CWHDI-TX & RX Wireless HDMI Transmitter and Receiver Box

Operation Manual

CWHDI-TX & RX

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1. Introduction

The wireless HDMI transmitter and receiver box are using baseband technology with Wireless High Definition Interface (WHDI) to deliver uncompressed HD video and audio up to 15~30 meters open field, while maintaining superb, wire-equivalent quality and robustness with no latency. The transmitter and receiver side are available with embedded antennas.

2. Features

- Uncompressed HD audio/video wireless transmission at wire-equivalent quality.
- Supports most video resolutions including 480i/p, 576i/p, 720p, 1080i VGA@60/72, SVGA@60/72, XGA@60/70 and 1080p(24fps/30fps).
- 15~30 meters open field depending on environment, no line of sight required.
- Real time link, less than 1 millisecond latency
- Strong 256-bit AEC based encryption for security.
- Video Data Rates 1.5Gbps.
- 5GHz licensed band, MIMO RF.
- Supports CEC functionality.
- Full HDCP Compliant.
- Unicast and Multicast change.
- Auto shut down when one of the device is turn off.
- Instant signal transition and timing change less than 10 second.
- Control Channel allows two-way communications of 10Kbps.

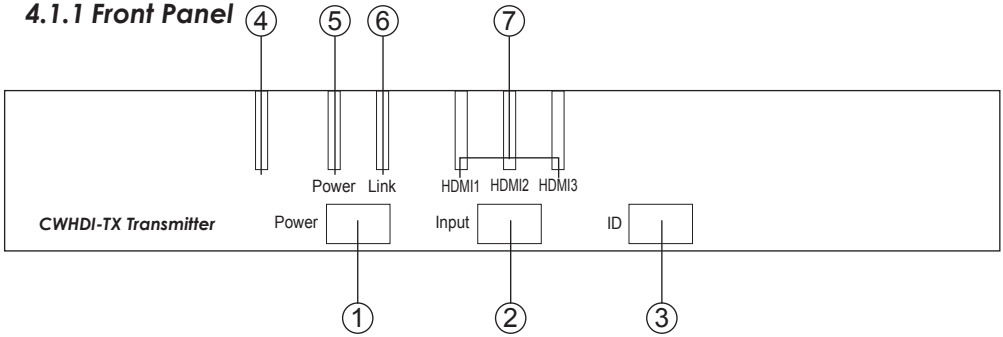
3. Package Contents

- Wireless HDMI Transmitter box.
- Wireless HDMI Receiver box.
- 2 x 5V/2.6A DC power supply adaptor.
- Operation Manual.
- CR-67 Transmitter Remote
- CR-68 Receiver Remote
- Holder x 2

4. Operation Controls and Functions

4.1 Transmitter side

4.1.1 Front Panel



① Power: Press to turn ON/OFF the system.

② Input: Press to select input source (1/2/3).

③ ID: Press transmitter "ID" button and receiver "ID" button for 2 second to pair the system. These systems already paired before exit factory hence, user don't need to reset it again unless the system can't up link probability. Press the ID button for more than 10 sec. to switch to different mode (Broadcast/Unicast). Green power LED means switch to Unicast mode and Red power LED means switch to Broadcast Mode. The factory default is on Unicast mode and it is suggested to use this mode for household using. It is not necessary to press both transmitter and receiver's ID button in the same time.

Note: Due to the nature of the transmission, the Broadcast mode has no uplink and therefore no bi-directional communication between Transmitter and Receiver. This results in the following limitations:

- HDCP protected content should not be transmitted.
- CEC and EDID repeater functionalities cannot be supported.
- Broadcast mode is not HDCP compliant.

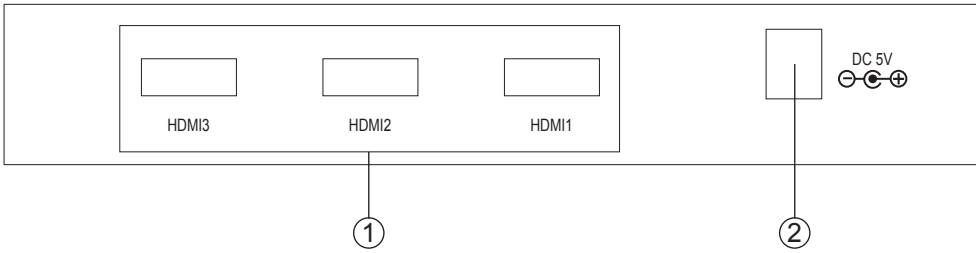
④ IR sensor.

⑤ Power: The LED will illuminate when power ON.

