



## HDMI EXTENDER SET, FULL HD



### Manual DS-55100-1

The Digitus HDMI Extender Set, Full HD offers an extender solution of up to 50 m for the highest demands. It is used to transmit digital video and audio signals to a maximum length of up to 50 m. The highest supported video resolution is 1080p / 60Hz. The transmitter unit features an EDID switch, which can be used to regulate resolution and audio format of the output signal. The transmitter also has an HDMI Loop Out Port, which allows you to connect a local monitor. Thanks to PoC (Power over Cable) support, it is only the transmitter unit that needs to be powered. The package includes two bidirectional infrared units (transmitter, receiver), which can be used for the remote control of the connected input source.

## Important Safety Notice

Please read below safety instructions carefully before installation and operation:

1. Do not mix up the transmitter unit (TX) and the receiver unit (RX), IR blaster extension cable and IR receiver extension cable before installation.
2. Do not hot plug when it is working.
3. Use DC5V power supply only. Make sure specification matched if using adapters not supplied by factory.
4. This HDMI Extender supports POE to power the receiver (Connect power supply to the transmitter only and receiver is powered by the Transmitter). Please note that this HDMI Extender cannot use with switch or router.

## Product Features

1. Include a transmitter unit (TX) and a receiver unit (RX), working as a pair.
2. Support resolution is up to full HD 1080p@60Hz.
3. Use CAT6/6A/7 for long distance transmission.
4. Transmission distance up to 50 meters via CAT6 cable.
5. Uncompressed and zero latency.
6. With EDID switch for setting a very needed HDMI signal format
7. Support POE to power the receiver from transmitter.
8. Support IR pass-back for remote control source device from receiver site easily.
9. Plug and play, without installation.

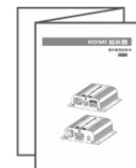
## Package Contents



Transmitter unit  
(Tx) × 1pcs



Receiver unit  
(Rx) × 1pcs



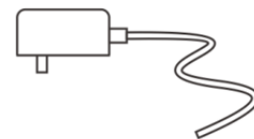
User manual×1pcs



IR blaster extension  
cable ×1pcs



IR receiver extension  
cable×1pcs



Power supply×1pcs

## Specification

Part No.	DS-55100-1	
Technical	Transmitter-TX	Receiver-RX
HDCP compliance	1.2a	
Video bandwidth	225MHz (10.2Gbps)	
Video support	480I/P, 576I/P, 720P, 1080I/P, 3D	
Audio support	PCM, AC3, DTS	
Input TMDS signal	1.2Vp-p	
Input DDC signal	5V	
ESD protection	8KV	
EDID support	yes	
loop-out on TX	one HDMI loop-out on TX	
POE support	RX powered by TX	
IR pass-back	yes	
IR frequency Range (KHz)	20-60KHz	
Mechanical	Transmitter-TX	Receiver-RX
Housing	Metal enclosure	
Dimensions	71.6 x 66.9 x 22.6mm	71.6×66.9×22.6mm
Net weight	70g	70g
Fixedness	wall-mounting case with screws	
Power supply	5V2A	
Consumption	≤3W	≤3W
Operation temperature	0~40°C	
Storage temperature	-20~70°C	
Relative humidity	0~95%(non-condensing)	

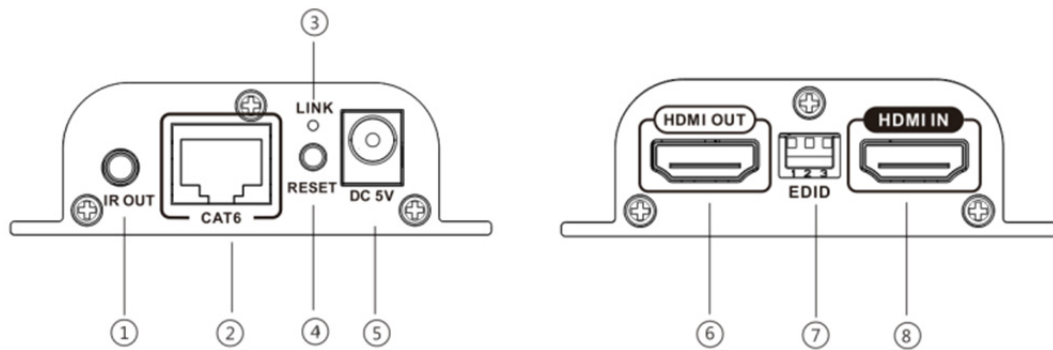
## Installation Requirements

1. HDMI source device (computer graphics card, DVD, PS3, HD monitoring equipment etc.).
2. HDMI display device like SDTV, HDTV, and projector with HDMI port.
3. UTP/STP CAT6/6A/7 cable, follow standard IEEE-568B.

(It is suggested to use shielding network cable to avoid interference based on CE requirement)

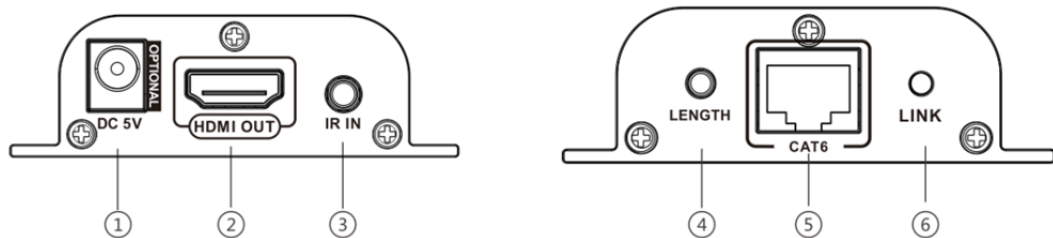
## Penal Description

### 1. Transmitter unit (TX)



- ① IR signal output to connect with blaster extension cable
- ② RJ45 signal output
- ③ HDMI signal indicator led: it lights on all the time when HDMI signal input, flashes when no signal input
- ④ Reset button
- ⑤ DC 5V power input
- ⑥ HDMI signal output
- ⑦ EDID switch
- ⑧ HDMI signal input

