



CPLUS-VHHE

4K2K HDMI to HDMI Enhancer



4K2K
HDCP2.2

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
RDV1	17/08/15	Preliminary release



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1. INTRODUCTION

The 4K2K HDMI to HDMI Enhancer is a handy device for your HDMI signal extension. With bandwidth, HDCP analyzing, EDID and YUV420 selections this device allows you with fast and clear viewing on the HDMI signal status. Further, this device allows user to upload EDID for selection which create alternative EDID selection for specific usage. Moreover, with hot keys and LEDs design which allow fast switching on various selection and quick viewing on the status.

2. APPLICATIONS

- HDMI signal extension
- Source and display signal status display
- EDID selection
- HDCP verification
- 4K2K YUV444 down sampling to 4K2K YUV420

3. PACKAGE CONTENTS

- 1×4K2K HDMI to HDMI Enhancer
- 1×5V/2.6A Power Adaptor
- 1×Operation Manual

4. SYSTEM REQUIREMENTS

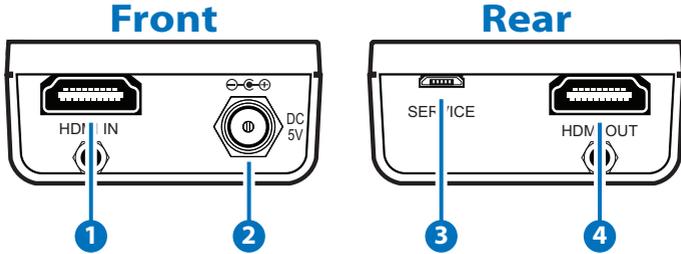
Input HDMI source a signals with output HDMI display and connection cables.

5. FEATURES

- HDMI with 4K2K 6G supported, HDCP 2.2/1.4 and DVI compliant
- Supports video source and output display signal analysis up to 6G 4K2K
- Supports HDMI 2.0
- Supports HDCP v1.4 & v2.2 a
- Supports EDID selection from internal, external and user's EDID to be insert
- Supports application control via USB
- Supports LEDs display with fast viewing on current selection status
- Supports USB firmware update
- Supports 6G bandwidth down sampling to 3G

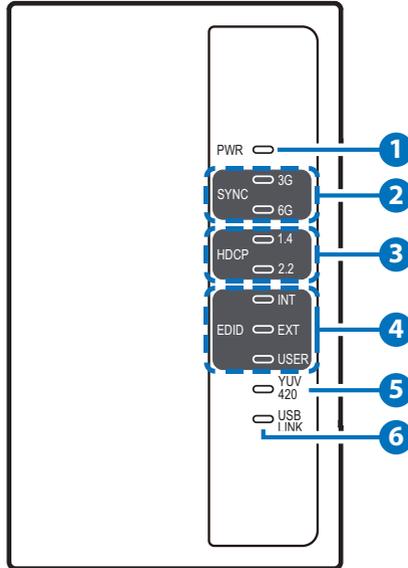
6. OPERATION CONTROLS AND FUNCTIONS

6.1 Front and Rear Panels



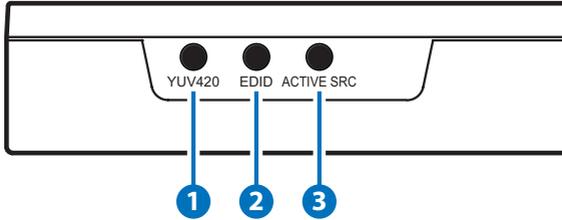
- 1 HDMI IN:** Connect with HDMI source equipment such as Blue-ray/ PS4 player with HDMI cable.
- 2 DC 5V:** Plug the 5V DC power supply into the unit and connect the adaptor to an AC outlet.
- 3 SERVICE:** This slot is for firmware update use and customer EDID file upload.
- 4 HDMI OUT:** Connect with display/amplifier for both video and audio output with HDMI cable.

