HDMI over Powerline Transmitter / Receiver Kit

HDMI-PTX

HDMI-PRX

User Manual

HDMI-over-Powerline Kit sold Exclusively by CCTV Camera Pros

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1. Introduction

The HDMI-PTX / PRX is an HDMI over powerline transmitter / receiver system. This extender system is based on H.265 video standard for distributing 1 HDMI video source to up to 3 HDMI video displays simultaneously. This is accomplished via power line transmission within the scope of one electrical panel. The product also supports one-way IR remote control. It offers high quality video with resolution up to 1080P@60Hz. In addition, there is one HDMI loop output port. This powerline adapter is designed to transmit high definition video & audio within a single electric panel.

2. Features

☆ HDMI 1.3, HDCP 1.4 and DVI 1.0 compliant

☆ Supports 6.75 Gbps video bandwidth

☆ Video resolution is up to 1080P@60Hz YUV 4:4:4

☆ Support HDMI HD source to HDMI HD display via power line transmission within the scope of one electrical panel

☆ Also transits IR remote control from receiver back to transmitter

☆ One HDMI loop output

☆ Audio format supports LPCM 2.0CH 32KHz/44.1KHz/48KHz

☆ End-to-end delay is less than 150ms

☆ Compact design for easy and flexible installation.

3. Package Contents

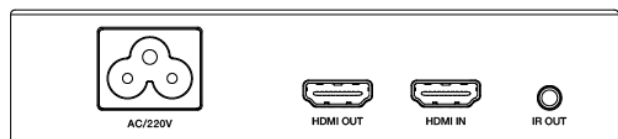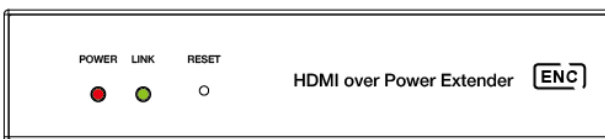| Qty	Item
1	HDMI over Power Transmitter (Encoder)
1	HDMI over Power Receiver (Decoder)
1	IR Blaster cable (1.5 meters)
1	20~60KHz IR Receiver cable (1.5 meters)
2	AC 100~240V 50/60Hz Power cable
1	User Manual

4. Specifications

Technical	
HDMI Compliance	HDMI 1.3
HDCP Compliance	HDCP 1.4
Video Bandwidth	6.75Gbps
Video Resolution	1080p, 1080i, 720p, 720i, 480p, 480i, the maximum up to 1920×1080@60Hz The PC resolution is up to 1400×1050
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0
Color Depth	8/10/12-bit
HDMI Audio Formats	LPCM 2.0CH 32KHz/44.1KHz/48KHz
ESD Protection	Human-body Model: $\pm$8kV (Air-gap discharge), $\pm$4kV (Contact discharge)
Connections	
Transmitter	Inputs: 1x HDMI Type A [19-pin female] Outputs: 1x HDMI Type A [19-pin female] 1x IR OUT [3.5mm Stereo Mini-jack]
Receiver	Inputs: 1x IR IN [3.5mm Stereo Mini-jack] Outputs: 1x HDMI Type A [19-pin female]
Mechanical	
Housing	Metal Enclosure
Color	Black

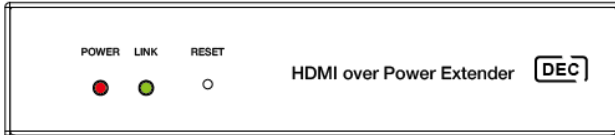| Dimensions	Encoder / Decoder: 135mm [W] x 96.5mm [D] x 29mm [H]
Weight	Encoder / Decoder: 405g
Power Supply	AC 100 - 240V 50/60Hz power cable
Power Consumption	Encoder: 3.4W, Decoder: 3.5W
Operating Temperature	0°C～40°C / 32°F～104°F
Storage Temperature	-20°C～60°C / -4°F～140°F
Relative Humidity	20~90% RH (non-condensing)
Resolution / **Cable Length**	**1080@P60 -** **Feet / Meters**
HDMI IN / OUT	42ft / 15M
The use of "Premium High Speed HDMI" cable is highly recommended.	

