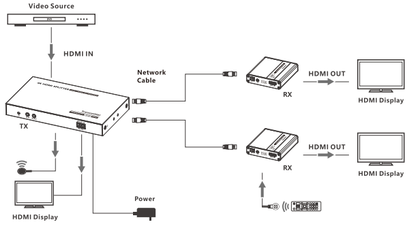
• Installation Procedures

1. Connection Diagrams



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) Use a Cat6/6A/7 cable to connect the RJ45 port of the transmitter and receiver.
3) If using HDMI loop out, connect the display device to the HDMI OUT port of the transmitter.
4) If using IR passthrough, the IR blaster extension cable should plug in the IR OUT port, the IR receiver extension cable should plug in the IR IN port.
5) If you need to output audio additionally, connect the speaker to the L/R port of the receiver with a 3.5mm stereo audio cable.

6) If you need to use RS-232 command control, connect the RS-232 port to the control device.
7) Plug the power supply into the devices to get started.

3. IR User Guide

IR blaster

1. Power
2. IR Signal
3. Null

IR receiver

1. Power
2. IR Signal
3. Grounding

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) Point the remote control at the receiving head of the IR receiver extension cable to operate.

• RS-232 SETTING

Baud rate: 9600
Data bits: 8
Stop bits: 1
Parity: none

Control Commands	Function Descriptions	
ES XX On【Enter】	1) Turn on the network signal output port(s), choose from "01" to "02" (the network ports from left to right are: 01, 02) 2) "All" means all four ports	
ES XX Off【Enter】	1) Turn off the network signal output port(s), choose from "01" to "02" (the network ports from left to right are: 01, 02) 2) "All" means all four ports	
Reset【Enter】	Restart the device	
Recover【Enter】	Restore device factory settings	
Baud XX【Enter】	Set the baud rate value: 9600 (default), 19200, 38400, 57600, 115200	
Examples of control commands are shown below:		
Control Command1	ES 02 On【Enter】	
Function Description	Turn on network signal output port 02	
Return Values	Received successfully	ES 02 On OK
	Receive failed	ES 02 On FAIL
Control Command2	ES All Off【Enter】	
Function Description	Turn off all the network signal output ports	
Return Values	Received successfully	ES All Off OK
	Receive failed	ES All Off FAIL
Control Command3	Reset【Enter】	
Function Description	Restart the device	
Return Values	Received successfully	Reset OK
	Receive failed	Reset FAIL
Control Command4	Baud 19200【Enter】	
Function Description	Set the baud rate value: 19200	
Return Values	Received successfully	Baud 19200 OK
	Receive failed	Baud 19200 FAIL

Note that you need to press the 'Enter' key to send the control command.

• FAQ

Q: Why there is no image output on the display device?
A: 1) Please check the power supply and all the cables are well-connected.
2) Please check whether there is an HDMI signal input.
3) Please make sure that the corresponding network port output is not turned off by the RS-232 command.
Q: Why is the output image unstable?
A: 1) Please check whether the length of the network cable is within the specified range.
2) Press the "reset" button on TX or RX to restart and reconnect.
Q: Why does the TV have a snowy/fuzzy screen?
A: 1) Change to a better quality or shorter HDMI cable, the recommended length of HDMI cable is less than or equal to 5 meters.
2) Try another network cable and make sure that the length is within the specified range.

• Technical Parameters

Item		Specification
Mode		1 in 2 out
HDMI Perfomance	Compatibility	HDMI 1.4, HDCP1.4
	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、4K@24/25/30Hz
	Audio Formats	PCM、LPCM、DTS-HD、DTS-Audio
Transmission distance	CAT6/6A/7	1080p@60Hz≤70 meters 4K@30Hz≤40 meters
IR Passback	Bi-directional IR passback (20-60khz)	

RS-232	3Pin: GND-RxD-TxD, follows RS-232 levels Default baud rate: 9600	
Operating Environment	Working temperature	-20~60℃
	Storage temperature	-30~70℃
	Humidity	0~90% RH
Protection	ESD protection 1a Contact discharge level 2 (±4KV) 1b Air discharge level 3 (±8KV) Implementation of the standard: IEC61000-4-2	
	Lightning protection	
	Surge protection	
Power	Supply	TX: DC12V/1A RX: DC5V/1A
	Consumption	TX < 10W RX < 2.5W
Physical Properties	Housing	Iron
	Color	Black
	Weight	TX: 280g RX: 160g x2
	Dimensions	TX: 151.5(L) x 86.5(W) x 19.0(H)mm RX: 75.0(L) x 80.0(W) x 18.0(H)mm

