



# CPRO-4ER

1×4 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 2012 by Cypress Technology.

All Rights Reserved.

Version 1.1 August 2011

## **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, 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
VR0	30/08/13	Preliminary release
VS1	24/03/14	Updated text/diagrams

## 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>1</b>
<b>6. Operation Controls and Functions</b> .....	<b>2</b>
6.1 Front Panel .....	2
6.2 Rear Panel.....	3
<b>7. Connection Diagram</b> .....	<b>4</b>
<b>8. Specifications</b> .....	<b>5</b>
<b>9. Acronyms</b> .....	<b>6</b>



## 1. INTRODUCTION

The 1 by 4 HDMI Splitter distributes a single HDMI input to four simultaneous HDMI outputs and supports 4K2K, 3D, 12-bit Deep Color as well as High Definition Lossless Audio. With its 9 Gbps bandwidth and the additional features of the latest in HDMI standards you can be sure of superior HDMI distribution.

## 2. APPLICATIONS

- Simultaneously display one HDMI source on 4 TVs/projectors
- Showroom display
- University lecture hall display
- Retail sales display
- Commercial presentation switcher/scaler

## 3. PACKAGE CONTENTS

- 1 by 4 HDMI Splitter
- 5V/2.6A DC Power Supply Adaptor
- Operation Manual

## 4. SYSTEM REQUIREMENTS

- HDMI equipped source devices such as a DVD/Blu-ray player with HDMI cables or DVI to HDMI cables
- HDMI equipped displays (TV or monitors) with HDMI cables

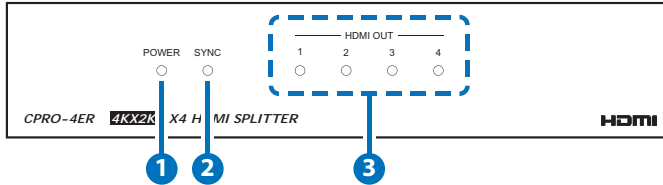
## 5. FEATURES

- Supports HDTV resolutions up to 4K2K/30Hz
- HDMI and DVI compatible
- Supports 1080p@60Hz, Deep Color 12-bit
- Supports LPCM 7.1CH, Dolby TrueHD and DTS-HD Master Audio
- Supports 3D signals
- Supports System reset and EDID selection functions

*Note: For playback of 4K2K HDMI source signals, a 4K2K capable display and High Speed HDMI cables are required.*

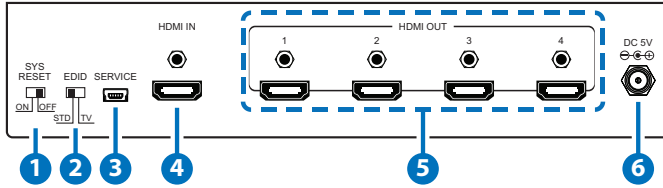
## 6. OPERATION CONTROLS AND FUNCTIONS

### 6.1 Front Panel



- 1 POWER LED:** The power LED will light up when the unit is connected to an active power supply.
- 2 SYNC:** This LED will light up when the HDMI input port is connected to an active source device.
- 3 HDMI OUT LEDs:** These LEDs will light up to indicate which HDMI outputs are connected to an active TV/display/monitor.

## 6.2 Rear Panel



- 1 SYS RESET ON/OFF:** When switched ON (default setting is off) the unit will, every 8~10 minutes, automatically switch all connected displays to their HDMI input 1.

*Note: For this feature to function connected displays must support CEC commands.*

- 2 EDID STD:** When in 'STD' mode, the unit will use its own built-in EDID settings. In this mode, the video output will be set to 1080p@60Hz and the audio output at LPCM 2CH Stereo. Use this mode if there are display problems in TV Mode.

