

# CH-1109TX&RX

HDMI & IP over Single  
CAT5e/CAT6 Extender

## Operation Manual



CH-1109TX & RX

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## • **Safety Precautions**

Please read all instructions before attempting to unpack or 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 module openings or empty slots, as you may damage parts.
- Do not attach the power supply cabling to building surfaces.
- Do not allow anything to rest on the power cabling or allow it to be abused by persons walking on it.
- To protect the equipment from overheating, do not block the slots and openings in the module housing that provide ventilation.

## • **Revision History**

<b><i>Version No</i></b>	<b><i>Date</i></b>	<b><i>Summary of Change</i></b>
<b>VR0</b>	<b>20110309</b>	<b>Preliminary Release</b>
<b>VR1</b>	<b>20110909</b>	<b>ARC Supportless</b>

# ***Table of Contents***

<b>1. Introduction .....</b>	<b>1</b>
<b>2. Applications .....</b>	<b>1</b>
<b>3. Package Contents .....</b>	<b>1</b>
<b>4. System Requirements .....</b>	<b>1</b>
<b>5. Features .....</b>	<b>2</b>
<b>6. Specifications .....</b>	<b>3</b>
<b>7. Operation Controls and Functions .....</b>	<b>4</b>
7.1 Front Panel .....	4
7.2 Rear Panel .....	5
<b>8. D-Sub 9 Pin Definitions .....</b>	<b>5</b>
<b>9. Connection and Installation .....</b>	<b>6</b>
<b>10. Acronyms .....</b>	<b>7</b>

## **1. Introduction**

The device that can make your home or office more efficient, this unit of HDMI with & IP over Single CAT5e/CAT6 can transmit and receive uncompressed audio/video, sending 3 different internet protocol, control through the built-in RS-232 and IR ports over 100M even more, it is adaptor free from the transmitter side. Further, with a HDMI bypass design it allows an instant display at the control point. Hence, if you want to make your home or office more efficient, get the HDMI & IP over Single CAT5e/CAT6 and prepare to be amazed.

## **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**

- HDMI & IP over Single CAT5e/CAT6 Transmitter x 1
- HDMI & IP over Single CAT5e/CAT6 Receiver x 1
- IR Blaster x 1
- IR Receiver x 1
- 48V 0.75A DC Power Adaptor x 1
- Operation Manual

## **4. System Requirements**

Input HDMI source equipment such as DVD/Blue-Ray player and output display with HDMI input jack.

IP router system or internet hub system and PC/NB devices.

## **5. Features**

- HDMI 1.4 - with 3D formats and 4K x 2K resolution supported
- Supports CEC bypass function
- Simultaneously uncompressed data sending over a single 100M/328ft with CAT5/CAT6 cable or 80M/262ft with CAT5e cable
- Uncompressed video 1080p, 60Hz, 48bits, 3D and 4K x 2K
- Audio support up to 7.1CH & Dolby TrueHD, DTS-HD
- Ethernet speed up to 100Mbps
- Various controls over HDMI CEC, RS232 & IR
- 5Play™ convergence: HDMI & Control (IR & RS232)/LAN/PoE
- Installation Friendly

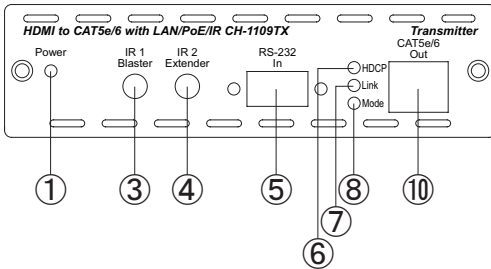
## 6. Specifications

Transmitter	
Input	1 x HDMI , 1 x HDMI Bypass, 3 x Ethernet, 1 x RS-232, 1 x IR Extender, 1 x IR Blaster
Output	1 x CAT5e/6
Receiver	
Input	1 x CAT5e/6
Output	1 x HDMI, 1 x RS-232, 3 x Ethernet, 1 x IR Extender, 1 x IR Blaster
ESD Protection	Human Body Model: $\pm 8\text{kV}$ (air-gap discharge) $\pm 4\text{kV}$ (contact discharge)
Dimensions (mm)	141(W) x 127(D) x 38(H)/Each
Weight(g)	525/Tx, 550/Rx
Chassis Material	Aluminum
Silkscreen Color	Silver
Power Consumption	15W
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Relative Humidity	20~90% RH (non-condensing)

