




LENKENG LKV822 1x2 HDMI Splitter With Extender User Manual

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LENKENG LKV822 1x2 HDMI Splitter With Extender



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.

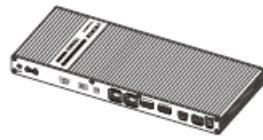
Introduction

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 bi-directional 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 bi-directional IR passback.
6. The transmitter supports HDMI loop out.
7. The receiver can output the digital audio of the TV or source device from the S/PDIF port.
8. Support EDID passthrough or manually set the EDID of the product.
9. Support RS-232 command control.
10. Surge Protection, Lightning Protection, ESD Protection.
11. Equipped with rack mount ears.

Package Contents



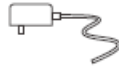
HDMI splitter extender
TX x1 pcs



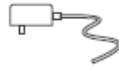
HDMI splitter extender
RX x2 pcs



User manual x1 pcs



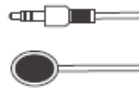
DC12V/2A x1 pcs



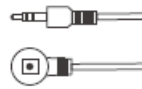
DC5V/2A x2 pcs



Terminal block
(RS-232) x1 pcs



IR blaster extension
cable x1 pcs



IR Receiver extension
cable x2 pcs



Mounting brackets
x12 pcs



Screw x24 pcs

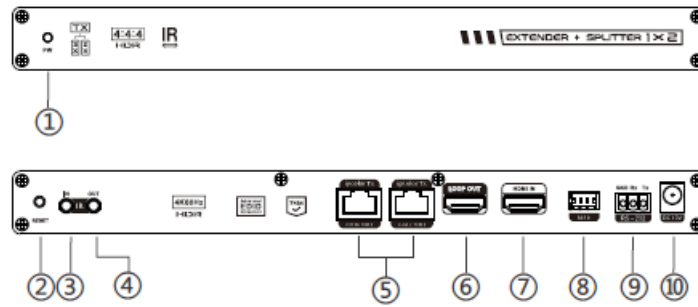
Installation Requirements

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

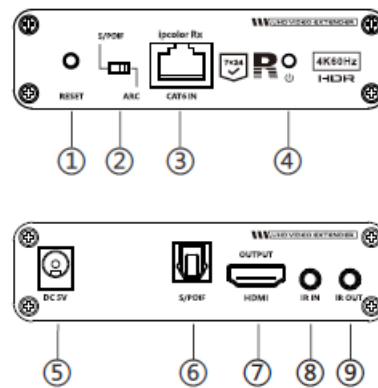
Panel Description

Transmitter (TX)



①	Power indicator	The indicator will turn blue when the power is turned on
②	Reset button	Restart the device
③	IR in	Connect with IR receiver extension cable
④	IR out	Connect with IR blaster extension cable
⑤	RJ45 output port	Connect with Cat6/6A/7 network cables
⑥	HDMI output port	Connect with local HDMI display device with HDMI cable
⑦	HDMI input port	Connect with HDMI source device with HDMI cable
⑧	EDID DIP switch	Set output resolution through EDID DIP switch
⑨	RS-232 Port	Connect with the external device to control the transmitter.
⑩	Power	Connect with DC 12V/2A power adapter

Receiver (RX)

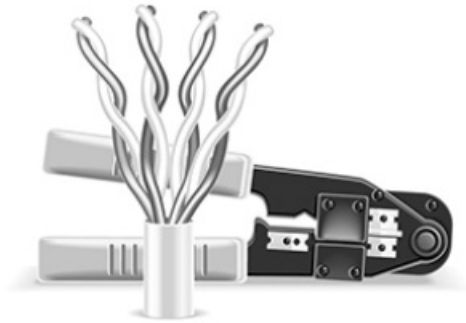


①	Reset button	Restart the device
②	Audio switch	Choose the audio source (output from the S/PDIF port) S/PDIF: from the source device ARC: from the TV (receiver end)
③	RJ45 signal input	Connect with Cat6/6A/7 network cables
④	Power/Signal indicator	When there is power and no HDMI signal, the indicator will flash, when there is HDMI signal, the indicator will light solid blue
⑤	Power	Connect with DC5V/2A power adapter
⑥	S/PDIF output	Connect with speaker or amplifier
⑦	HDMI output	Connect with HDMI display device
⑧	IR in	Connect with IR receiver extension cable
⑨	IR out	Connect with IR blaster extension cable

