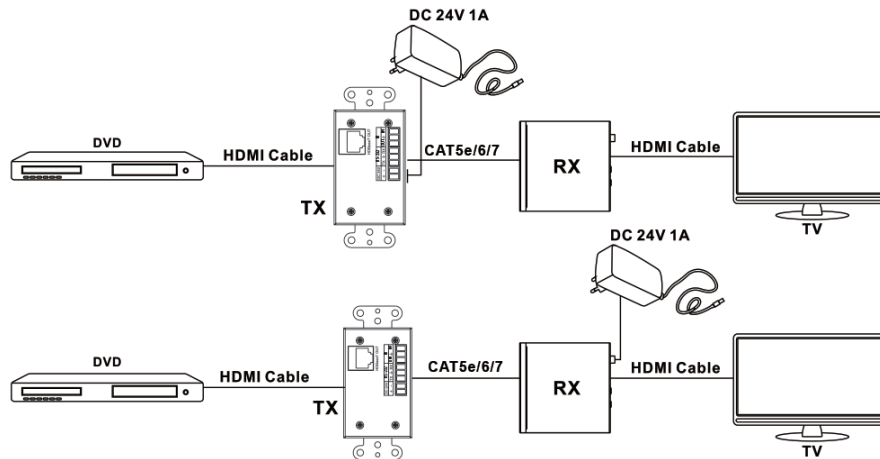4K HDBase-T Decora Wall Plate Transmitter - THBD-210

Rear Panel
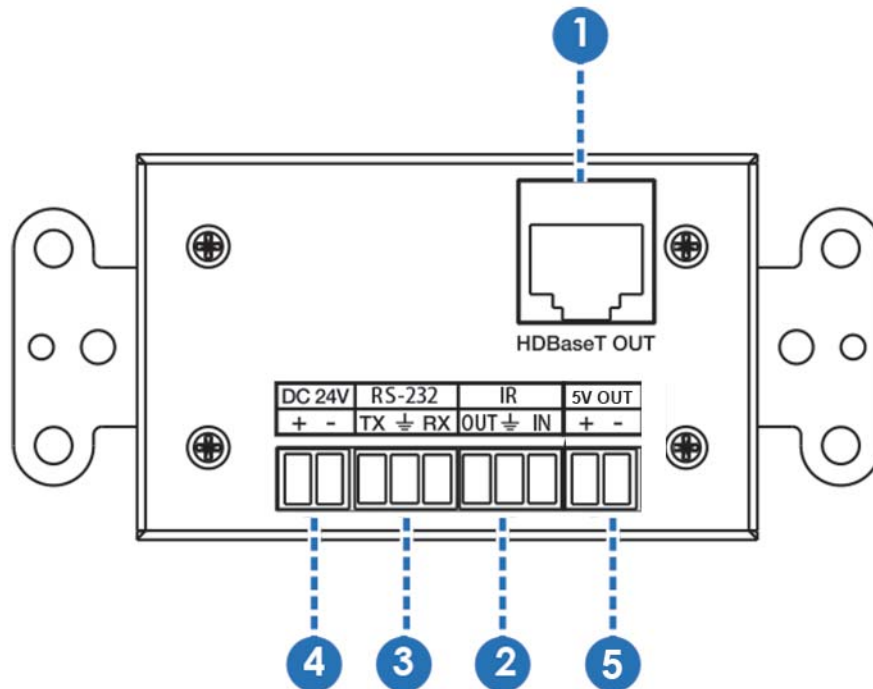
| Number	Name	Function Description
1	HDBaseT OUT	HDBaseT output port. Connect to HDBaseT receiver with a category cable.
2	IR IN/OUT	Use the phoenix jack to connect IR input or output.
3	RS-232	Use the phoenix jack to connect PC or control system to transmit RS-232 commands.
4	DC 24V	Use the phoenix jack to connect power supply.
5	5V OUT	5 Volt power for use with IR

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Description 1
POC (Power over Cable) Application Example