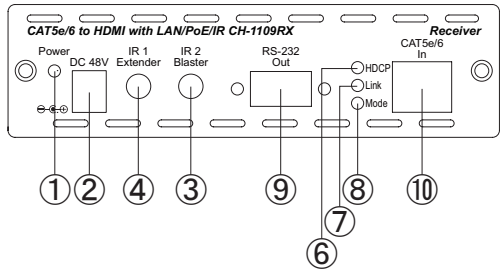
## 7. Operation Controls and Functions

### 7.1 Front Panel

#### Transmitter



#### Receiver

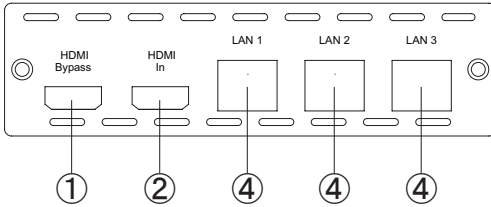


- ① Power LED: This red LED will illuminate when the power is connected with AC wall outlet.
- ② DC 48V: These slots are where you plug the 48V DC power supply into the unit and connect the adaptor to an AC outlet.
- ③ IR 1/2 Blaster: These slots are to connect with the IR blaster cables included in the package for IR signal transmitting.
- ④ IR 1/2 Extender: These slots are to connect with the IR receiver cables included in the package for IR signal receiving.
- ⑤ RS-232 In: This slot is to connect with PC/laptop with D-Sub 9 pin female cable for RS-232 control system.
- ⑥ HDCP LED: This red LED will illuminate in when the input source signal contains HDCP data.
- ⑦ Link LED: This yellow LED will illuminate when the both input and output signal is connected.
- ⑧ Mode LED: This green LED will blinking when the device is processing data.
- ⑨ RS-232 Out: This slot is to connect to the device that wishes to be controlled with D-Sub 9 pin female cable for RS-232 signal to be execute.
- ⑩ CAT5e/6 Out/IN: These slots are to be connected with a single CAT5e/6 cable for data transmitting.

