



Manual



04-1428B

**CE-H27R11-S1- Kit**  
**CE-H3KE01-S1- RX**  
HDMI 4K30Hz KVM Over IP  
Extender - 120m

User Manual

Thank you for choosing **SIIG** for your connectivity needs in IT and AV products. Our products are engineered for optimal performance and reliability. To ensure the best experience and safety, please read the instructions thoroughly and keep this user guide for future reference. For more details about our product range, visit [www.siig.com](http://www.siig.com)

If you require technical support, email us at [support@siig.com](mailto:support@siig.com)  
For drivers or manuals, please visit [www.siig.com/download](http://www.siig.com/download)



## Important Safety Guidelines

This device has been rigorously tested and certified to meet international safety standards. However, as with all electronic equipment, it should be handled with care. To ensure your safety and to minimize the risk of damage, please follow these safety guidelines:

- Follow all provided instructions and warnings
- Ensure proper ventilation and avoid using near water
- Do not put any items into the device or attempt to modify its operation
- Do not use liquid or aerosol cleaners; avoid exposure to moisture ; Unplug the device before cleaning
- If there is any strange sound, smoke or odor, pull of the cable immediately
- Use the included power adapters only. Make sure the specification matches if using 3rd-party DC power adapters
- Shut off power and make sure environment is safe before installation

## Introduction

Easily to extend an HDMI signals up to 394ft over IP with a single Cat6/7 cable for 4K30Hz video and extend two USB ports that enable you to connect Wired/Wireless keyboard and mouse to control the computer from any extended display.

## Key Features

- Extends HDMI signals to a remote display up to 394ft (120m) away over Cat6/7 network cable
- Supports 3D and HDCP 1.4 compliant
- Delivers HDTV video content up to 4K30Hz
- PC resolution support : 800x600 / 1024x768 / 1280x1024 / 1280x720 / 1280x768 / 1280x960 / 1400x1050 / 1440x900 / 1680x1050 / 1920x1080 / 1920x1440 / 2048x1536 / 2560x1440 / 2560x1600 60Hz / 3840x2160 30Hz
- Supports remote USB mouse and keyboard connection
- Support downscaling from 4K to 1080p resolution
- Video latency of 150ms
- Supports LPCM 2ch stereo audio for 44.1K / 48KHz
- Supports one to one and one to many connection with IGMP Gigabit Ethernet Switch
- Following TCP/IP standard of IEEE-T568B and supports up to 253 RXs
- Mountable metal housing design

## **Package Contents**

### **Kit (CE-H27R11-S1)**

- 1x HDMI 4K30Hz KVM Over IP Extender - 120m (TX+RX)
- 2 x Power Adapters (DC 5V/1A)
- 1x USB A to A Cable
- 1 x User Manual

### **RX (CE-H3KE01-S1)**

- HDMI 4K30Hz KVM Over IP Extender -RX
- 1 x Power Adapters (DC 5V/1A)
- 1 x User Manual

# Layout

## Transmitter (TX)



Figure 1: Transmitter layout

No.	Connections	Descriptions
1	Power jack	5V power input
2	HDMI in	Connect to input source via HDMI cable
3	HDMI out	Connect to display via HDMI cable
4	USB-A port	Connect with PC source
5	Power LED	Power indicator
6	USB LED	On: When USB signal normal pass Off: Without USB signal
7	RJ45 port	Connect to Cat6/7 cable to RX
8	Reset button	Transmitter/Receivers function as restart

## Receiver (RX)



Figure 2: Receiver layout

No.	Connections	Descriptions
9	Power jack	5V power input
10	HDMI out	Connect to display via HDMI cable
11	USB KM port	Connect to Keyboard and Mouse
12	Power LED	Power / Signal indicator
13	KM LED	Mouse LED indicator Keyboard LED indicator
14	KM switch	USB KM function select button
15	RJ45 port	Connect to Cat6/7 cable from TX
16	Reset button	Transmitter/Receivers function as restart

