VGA/HDMI (HDBaseT) CAT5e Extender Series ITEM NO.: VHE02EIP VGA/HDMI (HDBaseT) CAT5e Extender

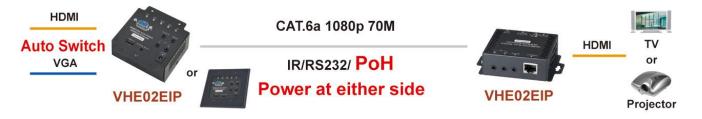


VHE02EIP support HDMI up to 4K@60Hz YUV4:2:0 and VGA up to 1920 x 1200@60Hz,with HD video/audio, bidirectional IR and RS-232, 2 way power over CAT5e/6 cable. It is an ideal solution for extending PC/laptop to a display output to a projector/monitor application. With a metal face plate at transmitter unit to provide installer a flexible installation to fit the TX unit at wall or on a meeting table, which is a perfect application at video conference room.

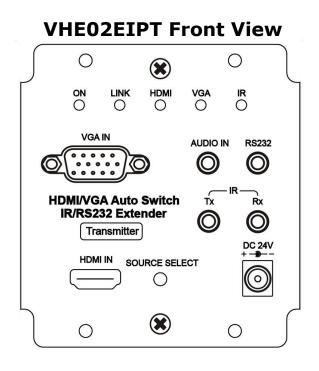
VHE02EIP VGA/HDMI Auto Switch to HDBaseT Extender With IR/RS232/PoH

- To send and extend VGA/HDMI signal with IR/RS232/Power signal over one CAT5e cable.
- Auto switch or manually setting for VGA and HDMI inputs.
- VGA support stereo audio convert to HDMI output, resolution up to 1920x1200@60Hz.
- Transmission range up to 70M by CAT5e/6 cable.
- Uncompression video transmission, HDMI resolution up to 4K@30Hz.
- Support Bi-directional IR with 30-60 KHz, RS232, PoH, and CEC.
- Max. Data Rate- 10.2Gbps.
- HDMI 1.4 and HDCP compliance.
- Audio support up to LPCM7.1@192Khz, Dolby TrueHD, DTS-HD MA.
- Support PoH (Power over HDBaseT), allow power send either from TX or RX unit.
- Built in power isolation.
- Transmitter unit include metal wall plate mounting brackets for easy installation at wall or on meeting table.

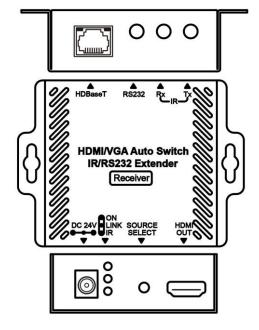
Installation view:

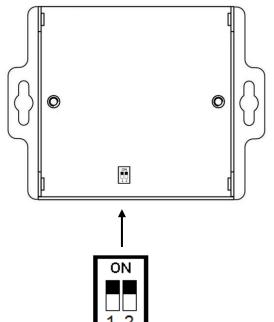


Panel View:



VHE02EIPR Front View

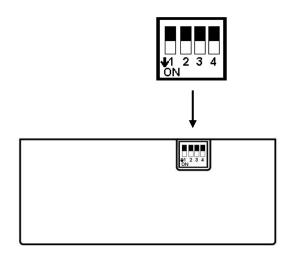




LED Instruction:

Status	Color	VHE02EIPT	VHE02EIPR
POWER	GREEN	ON : Power on	ON : Power on
LINK	BLUE	ON : HDBaseT Linking	ON : HDBaseT Linking
LINK	BLUE	Flash: Power saving mode	Flash: Power saving mode
HDMI	BLUE	ON : Select HDMI Input	
VGA	BLUE	ON : Select VGA Input	
IR	RED	Flash : IR Receiving or Sending	Flash : IR Receiving or Sending

Side View Dip Switch



Rear View Dip Switch

Button Function:

FORCE SELECT	Function		
Short Press	Manual Switch Mode: HDMI or VGA Input Selection		
Long Press over 2	 Auto Switch Mode: Auto Switch HDMI or VGA Input Long Press: HDMI and VGA LED flash at same time that mean the auto switch mode setting completed. Under Auto Switch Mode: HDMI and VGA connect simultaneously, VGA will be the priority. 		

Dip Switch Setting :

Switch	Function				
SW1	ON	Control Firmware update	OFF	– RS232 Extender	
SW2	ON	Video Firmware update	OFF	KSZSZ Extender	
SW3	Reserve				
SW4	Reserve				

VHE02EIPR

Switch	Function				
SW1	ON	Video Firmware update	OFF	RS232 Extender	
SW2			Res	serve	

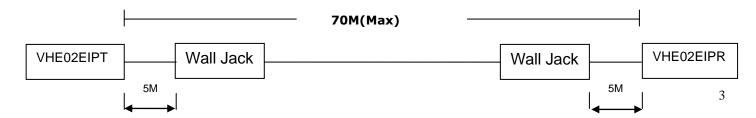
Cable:

Link cable recommend use high quality Cat.5e^{Cat.6}Cat.6a^{Cat.7} UTP / STP or FTP cable. Poor quality cable or network connection or improper construction will cause unstable connection, video or sound disruptions, picture noise appears.

