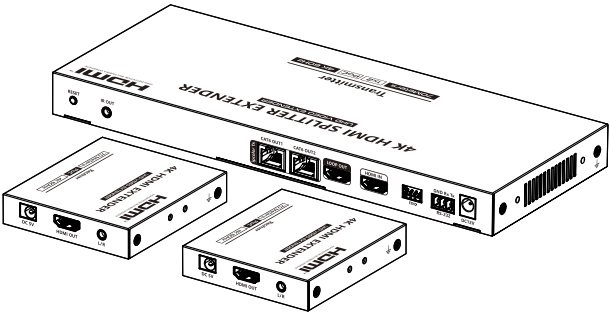


H23131英文说明书AH2: 0106010022354

材质: 157g铜版纸 骑马钉

尺寸: 100x138mm

# 1x2 HDMI Splitter Extender



## Disclaimer

The product name and brand name may be registered trademark of related manufactures. ™ and ® may be omitted on the user manual. The pictures in this user manual are just for reference. We reserve the rights to make changes without further notice to a product or system described herein to improve reliability, function or design.



The terms HDMI, HDMI High-Definition Multimedia Interface, HDMI Trade dress and the HDMI Logos are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

## • Important safety notice:

1. Do not expose this device to rain, moisture and liquid.
2. Do not put any stuff into the device.
3. Do not disassemble or repair this device without qualified service technician.
4. Make sure the specification matched if using 3rd party DC adapters.

## • Introduction

This product is a 1 input 2 outputs extender splitter kit, which integrates the functions of distribution and extension. It distributes 1 HDMI input signal to 2 identical signal outputs, extends these signals up to 70 meters, and supports 4K60Hz resolution. It also supports IR passback, RS-232 control and other functions. It is suitable for studios, multimedia classrooms, rail transit, etc.

## • Features

1. Zero latency transmission.
2. Split and extend one HDMI input signal to two identical network output signals.
3. Support up to 4K@60Hz resolution.
4. Transmission distance up to 70 meters by using Cat6/6A/7 cables.
5. Support IR passback (20KHz~60KHz).
6. The transmitter supports HDMI loop out.
7. The receiver supports 3.5mm stereo output.
8. Support EDID switch for setting.
9. Support RS-232 command control.
10. Surge Protection, Lightning Protection, ESD Protection.
11. Equipped with rack mount ears.
12. Support PoC, only the transmitter is required to supply power.
13. Supports stable 24/7 operation.

## • Package Contents



HDMI splitter extender  
TX x1pcs



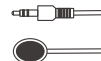
HDMI splitter extender  
RX x2pcs



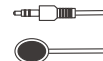
User manual x1pcs



DC12V/1A x1pcs



IR blaster extension  
cable x1pcs



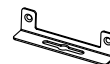
IR Receiver extension  
cable x2pcs



Terminal block  
(RS-232) x1pcs



Mounting brackets  
x4pcs



Mounting brackets  
x2pcs



Screw x16pcs



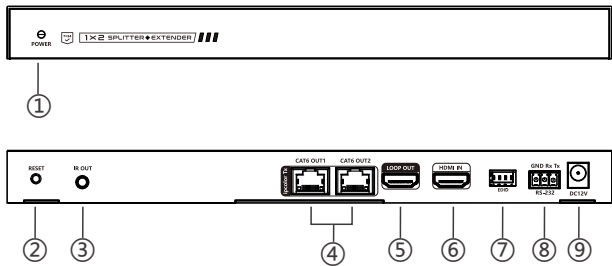
Grounding  
Screw x4

## • Installation Requirements

1. HDMI source device (PC, DVD, play station, etc.)
2. HDMI display device (TV, monitor, projector, etc.)
3. UTP/STP CAT6/CAT6A/CAT7 cable. Follow standard IEEE-568B.  
It is recommended to choose high-quality network cables.

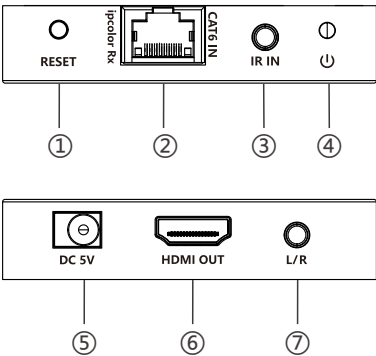
• Panel Description

Transmitter (TX)



①	Power/Signal indicator	When there is power and no HDMI signal, the indicator will flash, when there is HDMI signal, the indicator will light solid
②	Reset button	Press to restart the device
③	IR out	Connect with IR blaster extension cable
④	RJ45 output port	Connect with Cat6/6A/7 network cables
⑤	HDMI output port	Connect with local HDMI display device with HDMI cable
⑥	HDMI input port	Connect with HDMI source device with HDMI cable
⑦	EDID DIP switch	Set output resolution through EDID DIP switch
⑧	RS-232 Port	Connect with the external device to control the transmitter.
⑨	Power	Connect with DC 12V/1A power adapter

Receiver (RX)



①	Reset button	Press to restart the device
②	RJ45 input	Connect with CAT6/6A/7 network cable
③	IR in	Connect with IR receiver extension cable
④	Power/Signal indicator	When there is power and no HDMI signal, the indicator will flash, when there is HDMI signal, the indicator will light solid
⑤	DC5V	Connect with DC 5V power adapter (PoC, only TX power supply is needed)
⑥	HDMI output	Connect with HDMI display device with HDMI cable
⑦	3.5mm stereo output	Connect with earphone or speaker

