HDMI Wireless Extender with One-way IR (100M)

User Manual

VER 1.1

Thank you for purchasing this product

For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lighting strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

Table of Contents

1. Introduction

This product is based on H.265 standard solution for transmitting one HD source signal to one HD display. It extends distance up to 330ft/100 meters (In an open environment without Wi-Fi interference) between the encoder and decoder via wireless transmission. It supports one-way IR control. It offers high quality configurable, low-bandwidth H.265 compression video and supports resolution up to 1080P@60Hz. This wireless extender is designed special to transmit high definition video & audio within one environment.

2. Features

- ☆ HDMI 1.3, HDCP 1.4 and DVI 1.0 compliant
- ☆ Transmit one HDMI HD source signal to one HDMI HD display via wireless technology
- ☆ With one-way IR control
- ☆ Video resolution up to 1080P@60Hz
- ☆ HDMI wireless transmission distance up to 330ft/100m. (In an open environment without Wi-Fi interference.)
- ☆ Supported audio formats: LPCM 2.0CH 32KHz/44.1KHz/48KHz
- ☆ Adopt H.265 high performance codec technology
- ☆ End-to-end delay is less than 120Ms
- ☆ Compact design for easy and flexible installation.

3. Package Contents

Qty	Item
1	HDMI Wireless Extender (Encoder)
1	HDMI Wireless Extender (Decoder)
1	IR Blaster cable (1.5 meters)
1	20~60KHz IR Receiver cable (1.5 meters)
4	5G WiFi Antenna
2	5V/1A Power Adapter
1	User Manual

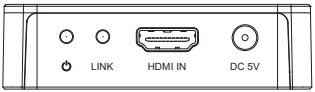
4. Specifications

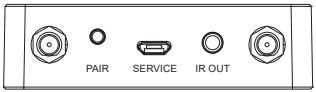
Technical	
HDMI Compliance	HDMI 1.3
HDCP Compliance	HDCP 1.4
Video Bandwidth	6.75Gbps
Video Resolution	1080p, 1080i, 720p, 720i, 480p, 480i, 1920×1080@60Hz，1920×1200@60Hz(Maximum)
Color Space	RGB/YCbCr 4:4:4, YCbCr 4:2:2, YUV 4:2:0
Color Depth	8/10/12-bit (1080P60Hz)
HDMI Audio Formats	LPCM 2.0CH 32KHz/44.1KHz/48KHz
ESD Protection	Human body model — ±8kV (Air-gap discharge) & ±4kV (Contact discharge)
Connection	
Encoder	Inputs: 1x HDMI Type A [19-pin female] Outputs: 1x IR OUT [3.5mm Stereo Mini-jack] 2x WiFi OUT [WiFi antenna] Control: 1x SERVICE [Micro USB, Update port]
Decoder	Inputs: 1x IR IN [3.5mm Stereo Mini-jack] 2x WiFi IN [WiFi antenna] Outputs: 1x HDMI Type A [19-pin female] Control: 1x SERVICE [Micro USB, Update port]
Mechanical	
Housing	Plastic Enclosure
Color	Black
Dimensions	Encoder / Decoder: 76mm [W] x 98mm [D] x 21mm [H]
Weight	Encoder / Decoder: 100g
Power Supply	Input: AC100 - 240V 50/60Hz Output: DC 5V/1A
Power Consumption	Encoder: 2.25W, Decoder: 1.8W
Operating Temperature	32 - 104°F / 0 - 40°C

Storage Temperature	-4 - 140°F / -20 - 60°C
Relative Humidity	20 - 90% RH (no condensation)
Resolution / Cable Length	**1080P60Hz - Feet / Meters**
HDMI IN / OUT	42ft / 15M
The use of “Premium High Speed HDMI” cable is highly recommended.	

5. Operation Controls and Functions

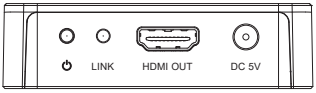
5.1 Encoder Panel

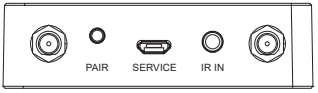




Name	Function Description
Power LED	The LED will illuminate red when the encoder is powered on.
LINK LED (Green)	■ Flicker quickly: The encoder and decoder are pairing. ■ Flicker slowly: The encoder and decoder are transmitting video signal. ■ Illuminate: The encoder is updating firmware. ■ Off: No pairing or no signal transmission after successful pairing.
HDMI IN	HDMI source input port for connecting the HDMI source device.
DC 5V	Connect the DC 5V/1A power adapter.
Antenna port	Connect the WiFi antenna.
PAIR button	■ Short pressing the button will reset the encoder to factory default status. ■ Simultaneously press the PAIR button of the encoder and decoder for 3 seconds to pair.
SERVICE port	Firmware update port.
IR OUT	Connect the IR blaster cable. The IR blaster signal is from the IR IN port on the Decoder.
Antenna port	Connect the WiFi antenna.

