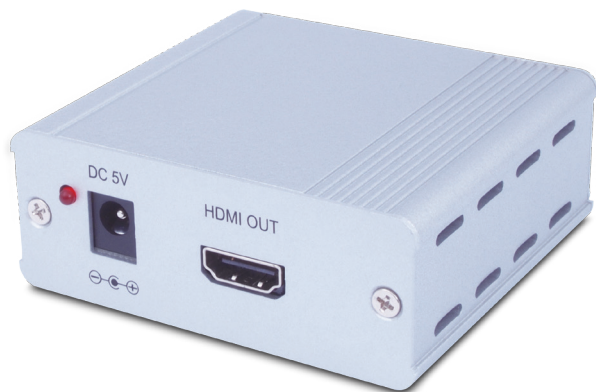# CYP

CH-107RXN
Single CAT6 to HDMI Receiver

DC 5V

HDMI OUT

Operation Manual

DISCLAIMERS

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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 to 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	10/07/13	Preliminary Release
VS1	04/03/13	Updated format/diagrams

CONTENTS

1. INTRODUCTION

The Single CAT6 to HDMI Receiver can receive High Definition video (1080p/Deep Color) and audio (Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio) over a single run of CAT6 cable from a compatible transmitter unit and convert the signal to HDMI for display on a HDTV. It has the added benefit of a 7 step HDMI signal equalization switch to optimize the signal strength.

2. APPLICATIONS

- Showroom display and control
- Home entertainment systems
- Commercial/Retail installations
- Commercial display
- University lecture hall display

3. PACKAGE CONTENTS

- Single CAT6 to HDMI Receiver
- 5V/1A DC Power Supply Adaptor
- Operation Manual

4. SYSTEM REQUIREMENTS

HDMI source device such as a DVD/Blu-ray player and an HDMI display with HDMI connection cables and industry standard CAT6 cable and a compatible transmitter.
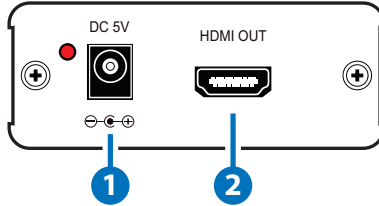
5. FEATURES

- HDMI, HDCP 1.1 and DVI 1.1 compliant
- Supports digital video formats in 'Deep Color' mode at up to 36-bit (12-bit/color)
- Supports lossless compressed Digital Audio formats (Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio)
- Uses a single CAT6 cable for Data/DDC transmission
- Equalizes and recovers incoming TMDS data before re-transmitting it in optimal quality regardless of the incoming signal quality
- Supports HDMI cable distances of up to 10 meters at 1080p/8-bit and 12-bit resolutions
- Supports CAT6 cable distances of up to 45 meters at 1080p/8-bit resolution and 15 meters at 1080p/12-bit resolution
- Supports x.v.YCC
- 7 step EQ adjustment for HDMI signal equalization

Note:

1. *This system was tested with CAT6/23AWG/Solid cable, results may vary with cables of another specifcation.*
2. *Cable distance tested with Sony Playstation 3 (120 GB model), 37" Philips 8-bit LCD TV and 40" Samsung 12-bit LCD TV.*
3. *The figures provided in this manual are for reference only; actual performance may depend on the source and display used as well as the cable specification.*
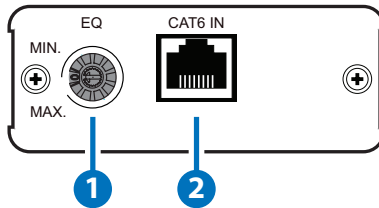
6. OPERATION CONTROLS AND FUNCTIONS
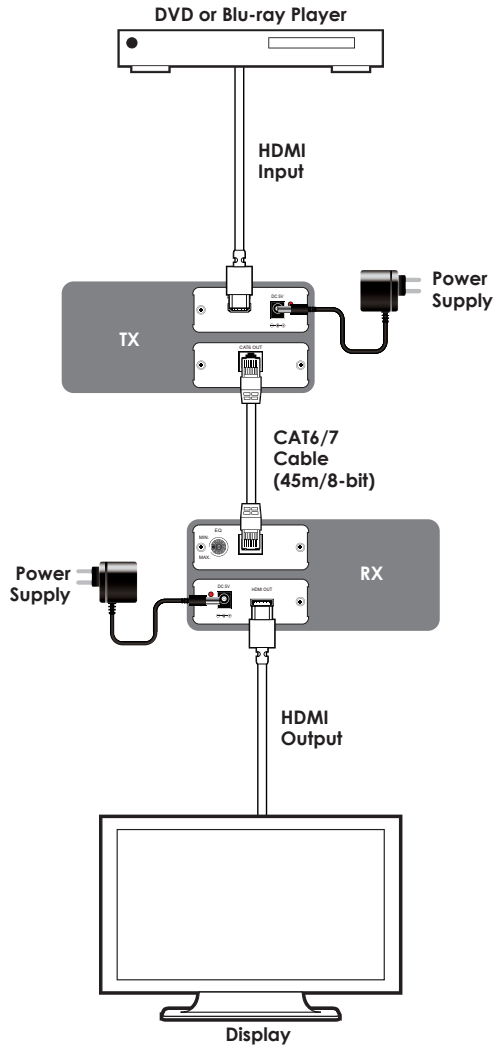
6.1 Front Panel

1 **DC 5V:** Connect the 5V DC power supply to the unit and plug the adaptor into an AC outlet.

2 **HDMI OUT:** Connect to the HDMI or DVI input (with a DVI to HDMI adaptor) of a display such as an HDTV/HD monitor with an HDMI cable or cascade to a compatible Transmitter unit (see Section 8.2) to extend the transmission distance.

6.2 Rear Panel

1 **EQ Wheel:** Turn the 'EQ' equalization wheel from 0~7 to optimize the HDMI signal strength according to the transmission length required.

2 **CAT6 IN:** Connect to the CAT6 output of a compatible HDMI to Single CAT6 Transmitter unit (see Section 8.2) attached to an source device.

7. CONNECTION DIAGRAM

DVD or Blu-ray Player

HDMI Input

TX

DC 5V

Power Supply

CAT6/7 Cable (45m/8-bit)

EQ

MIN.

MAX.

RX

Power Supply

DC 5V

HDMI OUT

HDMI Output

Display

8. SPECIFICATIONS

8.1 Technical Specifications

Video Bandwidth	2.25 MHz/6.75 Gbps
Input Port	1×RJ45
Output Port	1×HDMI (Female connector)
HDMI Cable Distance	10m@1080p/8-bit or 12-bit
CAT6 Cable Distance	45m@1080p/8-bit or 15m@1080p/12-bit
Power Supply	5V/1A DC (US/EU standards, CE/FCC/UL certified)
ESD Protection	Human Body Model: ±8kV (air-gap discharge) ±4kV (contact discharge)
Dimensions	78.5mm (W)×72mm (D)×30mm (H)
Weight	90g
Chassis Material	Aluminum
Silkscreen Color	Silver
Power Consumption	2W
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)

8.2 Compatible Products (Single CAT6)

The models listed below are compatible with each other:

- CLUX-8MCAT
- CH-107TX
- CH-107RXN
- CH-1107TX
- CH-1107EX

9. ACRONYMS

ACRONYM	COMPLETE TERM
CAT5e	Category 5 Cable
CAT6	Category 6 Cable
DVI	Digital Visual Interface
HDCP	High-bandwidth Digital Content Protection
HDMI	High Definition Multimedia Interface