

## • Important Safety Notice

1. Please pay attention to all warnings and read all instructions carefully prior to using the device.
2. Do not expose the device to rain, moisture or liquid.
3. Keep the receiver and transmitter device clear of everything and do not place anything on top of them.
4. Do not open or attempt to repair the device.
5. Keep in well ventilated area to avoid any overheating.
6. Turn off source device during installation.
7. Do not unplug power when device is in use.
8. Power the device using the included 5V/2A DC power supply adapter only. If using other adapters please make sure the specs are identical.

## • Introduction

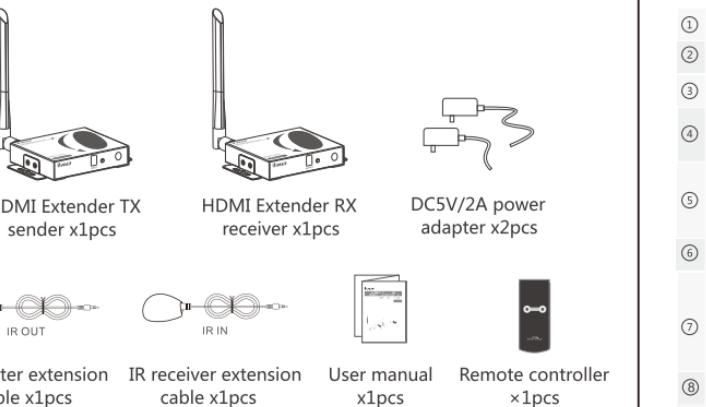
The OREI WHD22-165 transmitter extends HDMI signal wirelessly from source device to display device up to 165 feet. This setup requires no cables between the Sender (TX) or the Receiver (RX) thus resulting in a clean and easy setup.

Note: The actual transmission distance will vary depending on the environment and the setup area. Walls, bricks, stones, glass and other obstructions can shorten the signal coverage or cause signal loss.

## • Features

1. Smart portable design, wonderful performance.
2. Highest resolution up to 1080p full HD.
3. Strong anti-interference ability by running at 5GHz operation frequency.
4. Support point to point configuration, one to many (1 to 2) configuration and many to many (2 to 2, 2 to 1) configuration.
5. Support IR passback with 20-60KHz frequency.
6. Supports button control to set channels and IR controller to switch and choose input sources from receiver side.
7. 50m long range transmission distance.

## • Package Contents

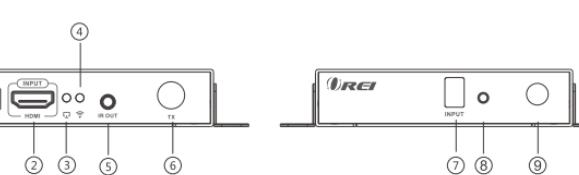


## • Installation Requirement

1. HDMI source device (DVD, PS3, Set top box, PC etc)
2. HDMI display device like SDTV, HDTV, and projector with HDMI port.

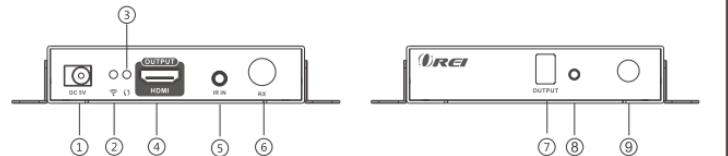
## • Functions

### 1. HDMI Extender TX sender



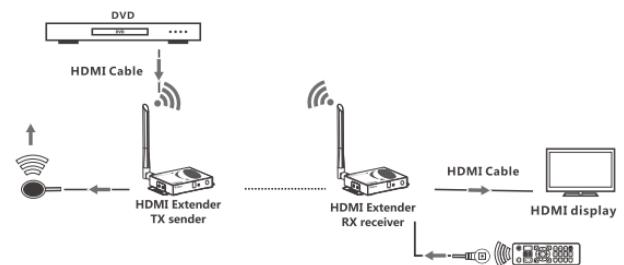
① Power input	Connect with DC5V/2A power adapter
② HDMI input	Connect with HDMI source device
③ HDMI signal indicator	HDMI signal input, it always on
④ Wireless connections indicator	It's on when the transmitter and the receiver connect well with each other, other wise, it's off
⑤ IR blaster extension cable interface	Connect with IR blaster extension cable. Please put the IR blaster close to source device to better transmit the IR signal from receiver
⑥ Antenna	Launch wireless signal
⑦ Input CHANNEL indicator	Indicate the input CHANNEL as a number, and when the CHANNEL of transmitter as same as the CHANNEL of receiver, wireless transmission connected
⑧ Digital control button	Display CHANNEL channel parameters
⑨ IR remote control window	Receive IR remote control signal

