



Introduction

The encoder (HDTVIPM920T) and decoder (HDTVIPM920R) can work together to provide complete end-to-end streaming system or it can work with the network switch to realize a one to many, many to one and many to many systems. It can transmit the video, audio, and RS232 signals together or separately over single LAN cable, with the POE function, the Rx and Tx can be powered by POE from a POE network switch, it helps with a clean installation. Except working as the matrix switch and distribution systems, it also supports the video wall function with maximum configuration of 16x16 Video wall. The resolution of this system can up to 1920x 1080@60Hz.

This system can support friendly-user control options, including RS232, IP control box, PC software, iPad APP control with Source & Videowall preview function. The decoder also supports the CEC/RS232 function to power on and off displays.

This system can be popularly used in the hospital, school, shopping mall, hotels, command center and corporate training etc.

Features

- Transmits the HDMI&USB over IP
- The resolution can up to 1920 x 1080@60Hz.
- Auto scaling function from 480p@60Hz to 1080@60Hz
- One push-key to read the IP address of each unit
- No limitation of the Rx and Tx on this broadcasting system
- Supports sources and TV preview functions on an iPad APP
- Featured video wall up to the configuration of 16 x 16 video wall
- Available API interface for third party control system integration
- Friendly user control through IP control box (IPM-MG), PC software and iPad APP
- Supports firmware upgrade online

- Supports 3-pin audio de-embedded function on both Tx and Rx
- Allows video, audio, and RS232 signals to be routed together or separately.
- Supports EDID importing to encoder and export from display to decoder.
- Supports CEC/RS232 function to power on and off the display.
- HDCP compliant, HDCP1.4, HDMI1.3
- Supports seamless switch with no black/blue screen while sources switching
- Supports POE function or use the DC power adapter
- Supports Auto IP(zeroconf), dynamic IP or static IP address settings
- Supports communications protocols such as H.264, TCP/IP, Telnet, UDP and IGMP
- Supports the bi-directional IR, USB keyboard & Mouse

Specification

Encoder

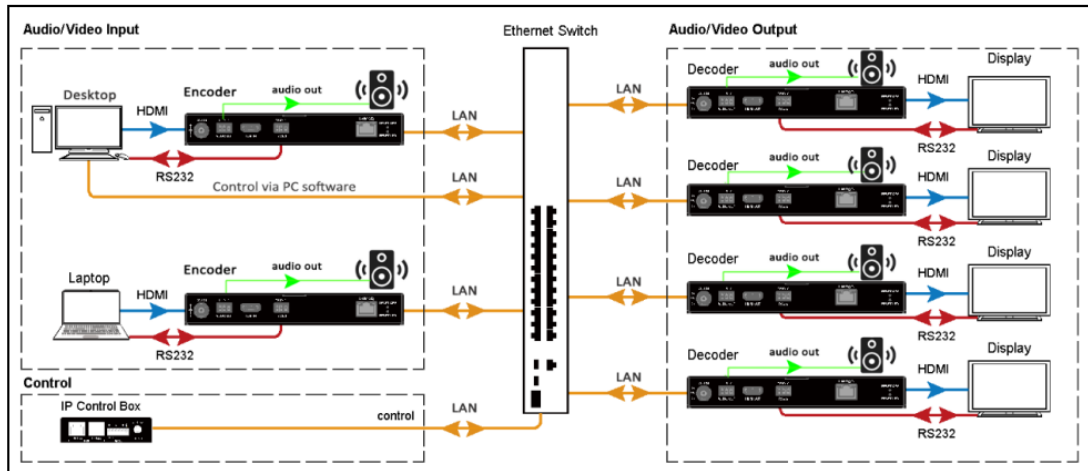
Video	
Input Port	1 x HDMI, 1xUSB-A, 1x IR Tx
Input Video Type	HDMI 1.3, HDCP 1.4
Input Resolution	640 x 480@60Hz, 480p@60Hz, 576i@50Hz, 576P@50Hz, 800 x 600@60Hz, 1024 x 768@60Hz, 720p@50Hz, 720p@60Hz, 1280 x 800@60Hz, 1280 x 1024@60Hz, 1360 x 768@60Hz, 1366 x 768@60Hz, 1400 x 1050@60Hz, 1440 x 900@60Hz, 1680 x 1050@60Hz, 1920 x 540@60Hz, 1080i@50Hz, 1080i@60Hz, 1080p@50Hz, 1080p@60Hz
Input Video Signal	0.5~1.2 V p-p
Encoding Data Rate	Up to 30 Mbps, configurable
Output Video Port	1 x LAN
Output Video Type	H.264/MPEG-4 AVC
Output Resolution	<ul style="list-style-type: none"> • Large IP stream: from 480p@60Hz to 1920 x 1080@60Hz • Small IP stream: 352x288@5Hz
Video Impedance	100 Ω
Input DDC Signal	5 V p-p (TTL)
End-to-End Time Latency	When works with decoder: <ul style="list-style-type: none"> • About 50 ms (Low latency mode) • About 250 ms (High quality mode)
Audio	
Input Audio Port	1 x HDMI
Input Audio Format	LPCM 2.0
Output Audio Port	1 x 3-pin Phoenix connector
Output Audio Format	Stereo
Control	
Control Method	IP Control Box (IPM-MG), PC configurator, iPad on iPad
General	
Operating Temperature	+32°F ~ +113°F (0°C ~ +45°C) 10% ~ 90%, non-condensing
Storage Temperature	-4°F ~ 140°F (-20°C ~ +70°C) 10% ~ 90%, non-condensing
Power Supply	12 V 1 A DC
Power Consumption	6W (Max.)
ESD Protection	Human body model: <ul style="list-style-type: none"> • ±8kV (air-gap discharge) • ±4kV (contact discharge)
Surge Protection	Voltage: ±1 kV
Product Dimensions (W x H x D)	175 mm x 25 mm x 100.2 mm / 6.9" x 0.98" x 3.9"
Net Weight	0.60kg / 1.32lb

