# HDBaseT HDMI UHD Receiver and Scaler - # 15372


## Operation Manual

CONVERTERS.TV

## Introduction

The UHD Scaler is designed to extend and upscale HDMI signal on to two HDMI output displays and one analog audio simultaneously. It supports 4Kx2K, 3D, 36-bit Deep Color, Hi-Def. lossless audio and other features defined by the latest HDMI specifications. Allowing uncompressed video and audio, as well as bi-directional IR control, RS-232 pass through, and LAN serving from a single CAT5e/6/7 cable over 100m of distance. The management of source/sink scenarios can be operated easily through on-panel buttons, OSD, IR remote control, RS-232 and WebGUI control.

## Applications

- Extending incoming signal through CAT5e/6/7 to HDMI outputs
- Scale up HDMI input low resolution video on High-Definition display
- Scale down HD signal down monitor
- Lecture room/showroom/Meeting room/Classroom display and control
- Public Commercial Display extension

## Features

- HDMI with 3D supported, and HDCP compliant
- Supports HDTV resolutions up to 4Kx2K (3840x2160@24/25/30, & 4096x2160@24)
- Supports scale down HD resolution on to monitor/display
- Supports data rate from 300Mbps to 3Gbps and Deep Color up to 1080p 36-bit
- Supports simultaneous HDMI outputs with different resolution setting
- Supports LPCM 2/5.1/7.1CH,Dolby Digital 2~5.1CH, DTS 2~5.1CH, Dolby TrueHD and DTS-HD Master Audio (Pass through)
- Extend HDMI, IR, RS-232 signal up to 100m through CAT5e/6/7 cable
- Supports Balanced audio and bi-directional IR control
- Supports Ethernet transmission rate up to 100Mbps
- Supports OSD, on-panel, Remote, RS-232 and WebGUI control

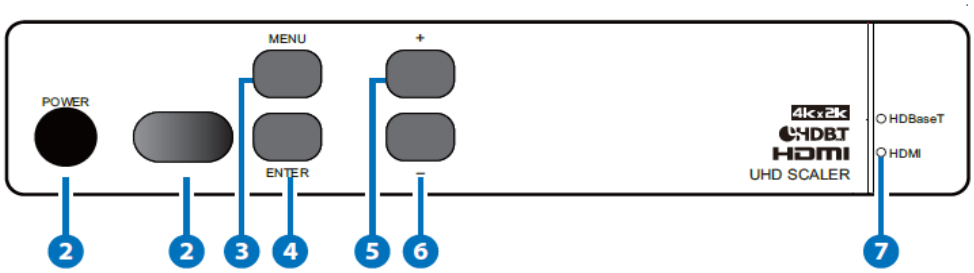
***Note:*** *This system was tested with CAT6/23AWG cable, result may vary with cable of a different specification.*

## System Requirements

HDBaseT compatible Transmitter input and PS3/Blu-ray player and output HDMI TV/Display with connection cables.

## Operation Controls and Functions

### Front Panel




*1.* **POWER & LED:** Press this button to turn ON the device or set the device to standby mode. The LED will illuminate in green when switch to ON. This device contains power last memory and therefore, when the power is connected the device will switch to ON/Standby according to the last status.

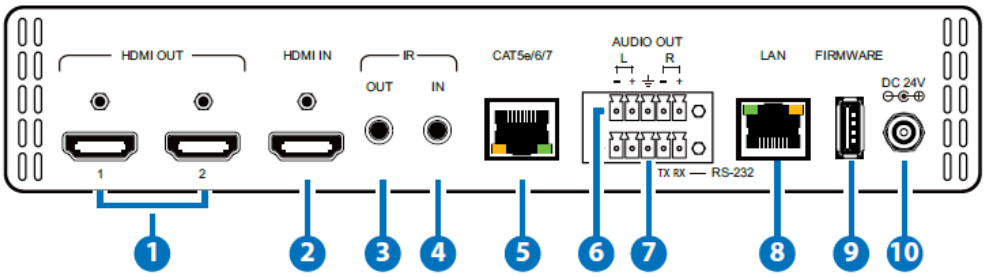
**2. IR Window:** This IR Receiver receives the remote control signal from the packaged included remote control only with IR frequency at 38kHz.

**3. MENU:** Press this button to enter into OSD menu.

**4. ENTER:** Press this button to select an OSD selection and press it again to confirm.

**5. +/-:** Press these buttons to move up/down in the OSD selection.

### Rear Panel




**1. HDMI OUT:** Connect to HDMI TV/display or HD Amplifier for output image and or audio display.

**2 HDMI IN:** Connect from source equipment such as Blu-ray/DVD/ PS3 players, Set-Top-Box or any HDMI equipped source device for input signal sending.

