



J-TECH DIGITAL[®]

V1.0

USER MANUAL



4K@60HZ WIRELESS HDMI EXTENDER
UP TO 196FT TRANSMITTER & RECEIVER KIT WITH IR

JTECH-WEX4K-50

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Scan the QR code below or visit <https://resource.jtechdigital.com/products/3080> to view and access detailed digital resources regarding this unit.



Safety Instructions:

- Before using this product, please carefully read the following safety instructions to ensure its proper use and keep this manual for future reference:
- To prevent electric shock, do not attempt to open the product.
- Only qualified personnel should perform any repairs or maintenance.
- Always place the product on a stable, flat surface to prevent it from falling.
- Do not expose the product to water, moisture, or high-humidity environments to avoid the risk of damage.
- To prevent damage from direct sunlight or high temperatures, do not expose the product to such environments.
- Do not place the product near heat sources like radiators, heat registers, stove, or other heat-producing apparatus.
- Do not place any objects on top of the product to avoid damage.
- Use only the attachments and accessories specified by the manufacturer.
- During lightning storms or prolonged periods of disuse, unplug the power supply to prevent damage.

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1. Introduction

This is a 4K@60Hz HDMI wireless extender, including a transmitter and a receiver. Adopting ipcolor STREAM technology can realize high definition and low-latency transmission. Based on the 5G wireless frequency band, with stable anti-interference and safety performance. It supports 1-to-1 wireless transmission, and the transmission distance can reach 50 meters, effectively solving problems caused by complicated wiring. It's an ideal wireless video transmission solution for video conferences, home entertainment, multimedia education, etc.

Note:

- 1) Transmission distances may vary depending on the environment.
- 2) Signals may be reduced or completely lost by solid structures such as walls, bricks, and glass.
- 3) The surrounding wireless signal may cause certain interference to the transmission, and the channel can be switched to reduce the interference.

2. Features

1. Adopting ipcolor STREAM technology can realize high definition and low-latency transmission.
2. Supports up to 3840x2160@60Hz resolution, backward compatible.
3. Supports wireless transmission up to 50 meters (line of sight).
4. The transmitter supports HDMI loop out.
5. In case of multiple sets of products in the same area, support SSID pairing and channel switching to avoid interference.
6. Supports IR passback.
7. Supports 5G wireless frequency bands, strong anti-interference.
8. Supports firmware upgrade via Micro USB port.