5. Operation Controls and Functions

5.1 Transmitter Panel (encoder)

Name	Function description
Power LED	When the encoder is powered on, the red LED will be on.
Link LED (Green)	■ Flicker intermittently three times: The encoder and decoder have not been paired. ■ Flicker quickly: The encoder and decoder are paired successfully.
RESET button	Press the button for 3 seconds to reset the encoder to factory default status.
AC/220V	Connect to 100~240V AC 50/60Hz power cable.
HDMI OUT	HDMI loop output port.

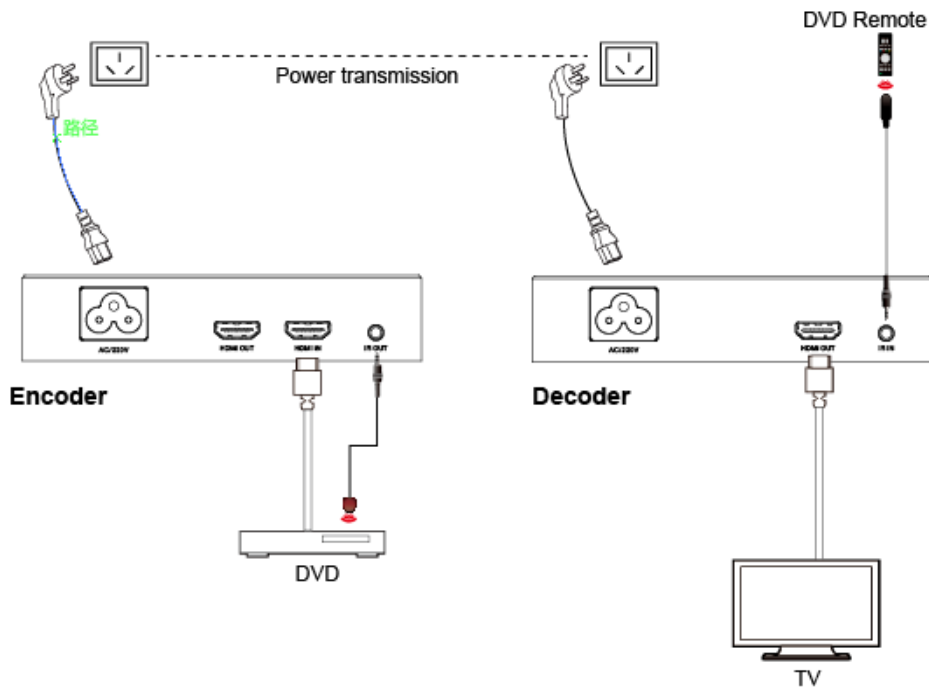|	
HDMI IN	HDMI input port, connect to HDMI source device with an HDMI cable.
IR OUT	Connect to the IR repeater cable.

5.2 Receiver Panel (decoder)

Name	Function description
POWER LED	When the decoder is powered on, the red LED will be on.
LINK LED (Green)	■ Flicker slowly: The encoder and decoder have not been paired. ■ Flicker quickly: The encoder and decoder are paired successfully.
RESET button	■ Press quickly the button to copy the EDID of display device to source device. ■ Press the button for 3 seconds to reset the decoder to factory default status.
AC/220V	Connect to 100~240V AC 50/60Hz power cable.
HDMI OUT	HDMI output port, connect to HDMI display device with an HDMI cable.
IR IN	IR input port for receiving the signal of IR remote.

