FHD264

AV and Control over IP Dynamic Virtual Matrix™

FHD264-S (Sender)

FHD264-R (Receiver)

- Create a virtual video matrix with up to 64 Senders and 250 Receivers
- Works on affordable 1Gig network infrastructure
- Front panel LCD for configuration of IP parameters, and status indication
- HDMI loop output connector on FHD264-S Sender
- HDMI Audio output on each device using 3.5mm stereo connector
- PoE ready. Does not require power supply when connected to LAN with PoE
- Fail-safe back up video designation to create automatic redundancy
- Serial Over IP(SoIP) to control external equipment connected to the Serial ports
- Receivers include small IR remote controller for switching multicast channels
- Easy to use WebGUI in each unit, accessible from any browser
- Bi-directional IR (infrared) extension
- User selectable streaming bit rate
- User-definable names for each device (e.g. Lobby Monitor, Projector, Training PC)
- Supports SD, HD and Full-HD (1080p@60 Hz) resolutions
- Free Windows DVM Manager Tool™ (for system-wide configuration and control)

The FHD264 is a family of HDMI over LAN Senders (encoders) and Receivers (decoders) utilizing advanced video encoding techniques in order to distribute up to 64 Full-HD video signals to hundreds of displays on a simple 1 Gigabit local area network (LAN). They also extend Serial RS-232 communications and bi-directional IR remote signals. HDMI Audio is extracted and available on a convenient 3.5mm stereo jack on both the Sender and the Receiver. The FHD264-S Sender also provides local HDMI output.

A two-line front panel LCD is provided to enable easily configuration or monitoring of parameters such as IP settings, multicast group selection, assignment of device names, and more. This eliminates the usual installation challenges of finding and configuring devices on the network for the first time. With the front panel LCD, users can see and assign configuration parameters with ease.

The RS-232 serial ports on each unit can be used in SoIP mode (Serial over IP). This allows 3rd party IP controllers to directly control peripheral equipment via RS-232. For example if the RS-232 of a receiver is connected to a video projector, you can turn the projector on or off via telnet commands sent to the FHD264 Receiver.

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All devices support IEEE 802.3af PoE (Power over Ethernet). So when connected to a network switch with PoE, no power supply needs to be connected to the FHD264 devices. A power supply is included for customers that may not have PoE on their network.

You can switch the Receiver's video among available video channels by

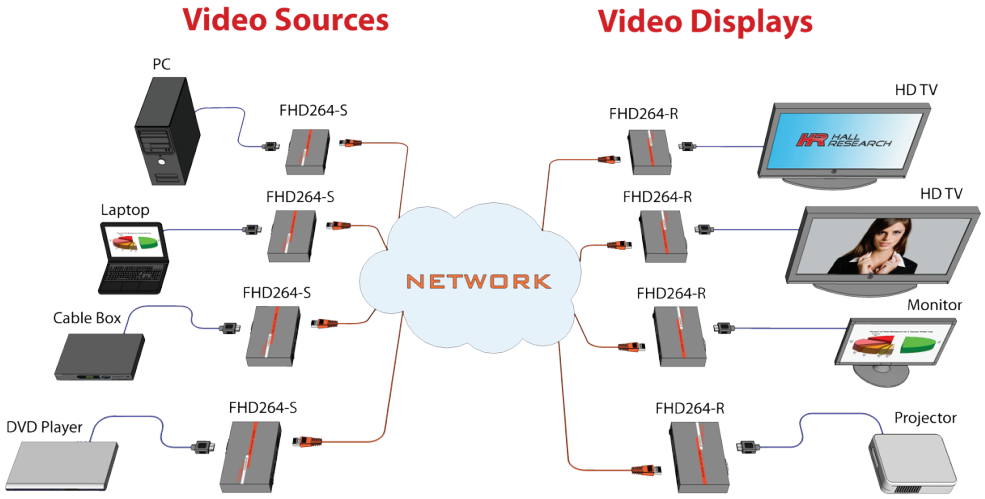
- Using the front panel LCD and push buttons
- Using the supplied IR Remote Control
- Browsing to the WebGUI in each unit
- Telnet Commands (ideal for third-party control of switching)
- Windows PC application: DVM Manager Tool™ (free)
- CNT-IP-264 (Global Video-over-IP Controller - sold separately)

Receivers also offer fail-Safe automatic video routing and redundancy. So if the receiver is not detecting any video on its currently assigned channel, it will switch to a user defined alternate channel. It can also automatically switch back to the original multicast channel if video is detected again.

Senders are available as a stand-alone box or as single-gang Decora® wall-plate. Rack mount hardware is also available for housing up to 12 senders in 4U rack space.

FHD264 applications include: digital signage, meeting rooms, classrooms, bus & metro stations, airports, home theater, and more.

Block Diagram



Specifications

Input Resolution	VGA or 480p thru Full HD 1080p@60
Video Encoding	H.264
Streaming Protocol	RTP/MPEG-TS/UDP
Casting	Unicast/Multicast
Control Interface	Telnet, Embedded Web Server
Video Latency	250-400 mS, dependant on Bit Rate and network congestion
Sender	
Input Ports	1 x HDMI
Output Ports	1 x RJ45, 1 x HDMI, 1 x IR, 1 x L/R AUDIO,1 x RS-232
Wall Plate	
Input Ports	1 x HDMI
Output Ports	1 x RJ45, 1 x IR, 1 x L/R AUDIO,1 x RS-232
Receiver	
Input Ports	1 x RJ45, 1 x IR
Output Ports	1 x HDMI, 1 x L/R AUDIO, 1 x RS-232

RS-232 Baud Rate	Bidirectional, pass thru: 2400 – 115200 bps
Audio	HDMI Stereo 2-channel Supports LPCM 2, 5.1, 7.1 Channel up to 48 KHZ
IR Frequency	38 -56 KHZ pass-thru modulated 56 KHZ (IR Remote Controller)
Video Sources	Up to 64
Video Displays	Up to 250+
Recommended Network Switch/Router	Gigabit LAN IGMPv2, Jumbo Frame and DHCP support
Operating Temp	+32 to +113°F (0 to +45 °C) 20%~90%, non-condensing
Power consumption	Max. 3 W
Mounting Option	Mounting Brackets (included)
Dimensions	5.40"(137 mm) W x 3.14"(80.0 mm) D x 1.38" (35 mm) H
Net Weight	TX (Unit) : 0.75 lbs (0.34 KG) RX (Unit): 0.75 lbs (0.34 KG)