HDMI over IP Broadcasting System

## ITEM NO.:   HE05BT , HE05BER   HDMI Matrix over IP Broadcasting

HE05B is a Multicast HDMI video over an IP network to up to 200 screens for faster, more efficient HD content sharing and distribution. It is ideal for distributing digital signage content or other HD video and audio across an Ethernet network. Because the transmitter and receivers install directly into your existing LAN infrastructure, integration is easy.

It works in point-to-point or point-to-multipoint and multipoint to multipoint configurations. Built in advanced management software, easy to use computer to setup transmitter/receiver linking and transmission.   It is perfect application for any digital signage application with screens in different buildings or stores, such as distributing high-quality medical imaging video across a hospital campus, streaming video to classrooms in schools, multicasting video in command and control room setups, corporate video sharing and training.

Features:

- Transmit HDMI signal over one CAT5e/6/7 cable.
- Flexible and scalable HDMI 1080p Broadcasting with Gigabit Ethernet LAN.
- Support point to point and point/multi to multi-display connections via Gigabit network switch.
- HDMI input : HE05BT transmitter maximum up to 16 pcs.
- HDMI output: HE05BER receiver maximum up to 254 pcs.
- Built in window based management software, using computer for easy setting input/output link and transmission.
- HE05BER receiver built in IR remote control to select input channel if the system do not have PC.
- Built in one individual stereo audio transmission to do sound broadcasting.
- Support HDMI resolution up to 1080p at 150M.
- HDMI 1.3b and HDCP compliant.
- HDMI audio support up to LPCM 7.1@192Khz
- Use IGMP protocol Gigabit Switch Hub to do HD signal distribution and transmission.
- Applications for digital signage, home network integration, and industrial control, hospital, education, security.
- Package include a VESA mounting bracket to allow HE05BER receiver to mount at back side o monitor.
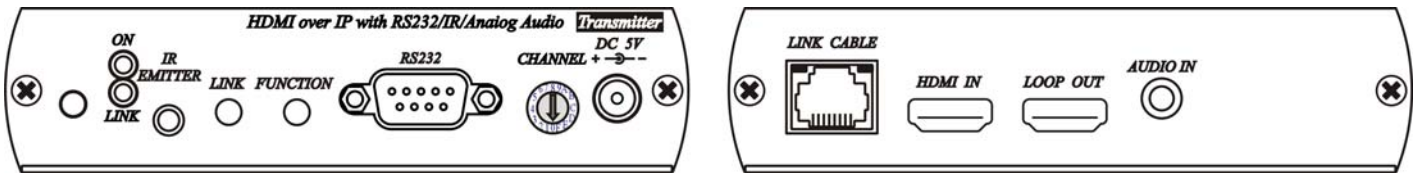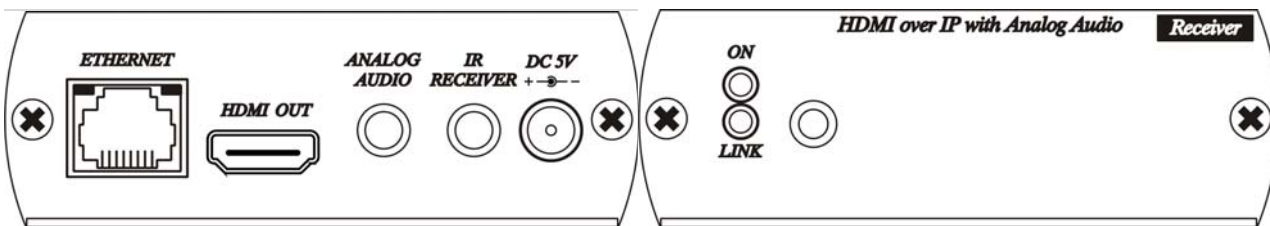- Option model: SR01 signal repeater for longer distance application.

Application：
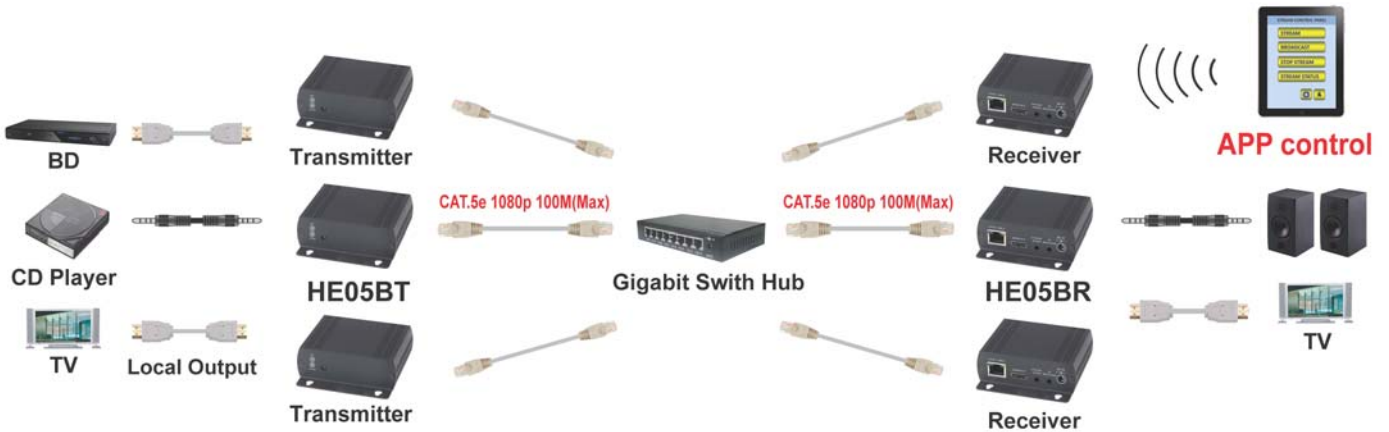
Recommend to use IGMP and Jumbo Frame over 8K Ethernet Switch Hub in order to achieve the best transmission quality