### 2. Receiver unit (RX)



- ① DC 5V power input
- ② HDMI signal output
- ③ IR signal input to connect with IR receiver extension cable
- ④ LENGTH: for adjusting to the length of network cable
- ⑤ RJ45 signal input
- ⑥ RJ45 indicator led: it lights on all the time when HDMI signal transmission, flashes when no signal transmission

## Installation and Connection

1. How to make a CAT6/6A/7 network cable Follow the standard of IEEE-568B:

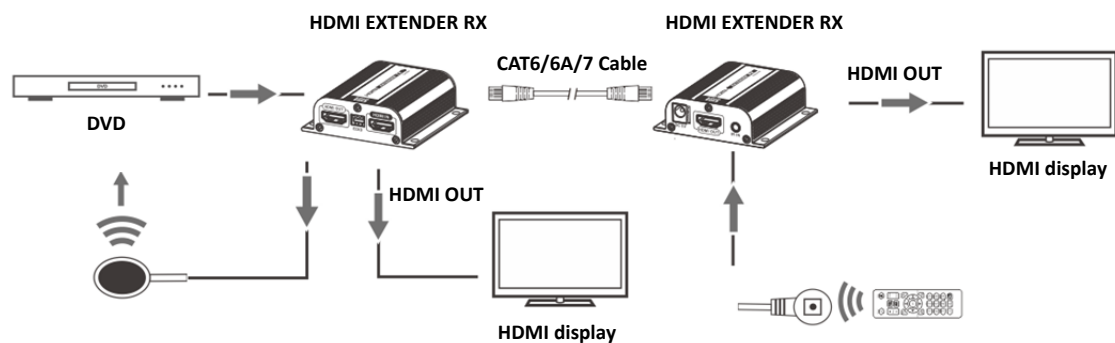


### 1. How to make a CAT5/5E/6 network cake

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 instruction

- 1) Connect source device to Transmitter unit (TX), and display device to Receiver unit (RX) via HDMI cables
- 2) Connect Transmitter unit (TX) and Receiver unit (RX) via network cables (CAT6, CAT6A or CAT7)
- 3) Plug the power supply to Transmitter unit only, each unit will power up then initialize itself, this HDMI extender works

**[NOTE] It is recommended to use a length range within 15~50m network cable.** If the CAT6 cable is too short, there may be no display output because of the signal is too strong. If the CAT6 cable is too long, the output may be with poor quality.

#### **4. IR User Guide**

- 4.1 IR blaster extension cable should plug in the IR OUT port of TX(Sender) of HDMI extender, and the IR receiver extension cable should plug in the IR IN port of the video wall controller
- 4.2 The emitter of IR blaster should as close as possible to the IR receiver window of the signal source device.
- 4.3 Using the IR remote controller of the signal source device towards the IR receiver (connected to the video wall controller), to remote control source media playback.

#### **5. EDID Setting**

- 5.1 First of all, set the resolution mode of the source device; please choose "AUTO" of the resolution mode. (However, when the resolution mode of your source device is "AUTO" already, and the output resolution (for instance, output is 720p) is still not in accord with the resolution that set by the EDID dip switch (for instance, it is 1080p). At this time, please set the resolution of your device again to make it in accord with the resolution that set by the EDID dip Switch (e.g. 1080p)
- 5.2 HDMI source device reads the EDID information of the transmitter (TX) and then output the Relative HDMI signal forma
- 5.3 It needs to power on again or reset the transmitter unit after re-setting EDID every time
- 5.4 When connect a TV with loop-out HDMI port of transmitter (TX), it can adjust EDID switch to read and save this TV's EDID information. When we use this function, it should connect TV with transmitter first, and then power on these devices, so that the EDID will be read and saved successfully. At next time, even though do not connect a TV into the loop-out HDMI Port, the source device will output the saved EDID information last time.

Switch Status			EDID information
switch-1	switch-2	switch-3	
0	0	0	720P@50Hz 2.1CH
1	0	0	720P@50Hz 7.1CH
0	1	0	1080i@60Hz 2.1CH
1	1	0	1080i@60Hz 7.1CH
0	0	1	1080P@60Hz 2.1CH
1	0	1	1080P@60Hz 7.1CH
0	1	1	read and save the EDID of the loop-out TV
1	1	1	Default EDID: 720P@60Hz 2.1CH



Switch UP: use the Arabic numeral “1” to represent



Switch DOWN: use the Arabic numeral “0” to represent

## FAQ

- Q:** No image output or audio and video display is not normal?  
**A:** Press receiver “LENGTH” button for adjusting this unit to self-adapt to the length of network cable.
- Q:** Receiver “LINK” led is flashing all the time?  
**A:**
- 1) Make sure network cable connection follows the standard of IEEE- 568B.
  - 2) Check whether TX has HDMI signal input.
  - 3) Reset TX&RX and reconnect.
- Q:** RX “LINK” led lights on all the time but no image output?  
**A:**
- 1) Press RX “LENGTH” button for adjusting to the length of network cable
  - 2) Make sure HDMI cable is well connected with TV.
  - 3) Make sure the network cable is fine copper wires.

### **Disclaimer**

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