



# CPRO-2E4KS

HDMI 4K2K Scaler



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
VR0	26/03/14	Preliminary Release
VS1	23/04/14	Updated text/diagrams

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## 1. INTRODUCTION

The HDMI 4K2K Scaler is designed to upscale a 1080p@24Hz signal up to 4K2K (Ultra HD) or downscale a 4K2K signal down to 1080p@24Hz. The device features a single HDMI input and two simultaneous HDMI outputs, a 'Bypass' output and a 'Scaled' output. The Bypass output will always bypass the original signal, while the Scaled output can be set to upscale to 4K2K, downscale to 1080p@24 Hz or to bypass without scaling. The HDMI 4K2K Scaler is an ideal solution for integrating a 4K2K source into a 1080p HD system or vice versa.

## 2. APPLICATIONS

- Display an 4K2K (Ultra HD) source on a standard HDTV/monitor (Downscale)
- Display an HD (1080p@24Hz) source on a 4K2K TV/monitor (Upscale)
- Integrate a 4K2K source into standard (1080p) HDMI system
- Integrate a 1080p source into 4K2K (UltraHD) HDMI system

## 3. PACKAGE CONTENTS

- HDMI 4K2K Scaler
- 5V/2.6A DC Power Adaptor
- Operation Manual

## 4. SYSTEM REQUIREMENTS

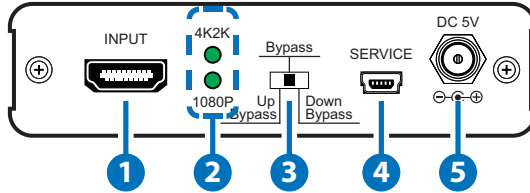
Source equipment such as DVD/Blu-ray(1080p/4K2K) player and output HDMI (1080p/4K2K) TV/display.

## 5. FEATURES

- Supports HDMI signal upscaling from 1080p to 4K2K or downscaling from 4K2K to 1080p
- Supports HD resolutions of 1080p@24/25/30Hz
- Supports 4K2K resolutions of 4096×2160p@24Hz and 3840×2160p@24/25/30Hz
- Supports HDMI signal bypass
- Simultaneous HDMI output
- User friendly and simple to use

## 6. OPERATION CONTROLS AND FUNCTIONS

### 6.1 Front Panel



- 1 INPUT:** Connect to a HDMI source device such as Blu-ray/DVD player (1080p@24Hz or 4K2K).
- 2 4K2K and 1080P LEDs:** These LEDs will illuminate to indicate the source device's resolution. Both LEDs will illuminate if the resolution of the source device is not 4K2K/1080p.
- 3 Bypass Switch:** Use this switch to select the required bypass/scaling mode. When switched to 'UP/BYPASS' or 'DOWN/BYPASS' the Scaled HDMI port will output 4K2K/1080p according to the input signal's format. The Bypass HDMI port will output according to the input format.

INPUT	SWITCH	BYPASS OUTPUT	SCALED OUTPUT
1080p	<b>Up</b>	1080p	4K2K
	<b>Down</b>	1080p	1080p
4K2K	<b>Up</b>	4K2K	4K2K
	<b>Down</b>	4K2K	1080p

Note:

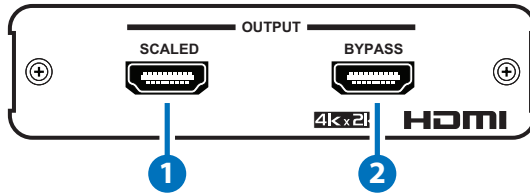
1. 1080p supports 24/25/30Hz.
2. 4K2K supports 4096×2160p@24Hz and 3840×2160p@24/25/30Hz.
3. 4096×2160p@24Hz input resolution is not supported when the Bypass Switch is set to 'DOWN/BYPASS'.
4. This device only supports 3D when the Bypass Switch is set to "BYPASS".
5. For other timings not listed above, use the Bypass Switch in 'BYPASS' mode.

6. Changing the HDMI output display will require a power cycle for the device to obtain the new EDID information.
7. For playback of 4K2K HDMI source signals, a 4K2K capable display and High Speed HDMI cables are required.

**4 SERVICE:** Manufacturer use only.

**5 DC 5V:** Connect the 5V DC power supply to the unit and plug the adaptor into an AC outlet. Both the 4K2K/1080P indicator LEDs will illuminate when connected to power.