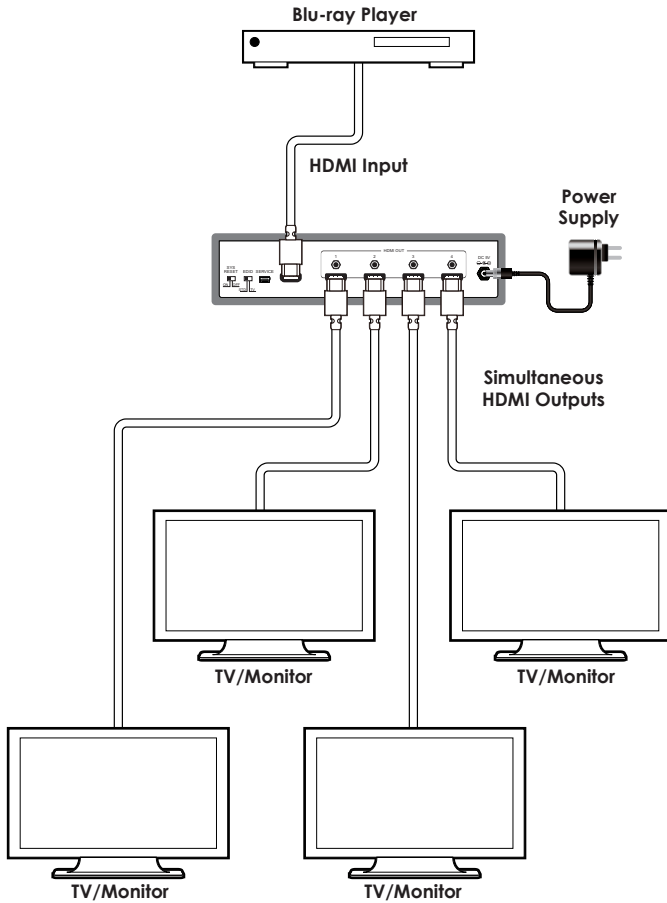
**EDID TV:** When in 'TV' mode, the unit will read the EDID settings of the display device connected to HDMI OUT 1. If it detects a 4K2K capable EDID setting it will transmit the signal in that format to all outputs. If no 4K2K capable EDID is detected then the unit will output the best resolution that all displays can support.

*Note: The unit will retain and use the EDID settings of the last device connected to the HDMI OUT 1 output if no device is connected to this output even after switching EDID modes or a power cycle.*

- 3 SERVICE:** Manufacturer use only.
- 4 HDMI IN:** Connect the input port to the HDMI or DVI output of your source device such as a DVD player or set-top box with an HDMI cable.
- 5 HDMI OUT 1~4:** Connect each of the HDMI outputs to an HDMI display for simultaneous HDMI distribution, or cascade the output to another transmitter to extend the operating distance.
- 6 DC 5V:** Plug the 5V DC power supply into the unit and connected the adaptor to an AC outlet.



## 7. CONNECTION DIAGRAM





## 8. SPECIFICATIONS

<b>Video Bandwidth</b>	300 MHz/9 Gbps
<b>Input Ports</b>	1×HDMI Type A (Female), 1×USB Mini-B (Service only)
<b>Output Ports</b>	4×HDMI Type A (Female)
<b>HDMI Resolutions</b>	Up to 4K2K (3840×2160@24/25/30Hz & 4096×2160@24Hz)
<b>HDMI Input Cable Distance</b>	15 m@1080p/8-bit, 10 m@1080p/12-bit, 5 m@4K2K
<b>HDMI Output Cable Distance</b>	10 m@1080p/8-bit, 15 m@1080p/12-bit, 10 m@4K2K
<b>Power Supply</b>	5V/2.6 A DC (US/EU standards, CE/FCC/UL certified)
<b>ESD Protection</b>	Human Body Model: ±8 kV (air-gap discharge) ±4 kV (contact discharge)
<b>Dimensions</b>	215 mm(W)×140 mm(D)×48 mm(H)
<b>Weight</b>	858 g
<b>Chassis Material</b>	Metal
<b>Color</b>	Black
<b>Operating Temperature</b>	0 °C ~ 40 °C / 32 °F ~ 104 °F
<b>Storage Temperature</b>	-20 °C ~ 60 °C / -4 °F ~ 140 °F
<b>Relative Humidity</b>	20 ~ 90 % RH (non-condensing)
<b>Power Consumption</b>	4 W

## 9. ACRONYMS

ACRONYM	COMPLETE TERM
<b>DTS</b>	Digital Theater System
<b>EDID</b>	Extended Display Identification Data
<b>HDCP</b>	High-bandwidth Digital Content Protection
<b>HDMI</b>	High-Definition Multimedia Interface
<b>HDTV</b>	High-Definition Television



**CYPRESS TECHNOLOGY CO., LTD**

Home page: <http://www.cypress.com.tw>

20130611 MPM-CPRO4ER