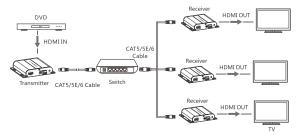
2.3 One-to-many Connection: By using network router/switch, one sender to several receivers, realize extender & splitter function.



#### 3. IR User Guide

- 3.1 IR blaster extension cable should plug-in the IR-out port of TX (Transmitter) of HDMI extender, and the IR receiver extension cable should plug-in the IR-out port of the RX (Receiver) of HDMI extender.
- 3.2 The emitter of IR blaster should as close as possible to the IR receiver of the signal source device.
- 3.3 Using the IR remote controller of the signal source device to wards the IR receiver (connected to the RX of HDMI extender), to remote control source media playback.

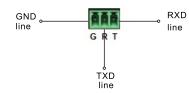
### 4. RS232 serial bi-direction pass back function

### 4.1 Baud rate

Different encoding mechanism can not mix-connect, the baud rate of RS232 serial of these transmitter unit and receiver unit, support 2400, 4800, 9600, 19200, 28800, 38400, 57600, and 115200

### 4.2 Line order

check and make sure the RS23S serial line connect firmly and well, and make sure serial data line is connected correctly as below:



If the RS232 serial does not work by following above connection, please try to change the order of TXD line and RXD line.

### 4.3 Check baud rate:

If you need to check the baud rate at last time, firstly, before power on, set the baud rate to 115200 on your serial port test tool. Then, power on, when the RS232 serial of product connects to serial port test tool, the software will read out the baud rate at present.

e.g.: software show information "  $\mbox{\sc Baud}$  rate: 9600 ", means 9600 is the current baud rate

#### 4.4 Set baud rate

For example: the current baud rate is 9600, but the baud rate of control equipment is 19200, so it needs to set the baud rate to 19200.

At this time, in serial port tool, choose baud rate "9600", then input command "set: 19200" in character format and send it out.

## • FAQ

- **O**: TV display "Waiting for connection" on the right corner?
- A: Please check if the power supply of transmitter and switcher (if used) is connected, and make sure connecting cable is firmly.
- Q: TV display "Please check the transmitter input signal"
- A: 1) please check if there is a HDMI signal input of transmitter.
  - Try to connect the signal source directly to display device to see if there is signal output from source device or change the signal source, HDMI cable and try again.
- **Q**: When playing 4kx2k source, screen is back without any content?
- A: Make sure both TV and HDMI cable support HDMI 1.4.

Q: Display not fluent, not stable?

- A: 1) Please check the cable length between the transmitter to switch, the switch to the receiver and the connection between each level is within the required range.
  - Press "reset" button on the transmitter/receiver front panel, reset and reconnect.

## Specification

Items	Specifications
HDMI Signal	Compatible with HDCP
transport protocol	HDbitT
Support resolutions	480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080p@50/60Hz, 4Kx2K @24/25/30Hz
Network Cable	UTP/STP CAT5/5E/6
Transmission distance	Up to 120 meters transmission distance for 4K x 2K@ 30Hz Full HD over single CAT6
RS232	Supports RS232 Bi-directional pass back
IR signal	Supports 20~60KHz IR devices
Working Temperature	0°C ~ 60°C
Power Supply	DC5V/2A
Power Consumption	<8W
Dimensions(LxWxH)	112.8x94 x 23.7mm *2PCS
Weight	TX:160g RX:160g
Color	Black

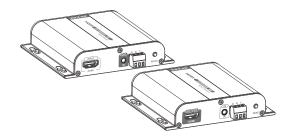
## Disclaimer

The product name and brand name may be registered trademark of related manufactures. ™ and ® may be omitted on the user manual. The pictures in this user manual are just for reference. The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc. We reserve the rights to make changes without further notice to a product or system described herein to improve reliability, function or design.

# **HDbitT HDMI Extender**

User manua

4KX2K





Thank you for purchasing this product. For optimum performance and safety, please read the instructions carefully and keep the manual for future reference.

## • Important safety notice

Please read below safety instructions carefully before installation and operation:

- \* Please pay attention to all the warnings and hints on this device.
- \* Do not expose this unit to rain, moisture and liquid.
- \* Do not put any stuff into the device.
- \* Do not repair or open this device without professional people's guidance.
- \* Make sure good ventilation openings to avoid product overheating damage.
- \* Shut off power and make sure environment is safe before installation.
- \* Do not plug-in/out the network cables and IR cables when it is in using to avoid cables damage.
- \* Use DC5V only. Make sure the specification matched if using 3rd party DC adapters.

## Introduction

HDMI HDbitT extender, takes the advantages of the latest transmission technology - HDbitT, extends your HDMI video/audio with the resolution of 4Kx2K@30Hz up to 120meters(394 feet) via single network cable. Supports IR signal trans mission, to control media playback of the signal source device at the display location.

### Features

- 1. Applies advanced HDbitT over IP technology
- 2. Transmission distance is up to 120 meters via CAT6 cable
- 3. Resolution supported is up to 4Kx2K@30Hz
- 4. Supports 20~60KHz IR devices

- 5. Supports RS232 Bi-directional pass back
- Allows to be distributed by network routers for cascade connection and support one transmitter to many receivers to realize distribution and extension functions
- 7. Plug and play
- 8. Metal housing, stable and durable
- 9. Wall-mountable design, easy for installation

## Package Contents



transmitter TX ×1pc





User Manual ×1pc









IR blaster extensi

IR receiver extension DC5V/2A ×2pcs cable x1pc

receiver RX ×1nc

RS232 serial port cap ×2pcs

## Installation Requirements

- HDMI source device(computer graphics card, DVD,PS3, HD monitoring equipment etc).
- 2. HDMI display device like SDTV, HDTV, projector with HDMI port.
- 3. UTP/STP CAT5/5E/6 cable, follow standard IEEE-568B

  Network cable length support between every connection:

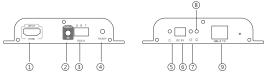
CAT5 80m

CAT5E 100m

CAT6 120m

## Panel Description

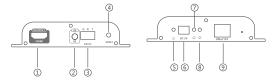
### 1. HDMI EXTENDER TX (Transmitter)



- ① HDMI signal input
- ② IR signal output to connect with IR blaster extension cable
- ③ RS232 Bi-directional pass back
- ④ Reset

- ⑤ Power Light
- ⑥ Power input ( DC5V )
- ⑦ Data transmission light
- Network link light
- HDbitT signal output

### 2. HDMI EXTENDER RX(Receiver)



- ① HDMI signal output
- IR signal input to connect with IR receiver extension cable
- ③ RS232 Bi-directional pass back
- 4 Reset
- ⑤ Power Light

- ⑥ Power input ( DC5V )
- $\ensuremath{\bigcirc}$  Data transmission light
- ® Network link light
- HDbitT signal input

### Installation Procedures

### 1. How to make a Cat5e/6 network cable

Follow the stanard of IEEE-568B:

1-Orange/white 4-Blue

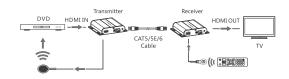
2-Orange 5-Blue/white 8-B

3-Green/white 6-Green



### 2. Connections

2.1 Point to Point connection: Up to 120 meters transmission distance over single CAT6 (High quality cable can reach 150 meters) .



2.2 Router Connection: By using network router/repeater, realize unlimited extension.

