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Manual

TWO YEAR
Manufacturer Warranty

04-1430A

CE-H3WE11-S1 Kit
CE-H3WE21-S1 RX
Full HD Wireless HDMI
Extender with IR

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*

If you require technical support, email us at *support@siig.com* For drivers or manuals, please visit *www.siig.com/download*

Important Safety Guidelines

ESD CAUTION

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
- Keep the product in a well-ventilated location to avoid damage from overheating.
- 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

The Full HD Wireless HDMI Extender with IR extends HDMI signals from a source device to a display device extension wirelessly up to 492ft (150m). It requires no cables between the Transmitter (TX) and Receiver (RX), making the installation easy and clean. Great for homes and offices.

> **Note:** Wireless transmission distance will vary due to the environmental conditions. Thick walls, brick, glass, electronic interference, and wireless signals from other devices will shorten the wireless transmission distance or cause signal loss.

Package Contents

Kit (CE-H3WE11-S1)

- Full HD HDMI Wireless Extender with IR Kit (TX & RX)
- HDMI cable x 2
- USB-A to USB-C power cable x 2
- IR blaster cable
- Power 5V/2A x 2
- User Manual

Receiver (CE-H3WE21-S1)

- Full HD HDMI Wireless Extender with IR - Receiver
- HDMI cable x 1
- USB-A to USB-C power cable x 1
- Power 5V/2A x 1
- User Manual

Installation Requirements

1. HDMI source device (DVD player, set top box, PC, etc.)
2. HDMI display device (SD or HD TV/Monitor, projector, etc.)
3. HDMI cables

Features

- Transmits 1080p HDMI signals wirelessly up to 492ft (150m) with IR control
- Supports up to four receivers (RX). Additional receivers (part# CE-H3WE21-S1) are sold separately*
- Supports up to 1080p @60Hz
- Equipped with the fast 802.11ac 2T2R WiFi MIMO module
- Auto Channel Selection
- Dual antenna design maximizes wireless reception with stable data transmission
- High-security protection
- Operates in a 5GHz wireless spectrum
- Equipped with HDMI loopout and one-way IR extension (20-60 KHz frequency)
- Less than 150ms latency. Not recommended for real-time applications

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*Note:

a) Wireless transmission range is reduced with each added receiver. See details on page 11.

b) Each added receiver requires pairing. See Pairing the TX and RX on page 8 for more details.

Product Layout
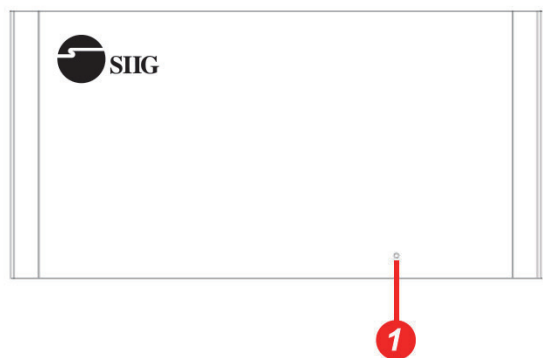
Transmitter Layout

Figure 1: Transmitter LED

1. **LED indicator:** The detailed status of the LED is outlined in the table below

Transmitter LED indicator

LED indicator	Description	LED indicator	Description
Static Red	Transmitter is booting on	**Static Blue**	Connected and start to present
Flashing Red	Searching for receiver	**Flashing Purple**	No video input
Flashing Blue	Waiting for connection		

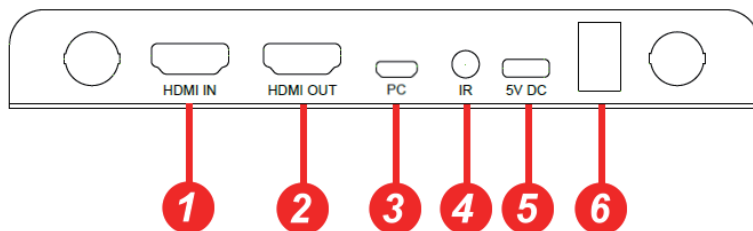## Transmitter Connectors Layout

Figure 2: Transmitter Connectors

1. **HDMI IN:** Connect with the video source
2. **HDMI OUT:** Connect with display for pass through
3. **PC port:** Micro USB port, reserve for FW update
4. **IR Jack:** Connect with IR blaster cable of video source for IR extended function
5. **5V DC:** USB-C port, connect with 5V/2A power adapter
6. **Power Switch:** Turn on/off the product

Receiver Layout

Figure 3: Receiver LED

1. **LED indicator:** The detailed status of the LED is outlined in the table below