## 2.HDMI Extender RX receiver

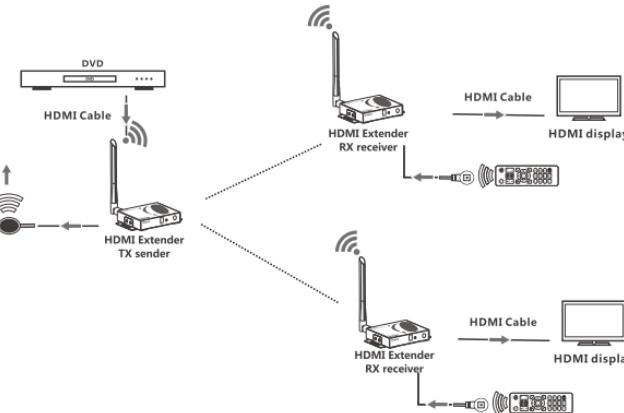


① Power input	Connect with DC5V/2A power adapter
② Wireless connections indicator	It's on when the transmitter and the receiver connect well with each other, other wise, it's off
③ Data transmission indicator	Led blinks slowly when it is building connection. Led blinks fast when it is successfully connected and transmitting data
④ HDMI output	Connect with HDMI display device
⑤ IR receiver extension cable interface	Connect with IR receiver extension cable. Please make sure the remote control is within the required range of IR receiver
⑥ Antenna	Receive wireless signal
⑦ Output CHANNEL indicator	Indicate the output CHANNEL as a number, and when the CHANNEL of transmitter as same as the CHANNEL of receiver, wireless transmission connected
⑧ Digital control button	Display CHANNEL channel parameters
⑨ IR remote control window	Receive IR remote control signal

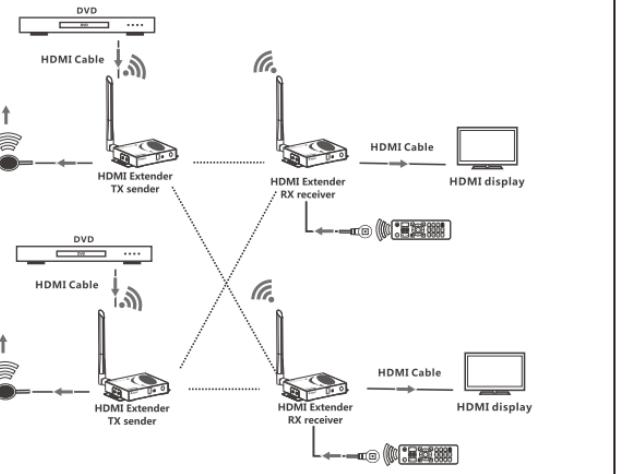
## 1. Point to Point connection:



## 2. One to two connection:



### 3. Matrix connections



### Connection instruction:

- 1) Connect HDMI input with HDMI source device and connect IR blaster extension cable with IR OUT interface of the sender (TX).
- 2) Connect HDMI output with HDMI display device and connect IR receiver extension cable with IR IN interface.
- 3) Power on the device (power led lights) and it works.

### Note:

1. Signal loss may occur when transmitting signal through wall, glass and other obstacles. Install device in a clear area with least obstacles.
2. Other wireless signals such as wireless mouse, cordless phones and microwaves can interfere with the setup.

### • FAQ

Q: Transmitter and receiver can't be connected with each other?

A: 1) Please check and make sure both receiver and transmitter have been powered on

2) Please check and make sure the input channel of the transmitter and the output channel of the receiver are the same.

Q: The wifi LED indicator of the transmitter keeps on, but no signal output on display/monitor?

A: 1) please check if there is an HDMI signal input of sender TX

2) Try to connect the signal source directly to display device to see if there is signal output from source device or change the signal source, HDMI cables and try again.

Q: Display not fluent and stable

A: 1) Please move the position of sender (TX) and receiver (RX) and make sure the device is within the signal coverage.

2) Press "reset" button on the TX/RX panel, reset and reconnect.

3) Remove other wireless signal disturbance and reduce the obstacle on the way.

### Disclaimer

OREI is a registered trademark of OREI, LLC. The pictures in the user manual are for reference only and there may be a slight difference in the appearance of the actual product. We reserve the right to make changes without further notice to a product or system described herein to improve its reliability and functionality.

### • Specification

Items	Specification
Power supply	DC5V/2A
	Power consumption TX < 7W Rx < 5W
HDMI compliance	HDMI1.3
HDCP compliance	HDCP1.2
HDMI resolution supported	480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080p@50/60Hz
Supports audio formats	L/R stereo audio
Maximum transfer rate	10.2Gbps
Audio signal transmission format	L/R stereo audio
Input and output TMDS signal	0.5 ~ 1.5Vp-p(TMDS)
Input and output DDC signal	5Vp-p(TTL)
Input cable length supported	≤5m(AWG26 HDMI1.3 cable standard)
Output cable length supported	≤5m(AWG26 HDMI1.3 cable standard)
IR performance and interface	IR remote control
	Support IR passback with 20-60KHz frequency
Wireless performance and interface	Transmission method 5G Wireless transmission
	Transmission distance 50 Meters
	Latency ≤200 ms
Protection level	Electrostatic protection of the whole machine
	1a Contact discharge level 3
	1b Air discharge level 3
	Standard: IEC61000-4-2
Operating environment	Working temperature 0 ~ 50°C
	Storage temperature -10 ~ 70°C
	Humidity (no condensation) 0 ~ 90%

Body properties	Dimension	95(W) x 120.58(D) x 20.1(H)mm
	Material	Iron alloy material + crystal panel
	Processing technology	Sandblasting
	Colour	black
	Weight	TX : 200g , RX : 200g
Reliability	Mean time between failures (MTBF)	>30000 Hours

### FCC Warning:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- o Reorient or relocate the receiving antenna.
- o Increase the separation between the equipment and receiver.
- o Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- o Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This device and its antenna must not be located or operating in conjunction with any other antenna or transmitter.

"To comply with FCC RF exposure compliance requirements, this grant is applicable to only mobile configurations. The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter."

Note: This device should be used for indoor only.

Please use the original antenna in the package, if the antenna is not contained in the package or the antenna is damaged, consult the seller for help, do not use other antenna.



1080P HDMI 50m Wireless 2X2 Transmitter & Receiver Matrix with 90 IR

WHD22-165-K User manual

Support many to many