## • Installation Procedures

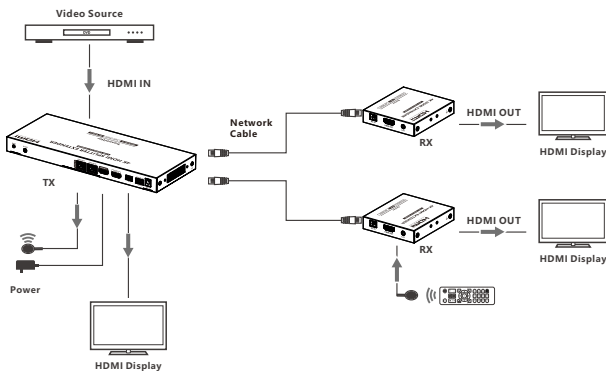
### 1. Network cable

Follow the standard of IEEE-568B:

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



### 2. Connection



### 3. Connection instructions

- 1) Connect the source device to the HDMI IN port of the transmitter through an HDMI cable.
- 2) Connect the CAT6 OUT ports of the transmitter to the CAT6 IN port of the receivers through the network cables.
- 3) Connect the HDMI OUTPUT port of the receivers to the display devices through HDMI cables.
- 4) If using HDMI loop out, connect the LOOP OUT port of the transmitter to the display through an HDMI cable.
- 5) If using the RS-232 control, connect the RS-232 port of the transmitter to an external device.
- 6) Plug the power into the devices to get started.

### 4. IR User Guide

- 1) IR blaster extension cable should plug in the IR OUT port of the transmitter, IR receiver extension cable should plug in the IR IN port of the receivers.
- 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.

## • Function setting

### 1. RS-232 settings

The default configuration is as follows:

Baud rate: 9600

Data bits: 8

Stop bits: 1

Parity: 0

Control Commands	Function Descriptions
ES XX On 【Enter】	Turn on the network signal output port(s), choose "01" / "02" (the network ports from left to right are: 01, 02.); "All" means all two ports
ES XX Off 【Enter】	Turn off the network signal output port(s), choose "01" / "02" (the network ports from left to right are: 01, 02.); "All" means all two 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 Command	ES 01 On 【Enter】
Function Description	Trun on network signal output port 01
Return Values	Received successfully      ES 01 On OK
	Receive failed              ES 01 On FAIL
Control Command	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 Command	Reset 【Enter】
Function Description	Restart the device
Return Values	Received successfully      Reset OK
	Receive failed              Reset FAIL
Control Command	Baud 19200 【Enter】
Function Description	Set the baud rate value: 19200

Return Values	Received successfully	Baud 19200 OK
	Receive failed	Baud 19200 FAIL

## 2. EDID settings:

There are 16 built-in EDIDs in the product, which can be switched through the DIP switch. The upward DIP switch indicates "1", and the downward DIP switch indicates "0".



Switch up for "1"



Switch down for "0"

Switch Status				EDID Information
1	2	3	4	
0	0	0	0	4K@60Hz 2CH
1	0	0	0	4K@60Hz 5.1CH
0	1	0	0	4K@60Hz 5.1CH HDR
0	0	1	0	4K@30Hz 2CH
0	0	0	1	4K@30Hz 5.1CH
1	1	0	0	4K@30Hz 5.1CH HDR
1	0	1	0	1080p@60Hz 2CH
1	0	0	1	1080p@60Hz 5.1CH
0	1	1	0	1080p@60Hz 5.1CH HDR
0	1	0	1	1080p@60Hz 7.1CH
0	0	1	1	1080p@60Hz 7.1CH HDR
1	1	1	0	1080i@60Hz 2CH
1	1	0	1	1080i@60Hz 5.1CH
1	0	1	1	1080i@60Hz 7.1CH

0	1	1	1	1080i@60Hz 7.1CH HDR
1	1	1	1	Copy loop out

## • 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 70 meters.  
 2) Press the "reset" button on TX and RX panels to restart and reconnect.

Q: Why does the TV have a snowy/fuzzy screen?

- A: 1) Please change the HDMI cable or use a shorter HDMI cable.  
 2) The recommended length of the HDMI cable connected to the transmitter is  $\leq 3$  meters, and the recommended length of the HDMI cable connected to the receiver is  $\leq 5$  meters.

## • Technical Parameters

Item	Specification
Transmission protocol	ipcolor
Distribution mode	1 IN 2 OUT
Transmission distance	CAT6/6A/7 $\leq 70$ m
HDMI signal	HDMI 2.0, HDCP 2.2
HDMI Resolution	480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080p@50/60Hz, 1280x960, 1280x800, 1280x1024, 1680x1050, 1600x1200, 1600x900, 1024x768, 800x600, 1920x1200, 3840x2160@24/25/30/50/60Hz, 4096x2160@24/25/30Hz
Audio formats	4K: LPCM/DTS/Dolby Digital 5.1 ; 1080P: LPCM/DTS/Dolby Digital 5.1/Dolby Digital plus7.1
IR	Support IR passback function (20KHz~60KHz)
RS-232	3 pin: Tx D-Rx D-GND, follows RS-232 levels
Working temperature	-20~60°C
Storage temperature	-30~70°C
Humidity (no condensation)	0~90% RH
Protection	ESD protection 1a Contact discharge level 2 1b Air discharge level 3 Implementation of the standard: IEC61000-4-2
	Lightning protection
	Surge protection
Power supply	TX:DC12V/1A
Power consumption	TX+RX < 9W
Material	Iron
Color	Black
Weight	TX:670g RX:145g
Dimension	TX: 265.0(L) x 104.0(W) x 23.0(H)mm RX: 85.0(L) x 75.5(W) x 16.5(H)mm