



# CH-514RXWPL

HDMI over CAT5e/6/7 Wall Plate Receiver



Operation Manual



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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
RDV1	20/06/13	Preliminary Release



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## 1. INTRODUCTION

The HDMI over CAT5e/6/7 Wall plate Receiver make your home or office more efficient. This Receiver can receive uncompressed Video/Audio and Bi-directional IR over 60 meters from Transmitter. It is freely to connect with compatible Transmitter through CAT5e/6/7 for data transmission.

## 2. APPLICATIONS

- Household entertainment sharing and control
- Showroom/Meeting room/Classroom display and control

## 3. PACKAGE CONTENTS

- HDMI over Cat5e/6/7 Receiver
- IR Blaster x 1
- IR Receiver x 1
- 5V DC Power Adaptor
- Operation Manual

## 4. SYSTEM REQUIREMENTS

Input HDMI over CAT5e/6/7 Transmitter and output with HDMI TV/display

## 5. FEATURES

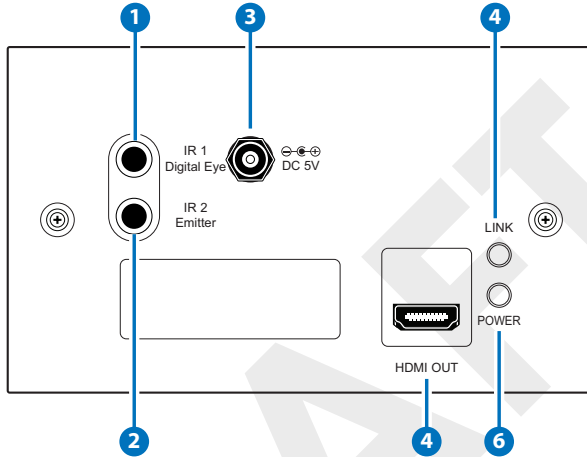
- HDMI with 3D & 4Kx2K supported, HDCP and DVI compliant
- Supports data rate from 250Mbps up to 3Gbps
- Supports wide range of PC resolutions from VGA to WUXGA and HDTV resolutions up to 4Kx2K (3840x2160@30Hz and 4096x2160@24Hz)
- Supports LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus and DTS-HD
- Master Audio transmission (32-192kHz sample rate)
- Supports distance up to 60 meters through HDMI to CAT5e/6/7 Transmitter
- Supports Bi-directional IR control
- Wall plate design and installation friendly

**Note:**

- 1. This system was tested with CAT6/23AWG cables, results may vary with cables of a different specification.*
- 2. Displaying HDMI 4Kx2K resolution require the standard 4Kx2K HDMI cable and display in order for proper image displaying.*

## 6. OPERATION CONTROLS AND FUNCTIONS

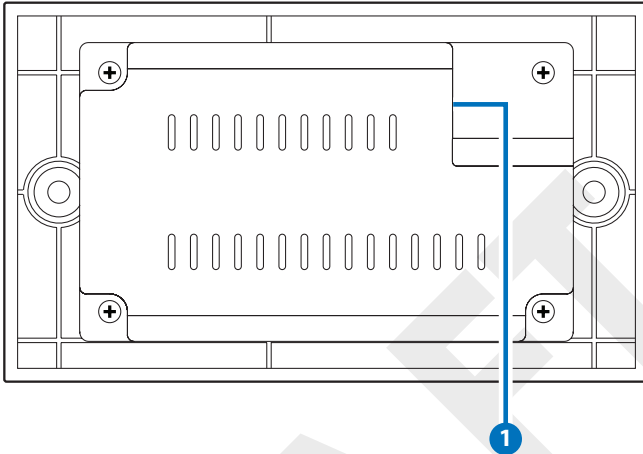
### 6.1 Front Panel



- 1 IR 1 EXTENDER:** Connect to the supplied IR Extender cable for IR signal reception. Ensure that remote controller being used is within the direct line-of-sight of the IR Extender.
- 2 IR2 BLASTER:** 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.
- 3 DC 5V:** Plug the 5V DC power supply into the unit and connect the adaptor to an AC outlet.
- 4 HDMI OUT:** Connect to HDMI TV/display for instant image display or cascade with another family type Transmitter.
- 5 LINK LED:** This LED will illuminate when both CAT5e/6/7 input and output signal is connected.
- 6 POWER LED:** This LED will illuminate when the device is connected to a power supply.

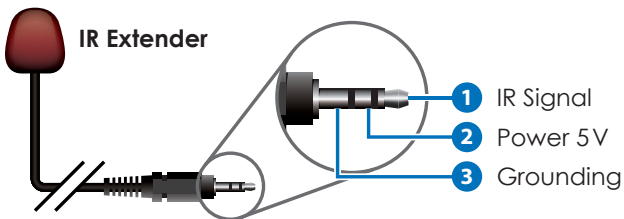
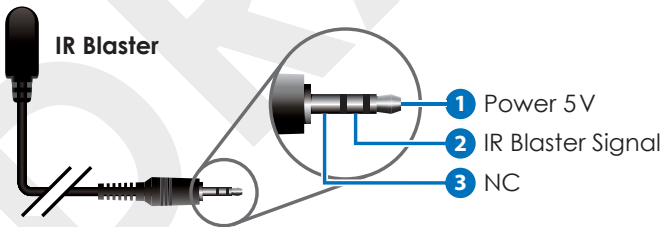