⑥ Link: For pairing and learning the LED will flashing speedily, during the signal link stage the LED will flashing slowly. When LED illuminate without flashing it means the signal link probability.

⑦ Input indicator: The LED will illuminate to indicate which input source is being selected and routed to the HDMI display.

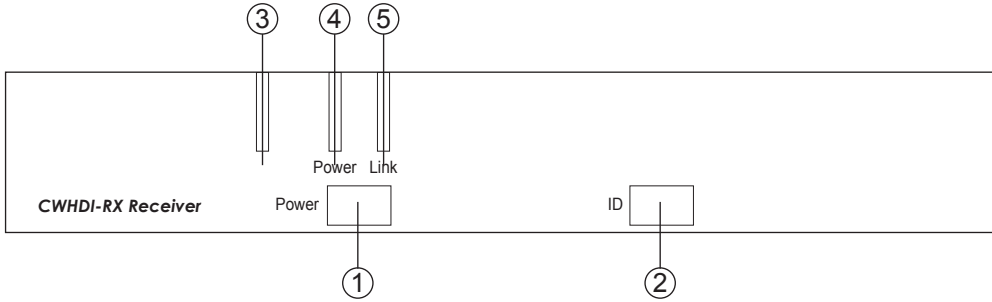
4.1.2 Rear Panel



① HDMI 1/2/3 Inputs: Connect each of the input ports to the HDMI output of your source equipment such as DVD player or set-top-box.
② Power: Plug the 5V DC power supply into this unit and connect the adaptor to AC wall outlet.

4.2 Receiver side

4.2.1 Front Panel



① Power: Press to turn ON/OFF the system.
② ID: Press transmitter "ID" button and receiver "ID" button for 2 second to pair the system. These systems already paired before exit factory hence, user don't need to reset it again unless the system can't up link probability. Press the ID button for more than 10 second to switch to different mode (Broadcast/Unicast). Green power LED means switch to Unicast mode and Red power LED means switch to Broadcast Mode. The factory default is on Unicast mode and it is suggested to use this modefor household using. It is not necessary to press both transmitter and receiver's ID button in the same time.
③ IR sensor.
④ Power: The LED will illuminate when power ON.
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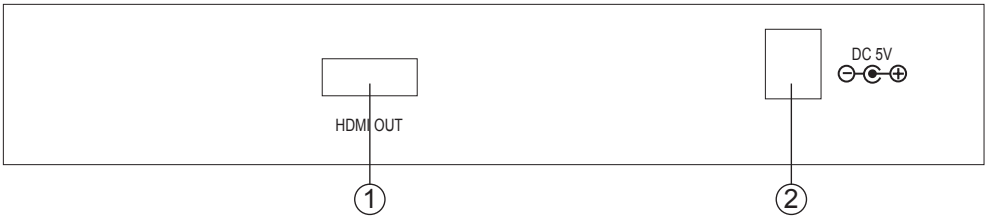
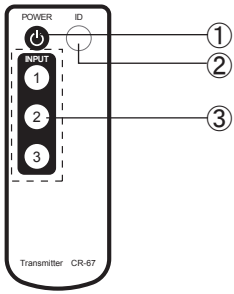
4.2.2 Rear Panel

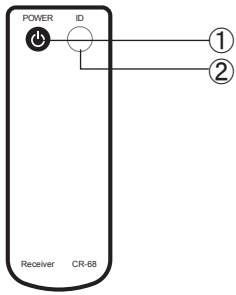


① HDMI output: Connect the HDMI output to the HDMI input of your display using HDMI cable.
② Power: Plug the 5V DC power supply into this unit and connect the adaptor to AC wall outlet.

5. Remote Control

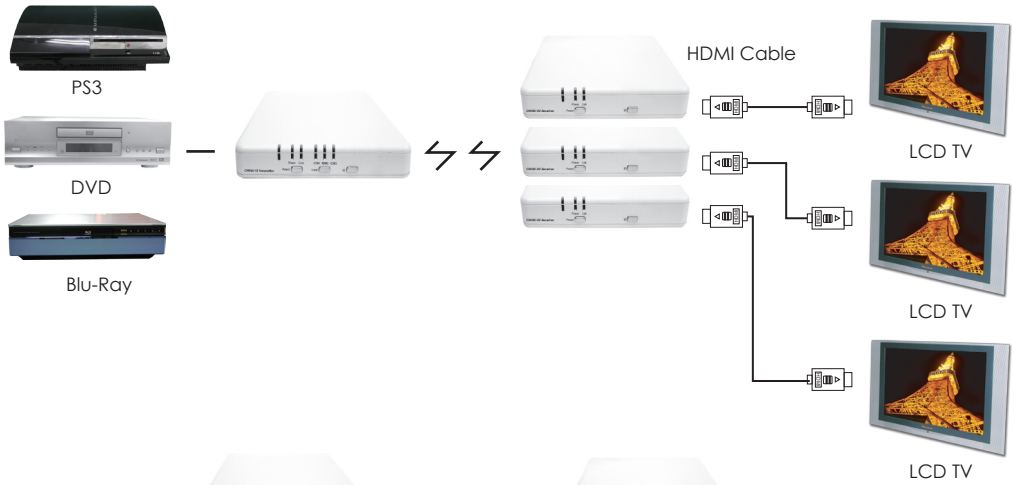
①. Power: Press to turn ON/OFF the device.
②. ID:Press transmitter "ID" button and receiver "ID" button for 2 second to pair the system. These systems already paired before exit factory hence, user don't need to reset it again unless the system can't up link probability.
③. 1~3: Input source selection of 1~3, press for your desire source to display on output HDMI.

