HDMI to CAT5e/CAT6 with LAN/PoE/IR Transmitter & Receiver - **ID# 990 - 991**



Operation Manual



Introduction

The device that can make your home or office more efficient, the HDMI to CAT5e/CAT6 with LAN/PoE/IR Extender is capable of sending HDMI (uncompressed audio/video), 3 Ethernet connections and control (through the built-in RS-232 and IR ports) over a single CAT5e/CAT6 up to a distance of 100m (300 ft.). Even more, it is adaptor free at the receiver end. Further, with the HDMI bypass is designed to allow instant display at the control point. So, if you wish to make your home or office more efficient, get the HDMI over Single CAT5e/CAT6 with LAN/PoE & IR Extender and prepare to be amazed.

Applications

- Household entertainment media sharing and control
- Lecture room display and control
- Showroom display and control
- Meeting room presentation and control
- Classroom display and control

Features

- HDMI 1.4 compliant with 3D formats and 4k/2k resolution support
- Supports CEC bypass function
- Simultaneous transmission of uncompressed video and audio (1080p @ 60Hz/'Deep Color) over a single CAT5e/CAT6 type cable for up to 100m (300 ft.)

NOTE: Tested with CAT-6E/23AWG cables, using cables of another specification may result in a different operating distance.

- Audio support up to 7.1CH Dolby TrueHD and DTS-HD
- Connect and share up to 6 Ethernet connections at speeds up to 100Mbps
- Various controls over HDMI, CEC, RS232 and IR
- 5Play convergence: HD video, audio & Control (IR and RS232)/LAN/PoE
- Installation friendly

• Single power supply powers both units, receiver unit is powered through the transmitter System

Requirements

- Input HDMI source equipment such as DVD/Blu-ray player and output display with HDMI input.
- RS232 controlled device
- Ethernet equipped device



Operation Controls and Functions Transmitter







1. Power LED

The red LED will illuminate when the 24 V DC Adaptor is connected to the AC outlet. **2. DC 24V**

This slot is where you plug the 24 V DC power supply into the unit and connect the adaptor to an AC outlet.

3. IR 1 Blaster

Connect the IR blaster cables included in the package for IR signal transmission. The related IR receiver port is IR1 Extender.

4. IR 2 Extender

Connect the IR receiver cables included in the package for IR signal reception. The related IR transmitter port is IR2 Blaster.

5. RS-232 In

This slot is to connect with PC/laptop with D-Sub 9-pin male cable for sending RS-232 commands.

6. Link LED

This yellow LED will illuminate when the both CAT5e/6 input and output signal is connected.

7. CAT5e/6 Out

Connect the transmitter and receiver via a single CAT5e/6 type cable for all data transmission.

8. HDMI Bypass

Connect to a HDMI TV/monitor for instant display of the HDMI input source signal. **Note:** When the HDMI bypass is connected, no signals will be transmitted to the receiver side. Therefore, unplug this connection after confirming that the correct image is displayed

9. HDMI In

Connect to the HDMI equipped source equipment such as DVD or Blu-ray player. **10. LAN 1/2/3**

The LAN connections can be used to connect and share up to 6 ethernet connections (3 at the reciver end, 3 at the transmitter end), including computers, routers and media servers.



Receiver



1. Power LED

The red LED will illuminate when the 24 V DC Adaptor is connected to the AC outlet. **2. IR 1 Extender**

This slot is to connect with the IR receiver cables included in the package for IR signal reception. The related IR transmitter port is IR1 Blaster.

3. IR 2 Blaster

Connect the IR blaster cables included in the package for IR signal transmission. The related IR receiver port is IR2 Extender.

4. RS-232 Out

Connect to a device that can be controlled (via D-Sub 9-pin female cable) by RS-232 commands.

5. Link LED

This yellow LED will illuminate when the both CAT5e/6 input and output signal is connected.

6. CAT5e/6 IN

Connect the transmitter and receiver via a single CAT5e/6 type cable for all data transmission.

7. HDMI Out

Connect to a HDMI equipped TV or monitor to display the HDMI input source signal. **8. LAN 1/2/3**

The LAN connections can be used to connect and share up to 6 ethernet connections (3 at the reciver end, 3 at the transmitter end), including computers, routers and media servers.

Pin	Define TxD / RxD
1	N/C
2	TxD / RxD
3	RxD / TxD
4	N/C
5	GND
6	N/C
7	N/C
8	N/C
9	N/C

D-Sub 9 pin definitions



Specifications

Video Bandwidth	300MHz/9Gbps
Ethernet Speed	100 Mbps
Transmitter	
Input	$1 \times \text{HDMI}$, $3 \times \text{Ethernet}$,
	$1 \times \text{RS-232}, 1 \times \text{IR Extender}$
Output	$1 \times CAT5e/6$, $1 \times HDMI$ Bypass,
	$1 \times IR Blaster$
Receiver	
Input	$1 \times CAT5e/6$, $1 \times IR$ Extender
Output	$1 \times \text{HDMI}, 1 \times \text{RS-232}, 3 \times \text{Ethernet},$
	$1 \times IR Blaster$
ESD Protection	Human Body Model:
	±8kV(air-gap discharge)
	±4kV(contact discharge)
IR Frequency Rate	30~50 kHz
Power Supply	24 V/1.25 A DC
	(US/EU Standards, CE/FCC/UL certified)
Dimensions	125 mm(W) x 127 mm (D) x 30 mm (H)/Each
Weight	Tx: 360 g, Rx: 382 g
Chassis Material	Aluminum
Silkscreen Color	Black
Power Consumption	Tx: 6 W: Rx: 8 W
Operating Temperature	$0^{\circ}\text{C} \sim 40^{\circ}\text{C} / 32^{\circ}\text{F} \sim 104^{\circ}\text{F}$
Storage Temperature	$-20 \ ^{\circ}C \sim 60 \ ^{\circ}C / -4 \ ^{\circ}F \sim 140 \ ^{\circ}F$
Relative Humidity	20~90 % RH (non-condensing)



Connection

