



CH-1107EX

HDMI/CAT6 to Single CAT6 Extender



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
VS1	25/10/11	First Release
VR2	16/04/12	CAT6 Type Error
VS2	24/02/14	Updated Diagrams/Text

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1. INTRODUCTION

The HDMI/CAT6 to Single CAT6 Extender is an advanced solution for HDMI and CAT6 signal distribution. It can be used to extend the distance between a compatible transmitter and receiver or used directly with an HDMI source. The CAT6 output can be easily connected to a compatible Single CAT6 to HDMI Receiver to allow a stable connection between an HDMI source and any compatible HDMI display. Alternatively, it can be cascaded to extend the signal to several hundred meters.

2. APPLICATIONS

- Smart AV installation for HDMI signal extension
- Switch between a local HDMI or remote CAT6 source
- Household entertainment media sharing

3. PACKAGE CONTENTS

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

4. SYSTEM REQUIREMENTS

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

5. FEATURES

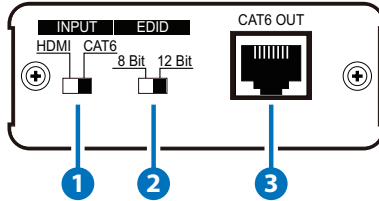
- HDCP 1.1 and DVI 1.0 compliant
- HDMI with Deep Color video up to 12-bit, 1080p@24/60Hz
- Supports LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio transmission (32 to 192kHz Fs sampling rate)
- Supports a wide range of PC and HDTV resolutions from VGA to WUXGA and 480i to 1080p
- Supports HDMI cable distances of up to 15 meters at 1080p/8-bit and 12-bit resolutions
- Supports CAT6 cable distances of up to 45 meters at 1080p/8-bit resolution and 10 meters at 1080p/12-bit resolution
- Fully HDCP compliant
- EDID 8/12-bit setting switch

Note:

1. *This system was tested with CAT6/23AWG/Solid cable, results may vary with cables of another specification.*
2. *Cable distance tested with Sony Playstation 3 (120GB 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.*

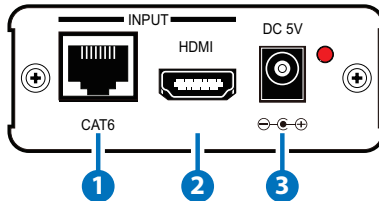
6. OPERATION CONTROLS AND FUNCTIONS

6.1 Front Panel



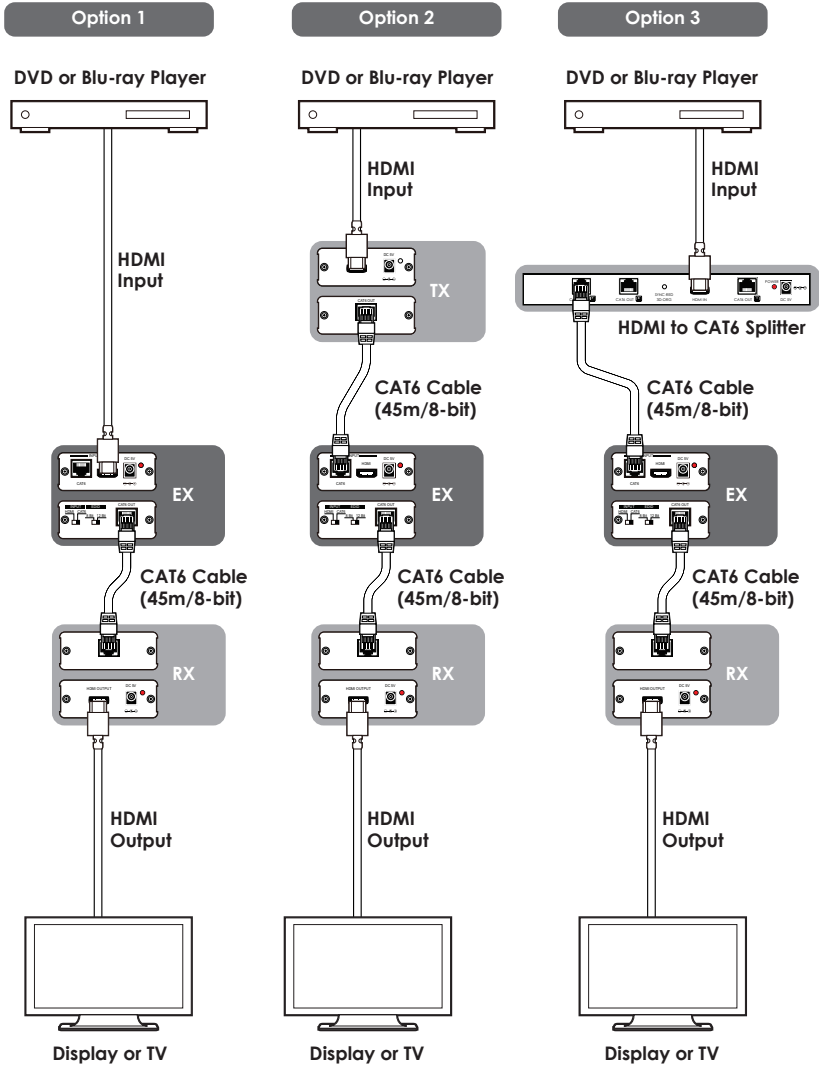
- 1 HDMI/CAT6 INPUT Switch:** Allows users to select either HDMI or CAT6 as the input source.
- 2 8/12-bit EDID Switch:** Allows users to change the output display's EDID between 8-bit or 12-bit resolution.
- 3 CAT6 OUT:** Connect to the CAT6 input of a compatible Single CAT6 to HDMI Receiver unit (see Section 8.2) attached to an display.

6.2 Rear Panel



- 1 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.
- 2 HDMI IN:** Connect to the HDMI or DVI output (with a DVI to HDMI adaptor) of a source device such as a DVD/Blu-ray player or a Set-top Box with an HDMI cable.
- 3 DC 5V:** Connect the 5V DC power supply to the unit and plug the adaptor into an AC outlet.

7. CONNECTION DIAGRAM





8. SPECIFICATIONS

8.1 Technical Specifications

Video Bandwidth	2.25 MHz/6.75 Gbps
Input Ports	1×HDMI (Female connector), 1×RJ45
Output Port	1×RJ45
EDID Setting	TV
HDMI Resolutions	480i~1080p@50/60, 1080p@24 & VGA~WUXGA (RB)
HDMI Cable Distance	15m@1080p/8-bit or 12-bit
CAT6 Cable Distance	45m@1080p/8-bit or 10m@1080p/12-bit
ESD Protection	Human body model: ±8kV (air-gap discharge) ±4kV (contact discharge)
Power Supply	5V DC/1 A linear power adaptor (US/EU standards, CE/FCC/UL certified) or 5V/1.2A switching power adaptor (with universal plug, CE/FCC/UL certified)
Dimensions	78.5 mm (W)×102 mm (D)×30 mm (H)
Weight	182 g
Chassis Material	Aluminum
Silkscreen Color	Silver
Power Consumption	4.1 W
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



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