PU-515PLRX-2HCD

HDBaseT™ LITE Receiver with dual HDMI output, Audio De-embedding, PoC, RS-232 & 2-way IR (up to 60m)

/// **OPERATION MANUAL**

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	23/10/14	Preliminary Release
RDV2	31/10/14	Add YUV_420

CONTENTS

1. INTRODUCTION

The PU-515PLRX-2HCD Receiver allows uncompressed HDMI signals to be transmitted over a Single CAT5e/6/7 cable. This device allows the distribution of Video, Audio, Power over Cable (PoC), RS-232 and 2-way IR control functionality over the same CAT5e/6/7 cable. These combined HDMI and control signals can be transmitted up to lengths of 60 metres. This variant of the PU-515-RX Receiver provides dual HDMI outputs for added flexibility enabling distribution to 2 displays within a zone and also provides both digital and analogue audio outputs for local amplification.

2. APPLICATIONS

• Extending incoming signal from CAT5e/6/7 to HDMI outputs

• Extending incoming signal from CAT5e/6/7 to both analog and digital audio outputs

• Lecture room/Showroom/Meeting room/Classroom display and control

3. PACKAGE CONTENTS

• 1 x HDMI Splitter with Audio over Single CAT5e/6/7 Receiver

• 1 x IR Receiver

• Operation Manual

4. SYSTEM REQUIREMENTS

HDBaseT compatible Transmitter input and output display with HDMI input jack.

5. FEATURES

- HDCP 2.2 Compliant
- HDMI, HDCP, & DVI compliant
- Supports uncompressed video/audio up to 10.2Gbps
- Supports resolutions VGA~WUXGA, 480i~1080p, 4K UHD@24/25/30Hz (RGB 4:4:4 & YUV 4:2:2), 4K UHD@ 60Hz (YUV 4:2:0), 4K/2K@24/25/30Hz (RGB 4:4:4 & YUV 4:2:2) and 4K/2K@ 60Hz (YUV 4:2:0) dependent upon the output display's EDID settings
- Receive uncompressed data over a single 60 m/328 ft CAT5e/6/7 cable
- Convergence: Video, Audio, PoC & Control (bi-directional IR & RS-232 bypass)
- Provided with 24V DC power or powered from compatible PoC Transmitter through CAT5e/6/7
- Supports Balanced analog audio output (R/L)
- Support coaxial digital audio up to 192kHz

Note:

1. The PoC function is designed for powering compatible Transmitter units only—non-PoC Transmitter will need their own power supply. Transmitters of another brand may not be compatible.

6. OPERATION CONTROLS AND FUNCTIONS

6.1 Front Panel
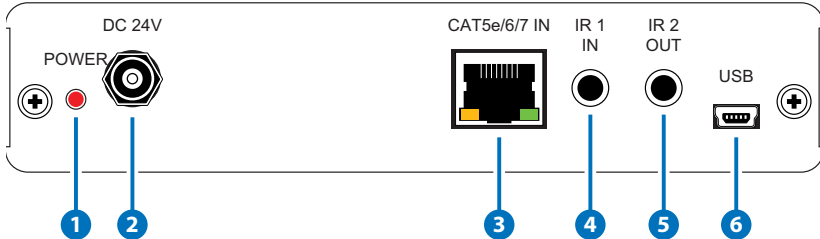
1 **Power LED:** This LED will illuminate when the device is connected to a power supply.

2 **DC 24V:** Plug the 24 V DC power supply into the unit and connect the adaptor to an AC outlet. Only one side of power is needed to activate both Transmitter and Receiver when both obtain the PoC function.

4 **CAT5e/6/7 IN:** Connect from the Transmitter unit with a Single CAT5e/6 cable for receiving all data signals.

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

6 **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.

7 **USB:** This port is reserved for firmware update only.

6.2 Rear Panel
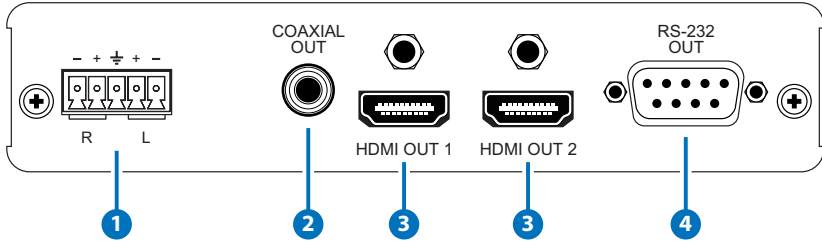
1 Balanced Analog R/L OUT: Connect to an amplifier or active speaker with 3.5mm terminal block jack for audio output.

2 COAXIAL OUT: Connect to an amplifier or active speaker with coaxial cable for audio output.

3 HDMI OUT 1/2: These slots are to connect with HDMI TV/Monitor for output image display.

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

6.3 IR Cable Pin Assignments

IR Blaster

1 Power
2 IR Blaster Signal
3 NC

IR Receiver

1 IR Signal
2 Power
3 Grounding
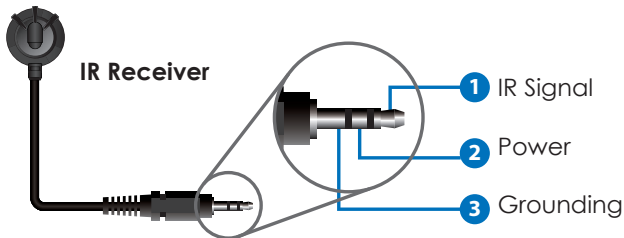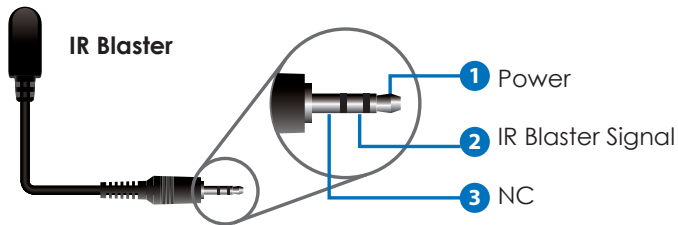
6.4 D-Sub 9 Pin Definition

