Signal Management

PRODUCT DATASHEET

VISSONIC ELECTRONICS LTD.

Think Solutions

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X9 Series Ultra-High Bandwidth

## Modular Seamless Switching Video Wall Processor

Features

- The processor is based on hardware architecture

- The front panel has an LCD display and illuminated buttons to display and configure the device IP address.

- Modular design, flexibly configure input and output cards

- 2U / 3U / 7U / 12U / 24U / 48U Chassis size with mounting structure, from 8x8, 16x16, 36x36, 72x72, 144x144, 288x288 input / output channels respectively。

- **Audio and video switching splicing processor based on FPGA architecture**

- **Can convert between the following signals: DVI HD, Dual-Link DVI 4K, HDMI HD, HDMI 4K, VGA, Component, Composite, YC, SD-HDI, HD-SDI, 3G-SDI, HDBaseT HD and HDBaseT 4K, Full digital switching, each seamless output card can achieve real-time seamless switching.**

- Maximum resolution up to 4Kx2K @ 30Hz, backward compatible with all standard resolutions, and support non-standard resolution customization.

- Up to 288x 1080P input or 144x 4K UHD input.

- Up to 288x 1080P or 144x4K UHD seamless output.

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- Redundant power supply is optional, will automatically take over without interrupting the operation of the controller

- Hot swapping of input boards and output boards without affecting the normal operation on systems.

- Real-time status monitoring of any module card temperature (input card, output card, control card), version, manufacturing information and fan speed.

- Automatic adjustment of cooling fan speed according to temperature changes.

- Automatic and manual backup configuration, export and import configuration file to control card.

- **Online firmware and Micro USB upgrade**

- EDID reading and EDID management

- Can simultaneously support seamless matrix pre-cutting / switching platform and LCD / LED / DLP video wall window splicing processing platform

- **Each splicing output card can realize the video splicing function, and the image window can be arbitrarily zoomed, overlap, cross-screen, roaming, background picture setting, partial interception and enlargement within the full screen**

- Configuration of preview card can realize video preview and switch on PC and tablet, and support real-time monitoring the content of the large screen.

- Comply with DVI 1.0 protocol, HDCP1.3 standard, HDMI 1.4a

- HDMI digital audio and analog audio selection input, HDMI digital audio and analog audio output simultaneously

- It has the characteristics of correction and compensation signals to reduce the error of video stream. DVI and HDMI input can reach 35 meters

- **200 sets of matrix pre-switching instructions and 200 sets of splicing plan instructions can be stored in the device, and can be switched with one key when called**

- The system contains a variety of test images such as red, green, blue, and white to facilitate quick debugging and system maintenance

- HDBaseT input and output signals support embedded (or local) bidirectional RS-232 and bidirectional IR signals, and can choose to switch with the video signal or separate switching mode, and support POC external power supply;

- Flexible control mode, with front panel LCD screen key control, infrared control, RS-232 control and RS-232 loop-out control, computer software control, web page control, RS-422 external panel control interface and panel lock function Through the serial port control of the remote HDBaseT, it is convenient for users to cooperate with various remote control devices

- **Using B / S architecture, the product itself supports mobile phone and tablet control, Android, IOS, Windows systems without installing any software and plug-ins without the need for external servers or central control;**

- Can adding text on input video, character color, size and position are optional

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- The splicing output supports a single display / screen with 2 or 4 windows.
- **SDI input card has a loop-out function, HDMI input card has both de-embedding output and analog input, and IP board has access of the network surveillance dome camera, and can control PTZ, and each board can connect at least 400 pcs**
- Window can be lock, the size and position of the window will be fixed, and once locked it cannot be moved **Manage more than 5 groups of display walls at the same time, each display wall can be a different display device, resolution or size. All display walls is real-time management.**

Board

name/model	Appearance
VW-HM4I HDMI Input card	
VW-DV4I DVI Input card	
VW-HD4I HDBaseT Input card	
VW-VA4I VGA Input card	
VW-SD4I SDI Input card	
VW-SF4I fiber Input card（single mode/multi-mode fiber）	
VW-HM4O HDMI seamless output card	
VW-DV4O DVI seamless output card	
VW-HD4O HDBaseT seamless output card	
VW-VA4O VGA seamless output card	
VW-SD4O SDI seamless output card	
VW-SF4O fiber output card（single mode/multi-mode fiber）	
VP-HM4O HDMI seamless splicing output card	
VP-DV4O DVI seamless splicing output card	
VP-HD4O HDBaseT seamless splicing output card	
VP-SF4O fiber splicing output card	