5.3 IR Repeater (blaster)

The IR Receiver and IR Repeater (blaster) are optional to use. They allow the user to operate their security camera DVR or other HDMI device via IR remote control from the remote TV (HDMI receiver location).
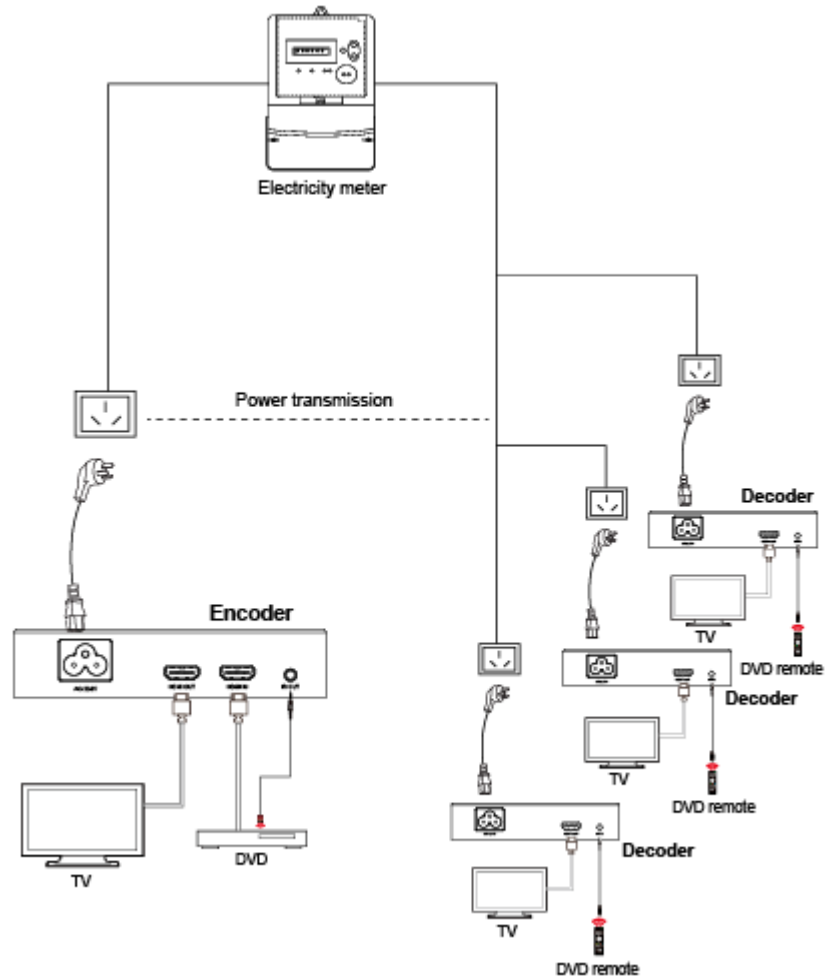

IR RECEIVER   IR BLASTER

IR Blaster
1. IR Blaster Signal
2. Power
3. NC

IR Receiver
1. IR Signal
2. Power
3. Grounding
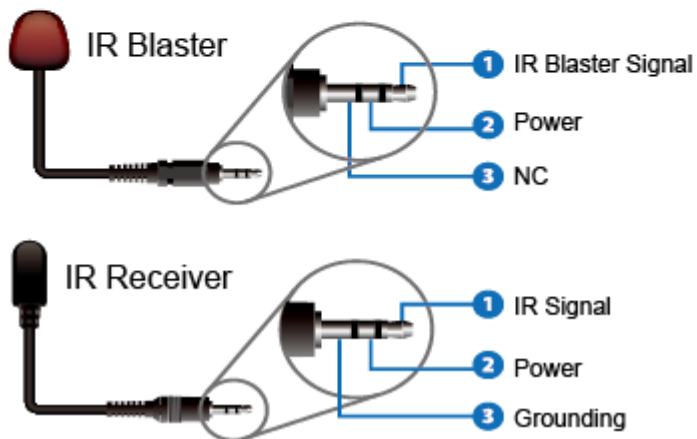
IR use example:

Note： When the angle between the IR receiver and the remote control is ± 45 °, the transmission distance is 0-5 meters; when the angle between the IR receiver and the remote control is ± 90 °, the transmission distance is 0-8 meters.

6. Application Example

Note: Audio & video signal transmission must be within the scope of one electrical panel.