Receiver LED indicator

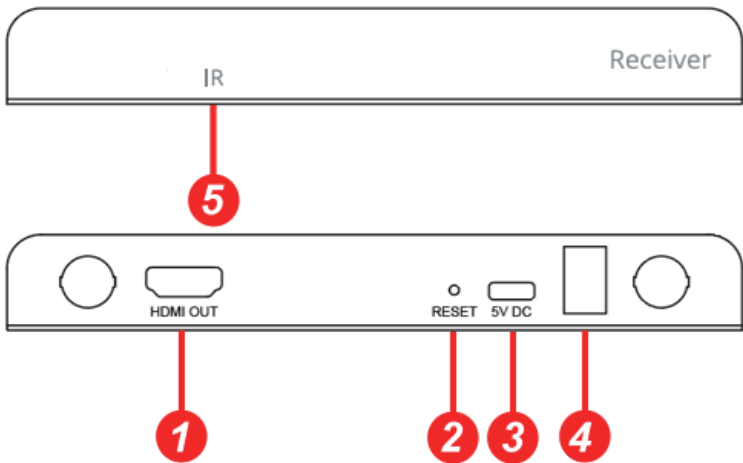| LED indicator	Description	LED indicator	Description
Flashing Blue	Waiting for connection	**Static Blue**	Connected and start to present

Receiver Connectors layout

Figure 4: Receiver Connectors

1. **HDMI OUT:** Connect to the display
2. **RESET:** Reset to factory setting
3. **5V DC:** USB-C port, connect with 5V/2A power adapter
4. **Power Switch:** Turn on/off the product
5. **IR Sensor:** IR extended function

Product Pairing

Pairing a transmitter and receiver

A standard wireless HDMI extender kit includes one transmitter and one receiver, which are pre-paired before shipment. Under normal circumstances, no additional pairing is required.

However, if you encounter persistent connection issues, purchase an additional transmitter, or need to pair with a different receiver, the devices must be paired before use.

Check if the Transmitter and Receiver are Paired

To check if the transmitter and receiver are paired, observe the LED indicator on the transmitter. If the transmitter's LED remains flash red above one minute, it indicates that the transmitter and receiver are not paired.

Pairing instructions

1. Power on the transmitter.
2. Power on the receiver till it's on the main menu.
3. Press the receiver's reset button and hold for 5 seconds till the LED is flashing fast.
4. Wait around 30 seconds, the transmitter and receiver will paired automatically.

Hardware Installation

1. Power off all devices including your HDMI source and HDMI devices or display(s).
2. Connect your HDMI source device to the Transmitter's HDMI Input connector with an HDMI cable.
3. Optional: Connect your local HDMI monitor or TV display to the Transmitter's Local HDMI Output connector with an HDMI cable. This connection allows you to monitor the HDMI signal from the source device location.
4. Optional: Connect the IR Blaster extension cable to the Transmitter's IR interface port. Face the eye towards your HDMI source device's IR sensor. This connection is needed only if you need to control your HDMI source from the remote location.
5. Connect your HDMI display to the Receiver's HDMI Output connector with an HDMI cable.
6. Plug the included power adapters into the Transmitter's and Receiver's USB power Jacks, then plug both power adapters into reliable power outlets and then to power on the Transmitter and Receiver.
7. Power on your HDMI source device and HDMI display(s).

> **Note:** For optimal signal range, install in a clear environment with few obstacles. Wireless signals from other devices, such as microwaves, etc. may interfere with transmission. Contact our technical support team if you have specific questions.

User Manual

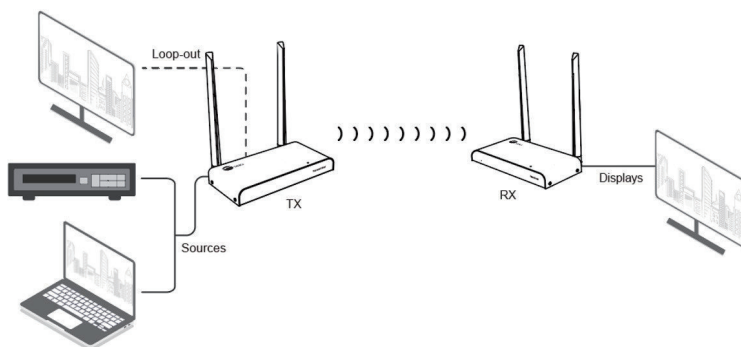# Application Diagram
One to One Connection

Figure 5: One TX to One RX diagram

One to Many Connection (up to 4 RXs)

