



# CHDBT-1H2CE

1 by 3 HDMI to HDMI & CAT5e/6/7 with LAN/IR/  
RS-232 Transmitter



Operation Manual



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Version VR1.0 November 2012

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## SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply.

Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

## REVISION HISTORY

VERSION NO.	DATE DD/MM/YY	SUMMARY OF CHANGE
VR0	13/03/14	Preliminary Release



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## 1. INTRODUCTION

The HDMI over HDMI & CAT5e/6/7 Transmitter can support resolutions up to 1080p Full HD, Deep Color and 4Kx2K timing, 3D and multichannel digital audio formats such as LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus and DTS-HD from Hi-Def sources to one HDTV and CAT5e/6/7 outputs. This Transmitter has the ability to provide you with 1 HDMI and 2 CAT5e/6/7 outputs where the HDMI can be connected to HDMI display for instant display or cascading with another Transmitter and the CAT5e/6/7 can be connected to CAT5e/6/7 to HDMI Receivers for distance up to 100 meters.

## 2. APPLICATIONS

- Household entertainment sharing and control
- Lecture room display and control
- Showroom display and control
- Meeting room presentation and control
- Classroom display and control

## 3. PACKAGE CONTENTS

- 1 x HDMI over HDMI & CAT5e/6/7 Transmitter
- 1 x IR Extender
- 1 x IR Blaster
- 1 x 3.5mm phone jack to D-Sub 9-pin adaptor cable
- 24V/2.7A DC Power Adaptor
- Power Cord
- Operation Manual

## 4. SYSTEM REQUIREMENTS

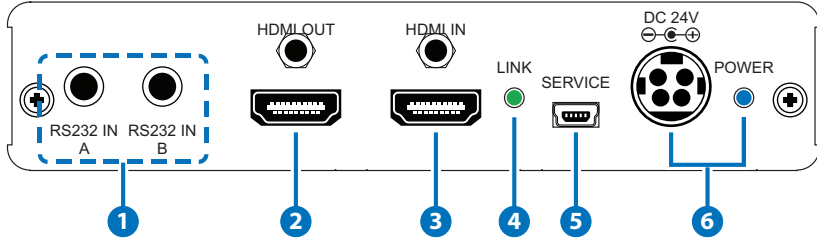
- Source equipment with HDMI output connector
- Display TV/monitor with HDMI input connector
- HDMI over CAT5e/6/7 Receivers with industry CAT5e/6/7 cables

## 5. FEATURES

- HDMI with 3D & 4Kx2K supported, HDCP and DVI compliant
- The HDMI and CAT5e/6/7 output are playing the same source simultaneously
- Supports Deep Color up to 1080p 36-bit
- Supports wide range of PC from VGA to WUXGA and HDTV resolutions up to 4Kx2K
- Supports LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio transmission (32-192kHz Fs sample rate)
- Supports distances up to 100 meters through CAT5e/6/7 cables
- Supports PoC (Power over Cable) with capable Receiver units

## 6. OPERATION CONTROLS AND FUNCTIONS

### 6.1 Front Panel



#### 1 RS232 IN A/B

Connect to a PC/Laptop or RS-232 enabled device (with supplied 3.5mm phone jack to D-Sub 9-pin adaptor) for the transmission of RS-232 commands.

#### 2 HDMI OUT

Connect this port to display TV/monitor.

#### 3 HDMI IN

Connect this port to source equipment such as DVD/Blu-ray player.

#### 4 LINK LED

This LED will illuminate when the Receiver is connected to source with signal display on screen.

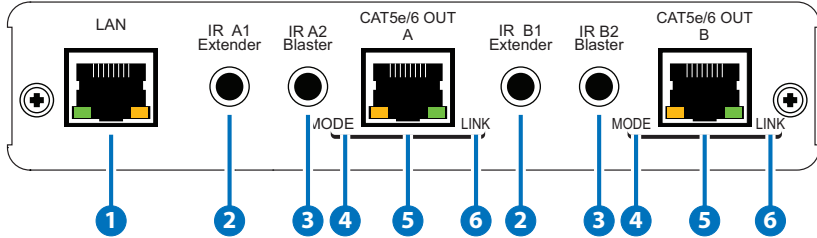
#### 5 SERVICE

This slot is reserved for factory service only.

#### 6 DC 24V & POWER LED

Plug the 24V DC power supply into the unit and connect the adaptor to an AC outlet, the device will be power on automatically once the power supply is connected and the LED will illuminate.

## 6.2 Rear Panel



### 1 LAN

Connect to an internet or network connection.

### 2 IR A1/B1 IR Extender

Connect to the IR Extender for IR signal reception from the remote control of this device or the source and display equipment. Ensure that remote being used is within the direct line-of-sight of the IR Extender for it will send out the signal to designate Receiver's IR output port.

### 3 IR A2/B2 IR Blaster

Connect to the IR Blasters for IR signal transmission. Place the IR Blaster in direct line-of-sight of the equipment to be controlled for it will blast out the IR signal received from the IR Extender.

### 4 MODE LED

When the device is power on the LED will flash.

