

Important Safety instructions:

1. Do not mix up the Transmitter and Receiver
2. Do not plug/unplug the cables when in use.
3. Use the provided 5V DC power supply only.
4. Only one power adapter for the Transmitter is needed when using point to point connection.

• Introduction

This HDMI extender applies advanced HDBiT over IP technology, to transmit 1080P HDMI signal over a single CAT5/5e/6 cable up to 394 feet (120 meters). It supports IR pass-back and bidirectional RS232 to control the HDMI source device from the remote unit, and the Receiver can be powered by Transmitter over the CAT-X cable. It is widely applied in digital signage advertisement, video conference system, movies shooting, teaching system etc.

• Package Contents:

Transmitter/Receiver Kit = Model #
33-12925 ; Receiver only = 33-12926



HDMI EXTENDER
Transmitter x1pcs



HDMI EXTENDER
Receiver x1pcs



User Manual x1pcs



DC5V/3A x1pcs



IR blaster extension
cable x1pcs



IR receiver extension
cable x1pcs



RS232 serial port
cap x2pcs

• Features

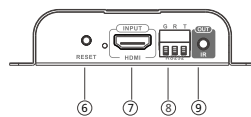
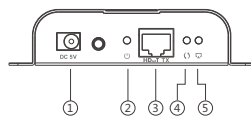
1. Applies advanced HDBiT over IP technology.
2. Transmission distance is up to 120 meters via CAT6 cable.
3. support resolution is up to 1920x1080@60Hz.
4. Support 20~60KHz IR devices.
5. Support Bi-directional RS232 pass back.
6. Support power from Transmitter to Receiver unit over the CAT-X cable when point to point connection.
7. Plug and play.
8. Metal housing, stable and durable.
9. Wall-mountable design, easy for installation.

• Installation Requirements

1. HDMI source device(computer graphics card, DVD,PS3, HD monitoring equipment etc).
2. HDMI display device like SDTV, HDTV, projector with HDMI port.
3. UTP/STP CAT5/5E/6 cable, follow standard IEEE-568B
Network cable length support between every connection:
CAT5 80m CAT5E 100m CAT6 120m

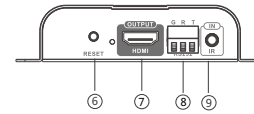
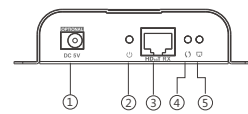
• Panel Description

1. HDMI EXTENDER TX (Transmitter)



- ① Power input (DC5V)
- ② Power indicator
- ③ HDBiT signal input
- ④ Data transmission indicator
- ⑤ Network connection indicator

2. HDMI EXTENDER RX(Receiver)



- ① Power input (DC5V)
- ② Power indicator
- ③ HDBiT signal input
- ④ Data transmission indicator
- ⑤ Network connection indicator

- ⑥ Reset button
- ⑦ HDMI signal input
- ⑧ Bi-directional RS232 pass back
- ⑨ IR signal output to connect with blaster extension cable

- ⑥ Reset button
- ⑦ HDMI signal output
- ⑧ Bi-directional RS232 pass back
- ⑨ IR signal input to connect with IR receiver extension cable

• Installation Procedures

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

Follow the standard of IEEE-568B:

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



4 pairs 8 core
ethernet cable

Follow the standard of IEEE-568B:

- | | |
|----------------|----------|
| 1-Orange/white | 2-Orange |
| 3-Green/white | 6-Green |

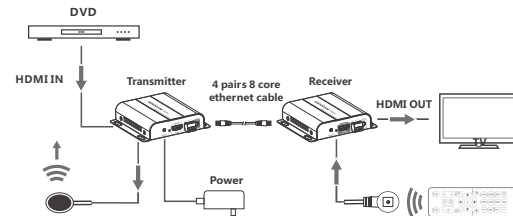


2 pairs 4 core
ethernet cable

2. Connections

1) Point to Point connection:

Up to 120 meters transmission distance over 4 pairs 8 core ethernet cable (High quality cable can reach 150 meters) .

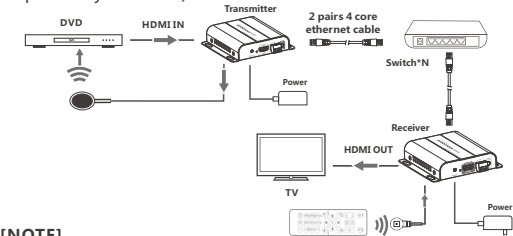


[NOTE]

Only one power adapter for the Transmitter is needed when point to point connection and the Receiver is powered by the Transmitter over 4 pairs 8 core ethernet cable

2) LAN Switch Connection:

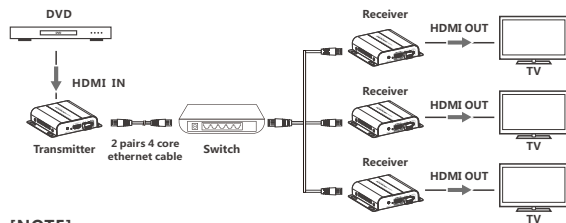
Using a LAN Switch allows multiple connections (Limited by the number of ports on your switch).