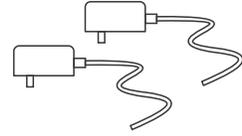
3. Package Contents



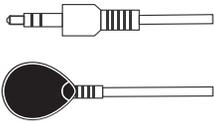
Transmitter x1



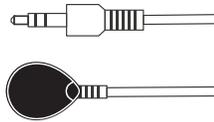
Receiver x1



DC 12V/1A
adapter x2



IR receiver extension
cable x1



IR blaster extension
cable x1



Antenna x4



Grounding
screw x2



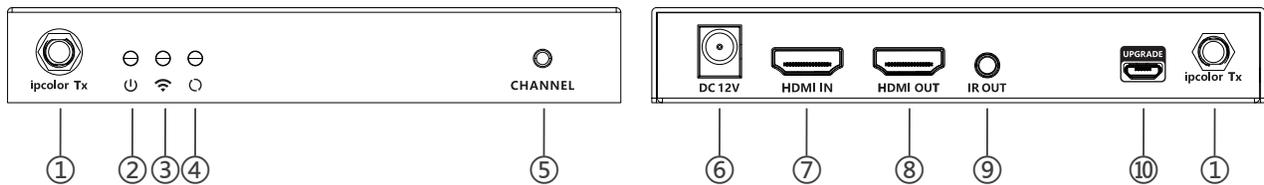
User manual x1

4. Installation Requirements

1. HDMI source device (DVD, game console, PC, etc.)
2. HDMI display device (TV, projector, LED screen, etc.)

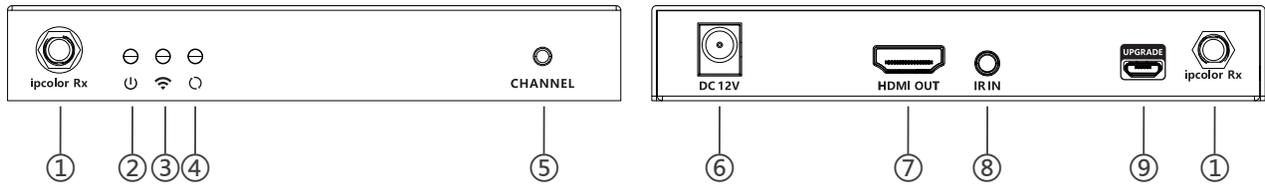
5. Panel Description

5.1 Transmitter (TX)



| | | |
|---|-----------------------|--|
| ① | Antenna connectors | Connect with antennas |
| ② | Power indicator | The indicator will turn blue when the power is turned on |
| ③ | WiFi indicator | a) Slow flash: waiting for connection b) Steady on: connection succeeded c) Quick flash: SSID Pairing mode |
| ④ | Signal indicator | a) Light off: no HDMI signal b) Steady on: HDMI signal is transmitting c) Quick flash: restore factory settings |
| ⑤ | Channel switch button | a) press to switch channels b) Press and hold 5s for SSID pairing c) Press and hold 10s for restore factory settings |
| ⑥ | Power input | Connect with DC 12V/1A power adapter |
| ⑦ | HDMI input | Connect with HDMI source device with HDMI cable |
| ⑧ | HDMI output | Connect with local HDMI display device with HDMI cable |
| ⑨ | IR out | Connect with IR blaster extension cable |
| ⑩ | Micro USB port | Used for firmware upgrade |

5.2 Receiver (RX)

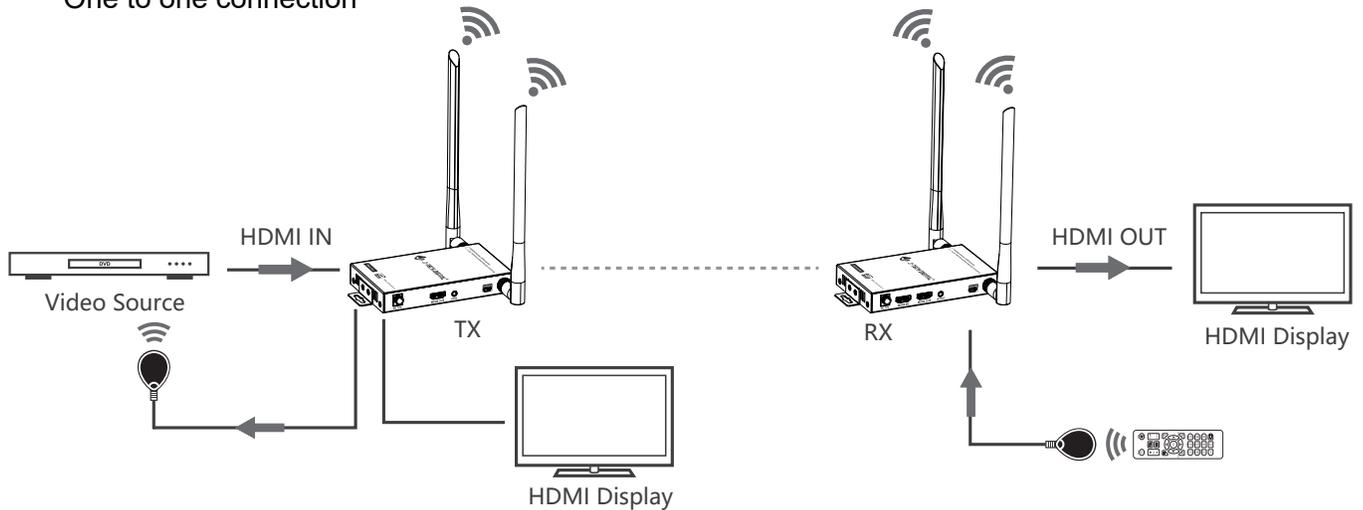


| | | |
|---|-----------------------|--|
| ① | Antenna connectors | Connect with antennas |
| ② | Power indicator | The indicator will turn blue when the power is turned on |
| ③ | WiFi indicator | a) Slow flash: waiting for connection b) Steady on: connection succeeded c) Quick flash: SSID Pairing mode |
| ④ | Signal indicator | a) Light off: no HDMI signal b) Steady on: HDMI signal is transmitting c) Quick flash: restore factory settings |
| ⑤ | Channel switch button | a) After connecting with TX, press to switch channels b) Press and hold 5s for SSID pairing c) Press and hold 10s for restore factory settings |
| ⑥ | Power input | Connect with DC 12V/1A power adapter |
| ⑦ | HDMI output | Connect with HDMI display device with HDMI cable |
| ⑧ | IR in | Connect with IR receiver extension cable |
| ⑨ | Micro USB port | Used for firmware upgrade |

6. Installation Procedures

6.1 Connection Diagrams

One to one connection



6.2 Connection Instructions

- 1) Connect the source device to the HDMI IN port of the transmitter with an HDMI cable, and connect the HDMI OUT port of the receiver to the display device with another HDMI cable.
- 2) If using the IR passback function, connect the IR blaster extension cable into the IR OUT port of the transmitter, and connect the IR receiver extension cable into the IR IN port of the receiver.
 - a: The emitter of the IR blaster extension cable should be as close as possible to the IR receiving window of the source device.
 - b: Point the remote control at the receiving head of the IR receiver extension cable to operate.
- 3) Plug the power supply into the devices to get started.
- 4) In the case of multiple sets being used at the same time in the same area. In order to prevent mutual interference, switch each set of transmitters and receivers to a different channel after they have been manually paired with the SSID.