Description 2
Bidirectional Infrared Control Application Example
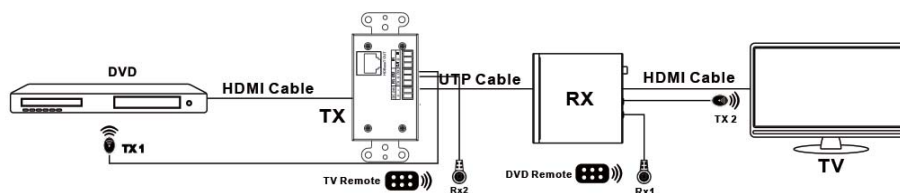
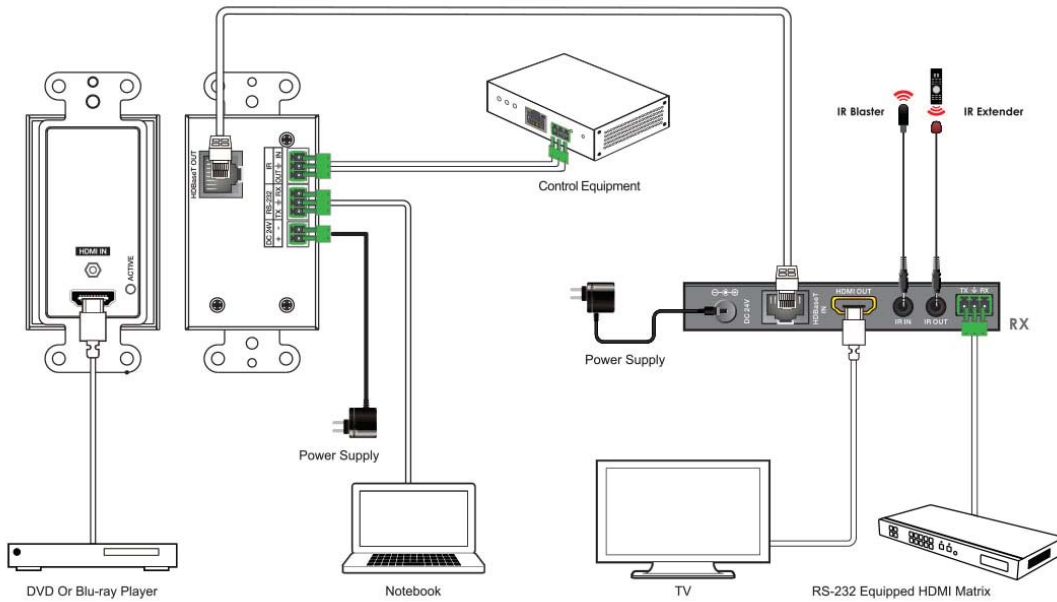## 4K HDBase-T Decora Wall Plate Transmitter - THBD-210

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Description 3
Bidirectional RS-232 Control Application Example
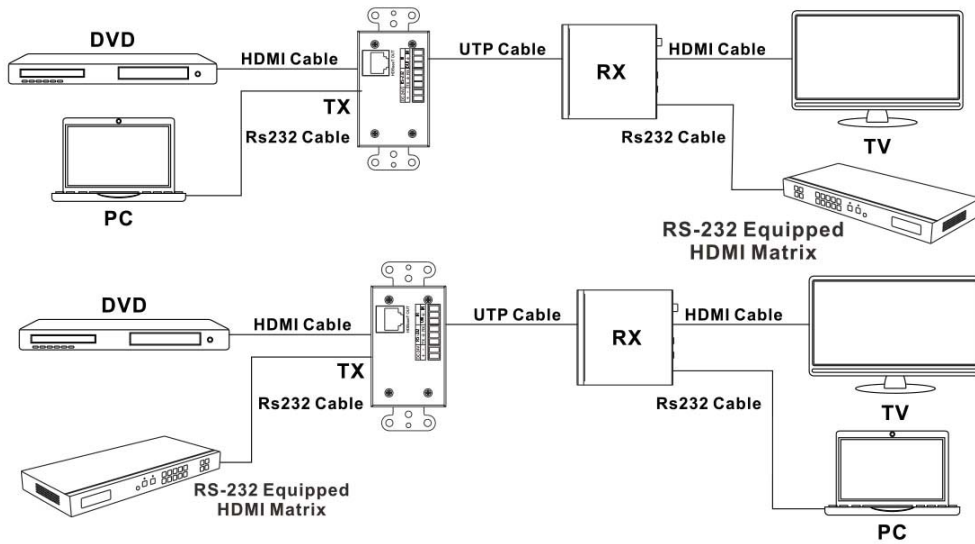
Application Example

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Safety Information

To reduce the risk of electric shock, do not expose this product to rain or moisture.

Do not modify the wall plug. Doing so will void the warranty and safety features.

If the wall plug does not fit into your local power socket, hire an electrician to replace your obsolete socket.

This equipment should be installed near the socket outlet and the device should be easily accessible in the case it requires disconnection.

Warranty

Warranty time is two year and from the date of original shipment.
This warranty shall be void if a serial number has been removed from the product.

Upon determination of a legitimate defect covered by this warranty, user should bear the transport cost during the warranty.

If product is out of warranty then repair charge is required. Minimum repair charge: 10% of the retail price plus the cost of failed components. We will repair the failed product after repair cost has been approved by Customers and proper financial arrangements are made.
Customer must cover round trip shipment expenses.

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