

CLUX-8M3D

1 by 8 HDMI 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 October 2009

• **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**

Version No	Date	Summary of Change
V1	20100607	Preliminary Release
VR2	20101217	Typo BGA to VGA
VR3	20100812	EDID STD Support 12bits
VR4	20120524	Weight
VR5	20121213	Testing Model

Table of Contents

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

1. Introduction

With eight HDMI outputs and capable of distributing 3D content the HDMI 1 by 8 splitter is a forward looking device that helps you handle futuristic technology today. Compatible with HDMI which defines the ability to transfer 3D content, Deep Color (10-bit and 12-bit) video and new lossless compressed (Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio) digital audio, this device doesn't merely handle splitting and distributing, far from it, it also amplifies and equalizes your signals to provide high performance I/O of audio and video.

2. Applications

- Display HDMI and 3D content
- Simultaneously display content on multiple screens.
- Retail store/Conference/Advertising display

3. Package Contents

- 1 by 8 HDMI 3D Splitter
- Operation Manual
- 5V/3A DC Power Adaptor

4. Features

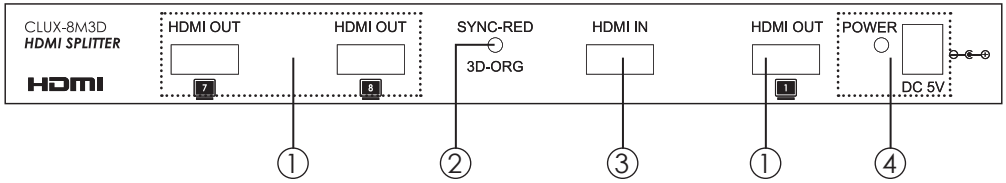
- HDMI, HDCP 1.1 and DVI 1.0 compliant
- Deep color video up to 12bits, 1080p@24/60Hz
- Supports 3D content with an LED indicator to indicate if the video is in standard definition or 3D.
- Allows one HDMI source to simultaneously connect with up to eight HDMI displays
- HDCP keysets allows each output to work independently when connected to an HDMI display
- Transmits an HDMI source to eight outputs without any signal loss
- Supports DVI source / display by using an HDMI/DVI adaptor cable
- Supports LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus and DTS-HD master Audio transmission (32-192kHz sampling rate)
- Supports a wide range of PC and HDTV resolutions from VGA to WUXGA and 480i to 1080p
- HDMI cable distance testing showed that with 1080p/8bits resolution, the input source can be 15 meters away and with 1080p/12bits it can be 10 meters away.
- HDMI cable distance testing showed that with 1080p/8bits resolution, the output source can be 15 meters away, and with 1080p/12bits it can be 15 meters away.

5. Specifications

Video Bandwidth	225MHz/6.75Gbps
Input Port	1 x HDMI
Output Ports	8 x HDMI
ESD Protection Human body model	±8kV (air-gap discharge) ±6kV (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)	665
Chassis Material	Metal
Silkscreen Color	Black
Operating Temperature	0°C~40°C / 32°F~104°F
Storage Temperature	-20°C~60°C / -4°F~140°F
Power Consumption	10W
Relative Humidity	20 ~ 90% RH (non-condensing)

6. Operation Controls and Functions

6.1 Front Panel

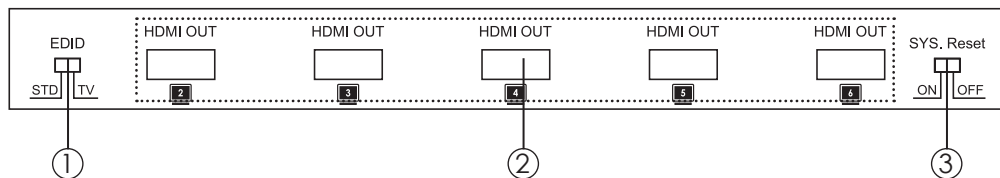


- ①. HDMI OUT 7/8/1: Using HDMI cables connect these slots to displays in order to show HDMI/3D content.

Note: When the input signal contains 3D data the display must support 3D content in order to display an image.

- A. This system was tested with 24AWG cables if using cables of another type, the performance of this system may be different.
 - B. Cable distance tested with a PS3 & 40" Samsung UA40B700 12 bits LED TV.
 - C. Figures provided in this manual are for reference only, actual figures may depend on the source and display used along with the cables specifications.
- ②. SYNC RED 3D ORG: This LED will turn red when the input signal is not in 3D. If the input signal is 3D then the LED will change to orange.
- ③. HDMI IN: This slot connects with source devices such as DVD/Blu-Ray players in order to receive an HDMI signal.
- ④. POWER LED & DC 5V: This slot is where you plug the 5V DC power supply into the unit and connect the adaptor to an AC outlet. The LED will switch on when power is ON.

6.2 Rear Panel



- ①. EDID switch STD/TV: This switch allows the user to choose the EDID settings, the device must be turned on then off in order to make these changes take effect. By switching to TV the device will read the EDID of HDMI output 1 and will record it, then it will have the source send the signal to the other seven HDMI outputs. The default setting is TV which supports 3D content, leave as is when the display is working properly. By switching to STD the device will use the built-in EDID, which is set at 1080p@60/12bits for video and LPCM 2Ch for audio, to allow the source to send a signal to the connected displays.
- ②. HDMI OUT 2~6: Using HDMI cables connect these slots to displays in order to show HDMI/3D content.
Note: When the input signal contains 3D data the display must also have 3D support in order to receive the signal.
- ③. SYS Reset ON/OFF: This switch allows the user to perform a system reset. The default setting is OFF, leave as is when in normal use. By switching ON, the unit will perform a reset every 8~10 minutes, in order to perform this function the displays must have CEC support. When performed successfully, the system will automatically switch the displays to HDMI 1 input. The system reset will not perform on those displays that do not have a CEC function.

7. Connection and Installation



Acronyms



Acronym

Complete Term

3D	Three Dimensional
CEC	Consumer Electronics Control
DVI	Digital Visual Interface
EDID	Extended Display Identification Data
HDCP	High-bandwidth Digital content protection
HDMI	High-Definition Multimedia Interface



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

MPM-CLUX8M3D