## 6.2 Rear Panel

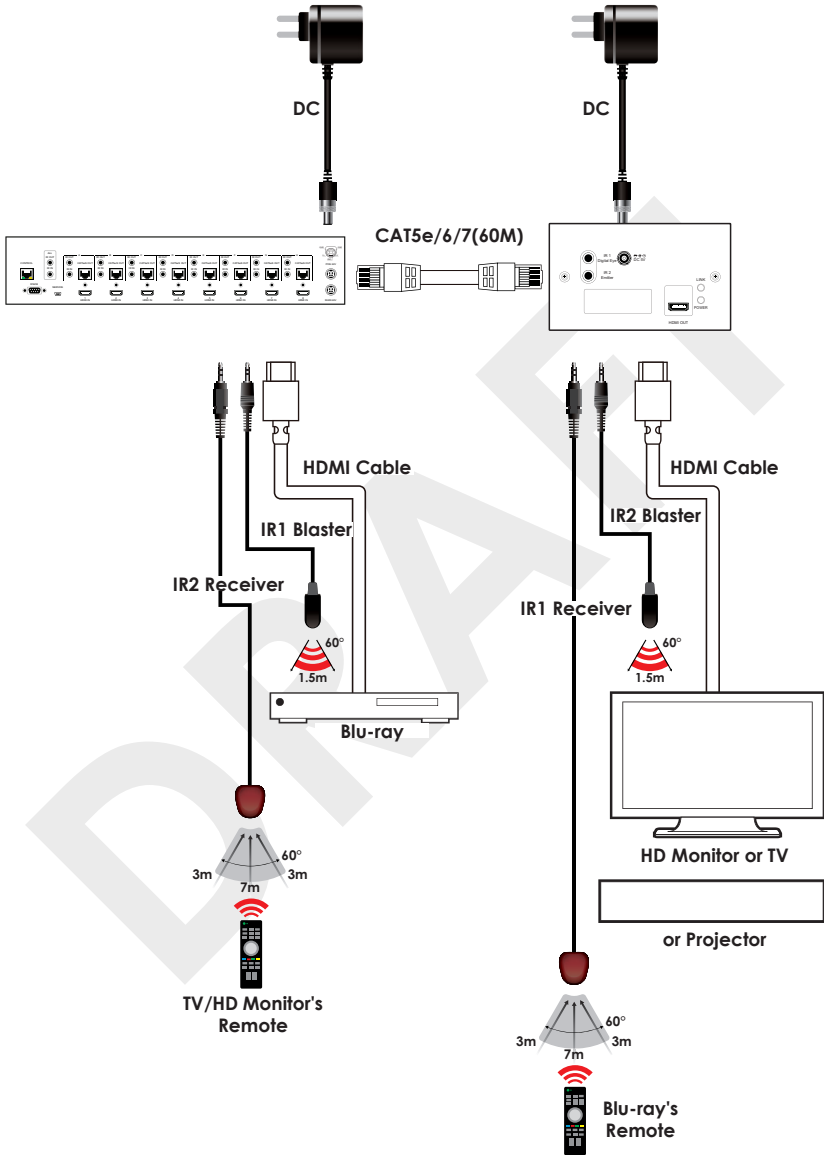


- 1 CAT5e/6/7:** Connect this port to HDMI to CAT5e/6/7 Transmitter (without PoE function) with CAT5e/6/7 cable to extend the signal up to 60 meters.

## 6.3 IR Cable Pin Assignment



## 7. CONNECTION DIAGRAM



## 8. SPECIFICATIONS

<b>Video Bandwidth</b>	300Mbps/10.2Gbps
<b>Input ports</b>	1 x CAT5e/6/7 1 x IR Extender
<b>CAT5e/6/7 Input Cable Distance</b>	Up to 60 meters
<b>Output port</b>	1 x HDMI, 1 x IR Blaster
<b>HDMI Output Cable Distance</b>	
<b>Resolution</b>	Up to 4Kx2K (3840x2160@30Hz/4096x2160@24Hz)
<b>IR Frequency</b>	30 ~50kHz
<b>Power Supply</b>	5V / 2.6A DC (US/EU standards, CE/FCC/ UL certified)
<b>ESD Protection</b>	Human-body Model: ±8kV (air-gap discharge) ±4kV (contact discharge)
<b>IR Frequency</b>	30~50 kHz
<b>Dimensions (mm)</b>	145.5 (W) x 85.5 (D) x 36.5 (H)
<b>Weight (g)</b>	154
<b>Chassis Material</b>	Plastic
<b>Silkscreen Color</b>	White
<b>Operating Temperature</b>	0 °C~40 °C
<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>	5W

## 8.1 CAT5e/6/7 Cable Specification

Cable Type	Range	Pixel clock rate	Video Data Rate	Supported Video
CAT5e/6/7	60 m	<=225 MHz	<=5.3 Gbps (HD Video)	Up to 1080p, 60 Hz, 36 bits, 3D (data rates lower than 5.3 Gbps or below 225 MHz TMDs clock).
	40 m	>225 MHz	> 5.3 Gbps (Ultra HD Video)	4K2K, 30Hz video formats

## 9. ACRONYMS

ACRONYM	COMPLETE TERM
<b>4Kx2K</b>	3840x2160 / 4096x2160
<b>DTS</b>	Digital Theater System
<b>HDMI</b>	High-Definition Multimedia Interface
<b>DVI</b>	Digital Visual Interface
<b>HDCP</b>	High-bandwidth Digital Content Protection
<b>HDTV</b>	High-Definition Television
<b>PoE</b>	Power over Ethernet







DRAFT



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