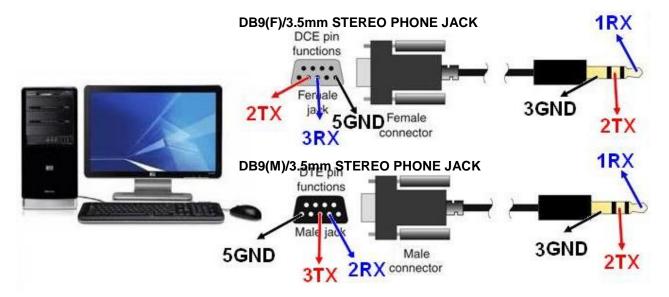
Distance chart by different cable:

Cable Type	Range	Supported Video	
CAT5e / CAT6	60M	1080p 60Hz 12bit	
CAT6a / CAT7	70M		
CAT5e / CAT6	35M	1080p 60Hz 16bit	
CAT6a / CAT7	40M	Up to 4096x2160@30Hz 4:4:4(9Gbps)	

If connection through the wall socket, the cable length must less 5 meters between HDMI extender and wall jack, as below drawing:



RS232 Define:



DB9(F)/3.5mm STEREO PHONE JACK

RS232		3.5 mm Phone Jack	
Footprint	Define	Footprint	Define
Pin 2	RX	Pin 1	TX
Pin 3	ТΧ	Pin 2	RX
Pin 5	GND	Pin 3	GND

DB9(M)/3.5mm STEREO PHONE JACK

RS232		3.5 mm Phone Jack	
Footprint	Define	Footprint	Define
Pin 2	ΤX	Pin 1	TX
Pin 3	RX	Pin 2	RX
Pin 5	GND	Pin 3	GND

Power Saving Mode:

When there is no HDMI video signal input or TV is not connected or power off, this product will enter a power saving mode to save power consumption; under a power saving mode still provides, RS-232 (Less 9600bps), IR, and CEC signal transmission.

Caution:

- 1. The wiring must away from any equipment with electromagnetic wave, i.e.: mobile phone, microwave, radio equipment, fluorescent lamp, high voltage power lines.
- 2. The cable must pull in straight to avoid any crosstalk interference and the transmission Stability.
- 3. This device HDBaseT port is not general Ethernet signal; do not connect with Network devices to avoid damage.
- 4. IR transmitter do not put near from receiver to avoid mutual interference.

VHE02EIP Package Include:

VHE02EIPT Transmitter x 1 pcs VHE02EIPR Receiver x 1 pcs DC24V/1.25Amp Power Adapter x 1 pcs IR Emitter Cable x 1 pcs IR Receiver Cable x 1 pcs DB9(M)/3.5mm STEREO PHONE JACK x 1 pcs DB9(F)/3.5mm STEREO PHONE JACK x 1 pcs Metal Wall Plate x 1 pcs Mounting Screw pack x 2 bags

Specification:

ITEM NO.	VHE02EIPT	VHE02EIPR	
HDMI Interface	HDMI Type A		
VGA Interface	VGA 15-Pin D-Sub		
HDMI Video Support	Up to 1080p@60Hz,48bits,3D		
	Up to 4096 x 2160@30Hz		
VGA Video Support	Up to 1920 x 1200@60Hz@24bits		
Audio Support	Up to LPCM 7.1 192Khz		
Analog Stereo Interface	3.5mm terminal x 1		
HDBaseT Connector	RJ45 x 1		
HDBaseT Distance	70M (Max)		
IR Input /Output	3.5mm Phone Jack x 2		
IR Carrier	30~60KHz / T : ± 10° / R : ± 55° / 5M / Bi-directional		
Frequency/Angle/Distance			
RS-232 Interface	DB9(F)/3.5mm STEREO	DB9(M)/3.5mm STEREO	
	PHONE JACK	PHONE JACK	
RS-232 Data Rate	115200 bps / Duplex		
Power Supply	DC 24 / 1.25A		
Power Consumption	Max: 11.4W, Power Saving Mode: 1.8W		
Temperature	Operation: 0 to 55°C, Storage: -20 to 85°C, Humidity: up to 95%		
Dimension mm	86 x 93.5 x 42.8	92 x 69.5 x 25	
Weightg	300	185	
Rohs (FC C		Rev. A	