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

7. CONNECTION DIAGRAM

DVD or Blu-ray Player

**Compatible
Transmitter**

7m

3m 3m
60°

1.5m
60°

DC 24V

POWER

CAT5e/6/7 IN

IR 1
IN

IR 2
OUT

USB

COAXIAL
OUT

RS-232
OUT

R L

HDMI OUT 1 HDMI OUT 2

**Digital Audio
Output (Optical)**

**RS-232 Equipped
PC or Notebook**

Smart TV or
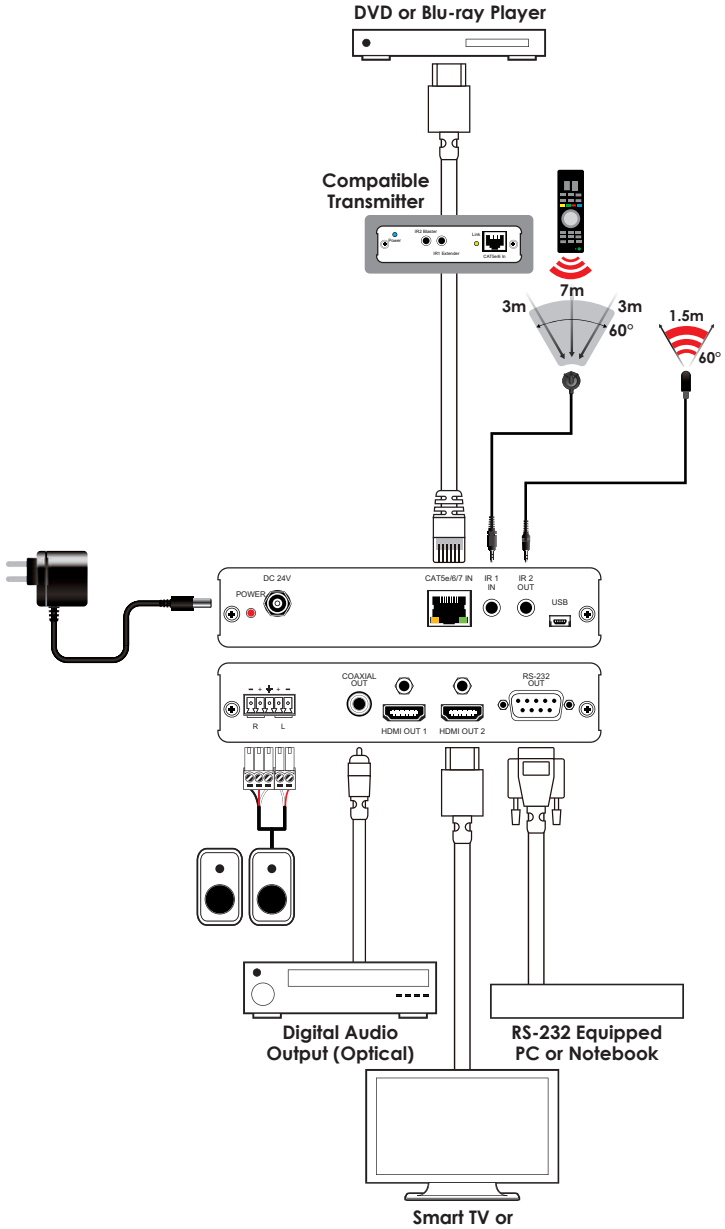
8. SPECIFICATIONS

Video Bandwidth	340MHz / 10.2Gbps
Input Ports	1x CAT5e/6/7, 1 x IR Extender
Output Ports	2 x HDMI, 1 x Coaxial, 1 x Balanced Analog (R/L), 1×IR Blaster, 1 x RS-232
CAT5e/6/7 Output Cable Distance	Up to 60 Meters
HMDI Input/Output Cable Distance	Up to 10 Meters@1080p or 5Meters@4K2K
HDMI output Resolution	Up to 4K2K@24/25/30 & 50/60 YUV_420
Audio Sampling Rate	Up to 96 kHz / Balanced Analog Up to 192 kHz / Coaxial & HDMI
IR Frequency	30~50 kHz
ESD Protection	Human body model: ±8kV (air-gap discharge) ±6kV (contact discharge)
Dimensions (mm)	145 (W) x 115 (D) x 30(H)/Jack Excluded
	145 (W) x 128 (D) x 30(H)/Jack Included
Weight (g)	394
Chassis Material	Aluminum
Silkscreen Color	Black
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)
Power Consumption	12w

9. ACRONYMS

ACRONYM	COMPLETE TERM
CAT 5e	Category 5 Cable
CAT6	Category 6 Cable
CAT7	Category 7 Cable
HDMI	High-Definition Multimedia Interface
IR	Infrared
WUXGA (RB)	Widescreen Ultra Extended Graphics Array (Reduce blanking)