## Specifications

HDMI standard	HDMI 1.4, HDCP 1.4
HDMI bandwidth	3.4Gbps / 340MHz (10.2Gbps all channels)
Input Port	1x HDMI, 2x USB-A, 1x RJ45
Output port	2x HDMI, 1x USB-A, 1x RJ45
Extension distance	Up to 120m for 4K30Hz
USB transmission	USB 1.1: 12 Mbps (It does not support USB storage devices or touch screen function)
Input resolution	Up to 4K30Hz
Output resolution	480p, 576p, 720p, 1080i, 1080p, 4K30Hz
RJ45 protocol	TCP/IP network standard Cat6/7 cable follows the IEEE-T568B
Operating temperature	0°C to 50°C
Storage humidity	5 to 90% RH (Non-condensation)
Power supply	DC 5V/1A
Dimension (L x H x D)	TX/RX: 4.09" (W) x 0.91" (H) x 4.41" (D)
Net weight	TX/RX: 214g (0.47 lbs)
Product material	Metal
Certifications	FCC / CE / RoHS
Country of origin	China

## Hardware Installation

1. Power off all devices including your HDMI source device and HDMI display
2. Connect your HDMI source device to the transmitter's HDMI In with an HDMI cable (**cable not included**)
3. Connect the USB-A cable to PC source and Transmitter USB-A port
4. Connect a Cat6/7 cable between the transmitter and receiver
5. Connect an HDMI display to the receiver's HDMI Out with an HDMI cable (**cable not included**)
6. Connect the Keyboard and Mouse device to Receiver USB-A (Based on Keyboard/Mouse port plug-in)
7. Plug in the included 5V power supply into the transmitter's & Receiver' power jack
8. Power on your HDMI source device and HDMI display. The Extender is ready for use

### **Note:**

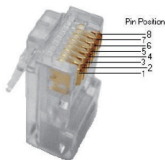
- *Dedicated IGMP Gigabit Ethernet Switches are recommended for the best performance and reliability.*
- *When connecting to an existing LAN environment, it's recommended to configure a VLAN dedicated to these transmitter and receiver to avoid traffic collision with other networking devices.*
- *This product USB port does not support touch screen function or USB storage devices.*



## Cat Cable Wiring

We suggest both RJ45 connectors be wired identically using T568B wiring standard for the best performance and compatibility

Both connections must be wired identically to the T568B standard



RJ45 Plug Colour Code (T568B) Contact Side - Tab is on Back	
8	BROWN
7	WHITE / BROWN
6	GREEN
5	WHITE / BLUE
4	BLUE
3	WHITE / GREEN
2	ORANGE
1	WHITE / ORANGE

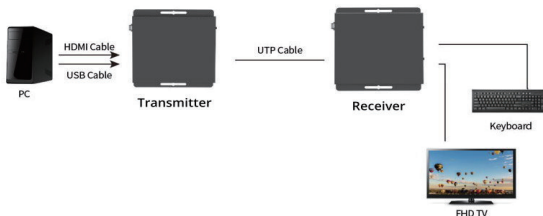
### **Note:**

*You may use Cat6 / Cat7 wiring, however, for best performance Cat6 or Cat7 (particularly in electrically noisy environments) is recommended. The maximum transmission distance and video quality may be compromised by cable quality, patch cables, poor termination, wall plates, cable kinks, and electrical interference. We recommend using 100% copper 23AWG (avoid CCA type) Cat cable, in one straight run (avoid/minimize patches) and avoid close proximity to electrical sources.*

## Application Diagram

The HDMI Over Cat6/7 Extender is perfect for extending high-definition video up to 120m distances, making it ideal for various professional AV setups, including conference rooms, and home theater systems

### One to One Mode



### One to Many Mode

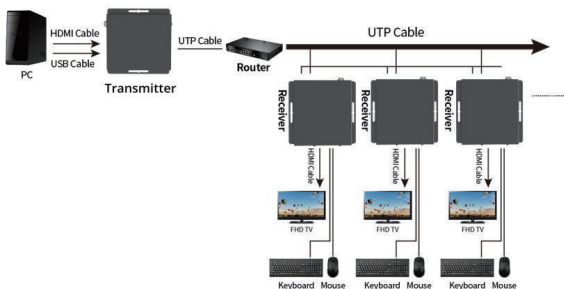


Figure 3: Application Diagram

## Disclaimer

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