6.3 SSID Pairing

- 1) Enter the SSID pairing mode by holding the transmitter and receiver's channel switch buttons for five seconds. Both WiFi connection indicators will flash quickly in yellow.
- 2) When the SSID pairing is successful, the WiFi indicators on the transmitter and receiver will change from quick flashing to slow flashing or steady on.

| NO. | Frequency |
|------------|------------------|
| Channel 1 | 5.180 GHz |
| Channel 2 | 5.200 GHz |
| Channel 3 | 5.220 GHz |
| Channel 4 | 5.240 GHz |

7. FAQ

Q: Why the receiver and transmitter cannot be connected, showing "Search ipcolor Tx..." on the screen?

- A: 1) Move transmitter and receiver closer.
 2) Re-power the transmitter or receiver.
 3) Re-pair the transmitter and receiver.

Q: Why the Wi-Fi indicator is steady on but showing "Please check the TX input signal" ?

- A: 1) Make sure the TX has HDMI input and that the resolution is within the specified range.
 2) Try to connect the signal source directly to the display device, or change the signal source and HDMI cable and test again.

Q: Why is the display stuttering or unstable?

- A: 1) Place the transmitter or receiver within the signal coverage and minimize obstructions between the transmitter and receiver.
 2) Switch to a different channel to avoid interference from other wireless signals.
 3) Re-power the receiver or transmitter.

8. Specification

| Items | | Specifications |
|---------------------------------------|------------------------------|---|
| Power Supply | Voltage/Current | DC 12V/1A |
| | Power consumption | TX ≤ 6W, RX ≤ 4W |
| HDMI Performance and Interface | HDMI version | HDMI 2.0 |
| | HDCP version | HDCP 1.4/HDCP 2.2 |
| | Maximum transfer rate | 18Gbps |
| | Resolution supported | 3840x2160@24/30/50/60Hz, 1080P@50/60Hz, 720P@50/60Hz, 1920x1200, 2560x1440, 2560x1600 |
| | Input and output TMDS signal | 0.7~1.2Vp-p (TMDS) |
| | Input and output DDC signal | 5Vp-p (TTL) |
| Transmission | Wi-Fi Frequency bands | 5.18~5.24 GHz |
| | Transmission distance | ≤ 50m |
| | Latency | 130~250ms |
| | Connection types | One-to-one |
| | SSID pairing | Supported |
| Protection Level | ESD protection | 1a Contact discharge level 3 1b Air discharge level 3 Standard: IEC61000-4-2 |
| IR Performance | Infrared frequency | 20~60kHz |
| | Receiving range | ≤ 5m |
| Operating Environment | Working temperature | -20~60 ℃ |
| | Storage temperature | -30~70 ℃ |
| | Humidity (no condensation) | 0~90% RH |
| Physical Properties | Dimension | TX: 133(W) x 78.8(L) x 20.6(H) mm RX: 133(W) x 78.8(L) x 20.6(H) mm |
| | Color | Black |
| | Material | Iron |
| | Net weight | TX: 310g; RX: 304g |

9. Maintenance

Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner, or benzine to clean.

10. Warranty

If your product does not work properly because of a defect in materials or workmanship, our company (referred to as “the warrantor”) will, for the length of the period indicated as below, “Parts and Labor (1) Year”, which starts with the date of original purchase (“Limited Warranty period”), at its option either (a) repair your product with new or refurbished parts, or (b) replace it with a new or a refurbished product. The decision to repair or replace will be made by the warrantor.

During the “Labor” limited warranty period, there will be no charge for labor. During the “Parts” warranty period, there will be no charge for parts. You must mail-in your product during the warranty period. This Limited Warranty is extended only to the original purchaser and only covers products purchased as new. A purchase receipt or other proof of original purchase date is required for Limited Warranty service.

11. Mail-In Service

When shipping the unit, carefully pack and send it prepaid, adequately insured, and preferably in the original carton. Include a letter detailing the complaint and provide a day time phone and/or email address where you can be reached.

12. Limited Warranty Limits and Exclusions

This Limited Warranty ONLY COVERS failures due to defects in material or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage. The Limited Warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, mis- adjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, or service by anyone other than a Factory Service center or other Authorized Servicer, or damage that is attributed to acts of God.

There are no express warranties except as listed under “Limited Warranty Coverage”. The warrantor is not liable for incidental or consequential damages resulting from the use of this product or arising out of any breach of this warranty. (As examples, this excludes damages for lost time, cost of having someone remove or re-install an installed unit if applicable, travel to and from the service, loss of or damage to media or images, data or other recorded content. The items listed are not exclusive but are for illustration only). Parts and service, which are not covered by this limited warranty, are your responsibility.



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