**3 IR OUT:** Connect to the supplied IR Blaster cable for IR signal transmission. Place the IR Blaster in direct line-of-sight of the equipment to be controlled.

**4 IR IN:** Connect the supplied IR Receiver cable for IR signal reception. Ensure that remote being used is within the direct line-of-sight of the IR Extender.

**Note:** *Both IR IN and IR OUT signal are sending through CAT5e/6/7 cable and therefore, it does not accept the remote signal included in this package.*

**5 CAT5e/6/7:** Connect to the Transmitter unit with a single CAT5e/6/7 cable for receiving all data signals.

**6 AUDIO OUT:** Connect to active speaker or audio receiver for audio signal output.

**7 RS-232:** This slot is to connect with D-Sub 9-pin cable from device equipment for receiving RS-232 commands.

**8 IP CONTROL:** Connect from PC/Laptop with active internet service for Telnet or WebGUI control with RJ-45 terminated cable.

**9 FIRMWARE:** This slot is reserved for firmware update use only.

**10. DC 24V:** Connect the adaptor with power cord included in the package and connect to AC wall outlet for power supply.

## Specifications

| | |
|---|---|
| Frequency bandwidth | 340Mbps to 10.2Gbps |
| Input ports | 1 x HDMI, 1 x CAT5e/6/7<br>1 x IR In, 1 x USB (Service only)<br>1 x Control |
| Output ports | 2 x HDMI, 1 x IR Out |
| Resolution | 480i~1080p@50/60, 1080p@24, 4K x 2K |
| HDMI I/O Cable Distance | 15M@8/12bit, 5M@4Kx2K |
| IR Frequency | 30~50kHz |
| ESD Protection | Human body model:<br>±8kV (air-gap discharge)<br>±4kV (contact discharge) |
| Power Supply | 24V/ 3.75A DC (US/EU standards, CE/ FCC/UL certified) |
| Dimensions | 219mm (W) x 164.3mm (D) x 48mm (H) |
| Weight | 450g |
| Chassis Material | Metal |
| Silkscreen Color | Black |
| Operating Temperature | Operating from 0°C ~ 40°C |
| Storage Temperature | -20˚C ~ 60˚C / -4 ˚F ~ 140 ˚F |
| Relative Humidity | 20 ~ 90% RH (non-condensing) |

| DVI and HDMI Supported Resolutions | Input | Output |
|---|---|---|
| 640x480@60 | √ | √ |
| 640x480@72 | √ | √ |
| 640x480@75 | √ | √ |
| 720x480@60 | √ | √ |
| 720x576p@50 | √ | √ |
| 800x600@60 | √ | √ |
| 800x600@72 | √ | √ |
| 800x600@75 | √ | √ |
| 1024x768@60 | √ | √ |
| 1024x768@70 | √ | √ |
| 1024x768@75 | √ | √ |
| 1280x720@50 | √ | √ |
| 1280x720@60 | √ | √ |
| 1280x768@60 | √ | √ |
| 1280x800@60 | √ | √ |
| 1280x1024@60 | √ | √ |
| 1360x768@60 | √ | √ |
| 1600x1200@60 | √ | √ |
| 1920x1080i@50 | √ | √ |
| 1920x1080i@60 | √ | √ |
| 1920x1080p@24 | √ | √ |
| 1920x1080p@25 | √ | √ |
| 1920x1080p@30 | √ | √ |
| 1920x1080p@50 | √ | √ |
| 1920x1080p@60 | √ | √ |
| 1920x1200@60(RB) | √ | √ |
| 3840x2160@24/25/30 | √ | √ |
| 4096x2160@24 | √ | √ |

Audio Sampling Rate Up to 192 kHz

| HDMI input (Up to 192kHz) | HDMI output | Analog output |
|---|---|---|
| LPCM 2CH | √ | N/A |
| LPCM 5.1CH | √ | X |
| LPCM 7.1CH | √ | X |
| Dolby Digital 2~5.1CH/<br>DTS 2~5.1CH | √ | N/A |
| Dolby TrueHD/<br>DTS-HD Master Audio | √ | X |

**Audio Format** LPCM 2/5.1/7.1CH,Dolby Digital 2~5.1CH, DTS 2~5.1CH (Pass through), Dolby TrueHD and DTS-HD Master Audio

| HDMI input | HDMI output | Analog output |
|---|---|---|
| LPCM 2CH | √ | √ |
| LPCM 5.1CH | √ | X |
| LPCM 7.1CH | √ | X |
| Dolby Digital (Plus)<br>DTS-HD & DTS Surround 5.1CH | √ | √ |
| Dolby TrueHD/<br>DTS-HD Master Audio | √ | X |

## Connection Diagram