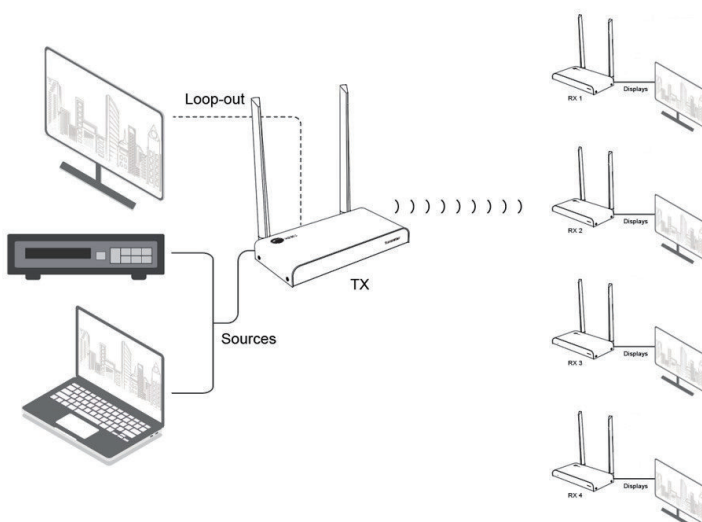Support up to four Receivers (RXs). Additional Receivers part number of CE-H3WE21-S1, sold separately.

Figure 6: One TX to Four Receivers diagram

Normally, if you buy a new receiver, after power on the receiver, the transmitter will recognize and stream the video to the second receiver automatically.

If the transmitter and new receiver are not paired automatically, please pair the TX and RX firstly, please check "Product Pairing" process.

Note: Wireless transmission range is reduced with each added receiver.

Wireless Transmission Distance:
- **1 TX to 1 RX up to 150m**
- **1 TX to 2 RXs up to 50m**
- **1 TX to 3 RXs up to 30m**
- **1 TX to 4 RXs up to 20m**

Connecting Infrared Return

The IR cable receives the commands sent by the IR receiver and forward it to your connected HDMI sources.
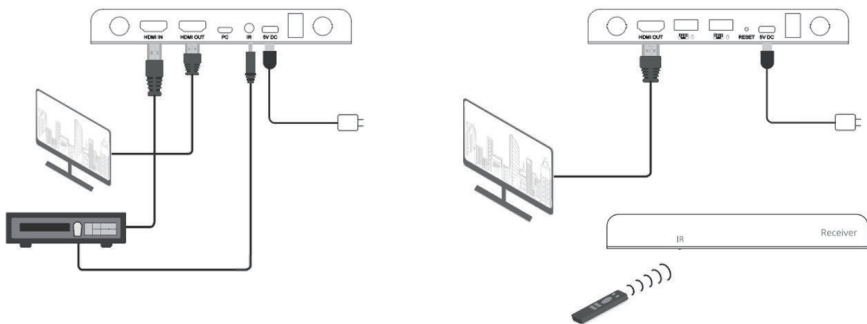

Figure 7: IR application diagram

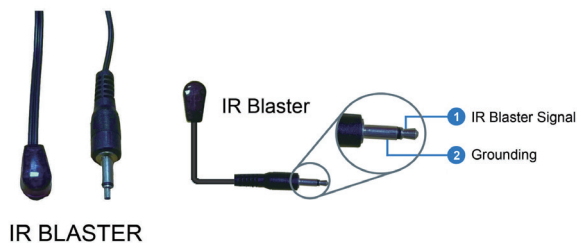*User Manual*

IR Blaster Cable Pin Out

Figure 8: IR Blaster Cable Pin Out

Notice

- Wireless signals transmitted through walls, glass, brick or other solid objects will cause signal loss and decrease the transmission distance
- External wireless signals from microwaves will interfere with HDMI signal transmission
- Keep the unit in a well ventilated environment to prevent it from overheating
- DO NOT expose the unit to rain, moisture, or liquids
- DO NOT place anything on the unit
- DO NOT open the housing, doing so will void the warranty and may cause personal injury due to electronic hazard

FAQ & Troubleshooting

Q: No (or poor) image and sound on TV or projector

A: Move the Transmitter and the Receiver in the same room to test if the connection works well, and please make sure all of below setting are correct.

1) Ensure that the power of the transmitter and receiver is properly connected. Ensure that all HDMI cables are connected properly or replace them.

2) Ensure that the HDMI source is turned ON and the correct HDMI input is selected on the TV.

3) Ensure that the HDMI source is set to a correct video resolution. If necessary, consult the user manual of your HDMI source.

4) Disconnect the power adapters from the wall socket and reconnect them to reboot the Wireless HDMI extender.
   If the transmitter and receiver still no connection, please follow the below step for pairing.

1) Power on the transmitter.

2) Power on the receiver till it's on the main screen.