Decoder

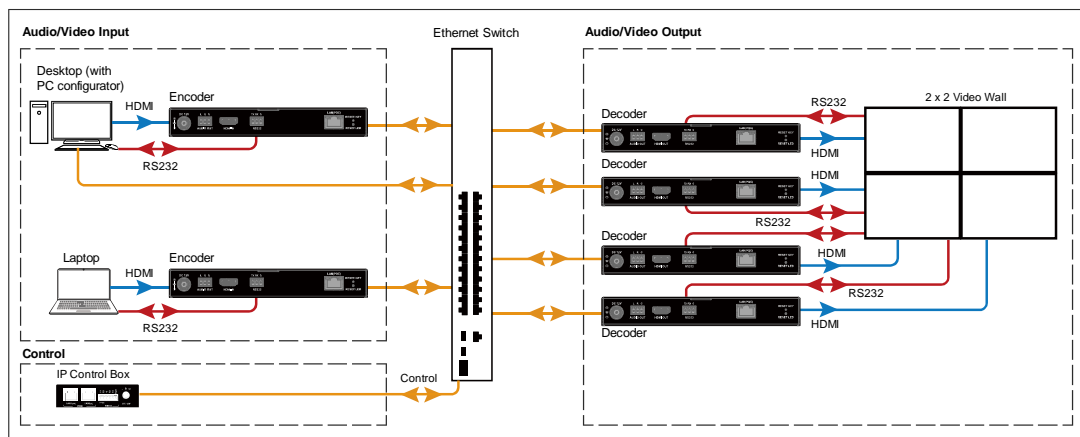
Video	
Input Video Port	1 x LAN
Input Video Type	H.264/MPEG-4 AVC
Input Resolution	From 480p@60Hz to 1920x1080@60Hz
Output Video Port	1 x HDMI
Output Video Type	HDMI 1.3, HDCP 1.4
Output Resolution	640 x 480@60Hz, 480p@60Hz, 576P@50Hz, 800 x 600@60Hz, 1024 x 768@60Hz, 720p@50Hz, 720p@60Hz, 1280 x 800@60Hz, 1280 x 1024@60Hz, 1366 x 768@60Hz, 1400 x 1050@60Hz, 1440 x 900@60Hz, 1680 x 1050@60Hz, 1920 x 540@60Hz, 1080p@24Hz, 1080p@25Hz, 1080p@30Hz, 1080p@50Hz, 1080p@60Hz
Video Impedence	100 Ω
End-to-End Time Latency	When works with encoder: <ul style="list-style-type: none"> About 50 ms (Low latency mode) About 250 ms (High quality mode)
Audio	
Input Audio Port	1 x LAN
Input Audio Format	Audio embedded in streaming media input
Output Audio Port	1 x Phoenix connector 1 x HDMI
Output Audio Format	LPCM 2.0
Control	
Control Method	IP Control Box (IPM-MG), PC configurator, iPad on iPad
Control	
Operating Temperature	+32°F ~ +113°F (0°C ~ +45°C) 10% ~ 90%, non-condensing
Storage Temperature	-4°F ~ 140°F (-20°C ~ +70°C) 10% ~ 90%, non-condensing
Power Supply	12 V 1 A DC
Power Consumption	6W (Max.)
ESD Protection	Human body model: <ul style="list-style-type: none"> ± 8kV (air-gap discharge) ± 4kV (contact discharge)
Surge Protection	Voltage: ± 1 kV
Product Dimensions (W x H x D)	175 mm x 25 mm x 100.2 mm / 6.9" x 0.98" x 3.9"
Net Weight	0.60kg/1.32lb

Application

Matrix Switcher



Video Wall



Connection diagram

