

# **CH-107 RX**

HDMI v1.3 over ONE CAT6  
HDMI Receiver

**Operation Manual**



## • **Disclaimers**

The information in this manual has been carefully checked and is believed to be accurate. Cypress Technology assumes no responsibility for any infringements of patents or other rights of third parties which may result from its use.

Cypress Technology assumes no responsibility for any inaccuracies that may be contained in this document. Cypress also makes no commitment to update or to keep current the information contained in this document.

Cypress Technology reserves the right to make improvements to this document and/or product at any time and without notice.

## • **Copyright Notice**

No part of this document may be reproduced, transmitted, transcribed, stored in a retrieval system, or any of its part translated into any language or computer file, in any form or by any means - electronic, mechanical, magnetic, optical, chemical, manual, or otherwise - without express written permission and consent from Cypress Technology.

© Copyright 2010 by Cypress Technology.

All Rights Reserved.

Version 1.0 November 2010

## • **Trademark Acknowledgments**

All products or service names mentioned in this document may be trademarks of the companies with which they are associated.

## • **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><i>V1</i></b>	<b><i>20101101</i></b>	<b><i>Preliminary Release</i></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>3</b>
7.1 Front Panel .....	3
7.2 Rear Panel .....	4
<b>8. Connection and Installation .....</b>	<b>4</b>
<b>9. Acronyms .....</b>	<b>5</b>

## **1. Introduction**

The HDMI 1.3 receiver over ONE CAT6 is a tool for displaying HDMI content at long distances. Instead of using expensive HDMI cables, your existing CAT 6 cables/sockets can perform functions like transferring Deep Color (12 bits/ color) video and new lossless compressed (Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio) Digital audio, with a bandwidth up to 2.25Gbps. The HDMI 1.3 receiver over ONE CAT6 extender is your preferred HDMI extension tool.

## **2. Applications**

- Long distance HDMI signal distribution
- Showroom display
- Hypermarket display
- Lecture room display

## **3. Package Contents**

- HDMI v1.3 Receiver x 1
- 5V DC Power Supply adaptor
- Operation Manual x 1

## **4. System Requirements**

Input HDMI source equipment with HDMI to CAT6 transmitter and output HDMI display with connection cables and one CAT6 cable.

## **5. Features**

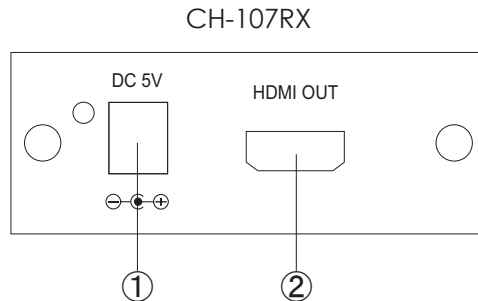
- Compliant with HDMI 1.3, HDCP 1.1 and DVI1.1 standards.
- Supports digital video formats in Deep Color Mode at up to 36 bits (12bits/color) and new lossless compressed (Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio) Digital audio .
- Supports one CAT6 cable for data/DDC transmission.
- Equalizes and recovers incoming TMDS data before re-transmitting it in optimal quality regardless of the incoming signal quality.
- Cable testing showed that with 1080p 8/12bit resolution the HDMI output display can be 15/10 meters away.
- Cable testing showed that with 1080p 8/12bit resolution the CAT6 input device can be 45/15 meters away.
- Support xvYCC

## 6. Specifications

Input Port	1 x CAT6
Output Port	1 x HDMI Female port
Power Supply	5V/ 1A DC (US/EU standards, CE/FCC/UL certified)
ESD Protection	Human Body Model: $\pm 8\text{kV}$ (air-gap discharge) $\pm 4\text{kV}$ (contact discharge)
Dimensions (mm)	78.5 (W) x 72 (D) x 30 (H)
Weight(g)	90
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)

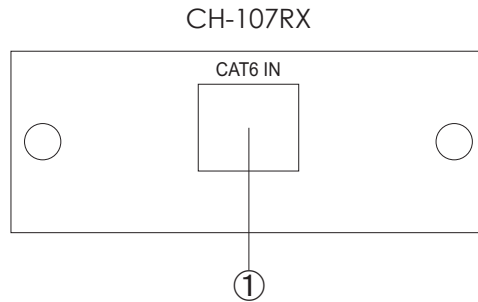
## 7. Operation Controls and Functions

### 7.1 Front Panel



- ① DC 5V: This slot is where you plug the 5V DC power supply into the unit and connect the adaptor to an AC outlet.
- ② HDMI OUTPUT: This slot is where you connect the HDMI or DVI input port of your display such as an HDTV/HD monitor or connect it to another transmitter from the same family in order to extend your transmission over long distances.

## 7.2 Rear Panel

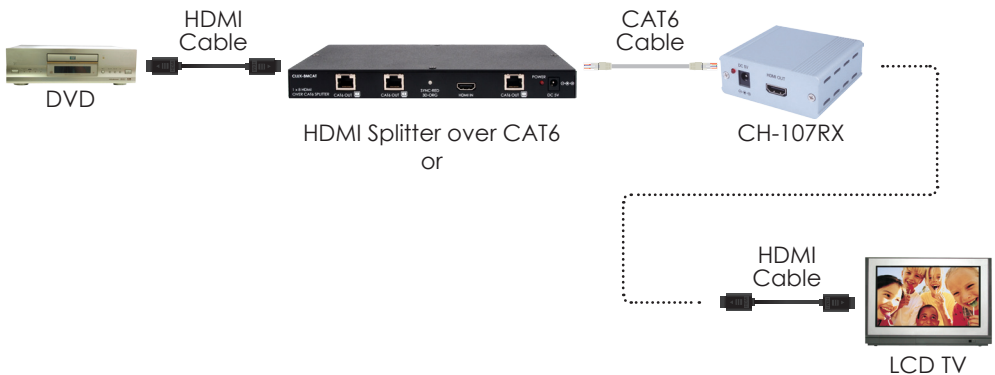


- ① CAT6 IN: Connect from the CAT6 output of the transmitter with a CAT6 cable to the CAT6 input of the receiver.

**Note:**

- A. Cable tested with CAT6E/23AWG/Solid/UTP, using cables of another type may result in a different operating distance.
- B. Equipment used in cable distance testing included: PS3 120G, 37" Philips 8 bit LCD TV and 40" Samsung 12 bit LCD TV.
- C. Figures provided in this manual are for reference only, actual performance may depend on the source and display used along with the type of cable.

## 8. Connection and Installation







# Acronyms

---

## **Acronym**

## **Complete Term**

CAT6

Category 6 Cable

HDMI

High-Definition Multimedia Interface







**CYPRESS TECHNOLOGY CO., LTD.**  
Home page: <http://www.cypress.com.tw>

20101112 MPM-CH107RX