VW-PVW preview card	
VW-Con Control card	
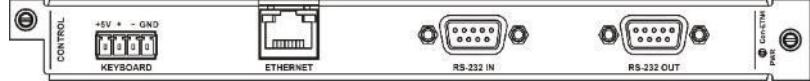
Typical Application
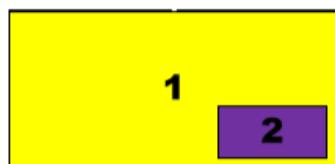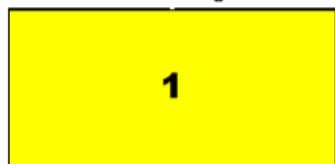
Seamless Switching

Normal Matrix

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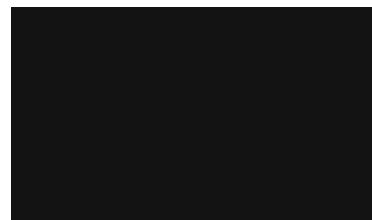
Output scalable resolution

Scalable output resolution

Each output channel can be configured with the same or different resolution. High resolution and low resolution can be switched seamlessly, and better display effect can be achieved between screens supporting different resolutions.

Application cases:

Addressing Room

Training Room

Command center

Education

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Video wall effect it can achieve:

Technical parameter

Serial control port structure	9-pin female D-type connector: 2 = TX, 3 = RX, 5 = GND; 9-pin male D-type connector: 2 = RX, 3 = TX, 5 = GN					
KEYBOARD Control interface						
Keyboard control	4-digit 3.8mm Phoenix interface					
usage mode	Used with the expansion keyboard MCP100					
Keyboard control	+5V=DC5V , + = DATA+, -=DATA- GND = Signal ground					
Ethernet control						
Ethernet control	RJ-45 Female interface					
Ethernet Control	TCP/IP					
Ethernet control rate	Adaptive 10M / 100M, full duplex or half duplex					
specification						
System working	100VAC ~ 240VAC﹐50/60 Hz﹐International adaptive power supply					
Storage, working temperature	0 ~ +50℃					
Storage, working humidity	20% ~ 70%					
Chassis size	2U	3U	7U	12U	24U	
Product weight (not included board)	5KG	7KG	16KG	29KG	80KG	250KG
No-load power consumption (not included board)	18W		30W		70W	300W
Size (L x W x H) mm	483x400x89	483x400x132	483x400x310	483x400x532	483x400x1043	
Failures time period	30,000 hours					
Warranty	3 year free warranty, lifetime maintenance					
Serial control port structure	9-pin female D-type connector: 2 = TX, 3 = RX, 5 = GND; 9-pin male D-type connector: 2 = RX, 3 = TX, 5 = GN					
KEYBOARD Control interface						
Keyboard control	4-digit 3.8mm Phoenix interface					
usage mode	Used with the expansion keyboard MCP100					
Keyboard control	+5V=DC5V , + = DATA+, -=DATA- GND = Signal ground					
Ethernet control						
Ethernet control	RJ-45 Female interface					
Ethernet Control	TCP/IP					

Ethernet control rate	Adaptive 10M / 100M, full duplex or half duplex					
specification						
System working	100VAC ~ 240VAC · 50/60 Hz · International adaptive power supply					
Storage, working temperature	0 ~ +50℃					
Storage, working humidity	20% ~ 70%					
Chassis size	2U	3U	7U	12U	24U	
Product weight (not included board)	5KG	7KG	16KG	29KG	80KG	250KG
No-load power consumption (not included board)	18W		30W		70W	300W
Size (L x W x H) mm	483x400x89	483x400x132	483x400x310	483x400x532	483x400x1043	
Failures time period	30,000 hours					
Warranty	3 year free warranty, lifetime maintenance					

| Model	VW-VM 0808	VW-VM 1616	VW-VM 3636	VW-VM 7272	VW-VM 144144	VW-VM 288288
interface						
Number of input cards	2/8	4/16	9/36	18/72	36/144	72/288
Number of output cards	2/8	4/16	9/36	18/72	36/144	72/288
input card type	VW-HM4I,VW-DV4I,VW-HD4I,VW-VA4I,VW-SD4I,VW-IP2,VW-SF4I					
seamless output card type	VW-HMM4O,VW-DV4O,VW-HD4O,VW-VA4O,VW-SD4O,VW-SF4O,VW-SF4O,VW-PVW					
splicing output card type	VP-HM4O,VP-DV4O,VP-HD4O,VP-SF4O					
bandwidth	13.5Gbps					
Serial control						

