

AV-950

HDMI with USB Over IP Intranet

(Multi-cast Version)

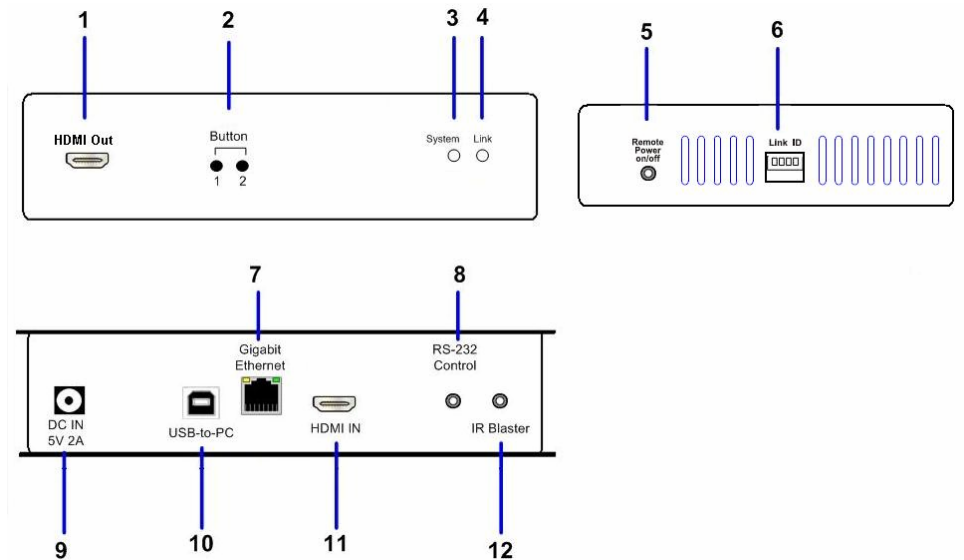
Installation and User's Manual

Introduction

The AV-950 system is a perfect solution to extend high resolution HDMI, USB, and optional IR/RS-232 over IP network. It includes an AV-950T transmitter and an AV-950R Receiver. The AV-950T transmitter connects with PC or any device with HDMI source. The AV-950R receiver connects to HDMI display, speaker, microphone, USB devices (Keyboard/Mouse/Storage/...) and RS232 devices. It based on the standard Ethernet Internet Protocol, all of Gigabit or Fiber LAN switch HUB can be used for inter-connection.

Panel View

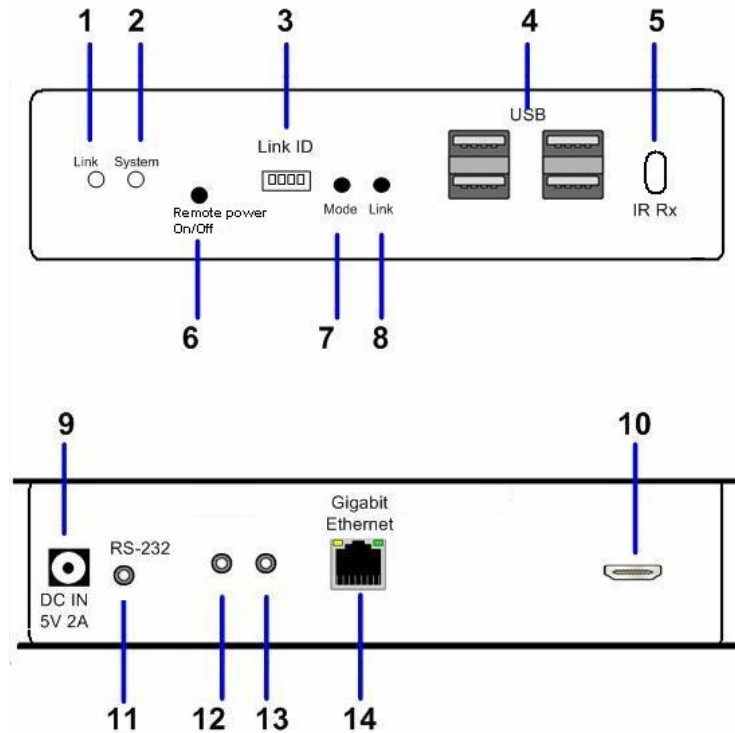
AV-950T Transmitter



No. Component	Description	
1 HDMI (or DVI-D) Loop-back	HDMI (or DVI-D) Loop-back for Local Monitor.	
2 (Button 1)	Short press	Switch video to Remote or Loopback monitor.
	Long press	Output video to both Remote and Loopback monitors.
	Press and Hold at Power ON until Green and Red LED blinking	Reset the unit to the Factory default setting
2 (Button 2)	Short press	Switch to Video or Graphic mode
	Long press	(*)Anti-Dither Mode
	Press and Hold at Power ON until Green LED blinking	Use Loop-back EDID
3 Red LED (System status)	Green Blinking/Red Off: System is starting up. Green On/Red Blinking: Linking or waiting HDMI input.	
4 Green LED (Power/Link status)	Green On/Red On: Connection established.	
5 Remote Power On/Off (optional)	Provide Remote Power On/Off function.	

