



# **RE-11HS-4K**

**HDMI to HDMI Equaliser (4K Resolution support)** 





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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	SUMMARY OF CHANGE
v1.00	22/10/2013	First release





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#### 1. INTRODUCTION

The RE-11HS-4K is perfect for placing at the end of a HDMI cable to boost the signal to improve the HDMI signal quality to the display. The RE-11HS-4K Equaliser uses v1.4 HDMI specifications, supporting 4K resolutions, 3D signals, and 'Deep Colour' together with High Definition Audio at 192KHz sampling rate.

### 2. APPLICATIONS

- **III** Extend the operating distance of a 4Kx2K HDMI connection
- **III** Extend the distance between HDMI matrix systems

#### 3. PACKAGE CONTENTS

- **III** HDMI 4K×2K Repeater
- **JJJ** 5V Power adaptor
- **III** Operation Manual

### 4. SYSTEM REQUIREMENTS

Source equipment such as a PC/Laptop or Blu-ray/DVD player and TV/display or AV receiver with suitable HDMI connection cables.



#### 5. FEATURES

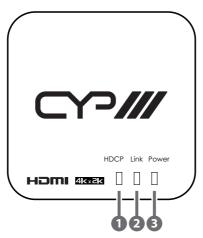
- v1.4 HDMI, HDCP 1.1 and DVI 1.0 compliant
- ## HDMI to HDMI Equaliser with 4K resolution support
- Resolutions Support: Output resolution follows Input. PC: VGA,SVGA,XGA,SXGA, UXGA (1600 x 1200) and WUXGA (1920x1200). HDTV: 480i, 576i, 480p, 576p, 720p, 1080i & 1080p + 1080P 24fps, 4K
- High Definition Audio supported: Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio plus LPCM
- Corrects digital error and automatically provides equalisation where the input is Compensated, Clock / Phase Adjusted, and Jitter Eliminated
- III Supports maximum input and output HDMI cable lengths of up to 15 meters each @ 1080p/8-bit resolution, or 10 meters each at 1080p/12-bit resolution
- Support xvYCC & CEC Bypass
- **III** Supports 3D signals

Note: For playback of 4kx2k HDMI source signals, a 4Kx2K capable display and High Speed HDMI cables are required.



### 6. OPERATION CONTROLS AND FUNCTIONS

### **6.1 Top Panel**



#### 1 HDCP:

This LED will illuminate when an HDCP encoded HDMI signal has been detected.

2 Link:

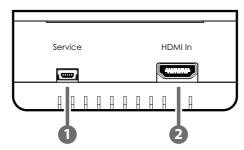
This LED will illuminate when an active HDMI signal is being received.

**3** Power:

This LED will illuminate when the unit is connected to an active power supply.



### **6.2 Right Panel**



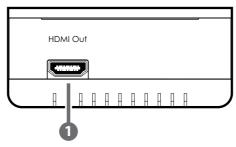
Service:

This port is reserved for manufacturer use only.

2 HDMI In:

Connect to a source such as Blu-ray player, games console or PC/laptop with an HDMI output\*.

#### 6.3 Left Panel



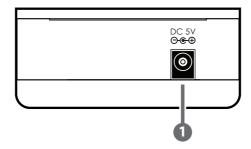
1 HDMI OUT:

Connect a TV/display with an HDMI cable for output of the combined audio/video HDMI signal\*.

\*Note: For playback of 4kx2k/3D HDMI source signals, a 4Kx2K/3D capable display and High Speed HDMI cables are required.



#### **6.4 Front Panel**

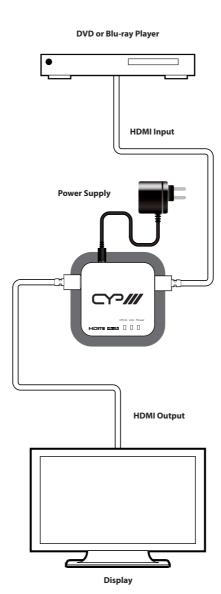


### ① DC 5V:

Connect the 5V DC power supply to the unit and plug the adaptor into an AC wall outlet.



# 7. CONNECTION DIAGRAM







#### 8. SPECIFICATIONS

Video Bandwidth 300 Mbps/10.2 Gbps

Input Ports 1×HDMI,

1×Mini-USB (service only)

Output Port 1×HDMI

**HDMI Audio Sampling Rate** Up to 192 kHz

**HDMI Audio Format** LPCM 2/5.1/7.1CH, Dolby Digital

2~5.1CH, DTS 2~5.1CH, Dolby Digital Plus, Dolby TrueHD, and

DTS-HD Master Audio

HDMI Cable I/O Distance 10 meters, 1080p@12-bit

15 meters, 1080p@8-bit

HDMI I/O 4Kx2K Cable Distance 10m/10m

**Power Supply** 5V / 1.2A DC ( US/EU standards,

CE/FCC/UL certified)

**ESD Protection** Human body model:

±8kV (air-gap discharge) ±6kV (contact discharge)

**Dimensions (mm)** 85 (W) x 87.5 (D) x 34(H)

**Weight (g)** 102

Chassis Material Plastic

Colour White

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 ~ 90 % RH (non-condensing)

Power Consumption 2.5 W



# 9. ACRONYMS

ACRONYM	COMPLETE TERM
4Kx2K	UltraHD (3840×2160/4096×2160)
DTS	Digital Theater System
EDID	Extended Display Identification Data
HDCP	High-bandwidth Digital Content Protection
HDMI	High-Definition Multimedia Interface
TMDS	Transition-minimized differential signaling



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