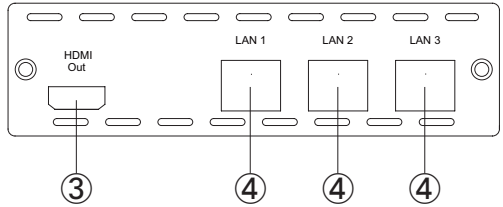


## 7.2 Rear Panel

Transmitter



Receiver

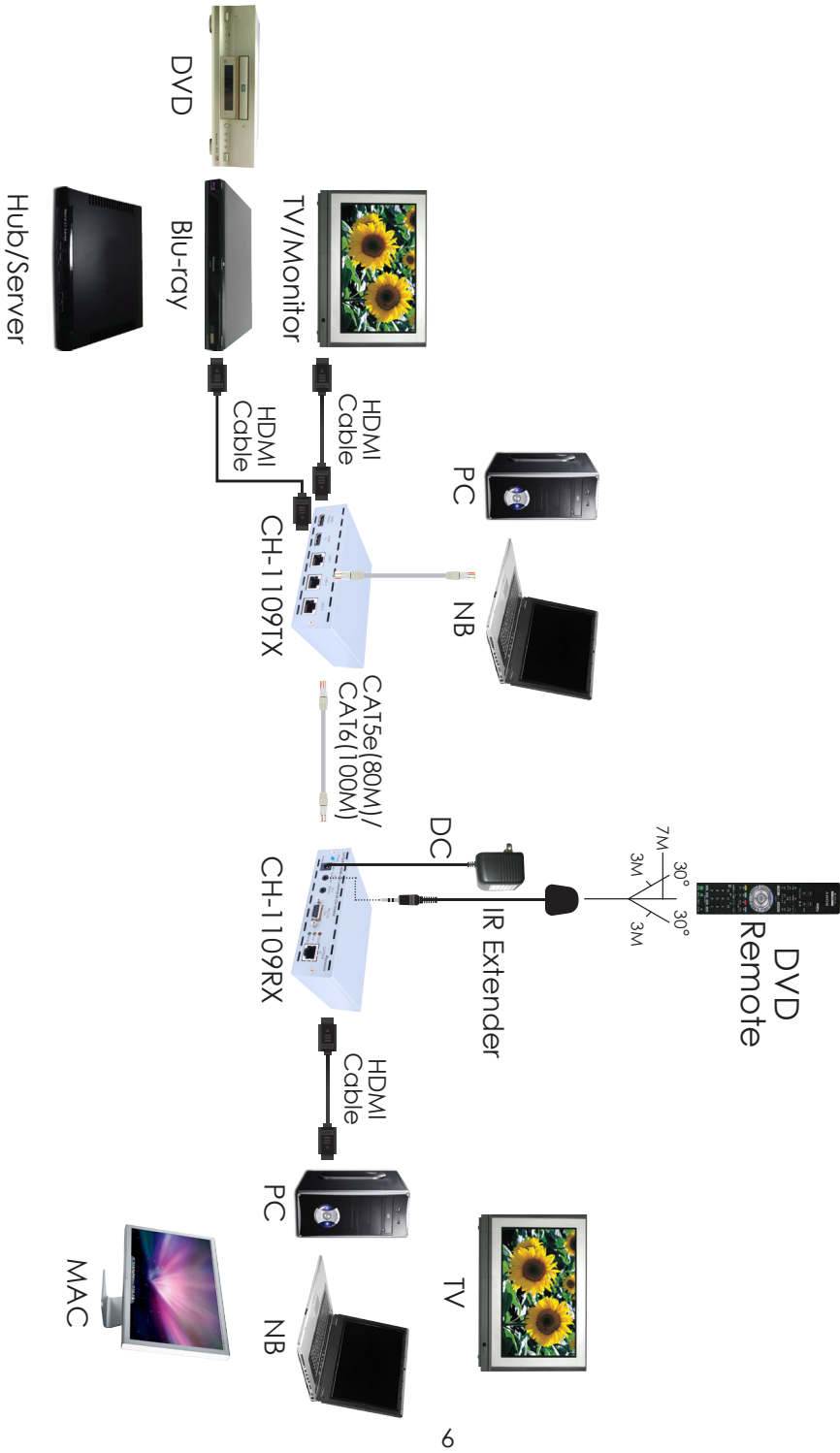


- ① HDMI Bypass: This slot is to connect with HDMI TV/monitor for instant display HDMI input source signal. When the HDMI bypass is connected, all signals will not transmit to the receiver side. Therefore, unplug this slot after confirm image display.
- ② HDMI In: This slot is to connect with HDMI source equipment such as DVD/Blue-Ray player.
- ③ HDMI Out: This slot is to connect with HDMI TV/monitor for display HDMI input source signal.
- ④ LAN 1/2/3: These slots are to connect with internet server hub or IP system allowing internet protocol to be transmit and received from 100M away. Either side can be a transmit or receive side and all three LAN are shareable within the two device's connection.

## 8. D-Sub 9 Pin Definitions

Pin	Define TX / RX
1	N/C
2	TxD / Rx D
3	RxD / Tx D
4	N/C
5	GND
6	N/C
7	N/C
8	N/C
9	N/C

9. Connection and Installation





# Acronyms

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<b>Acronym</b>	<b>Complete Term</b>
CAT5e	
CAT6	Category 6 cable
CEC	Consumer Electronics Control
DVI	Digital Visual Interface
HDCP	High-bandwidth Digital content protection
HDMI	High-Definition Multimedia Interface
IR	Infrared
LAN	Local Area Network



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