Disclaimer

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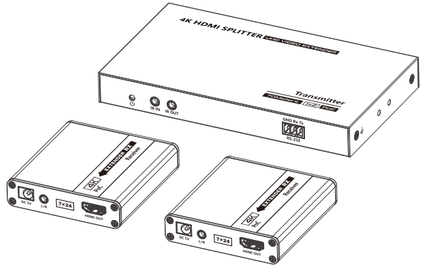
User Manual

1x2 HDMI Splitter With Extender



HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

• Important Safety Instructions:

1) Do not place this apparatus near or over a radiator or heat register, or where it is exposed to direct sunlight.
2) Place the device in a well-ventilated area, do not block any ventilation openings.
3) Do not expose this apparatus to rain or place it near water. Any liquid that goes into the apparatus may cause a failure, fire, or electric shock.
4) Do not place the device on an uneven or unstable surface. The device may fall resulting in a malfunction.
5) Never insert anything metallic into the open parts of this apparatus. This may cause a danger of electric shock.
6) If a three-party power supply is used, please ensure that the power supply specifications meet the product requirements.

• Introduction

This product is a 1 input 2 outputs splitter extender kit, It distributes 1 HDMI input signal to 2 identical signal outputs, extends these signals up to 70 meters. support 4K30Hz resolution, bi-directional IR passthrough, RS-232 control and 3.5mm L/R audio output functions.
It is suitable for outdoor advertising, studios, multimedia classrooms, etc.

• Features

1. Zero-latency transmission.
2. Support up to 4K@30Hz resolution, downward compatible.
3. Support HDR10.
4. Distribute 1 HDMI source to 2 HDMI displays.
5. Support CAT6/6A/7 network cable, which can transmit 1080p signal up to 70 meters and 4K30Hz signal up to 40 meters.
6. Support power over network cable, only the transmitter needs to be powered.
7. The transmitter support HDMI loop out.
8. Support bi-directional IR passthrough(20~60KHz).

9. Support RS-232 command control.
10. Surge Protection, Lightning Protection, ESD Protection.

• Package Contents


Transmitter x1


Receiver x2


User manual x1


DC12V/1A x 1


IR receiver extension cable x2


IR blaster extension cable x1


Terminal block (RS-232) x1


Mounting ear x2

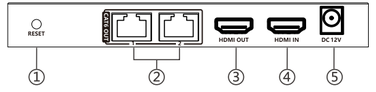

Screw x8

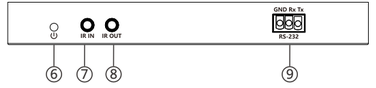
• Installation Requirements

Item	Description	Requirement
Signal source	Devices with HDMI port (PC, DVD, NVR, etc.)	HDMI cable ≤5m
Cable	CAT6/6A/7, following standard IEEE-568B	CAT6/6A/7≤70m
Display device	TV, projector, etc. with HDMI port	HDMI cable ≤5m

• Panel Description

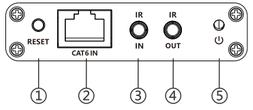
Transmitter (TX)

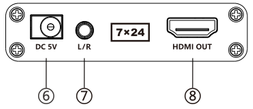




①	Reset button	Press to restart the device
②	RJ45 signal output	Connect with CAT6/6A/7 network cable
③	HDMI signal output	Connect with HDMI display device
④	HDMI signal input	Connect with HDMI source
⑤	Power input	Connect with DC12V/1A power adapter
⑥	Power indicator	a. When power is on and no HDMI signal is transmitted, the indicator flashes b. When power is on and HDMI signal is transmitted, the indicator is always on
⑦	IR in	Connect with IR receiver extension cable
⑧	IR out	Connect with IR blaster extension cable
⑨	RS-232	Connected to a control device (like computer), input control commands for management

2. Receiver (RX)





①	Reset button	Press to restart the device
②	RJ45 signal input	Connect with CAT6/6A/7 network cable
③	IR in	Connect with IR receiver extension cable
④	IR out	Connect with IR blaster extension cable
⑤	Power 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	Power input	Connect with DC5V/1A power adapter (No need to connect to power when the transmitter is powered)
⑦	3.5mm L/R out	Connect headphones or power amplifiers to output stereo audio
⑧	HDMI signal output	Connect with HDMI display device