Panel View:

HE05T Transmitter

HE05BER Receiver

Back Panel Rotary Switch Function:

HE05BT and HE5BER l must setting at same channel in order to do mutual transmission.
Rotary switch to be follow 16 HEX, could switch " 0 ~ F " total 16 channels,A = channel 10, B = channel 11, others channel same as 16 hex conversion.
HE05BT host channel setting must setup as the only one channel to avoid conflict with any other HE05BT transmitter.

HE05BT Button Function：

Button	HE05BT Button	
	LINK	**FUNCTION**
Short Press	*Remote output* ON / OFF	Video Mode/ *Graphic Mode*
Long Press (3 seconds)	Loop Out Output ON / OFF	Anti-Dither (OFF / 1 / 2)
Press to power on (Press and hold until Green LED Flash)		Use Loop Out EDID
Press to power off (Press and hold until Green LED and Blue LED Flash)	RESET to Default	

LED Indication Status:

Power (Green LED):   Flash   Booting
                               ON   Boot completed

Link (Blue LED):   Flash   Connection or connected but no HDMI input
                               ON   linking

RJ45 LED: Green Flash (Data transmission)
                          Orange On   (linking)

Cable & Transmission Distance :

Link Cable use high quality Cat.5e UTP/STP/FTP or Cat.6 UTP cable

Transmission distance will be effected by equipment (Switch HUB), cable quality…etc. When using Cat.5e the   max. transmission distance up to 150M, using Cat.6 cable up to 180M.

You can also use model no: SR01 repeater for extended longer distance or using Gigabit Switch hub which support IGMP protocol and Jumbo Frame 8K for signal distribution or extend distance.

RJ45 Define:
Link Cable (TIA/EIA-568-B)
1. Orange-white   Data 1 +
2. Orange   Data 1 -
3. Green-white   Data 2 +
4. Blue   Data 3 +
5. Blue-white   Data 3 -
6. Green   Data 2 -
7. Brown-white   Data 4 +
8. Brown   Data 4 -

Remote Control Function:
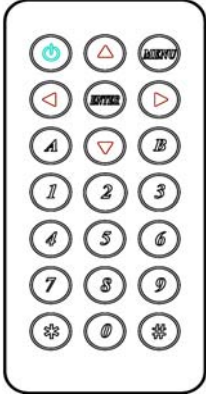
If you do not use PC computer management to setup HE05BER, then you could use the IR infrared remote control   for simple preset channel selection.   Using the IR remote control to the front of HE05BER will be ok..

The external IR receiver cable could be used if the installation environment not allow to use remote control successfully.

Initial use the remote control or after change battery of remote control, the IR ID must set up at "8 ".   Press and hold power button, then press button 8 to complete the setting.

Remote Control Button Function:

Symbol		Function
	LEFT	previous channel
	RIGHT	next channel
	UP	channel
	DOWN	channel
	1	number 1
	2	number 2
	3	number 3
	4	numuber4
	5	number 5
	6	number 6
	7	number 7
	8	number 8
	9	number 9
	0	number 0
	*	clear input
	ENTER	Enter the confirmation / display the current channel

	MENU	no function
	#	no function
	A	no function
	B	no function
	Power	setup IR ID

Caution：

1. HE05B do not recommend to work with general LAN connection to avoid large video 甲、data transmission or multicast packets to slow down your other LAN devices.
2. When use HE05BT with HE05BER receiver, the RS232, IR will be no function.
3. HE05BER IR function only provide the input channel selection, not IR extender function.
4. If HE05BER channel setup by computer management, the IR will back to original setting channel when system reboot.
5. Gigabit switch hub muse use support IGMP protocol and Jumbo Frame over 8K Ethernet Switch Hub in order to achieve the best transmission quality
6. Computer software operation, please refer. to software operating instruction.

Specifications:

ITEM No.	HE05BT	HE05BER
Distance	150M	
HDMI Video Support	480i / 480p / 720p / 1080i / 1080p @ 24Hz、25Hz、30Hz、50Hz、60Hz	
HDMI Audio Support	Up to 7.1 LPCM 192Khz	
HDMI Input	HDMI Type-A	
HDMI Pass-Through	HDMI Type-A	
HDMI Output		HDMI Type-A
Analog Audio Input	3.5mm Stereo Phone Jack (10KΩ / 1Vpp)	
Analog Audio Output		3.5mm Stereo Phone Jack (10KΩ / 1Vpp)
IR Receiver (Int)	30-60Khz / ±45° / 5M	38Khz / ±45° / 5M
IR Receiver (Ext)		3.5mm Stereo Phone Jack
Ethernet	Gigabit RJ45	
Power Consumption	1300mA (Max)	1300mA (Max)
Power Supply	DC 5V 2000mA	
Dimensions mm	125 x 140 x 30	88 x 130 x 30
Weight g	380	260

RoHS CE FC ℃

Rev.A