# CLUX-8MCAT

# 1 by 8 HDMI to single CAT6 Splitter

**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 2009 by Cypress Technology. All Rights Reserved. Version 1.0 June 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>Version No</b>	Date	Summary of Change
V1	20100621	Preliminary Release
VR2	20100927	Deep Color Output up to 10bit
VR3	20120416	CAT6 Type Error

# **Table of Contents**

1.	Introduction		
2.	Applications		
3.	Package Contents		1
4.	System Requirements		
5.	Features		
6.	Specifications		
7. Operation Controls and Functions		ration Controls and Functions	4
	7.1	Front Panel	4
	7.2	Rear Panel	4
8.	Connection and Installation		6
9.	Acronyms		

#### 1. Introduction

This 1 by 8 HDMI v1.3 to single CAT6 Splitter can simultaneously distribute a single HDMI source to eight displays when connecting with a CAT6 to HDMI receiver. Providing you with an efficient and cost effective way to link your displays, this system uses a direct input of one HDMI source and eight CAT6 outputs that send uncompressed data and allow you to distribute HDMI signals at their full strength and at great distances. Moreover, this device supports 3D signals and includes an LED indicator that shows when you are broadcasting 3D media. The 1 by 8 HDMI to single CAT6 Splitter is the most efficient way to handle your HDMI splitting needs.

# 2. Applications

- Simultaneously connect to eight HDMI displays with a CAT6 to HDMI receiver.
- Showroom displays
- Advertisement display control
- System installation control
- Educational or presentation display

# 3. Package Contents

- 1 by 8 HDMI to Single CAT6 Splitter Box
- 5V/3.2A DC power adaptor
- Operation manual

## 4. System Requirements

- Input devices such as Blu Ray or DVD players with connection cable(s).
- A single CAT6 to HDMI receiver with connection cable(s) and displays.

#### 5. Features

- HDMI 1.3, HDCP 1.1 and DVI 1.0 compliant
- Deep color video input up to 12 bits, 1080p@60Hz
- Deep color video output up to 10 bits, 1080p@60Hz
- One HDMI source to eight CAT6 output allows users to simultaneously link eight displays with eight CAT6 to HDMI receivers.
- Transmit a single HDMI source through eight outputs without any signal loss
- Supports LPCM 7.1Ch, Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio transmission (Sample Rate: 32-192kHz)
- Supports a wide range of PC and HDTV resolutions from VGA to WUXGA (1920 x 1200) and 480i to 1080p
- Selectable EDID from either the TV or STD mode
- Deep color setting of 8 bits or 12 bits
- Supports 3D signals with an LED indicator

## 6. Specifications

video Bandwidth 225MHz/6.75Gbps

Input Port 1 x HDMI

Output Port 8 x Single CAT6

EDID STD/TV

HDMI Audio Output PCM2, 5.1, 7.1, Dolby 5.1 DTS 5.1, DD+, D-TrueHD,

DTS-HD

HDMI Cable In 1080p 8-bit (10M), 12-bit (10M) CAT6 Cable Out 1080p 8-bit (45M), 10-bit (15M)

HDMI Resolution 480i~1080p 50/60, 1080p 24, VGA~WUXGA

ESD Protection Human body model: ± 8kV (air-gap discharge)

± 4kV (contact discharge)

Power Supply 5V/3A DC (US/EU standards,

CE/FCC/UL certified)

Dimensions (mm) 240 (W) x 103 (D) x 25 (H)

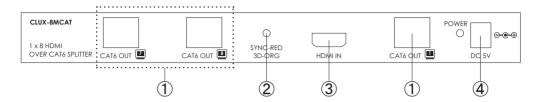
Weight(g) 676
Chassis Material Metal
Silkscreen Color Black
Power Consumption 9W

Operating Temperature  $0^{\circ}\text{C} \sim 40^{\circ}\text{C} / 32^{\circ}\text{F} \sim 104^{\circ}\text{F}$ Storage Temperature  $-20^{\circ}\text{C} \sim 60^{\circ}\text{C} / -4^{\circ}\text{F} \sim 140^{\circ}\text{F}$ Relative Humidity  $20\sim90\%$  RH (non-condensing)

## 7. Operation Controls and Functions

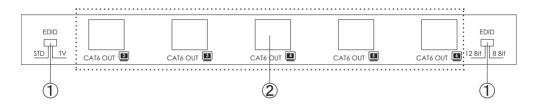
The following sections describe the hardware components of the unit.

#### 7.1 Front Panel



- ① CAT6 OUT 7/8/1: These slots are to connect with single CAT6 to HDMI receivers and from the receiver to display with an HDMI cable.
- ② SYNC-RED / 3D-ORG: This LED indicator will turn red when the device detects both an input signal and any output display. When the input signal is 3D, the LED will turn orange.
- 3 HDMI IN: This slot is for connecting the source device with HDMI cables.
- 4 DC 5V: This slot is where you plug the 5V DC power supply into the unit and connect the adaptor to an AC outlet.

#### 7.2 Rear Panel



(1) EDID Control Switcher: Switch the EDID between STD & TV. Switch to STD to use the built-in EDID or switch to TV to use the TV's EDID. Default factory setting is on TV, leave as is when the display is working properly. By switching to TV the device will read the first CAT6 outputs EDID and will record it in the unit then have the source send the signal accordingly to the other seven HDMI outputs. EDID under TV supports 3D signals, in order to allow it to be displayed, the display must support 3D.

#### Note:

- 1. When the EDID is switched to TV, the unit will detect the first CAT6 output's EDID and will record in the unit. If the first detected output source is DVI it will pass on to the next one until the first HDMI is been detected. The detection priority is HDMI v1.4 > HDMI v1.3 > HDMI V1.2 > DVI.
- 2. When EDID switches to STD the unit will use built-in EDID which supports: Video →1080p 8-bit or 12-bit (max)
  Audio →PCM 2CH

- 3. The EDID selection will only be activated when the unit is plugged in and powered on.
- ② CAT6 OUT 2~6: These slots are to connect with the displays through single CAT6 to HDMI receiver with connection cables.

#### Note:

- A. This system was tested with CAT6/23AWG cables, so if using cables of another type, the performance of this system may be different.
- B. Cable distance tested with a PS3 & 40" Samsung LED 12 bit LCD TV.
- C. Figures provided in this manual are reference figures only, actual figures may depend on source and display use with cable specification.

## 8. Connection and Installation



# Acronyms



Acronym Complete Term

3D 3 Dimension

CAT6 Cable Category 6 cable

DVI Digital Visual Interface

EDID Extended Display Identification Data

HDCP High-bandwidth Digital Content Protection

HDMI High-Definition Multimedia Interface