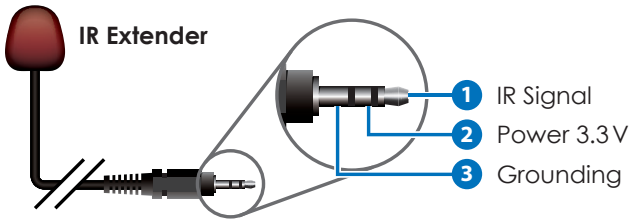
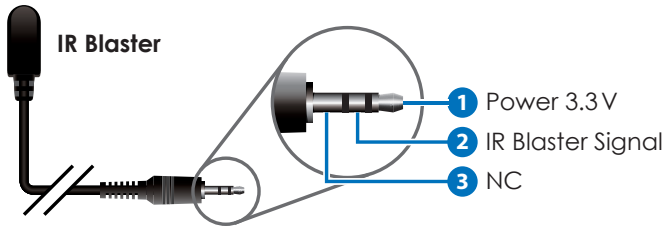
### 5 CAT5e/6 OUT A & B

Connect these ports to HDMI to CAT5e/6/7 Receivers (with our without PoC function) with CAT5e/6/7 cable to extend the signal up to 100m.

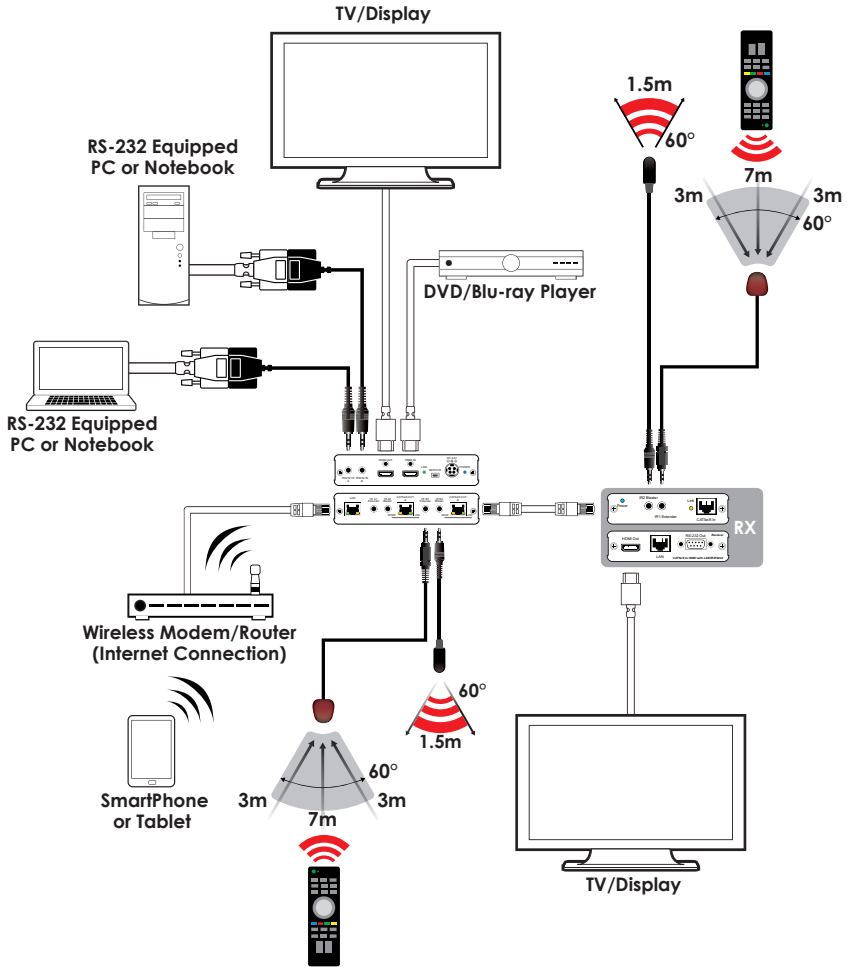
### 6 LINK LED

When the device is power on and this slot is connected from Receiver device with CAT5e/6/7 cable the LED will illuminate.

### 6.3 IR Cable Pin Assignment



## 7. CONNECTION DIAGRAM





## 8. SPECIFICATIONS

<b>Video Bandwidth</b>	340Mbps/10.2Gbps
<b>Input ports</b>	1 x Female HDMI type A, 2 x 3.5mm RS232, 2 x IR Extender, 1 x LAN (Ethernet), 1 x USB (Service Only)
<b>Output ports</b>	1 x HDMI, 2 x CAT5e/6/7, 2 x IR Blaster
<b>Resolution</b>	Up to 4Kx2K
<b>HDMI I/O Cable Distance</b>	15M@1080p-8bit, 10M@1080p-12bit, 5M@4Kx2K
<b>Power Supply</b>	24V/2.7A DC (US/EU standards, CE/FCC/UL certified)
<b>Dimensions</b>	145mm x 178mm x 30mm
<b>Weight</b>	528g
<b>Chassis Material</b>	Aluminum
<b>Silkscreen Color</b>	Black
<b>ESD Protection</b>	Human body model: ±8kV (air-gap discharge) ±4kV (contact discharge)
<b>Operating Temperature</b>	0°C ~ 40°C / 32 °F ~ 104 °F
<b>Storage Temperature</b>	-20°C ~ 60°C / -4 °F ~ 140 °F
<b>Relative Humidity</b>	20 ~ 90% RH (non-condensing)
<b>Power Consumption</b>	23.1W

## 9. ACRONYMS

ACRONYM	COMPLETE TERM
DTS	Digital Theater System
EDID	Extended Display Identification Data
HDCP	High-bandwidth Digital Content Protection
HDMI	High-Definition Multimedia Interface
HDTV	High-Definition Television







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20121116 MPM-CHDBT1H2CE