6 Link ID	4 bit DIP switch for 16 ID settings. To make Transmitter/Receiver as a pair or a group, the transmitter and receiver must be set with the same Link ID.
7 Gigabit Ethernet	Connects to Gigabit switch or directly to AV-950R
8 RS-232 Control (optional)	Provide Serial-over-IP function.
9 DC 5V In	System power input port. Connect to a DC 5V 2A external power adapter.
10 USB-to-PC	Connects this USB-B to PC to provide 2 functions: 1. USB audio device. (An USB audio device will be detected when it is attached to PC in Windows OS) 2. Virtual 4-port USB Hub for remote USB devices.
11 HDMI IN	Connects to HDMI Source. For DVI source, you may need a HDMI-to-DVI adapter.
12 IR Blaster (optional)	Connects to external IR LED.

AV-950R receiver



No.	Component	Description
1	Green LED (Power/Link status)	Green Blinking/Red Off: System is starting up. Green On/Red Blinking: Linking or waiting HDMI input.
2	Red LED (System status)	
3	Link ID	4 bit DIP switch for 16 ID settings. To make Transmitter/Receiver as a pair or a group, the transmitter and receiver must be set with the same Link ID.

4	USB Host	For remote USB devices, such as USB KB/Mouse, storage, audio, ...	
5	IR Rx (optional)	Remote Universal IR receiver.	
6	Remote Power On/Off (optional)	Provide Remote Power On/Off function.	
7	Mode button	Short press	Switch to Video or Graphic mode
		Long press	(*)Anti-Dither Mode
		Press and Hold at Power ON until Green LED blinking	Update EDID
8	Link button	Short press	Link/Unlink
		Long press	To gain the USB access right.
		Press and Hold at Power ON until Green and Red LED blinking	Reset the unit to the Factory default setting
9	DC 5V In	System power input port. Connect to a DC 5V 2A external power adapter.	
10	HDMI OUT	Connect to HDMI display. For DVI display, you may need a HDMI-to-DVI adapter.	
11	RS-232 Control (optional)	Provides Serial-over-IP function.	
12	Mic IN	Microphone Input for the USB audio device. (Please set the OS default audio device to the USB PnP audio device that created by AV-950T)	

13	Line OUT	Stereo Audio output for the USB PnP audio device. (Please set the OS default audio to the USB PnP audio device that created by AV-950T)
14	Gigabit Ethernet	Connects to Gigabit switch or directly to AV-950T

(*) For some of ATI graphic card that with Dithering function enabled, you may set to “Anti-Dither Mode” to achieve the better Video quality.

Installation

Please follow the following procedures to install Multi-Cast AVK-950:

1. Make sure the Link-ID both of AV-950T and AV-950R are having the same setting. They make pair according to this Link-ID setting.
2. Attach your HDMI display to the AV-950R’s HDMI-Out port.
3. Power on the AV-950R, an “AVExtender” logo will be displayed. If not, then there is something wrong either on the AV-950R or HDMI cable or HDMI display.
4. You can connect multiple AV-950R and multiple AV-950T units to your Gigabit Ethernet switch. Or you can also use a CAT5e or preferred CAT6 UTP cable (straight, EIA 568B) to directly connect a AV-950T with a AV-950R as a pair connection.
5. Attach your HDMI source (either PC or Blue-ray Disc) to the AV-950T’s HDMI-In port and then power On the AV-950T.
6. The first AV-950R that being detected by the AV-950T will gain the USB access right.
7. If you are using PC as your HDMI source, you shall be able to see your HDMI display EDID information on the PC graphic card control panel. If not, then there is something wrong either on the AV-950T or HDMI cable.
8. Output your HDMI (with audio) from your HDMI source and check if they are correctly displayed on your HDMI display.

Please follow the following procedures to install Multi-Cast AVK-950 for USB over IP:

9. Connect AV-950T’s USB-to-PC port to a Windows based PC USB port by an USB-A-B cable. You shall see 3 devices are detected: “Generic USB Hub”, “USB Composite Device”, “USB PnP Sound Device”.
10. You can select “USB PnP Sound Device” as Windows default sound device in order to use speaker and microphone on the AV-950R’s Line-Out (green) and Microphone jack (pink).
11. You can attach USB devices like keyboard, mouse, Pen Drive, audio speak/microphone ... to the AV-950R’s 4 USB-A ports. Please note that you will need DC 5V with 4A power adapter if all of AV-950R’s 4 USB ports are used.
12. To gain the USB access right among multiple AV-950R, **long press** the “Link button” of the AV-950R until an OSD message of “Requesting USB” displayed then release. An OSD message of “Starting USB” will be displayed if it successfully gained the USB access right. Meanwhile, the previous USB Master unit will show an OSD message of “USB Stopping”.

Setup Operation

1. To Reset the AV-950T to the Factory default setting: Press and Hold the Button 1 then Power ON until Green and Red LED blinking.
2. To Use the AV-950T Loopback monitor EDID: Press and Hold the Button 2 then Power ON until Green LED blinking.
3. To update the AV-950R EDID: Press and Hold the Mode button then Power ON until Green LED blinking.
4. To Reset the AV-950R to the Factory default setting: Press and Hold the Link button then Power ON until Green and Red LED blinking.