Installation Procedures

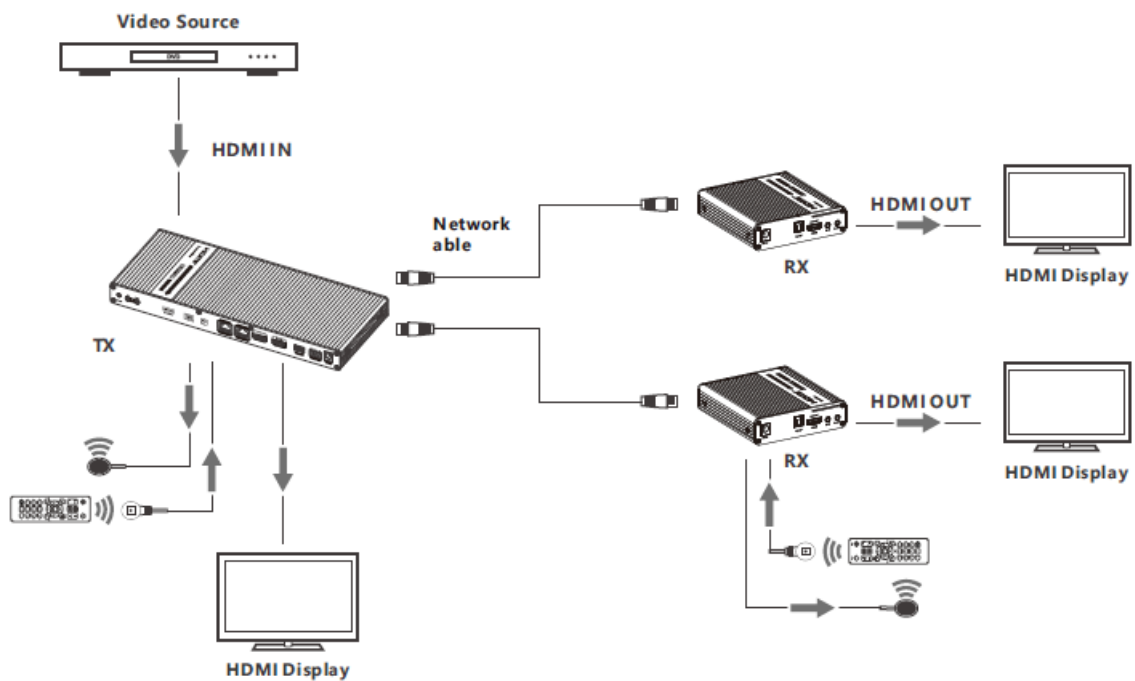
Network cable

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

Connection



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

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 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

RS232 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/n	Turn on the network signal output port(s), choose from "01" to "02" (the network ports from right to left are: 01, 02,.); "All" means all four ports	
ES XX Off/n	Turn off the network signal output port(s), choose from "01" to "02" (the network ports from right to left are: 01, 02.); "All" means all four ports	
Reset/n	Restart the device	
Recover/n	Restore device factory settings	
Baud XX /n	Set the baud rate value: 9600 (default), 19200, 38400, 57600, 115200	
Examples of control commands are shown below:		
Control Command	ES 02 On/n	
Function Description	Trun on network signal output port 02	
Return Values	Received successfully	ES 02 On OK
	Receive failed	ES 02 On FAIL
Control Command	ES All Off/n	
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/n	
Function Description	Restart the device	
Return Values	Received successfully	Reset OK
	Receive failed	Reset FAIL
Control Command	Baud 19200/n	
Function Description	Set the baud rate value: 9600	

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 7.1CH
0	0	1	0	4K@60Hz HDR 7.1CH
0	0	0	1	4K@30Hz 2CH
1	1	0	0	4K@30Hz 5.1CH
1	0	1	0	4K@30Hz 7.1CH
1	0	0	1	4K@30Hz HDR 7.1CH
0	1	1	0	1080p@60Hz 2CH
0	1	0	1	1080p@60Hz 5.1CH
0	0	1	1	1080p@60Hz 7.1CH
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	1080p@60Hz HDR 7.1CH
1	1	1	1	Auto

Auto: Auto output at a resolution compatible with all displays

FAQ

- Q: Why there is no image output on the display device?
 - Please check the power supply and all the cables are well-connected.
 - Please check whether there is an HDMI signal input.
 - 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?
 - Please check whether the length of the network cable is within 70 meters.
 - Press the “reset” button on TX and RX panels to restart and reconnect.
- Q: Why does the TV have a snowy/fuzzy screen?
 - Please change the HDMI cable or use a shorter HDMI cable.
 - The recommended length of the HDMI cable connected to the transmitter is ≤ 3 meters, and the recommended length of the HDMI cable connected to the receiver is ≤ 5 meters.

Technical Parameters

Item	Specification
Transmission protocol	ipcolor
Distribution mode	1 IN 2 OUT
Transmission distance	CAT6/6A/7 ≤70m
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, 1280x768, 1680x1050, 1360x768, 1366x768, 1600x900, 1024x768, 800x600, 3840x2160@24/25/30/50/60Hz, 4096x2160@24/25Hz
Audio formats	LPCM/DTS-HD/DTS-Audio/Dolby Digital 5.1
IR	Bi-directional IR passback (20-60khz)
RS-232	3 pin: GND-RxD-TxD, 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 3 1b Air discharge level 3 Implementation of the standard: IEC61000-4-2
	Lightning protection
	Surge protection
Power supply	TX:DC 12V/2A RX:DC 5V/2A
Power consumption	TX<9W RX<4W
Material	Aluminum alloy material + crystal panel
Color	Black
Weight	TX: 640g RX: 210g
Dimension	TX: 264.00(L) x 104.00(W) x 23.50(H)mm RX: 106.0(L) x 99.0(W) x 26.2(H)mm

Disclaimer

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Documents / Resources

	LENKENG LKV822 1x2 HDMI Splitter With Extender [pdf] User Manual LKV822, 1x2 HDMI Splitter With Extender, LKV822 1x2 HDMI Splitter With Extender, Splitter With Extender
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