3) Press the receiver's reset button and hold for 5 seconds till the LED is flashing fast.

4) Wait around 30 seconds, the transmitter and receiver will be paired automatically.

Q: I do have picture, but no (or bad) sound

A: This product supports up to 2CH PCM stereo.
   Check the audio setting in the settings menu of the connected HDMI source and manually set it to 2CH PCM stereo when the automatic setting does not work.

Q: No or bad connection between the Transmitter and Receiver

A: 1) Move the Transmitter and/or the Receiver from the immediate
vicinity of the connected HDMI sources and Wi-Fi equipment.
These may affect the range.

2) Slightly adjusting the position of the Transmitter and or Receiver
may already help out.

3) Too much distance or obstacle between Transmitter and Receiver.
Try using shorter distances.

4) Disconnect the power adapters from the wall socket and
reconnect them to reboot the wireless HDMI extender.

Q: The IR blaster doesn't work

A: 1) Make sure to use the original remote control of the video source.

2) Please stick the IR blaster probe in the surface of IR sensor of the
source device, if you are not sure the correct positon of IR sensor
of source device.

3) Please refer to the manual of source device.

4) Please point the remote control to the IR receiver probe with 5
meters directly.

5) The IR extender cable based on 20KHz-60KHz remote signal
protocol, which support most of the IR remote in the market, for
special standard or old remote may not supported.

Q: Transmitter LED Indicator Stays Constant Red

A   If the transmitter's LED indicator remains constant red for more than
30 seconds, it indicates that the device did not boot up successfully.

Possible Cause:

While the transmitter's HDMI IN port supports power delivery the
video source's HDMI port may not provide sufficient power Insufficient
power can prevent the transmitter from booting up properly.

Solution:
To ensure stable operation, always connect the USB power supply to the transmitter, even if the HDMI IN port is in use.

Q: The Transmitter's LED indicator is flashing red continuously

A: Please follow below steps to troubleshoot the issue:
Place the transmitter and receiver close to each other. Make sure you power the transmitter separately via USB-C cable with sufficient 5V/2A power supply.
Verify that the Receiver is powered on and displaying the main interface.
If the Receiver is on and the transmitter indicator has been flashing red for more than three minutes, it indicates that the devices are not paired. Please refer to section, "Pairing a Transmitter and Receiver," in the manual to re-establish pairing.

Q: The transmitter's LED indicator is flashing purple continuously

If the transmitter's LED indicator is flashing purple, it indicates that the transmitter and receiver are successfully paired, but the transmitter is not detecting a video source from the HDMI input.

This issue may occur due to:

Incompatible resolution settings between the video source and the transmitter.
A faulty HDMI port on the video source device.

Please follow below steps to resolve:

Adjust the video source's output resolution to match the supported resolutions listed in the transmitter's specifications.
If the issue persists, test the transmitter with a different video source.

Specifications

HDMI Signal	HDMI 1.4 and HDCP 1.3 compatible
Resolution	480p@60Hz, 576p@50Hz, 720p@50/60Hz, 1080i@24/50/60Hz, 1080p@24/50/60Hz
Latency	Under 150ms latency
IR Remote Control	Supportss 20-60KHz wide frequency remote control
Audio Format	PCM
Audio Channel	2 channels
Wireless standard	IEEE 802.11 a/b/g/n/ac 5.8G
WiFi Frequency	5.150 GHz to 5.825 GHz
WiFi Bandwidth	866 Mbps (5GHz)
Frequency Bands	5150-5350 MHz, 5470-5725 MHz, 5725-5850 MHz, 5850-5925 MHz The specific frequency bands utilized are upon the legal regulations by each country
Bitrate	Maximun 50 Mbps (actual rate may vary depending on environmental factors
Channel width	Supports 20 MHz, 40 MHz and 80 MHz
RF Power Amplifier	Maximum 17 dBm
Antenna	2x 5dBi high-sensitive antenna

Distance	Up to 150 meters in the clear line of sight The distance will be shorter in obstructed environments
I/O ports	**Transmitter:** 1x HDMI input 1x HDMI loopout 1x USB-C power input 1x 3.5mm IR jack 1x Power switch **Receiver:** 1x HDMI output 1x USB-C power input 1x Power switch 1x Reset button
Power supply	DC 5V/2A
Power Consumption	About 5W
Dimension	6.06″ (W) x 0.79″ (H) x 3.04″ (D)
Weight	0.72 lbs (TX) / 0.73 lbs (RX)
Operating Temperature	- 4 to 104 degree F
Storage Temperature	- 4 to 140 degree F
Operating Humidity	10% to 80% relative humidity
Warranty	2 years limited
Country of Origin	Made In China

Disclaimer

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