6.2 Top Panel



- ❶ **PWR LED:** This LED will illuminate when the device is connected with power supply from the AC outlet.
- ❷ **SYNC LEDs:** These LEDs will illuminate according to both HDMI input and output signal's current bandwidth.
- ❸ **HDCP LEDs:** These LEDs will illuminate according to both HDMI input and output's HDCP encrypted signal.
- ❹ **EDID LEDs:** These LEDs will illuminate according to the selected EDID setting.
- ❺ **YUV420 LED:** This LED will illuminate according to YUV420's selection.
- ❻ **USB LINK LED:** This LED will illuminate when the connected USB device is valid for PC control.

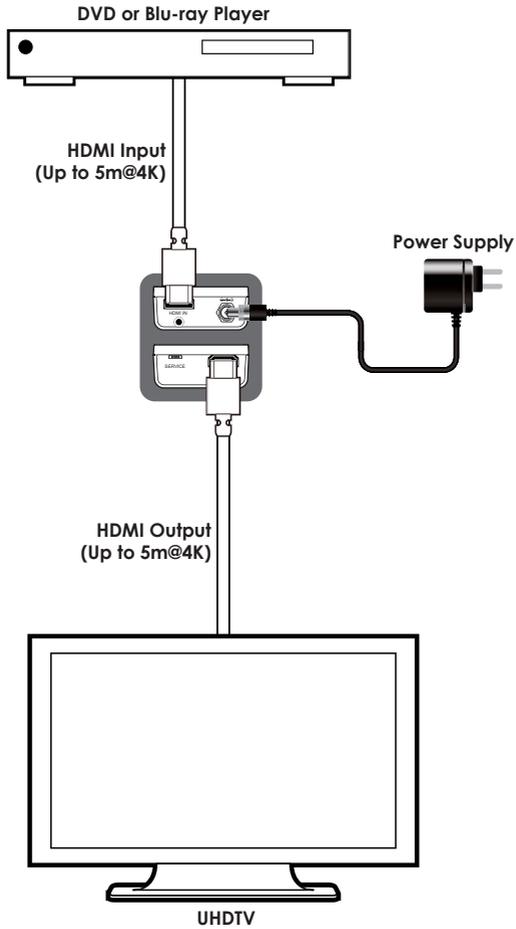
6.3 Side Panel



- 1 YUV420:** Press this button to allow HDMI input 6G signal to be subsampled to YUV420 from YUV444.
- 2 EDID:** Press this button to select EDID of INTERNAL/EXTERNAL or USER where internal EDID is 1080p at 2CH, external EDID is depending on the connected HDMI output display and USER is for upload EDID.
- 3 ACTIVE SRC:** Press this button to force the connected HDMI output display to output image always.

Note: Output display must support CEC in order to perform this function.

7. CONNECTION DIAGRAM





8. SPECIFICATIONS

Video Bandwidth	600 MHz/6 Gbps
Input Ports	1×HDMI
Output Ports	1×HDMI
HDMI Resolutions	VGA~WUXGA (RB), 408i~1080p@24/50/60, 4K@24/25/30, 4K@50/60 (YUV444)
HDMI Cable Distance	10m@1080p/8-bit, 10m@1080p/12-bit, 5m@4K
Power Supply	5V/2.6A DC (US/EU standards, CE/FCC/UL certified)
ESD Protection	Human body model: ±8 kV (air-gap discharge) ±4 kV (contact discharge)
Dimensions	50mm (W)×85mm (D)×22.5mm (H)/ Jack Excluded 51 mm (W)×97 mm (D)×22.5 mm (H)/ Jack Included
Weight	58g
Chassis Material	Metal
Color	Black
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)
Power Consumption	? W

9. ACRONYMS

ACRONYM	COMPLETE TERM
CEC	Consumer Electronics Control
DVI	Digital Visual Interface
EDID	Extended Display Identification Data
HDCP	High-bandwidth Digital Content Protection
HDMI	High-Definition Multimedia Interface
USB	Universal Serial Bus
VGA	Video Graphics Array
WUXGA (RB)	Widescreen Ultra Extended Graphics Array (Reduce Blanking)



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