## 6.2 Rear Panel



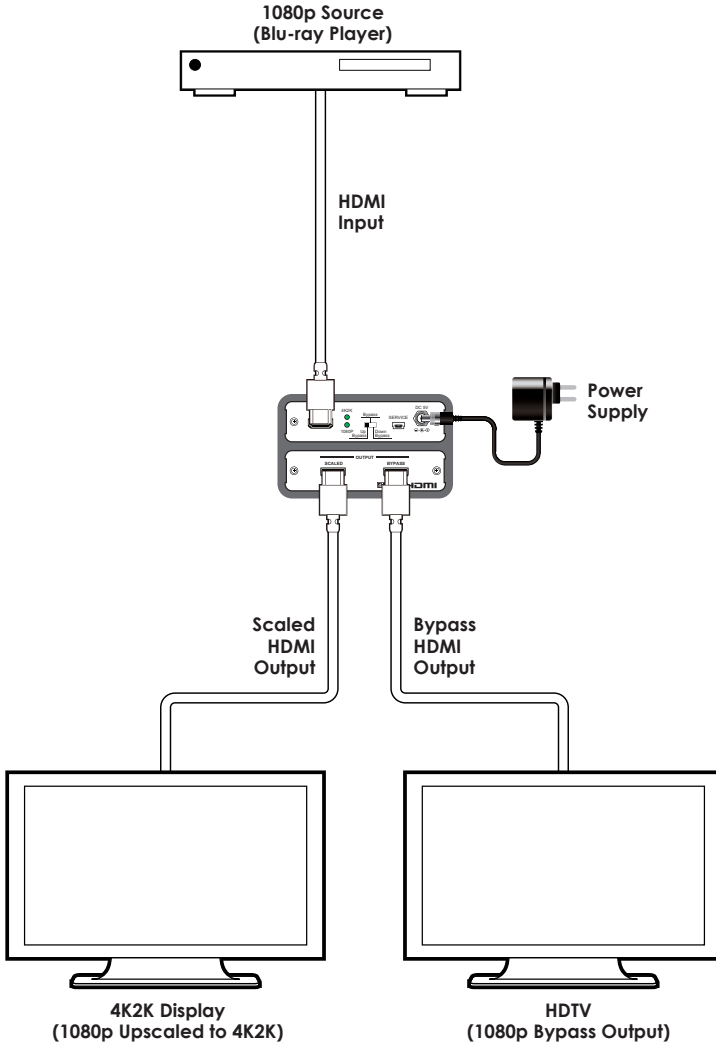
- 1 SCALED:** Connect to a HDMI equipped TV/display to display the scaled output. Output resolution will depend on the UP/DOWN/BYPASS switch setting.
- 2 BYPASS:** Connect to a HDMI equipped TV/display to display the bypass output. Output resolution will depend on the original input signal.

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

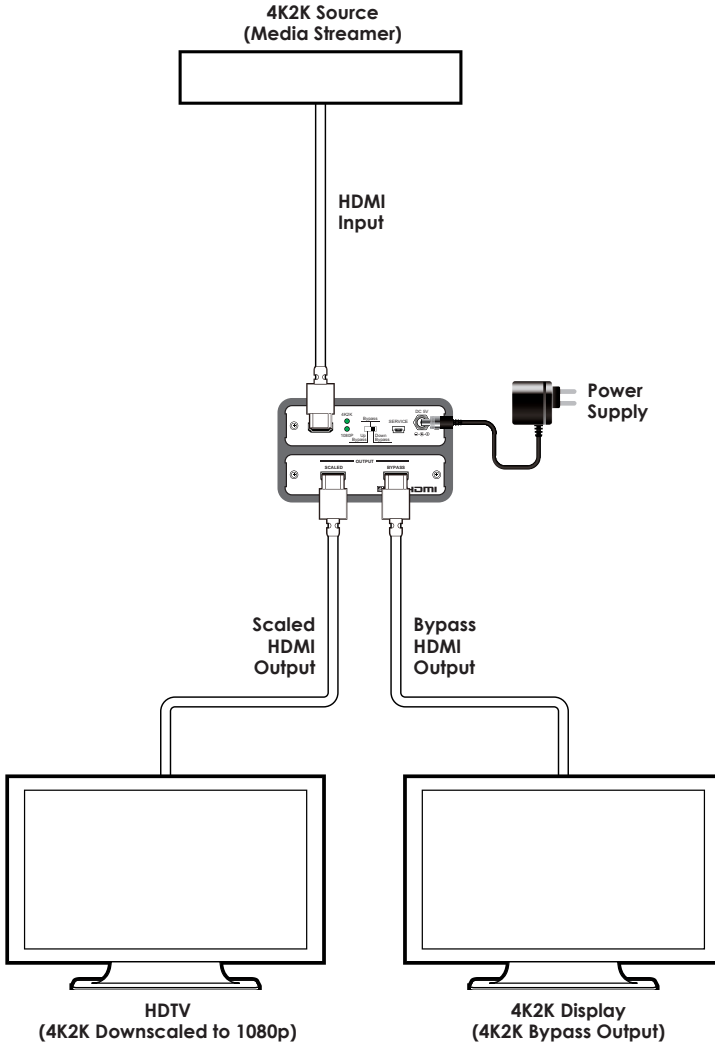


## 7. CONNECTION DIAGRAMS

### 7.1 Option 1: Upscale to 4K2K



## 7.2 Option 2: Downscale to 1080p



## 8. SPECIFICATIONS

<b>Video Bandwidth</b>	300 MHz/9 Gbps
<b>Input Port</b>	1×HDMI
<b>Output Ports</b>	2×HDMI
<b>HDMI Cable Distance</b>	Input: 5 m Output: 10 m
<b>Power Supply</b>	5V/2.6A DC (US/EU standards, CE/FCC/UL certified)
<b>ESD Protection</b>	Human body model: ±8kV (air-gap discharge) ±4kV (contact discharge)
<b>Dimensions</b>	102 mm(W)×102 mm(D)×25 mm(H)/ Excluding Connectors 102 mm(W)×108.75 mm(D)×25 mm(H)/ Including Connectors
<b>Weight</b>	220 g
<b>Chassis Material</b>	Aluminum
<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 (no condensation)
<b>Power Consumption</b>	2.4 W

## 9. ACRONYMS

ACRONYM	COMPLETE TERM
4K2K	Ultra High Definition
HDMI	High-Definition Multimedia Interface



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