

HDMI 1.3 over 1-Cat5e Extender

Quick Installation Guide

Introducing the *HDMI 1.3 over 1-Cat5e Extender*

The *HDMI 1.3 over 1-Cat5e Extender* extends video/audio transmissions from an HDMI source to an HDMI display over one economical CAT5e/6 cable.

Features and Benefits

- HDMI 1.3c compliant & HDCP compatible
- Minimize skew with the adjustable 8-level equalization knob
- Supports uncompressed 7.1 digital & DTS-HD and Dolby True HD bit rate audio
- Chipset: Silicon Image
- Video bandwidth: 10.2 Gbps (single-link 340MHz)
- Input TMDS signal: 1.2 Volts (peak to peak)
- Input DDC signal: 5 Volts (peak to peak)
- Video support: 480i / 480p / 720p / 1080i / 1080p (60Hz)
- Power supply: 5V, 4A DC
- Power consumption: 1 Watt (max)
- Housing: metal (for better RF shielding)

Note: Higher resolutions and longer transmission distances require low skew cables (<25ns/100m) for best performance. Unshielded CAT6 with metal RJ-45 connectors is recommended.

Package Contents

- *HDMI 1.3 over 1-CAT5e Extender kit (Tx & Rx units)*
- 2x Power adapters
- Quick installation guide

Layout



Figure 1: Front View of Transmitting (Tx) Unit

- **HDMI-IN:** Connect an HDMI source with an HDMI M-M cable here
- **Mode:**
 - 0 = HDMI mode with surround sound audio output
 - 1 = HDMI mode with stereo audio output
 - 2 = DVI mode
 - 3-5 = Reserved
 - 6 = Use default EDID*
 - 7 = Learn EDID from the connected display

***Note:** If the default EDID setting doesn't work with your display, see **EDID Learning** on page 4 for instructions.

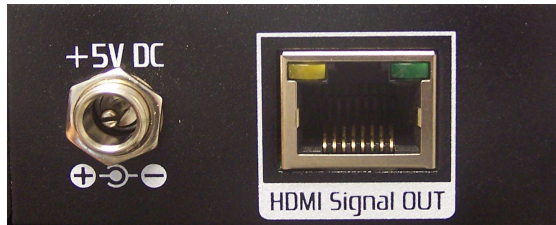


Figure 2: Rear View of Transmitting (Tx) Unit

- **+5V DC:** Connect to 5V DC power adapter
- **HDMI Signal OUT:** Plug in a CAT5/5e/6 LAN cable to be linked to the RJ-45 connector of the receiving unit

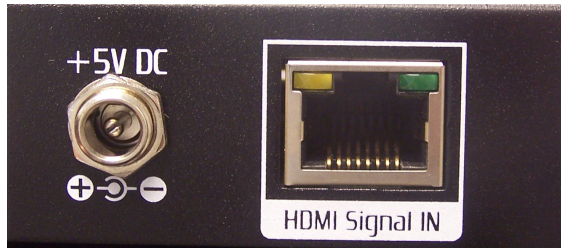


Figure 3: Rear View of Receiving (Rx) Unit

- **HDMI Signal IN:** Plug in a CAT-5/5e/6 cable from the RJ-45 connector of the transmitting unit
- **+5V DC:** Connect to 5V DC power adapter



Figure 4: Front View of Receiving (Rx) Unit

- **HDMI-OUT:** Connects to an HDMI display with an HDMI M-M cable here
- **Signal Level:** Adjust the 8-level equalization control knob to the received HDMI signals. 0–7 (strongest – weakest). It is recommended to switch from 7 to 0 to find the optimal visual experience

Hardware Installation

1. Power off all devices, including the source HDMI device and display.
2. Connect your HDMI source (such as a Blu-ray player) to the transmitting unit's **HDMI IN** connector.
3. Connect your HDMI display (such as a LCD TV) to the receiving unit's **HDMI OUT** connector.
4. Connect your CAT-5/5e/6 LAN cable between the transmitting and receiving units.
5. Make sure your CAT-5/5e/6 LAN cable is securely connected and not loose.
6. Plug one of the included power adapters into the **+5V DC** power jack of the transmitting unit, plug the second power adapter into the **+5V DC** power jack of the receiving unit, then plug both power adapters into a reliable power source.
7. If a flickering or blinking image is seen, adjust the receiving unit's **Signal Level** dial from 0-7 to improve the image.

EDID Learning

1. Turn to the Front View of the transmitting unit, see **Figure 1**.
2. Turn the **Mode** dial counter clockwise from 0 (for surround sound) or 1 (for stereo) to 7.

3. Connect an HDMI cable from the **HDMI IN** connector to the display's HDMI connector. *Do not connect the HDMI source device at this time.* The LED on the **HDMI Signal OUT** of the transmitting unit, see **Figure 2**, will dim and light again, which indicates the EDID learning process is finished.
4. Turn the **Mode** dial of the transmitting unit, see **Figure 1**, clockwise from 7 to 0 (surround sound) or 1 (stereo). Don't let the rotary arrow pass through 6 which will erase the EDID just learned and restore to default EDID.

Note:

1. If the HDMI device requires the EDID information, please use an EDID Reader/Writer (not included) to retrieve and provide the EDID information.
2. All HDMI over CAT5 transmission distances are measured using Belden 1583A 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. Solid LAN cables (usually found in bulk 300m/1000ft form) can transmit longer distances compared to stranded LAN cables (usually in patch cord form). Shielded STP cables are better suited than unshielded UTP cables. Solid UTP CAT5e cable provides longer transmission length than stranded STP CAT6 cable. For long transmission distance, 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 interference caused by EMI, use shielded LAN cables over unshielded LAN cables.
6. 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.

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 [SIIG RMA](#). 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

HDMI 1.3 over 1-CAT5e Extender

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

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