5.2 Decoder Panel





Name	Function Description
Power LED	The LED will illuminate red when the decoder is powered on.
LINK LED (Green)	■ Flicker quickly: The encoder and decoder are pairing. ■ Flicker slowly: The encoder and decoder are transmitting video signal. ■ Illuminate: Successful pairing, or the decoder is updating firmware. ■ Off: No pairing or no signal transmission after successful pairing.
HDMI OUT	HDMI output port for connecting the HDMI display device.
DC 5V	Connect the DC 5V/1A power adapter.
Antenna port	Connect the WiFi antenna.
PAIR button	■ Short pressing the button will reset the decoder to factory default status. ■ Simultaneously press the PAIR button of the encoder and decoder for 3 seconds to pair.
SERVICE port	Firmware update port.
IR IN	Connect the IR receiver cable. The IR signal is sent to the IR OUT port on the encoder.
Antenna port	Connect the WiFi antenna.

5.3 Pairing Instruction

Power on the encoder and decoder, then simultaneously press their **PAIR** buttons for three seconds, then **LINK LEDs** on both of them will flicker quickly. If the LINK LED of the decoder turns to illuminate, but the LINK LED of the encoder still flickers quickly, it indicates successful pairing. Then, release the button, both the LINK LEDs will be off. When there is signal transmission between the encoder and decoder, both the LINK LEDs will flicker slowly.

Encoder's LINK LED status (Green)	Decoder's LINK LED status (Green)	Description
Flicker quickly	**Flicker quickly**	The encoder and decoder are pairing.
Flicker quickly	**Illuminate**	Successful pairing.
Off	**Off**	No pairing or no signal transmission after successful pairing.
Flicker slowly	**Flicker slowly**	The encoder and decoder are transmitting video signal.

5.4 Updating Instruction

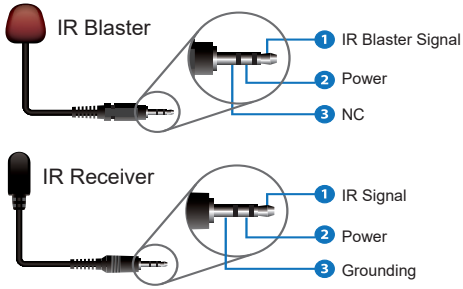
Change the name of the update file to be **update.bin**, then put it in the **root directory** of U disk**.** Power off the unit and insert the U disk into the **SERVICE** port. Press and hold on the **PAIR** button, and power on the unit simultaneously. If the **LINK LED** illuminates, it indicates that the unit is updating the firmware, then release the button. After the updating is finished, the LINK LED will be off automatically.

5.5 IR Pin Definition

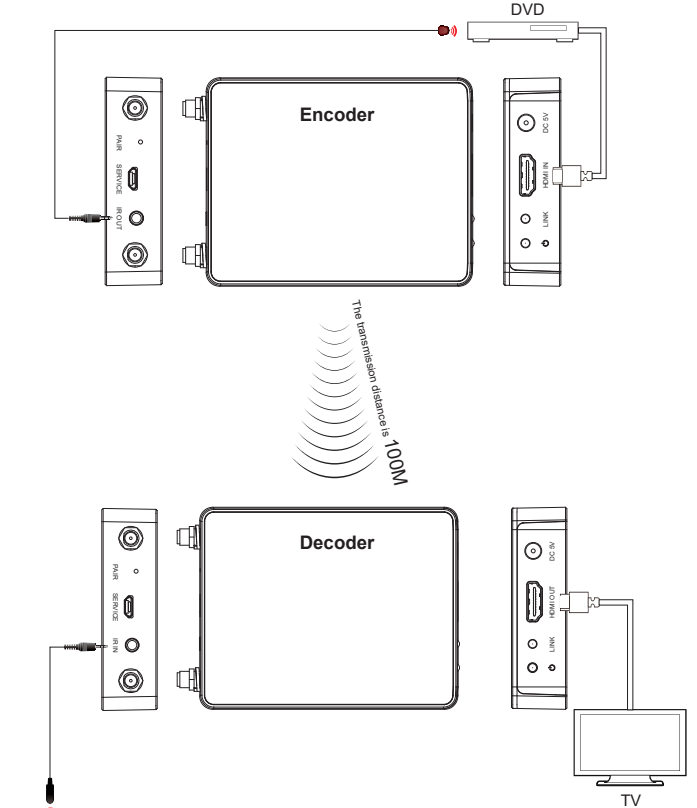
IR Receiver and Blaster pin's definition is as below:

IR RECEIVER

IR BLASTER



Connection diagram of using IR cables.



Note that when the angle between the IR receiver and the remote control is ± 45 °, the transmission distance is 0-5 meters; when the angle between the IR receiver and the remote control is ± 90 °, the transmission distance is 0-8 meters.

6. Application Example