

# Introducing the 2x4 HDMI CAT5e Distribution Amplifier

The 2x4 HDMI 1.3 CAT5e Distribution Amplifier provides the most flexible solution by which the high definition video and high quality audio can be transmitted to different locations over a long distance.

#### **Features and Benefits**

- HDMI 1.3c and HDCP compliant
- Chipset: Silicon Image
- Video bandwidth: 6.75 Gbps
- Input TMDS signal: 1.2V (peak-to-peak)
- Input DDC signal: 5V (peak-to-peak)
- Resolution: 480i / 480p / 720p / 1080i / 1080p (60Hz)
- Input: 2x HDMI (female, 19-pin)
- Output: 4x RJ-45

# **Package Contents**

- 2x4 HDMI 1.3 CAT5e Distribution Amplifier
- IR remote control
- Power adapter (5V)
- Screw kit
- Quick installation guide

04-0596A

# Layout

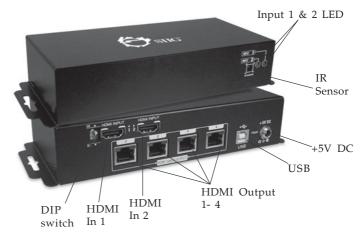


Figure 1: Front & Back Layout

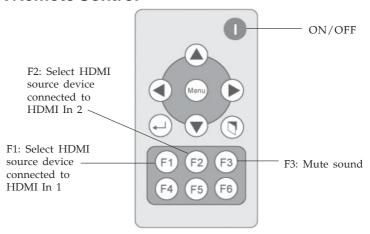
- +5V DC: Power adapter jack for the included 5V power adapter
- HDMI In 1: Connect HDMI source #1 here
- **HDMI In 2**: Connect HDMI source #2 here
- **USB**: For firmware update use only
- Input 1 & 2 LED: The LED will light up when the HDMI source is selected
- IR Sensor: Receives IR signal from the included IR Remote Control, point the IR remote control directly at the IR Sensor for best performance
- **HDMI Out 1–4**: HDMI signal output 1-4 to link to the HDTV(s) over CAT5e/6 cable and terminated by receiver(s) **CE-H20111-S1** or **CE-H20211-S1**
- DIP Switch: EDID & audio information (see table on the next page)

## **Dip Switch**

Switch Position				
Pin#1	Pin#2	Video	Audio	Description
OFF	OFF	Up to 1080p	Stereo <sup>1</sup>	Default mode <sup>2</sup> - up to 1080p & stereo audio output for most HDTVs
OFF	ON	Up to 720/1080p	Stereo	Safe Mode <sup>3</sup> - enforce 720p/1080i video & stereo audio output for basic compatibility among HDTVs
ON	OFF	Bypass <sup>4</sup>	Bypass <sup>4</sup>	EDID Learning <sup>5</sup> - learning EDID from the display while playing any received HDMI audio format
ON	ON	Bypass	Stereo	EDID Learning <sup>5</sup> & Stereo - learning EDID from the display & enforcing stereo output

- 1 If the HDTV shows video without audio, set audio mode to stereo
- **2** Factory default setting is Pin#1 OFF, Pin #2 OFF, for 1080p with stereo
- 3 If you encounter unsolved audio/video output problem during system installation, please set the DIP switch to Pin #1 OFF, Pin #2 ON to enforce 720p with stereo output to check the system. Also, make sure to reset your HDMI sources to output 720p
- 4 Setting at this mode may cause compatibility issues amongst different HDMI sources and displays. If you cannot get the audio and/or video output, change the DIP switch setting to default mode or safe mode to verify the functionality of the device
- 5 EDID learning mode set Pin #1 ON first then connect the HDTV set to the HDMI In via HDMI cable, wait for 20 seconds to complete the EDID learning process. To learn the EDID of another HDTV, repeat the process.

#### IR Remote Control



**Note**: All other buttons (not labeled) are not used with this product.

## Hardware Installation

Broadcasts HDMI signals to 4 remote displays from either of 2 video sources.

- 1. Switch off all devices, including display(s).
- 2. Connect HDMI sources (such as a Blu-ray Disc player) to the HDMI In(s) or the 2x4 HDMI 1.3 CAT5e Distribution Amplifier.
- 3. Connect the 2x4 HDMI 1.3 CAT5e Distribution Amplifier to the receivers (CE-H20111-S1 or CE-H20211-S1) via CAT5e cable(s).
- 4. Connect the HDMI cable(s) from the receivers (**CE-H20111-S1** or **CE-H20211-S1**) to the HDMI display(s).
- 5. Plug the included power adapter into the **+5VDC** power adapter jack of the 2x4 HDMI 1.3 CAT5e Distribution Amplifier. Power on all devices.