[NOTE]

If a LAN switch is used with this device make sure that the connection wire is 2 pairs 4 core ethernet cable and both the Transmitter and the Receiver are powered by 5V DC/2A.

3) One Transmitter to Multiple Receivers: By using network router/switch and multiple receiver units.



[NOTE]

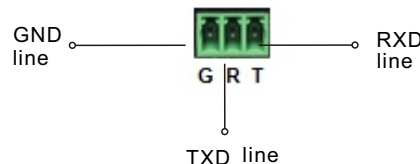
If a LAN switch is used with this device make sure that the connection wire is 2 pairs 4 core ethernet cable and both the Transmitter and the Receiver are powered by 5V DC/2A.

3. IR User Guide

- 1) IR blaster extension cable should plug-in the IR-out port of the transmitter of the HDMI extender, and the IR receiver extension cable should plug-in the IR-out port of the receiver of the HDMI extender.
- 2) The emitter of the IR blaster should be as close as possible to the IR receiver of the signal source device.
- 3) Point the IR remote control of the signal source device towards the IR receiver (connected to the RX of HDMI extender), to control source media playback.

4.RS232 serial bi-direction passback function

- 1) Baud rate
Different encoding mechanisms cannot mix. The baud rate of the RS232 serial of the transmitter and receiver unit support, 2400, 4800, 9600, 19200, 28800, 38400, 57600, and 115200
- 2) Line order
Check and make sure the RS232 serial line is connected firmly.



If the RS232 serial does not work by following above connection, please try to change the order of TXD line and RXD line.

• FAQ

- Q** : TV displays "Waiting for connection" in the right corner?
A : Check if the power supply of the transmitter and switcher (if used) is connected, make sure cable is connected firmly.
- Q** : TV displays "Please check the transmitter input signal" ?
A : 1) Check if there is a HDMI signal input of transmitter.
 2) Try to connect the signal source directly to the display device to see if there is a signal output from the source device or change the signal source HDMI cable and try again.
- Q** : Display not stable?
A : 1) Please check the cable length between the transmitter to the switch is within the required range.
 2) Press "reset" button on the transmitter/receiver front panel, reset and reconnect.

Items	Specifications
HDMI Signal	HDMI1.3, Compatible with HDCP1.2
transport protocol	HDBiT
Support resolutions	480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz 720p@50/60Hz, 1080i@50/60Hz, 1080p@50/60Hz
Network Cable	UTP/STP CAT5/5E/6
Transmission distance	Up to 120 meters transmission distance for 1080p 60Hz Full HD over single CAT6
IR signal	Supports 20~60KHz IR devices
RS232	Support Bi-directional RS232 pass back
Working Temperature	0°C ~ 60°C
Power Supply	DC5V/3A
Power Consumption	≤8W
Dimensions	104.6(W) x 96.4(D) x 23.8(H)mm *2pcs
Weight	RX:240g TX:230g
Color	Black

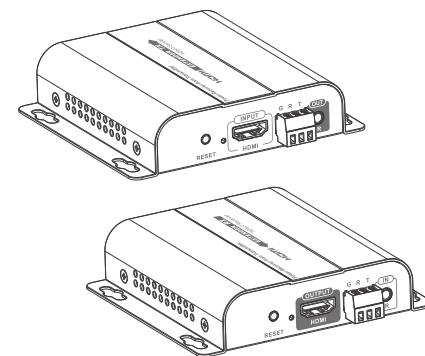
Disclaimer

This product carries a limited 90 day warranty, which does not apply if the product has been damaged, deteriorates, malfunctions or fails from: improper installation, misuse, abuse, neglect, accident, tampering, modification of the product as originally manufactured by Stellar Labs® in any manner whatsoever, usage not aligned with product instructions or acts of nature such as damage caused by wind, lightning, ice or corrosive environments such as salt spray and acid rain. This Limited Warranty also does not apply if the product becomes unable to perform its intended function in any way as a result of the television signal provider making any changes in technology or service. Should a failure be determined covered by the warranty, it will be the sole discretion of MCM Electronics to repair or replace the product. This warranty covers the product only, and does not include any additional product or expense incurred. No liability outside the product itself is implied.



HDBiT HDMI Extender

User manual



Model#: 33-12925