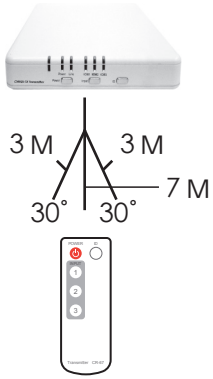


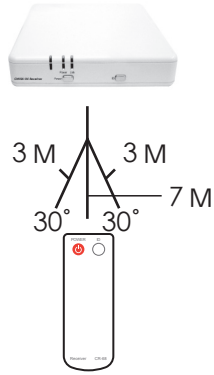


6. Connection and Installation

Or







7. Specifications

Radio Power	Transmit power is configurable up to 63mW (+18dBm)
Video resolutions (partial list)	480i/p, 576i/p, 720p, 1080i, VGA@60/72, SVGA@60/72, XGA@60/70 and 1080p(24fps/30fps)
Frequencies Supported	4.9 ~ 5.9GHz
Modulation	OFDM MIMO with WHDITH video-modem Technology
Bandwidth	20MHz
Wireless Range	15~30 meters open field
Antenna	Transmitter: 4 transmit antennas and 1 receive antenna Receiver: 5 receiver antenna and 1 transmit antenna
System Features	Automatic Transmission Power Control (ATPC)-for best power performance Automatic Frequency Selection (AFS)-For avoiding interferences
Digital Video Interface	Up to 24 bit RGB or YCbCr (4:4:4)
Digital Audio Interface	PCM2CH, DTS5.1, AC3 5.1
System Latency	Less than 1 millisecond delay between video/audio source and sink
Security	Strong 256 bit AES-based encryption
Input ports	3 x HDMI
Output port	1 x HDMI
Power Supply	5V/2.6A DC (US/EU standards, CE/FCC/UL certified)
Dimensions (mm)	162.6(W) x 164.5(D) x 33.5(H)
Weight(g)	Trsnsmitter: 348 Receiver: 316
Chassis Material	Plastic
Silkscreen Color	White
Operating Temperature	0°C ~ 40°C
Power Consumption	Transmitter: 1.95 Receiver: 1.62

8. Troubleshooting

Situation	Check Point
Power LED is not illuminate when power ON.	1. Check if the right adaptor is used. 5V 2.6A's adaptor. 2. Check all power connectors are plugged in correctly. 3. Push the power buttons to turn on the devices.
After powering on Tx & Rx the Link's LED is flashing speedily / slowly without image.	1. This is normal if the devices are pairing or learning, the LED will illuminate slowly when it is doing signal linking. After signal is transmit and received steadily the LED will be light up consistently. 2. If the LED keeps on flashing speedily for more than 3 minute, then repairing devices by pushing the ID keys for 2 second. 3. If the LED keeps on flashing slowly for more than 3 minute, then check the input selection of the transmitter if its correct.
The Link's LED is illuminating consistently without image display or unexpected image display.	1. Check if source's timing is supported by the device. The device support up to 1080i and therefore, please make sure the source is sending acceptable timing for device and display and the display also can accept that timing. 2. Check if both source and the display are HDCP/CEC complaint. 3. Check if TV mode is selected rightly. 4. Check if both source and display are connected stably.
Input's LED not illuminate.	1. For the first time linkage, if the output display is not link up the input LED will not illuminate therefore, please check if the HDMI output is connected.
Different color on Power LED.	1. Red Power LED means under Broadcast mode and Green Power LED means under Unicast mode. If Tx is on Green LED but Rx is on Red LED, press Rx's ID key for 10 second to change to Unicast mode. Vice versa, when Broadcast mode is demanded press Tx's ID key for 10 second to change to Broadcast mode.

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