#### Note:

- 1. If the HDMI device requires the EDID information, please use a EDID Reader/Writer (not included) to retrieve and provide the EDID information.
- All HDMI over CAT5 transmission distances are measured using Belden CAT5e 125MHz LAN cable and ASTRODESIGN Video Signal Generator VG-859C.
- 3. The transmission length is largely affected by the type of LAN cables, the type of HDMI sources, and the type of HDMI displays. The testing result shows solid LAN cables (usually in bulk cable 300m/1000ft form) can transmit longer distances than stranded LAN cables (usually in patch cord form). Shielded STP cables are better suited than unshielded UTP cables. A solid UTP CAT5e cable shows longer transmission length than stranded STP CAT6 cable. For long extension users, solid LAN cables are your best choice.
- 4. EIA/TIA-568-B termination (T568B) for LAN cables is recommended for better performance.
- 5. To reduce the interference among the unshielded twisted pairs of wires in the LAN cable, you can use shielded LAN cables to reduce EMI problems.
- 6. Because the quality of the LAN cables has a major effect in the transmission distance, the actual transmission length is subject to your LAN cables. For resolution greater than 1080i or 1280x1024, a CAT6 cable is recommended.
- 7. If your HDMI display has multiple HDMI inputs, it is found that the first HDMI input (HDMI input #1) generally can produce better transmission performance among all HDMI inputs.

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# **Technical Support and Warranty**

**QUESTIONS?** SIIG's **Online Support** has answers! Simply visit our web site at *www.siig.com* and click **Support**. Our online support database is updated daily with new drivers and solutions. Answers to your questions could be just a few clicks away. You can also submit questions online and a technical support analysts will promptly respond.

SIIG offers a 3-year manufacturer warranty with this product. Please see our web site for more warranty details. If you encounter any problems with this product, please follow the procedures below.

- A) If it is within the store's return policy period, please return the product to the store where you purchased it.
- B) If your purchase has passed the store's return policy period, please follow these steps to have the product repaired or replaced.

**Step 1:** Submit your RMA request.

Go to **www.siig.com**, click **Support**, then **RMA** to submit a request to <u>SIIG RMA</u>. Your RMA request will be processed, if the product is determined to be defective, an RMA number will be issued.

**Step 2:** After obtaining an RMA number, ship the product.

- Properly pack the product for shipping. All software, cable(s) and any other accessories that came with the original package must be included.
- Clearly write your RMA number on the top of the returned package. SIIG will refuse to accept any shipping package, and will not be responsible for a product returned without an RMA number posted on the outside of the shipping carton.
- You are responsible for the cost of shipping. Ship the product to the following address:

SIIG, Inc. 6078 Stewart Avenue Fremont, CA 94538-3152, USA RMA#:

• SIIG will ship the repaired or replaced product via Ground in the U.S. and International Economy outside of the U.S. at no cost to the customer.

### About SIIG, Inc.

Founded in 1985, SIIG, Inc. is a leading manufacturer of IT connectivity solutions (including Serial ATA and Ultra ATA Controllers, FireWire, USB, and legacy I/O adapters) that bridge the connection between Desktop/Notebook systems and external peripherals. SIIG continues to grow by adding A/V and Digital Signage connectivity solutions to our extensive portfolio. All centered around the distribution and switching of A/V signals over CAT5/6, these products include matrix switches, distribution amplifiers, extenders, converters, splitters, cabling, and more.

SIIG is the premier one-stop source of upgrades and is committed to providing high quality products while keeping economical and competitive prices. High-quality control standards are evident by one of the lowest defective return rates in the industry. Our products offer comprehensive user manuals, user-friendly features, and most products are backed by a lifetime warranty.

SIIG products can be found in many computer retail stores, mail order catalogs, and e-commerce sites in the Americas, as well as through major distributors, system integrators, and VARs.

#### PRODUCT NAME

2x4 HDMI 1.3 CAT5e Distribution Amplifier

FCC RULES: TESTED TO COMPLY WITH FCC PART 15, CLASS B OPERATING ENVIRONMENT: FOR HOME OR OFFICE USE

#### FCC COMPLIANCE STATEMENT:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

THE PARTY RESPONSIBLE FOR PRODUCT COMPLIANCE

SIIG, Inc.

6078 Stewart Avenue

Fremont, CA 94538-3152, USA

Phone: 510-657-8688

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