



[www.alfatronelectronics.com](http://www.alfatronelectronics.com)  
Alfatron Electronics GmbH Germany  
**ALF-EXT60IR**



## • Important Safety Notice

1. Please distinguish the transmitter and receiver before installation.
2. Do not disassemble the machine to repair the product during the working process to avoid electric shock.
3. Please cut off the power before installation. Live installation may damage the equipment.
4. Do not expose the devices to rain, moisture and liquid.
5. Use a 5V/2A DC adapter only. Make sure the specification matched if using 3rd party DC adapters.

## • Introduction

This HDMI Extender includes a transmitter unit and a receiver unit, allows the HDMI signal to be transmitted up to 70 meters using a Cat6/6A/7 network cable. It adopts a point-to-point connection configuration, supports bi-directional IR pass-back. It is perfect for outdoor advertising, monitor system, home entertainment, conference, etc.

## • Features

1. Zero latency.
2. Support up to 4K@30Hz resolution.
3. Support CAT6/6A/7 network cables, 1080p@60Hz transmission distance is up to 70 meters, 4K30Hz transmission distance is up to 40 meters.
4. Support bi-directional IR pass-back function (20 ~ 60KHz).
5. Support HDR10.
6. Support EDID passthrough.
7. Transmitter supports HDMI loop-out.
8. Lightning Protection, Surge Protection, ESD Protection.
9. Support PoC network cable power supply, only TX power supply is needed.

## • Package Contents



Transmitter unit x1pc



Receiver unit x1pc



DC5V/2A x1pc



User manual x1pc



IR blaster extension  
cable x2pc



IR receiver extension  
cable x2pc



Mounting brackets



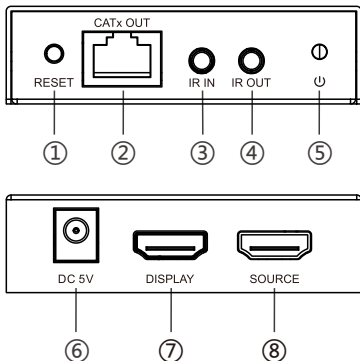
Screws

## • Installation Requirements

1. HDMI source device (compute graphics card, DVD, PS3, )HD monitoring equipment etc.
2. HDMI display device like SDTV, HDTV, projector with HDMI port.
3. UTP/STP CAT6/CAT6A/CAT7 cable. Follow standard IEEE-568B,  
It is recommended to select a network cable with less loss and crosstalk.

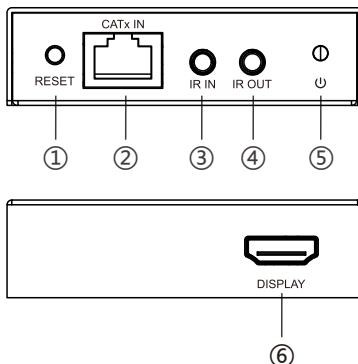
## • Interfaces

### 1. Transmitter (TX)



①	Reset button	Press to restart the device
②	RJ45 signal output	Output modulated HDMI signal.
③	IR in	Connect the IR receiver extension cable to ensure that the remote control used is within the range of the IR receiving device.
④	IR out	Connect the IR blaster extension cable, please keep the infrared transmitter as close as possible to the signal source device when using.
⑤	Power/Signal indicator	a. When power is on and no HDMI signal is transmitted, the indicator flashes. b. When power is on and HDMI signal is transmitted, the indicator is always on.
⑥	DC 5V input	Connect to the 5V/2A DC power adapter.
⑦	HDMI output	Connect to a local HDMI display device.
⑧	HDMI input	Connect to a HDMI source device.

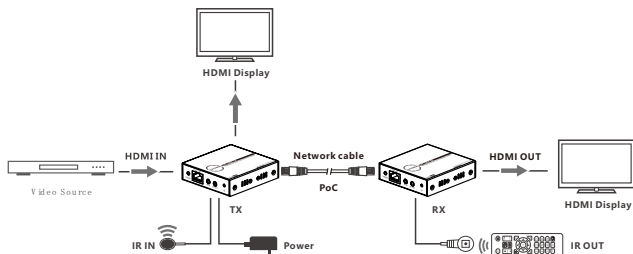
## 2. Receiver (RX)



①	Reset button	Press to restart the device
②	RJ45 signal input	Input modulated HDMI signal.
③	IR in	Connect the IR receiver extension cable to ensure that the remote control used is within the range of the IR receiving device.
④	IR out	Connect the IR blaster extension cable, please keep the infrared transmitter as close as possible to the signal source device when using.
⑤	Power/Signal indicator	a. When power is on and no HDMI signal is transmitted, the indicator flashes. b. When power is on and HDMI signal is transmitted, the indicator is always on.
⑥	HDMI output	Connect to a HDMI display device.

# • Installation Procedures

## 1. Connection



The network cable should follow the standard of IEEE-568B. It is recommended to select a network cable with less loss and crosstalk.

- |                |              |               |
|----------------|--------------|---------------|
| 1-Orange/white | 2-Orange     | 3-Green/white |
| 4-Blue         | 5-Blue/white | 6-Green       |
| 7-Brown/white  | 8-Brown      |               |



## 2. Connection instruction

- 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 ) Connect the CAT out port of the transmitter and the CAT in port of the receiver via a network cable (CAT6/CAT6A/CAT7).
- 3 ) If using HDMI loop out, connect the display device to the HDMI OUT port of the transmitter.
- 4 ) Plug the power supply into the device to get started.

**[NOTE]:** It is recommended to use a length range within 2~70m network cable. If the cable is too short, there may be no display output because the signal is too strong. If the cable is too long, the output may be with poor quality.

### **3. IR User Guide**

- 1 ) IR blaster extension cable should plug in the IR OUT port of the transmitter or receiver, IR receiver extension cable should plug in the IR IN port of the transmitter or receiver.
- 2 ) The emitter of the IR blaster extension cable should be as close as possible to the IR receiving window of the source device.
- 3 ) Face the receiving head of the IR receiver extension cable to the user for convenient remote control.

## • Specification

Items		Specification
Power Supply	Voltage/Current	DC5V/2A
	Power consumption	TX < 4W RX < 4W
HDMI Performance And Interface	HDMI compliance	HDMI 1.4
	HDCP compliance	HDCP 1.4
	HDMI resolution	800x600, 1024x768, 1280x720, 1280x960, 1366x768, 1440x900, 1680x1050, 1920x1080, 480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080p@24/25/30/50/60Hz, 3840x2160@24/25/30Hz
	Supports audio formats	PCM, LPCM, DTS HD, DTS Audio
	Input and output TMDS signal	0.7~1.2Vp-p(TMDS)
	Input and output DDC signal	5Vp-p(TTL)
	Input cable length	≤8m(AWG24)
	Output cable length	≤8m(AWG24)
Transmission Distance	Cat6/6A/7	1080p@60Hz transmission 70 meters 4K@30Hz transmission 40 meters
Protection Level	Electrostatic protection of the whole machine	Implementation of the standard: IEC61000-4-2 1a Contact discharge Level 2 (±4KV) 1b Air discharge Level 3 (±8KV)
Operating Environment	Working temperature	-20~60°C
	Storage temperature	-30~70°C
	Humidity (no condensation)	0~90%RH
Body Properties	Dimension	75.0(L) x 80.0(W) x 18.0(H)mm
	Material	Iron
	Treatment process	Grit blast
	Color	Black
	Weight	TX: 160g RX:160g