VW-PVW Video preview card

Features:

- 1 channel RJ45 interface preview output, can view 4 channels of video image information at the same time;
- Each channel video resolution:
  1280x720@30fps；
  800x600@30fps；
  640x480@30fps；
  352x288@30fps；
- H.264 & JPEG multi-stream encoding is applied, and the frame rate supports 1/16 ~ 60fps;
- Support hot plugging;
- Video switching through preview control

VIS-X9SOFT Management Software

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Features

- Matrix switching control with preview to switch function
- Video wall configuration function
- Real-time status monitoring of the temperature (input card, output card, control card), version, manufacturing information and fan speed etc.
- Maximum controlling 5 video walls simultaneously
- Support input video preview function (requires preview card)
- 200 splicing plans can be saved on the processor, 200 matrix switching plans can be recalled with one key on the software
- OSD text overlay function for subtitles and messaging
- User right management
- Drag and drop from input to output
- Open the window and draw the window size on the video wall

VW-HM4I HDMI INPUT CARD

Features

- 4 HDMI-A interfaces, 8x3.5mm audio sockets;
- The longest distance up to 35 meters;
- Hot swap, support audio and video signal switching together
- 3.5 analog audio and HDMI embedded audio selection input;
- Digital audio de-embedding can output to 3.5 audio socket
- EDID reading function
- Compatible with HDMI1.3a standard, HDCP1.3 protocol, DVI1.0 protocol;
- Maximum supported resolution:

HDPC：1920x1200P@60；

HDTV：1920x1080P@60

Technical parameter

Model	VW-HM4I
protocol	
HDMI1.3a standard, HDCP1.3 protocol, DVI1.0 protocol;	
video	
Gain	0dB
Pixel bandwidth	165MHz,full digital
Interface bandwidth	2.25Gbps,full digital (total 6.75Gbps, each color is 2.25Gbps)

Resolution	800x600@60,1024x768@60,1280x720@60,1280x768@60，1280x800@60，1280x960@60，1280x1024@60,1360x768@60,1366x768@60,1440x900@60,1600x900@60,1600x1200@60,1920x1080@25,1920x1080P@30,1920x1080P@60,1920x1200P@60,1920x1080i@50,1920X1080i@60;
Clock Jitter	<0.15 Tbit
Risetime	<0.3Tbit（20%--80%）
Bit fall time (Falltime)	<0.3Tbit（20%--80%）
Maximum transmission delay	5nS(±1nS)
interface	4 HDMI-A ports, 4 3.5mm audio jacks
Signal strength	T.M.D.S. +/- 0.4Vpp
Min / Max level	T.M.D.S. 2.9V/3.3V
impedance	50 Ω
EDID	default EDID and read function (Optional ）	N/A
Maximum DC offset error	15mV
	Input less than 35 meters, at 1600x1200 @ 60 (recommended to use certified HDMI Special wire, such as Molex TM wire)
Recommended maximum	0.5KG
product weight	15W

VW-HM2I HDMI 4K INPUT CARD

Features:

- 2 HDMI-A interfaces, 4x3.5mm audio sockets;
- The longest distance up to 35 meters;
- Hot swap, support audio and video signal switching together
- 3.5 analog audio and HDMI embedded audio selection input;
- Digital audio de-embedding output to 3.5 audio socket
- EDID reading function
- Compatible with HDMI1.3a standard, HDCP1.3 protocol, DVI1.0 protocol;
- Maximum supported resolution:

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Technical parameter

MODEL	VW-HM2I
protocol	
HDMI1.4 standard, HDCP1.3 protocol, DVI1.0 protocol;	
Video	
Gain	0dB
Pixel bandwidth	297MHz,full digital
Interface bandwidth	4.5Gbps full digital (13.5Gbps in total, 4.5Gbps for each color)
Resolution	800x600@60,1024x768@60,1280x720@60,1280x768@60,1280x800@60,1280x960@60,1280x1024@60,1360x768@60,1366x768@60,1600x900@60,1600x1200@60,1920x1080P@60,1920X1200P@60,3840X2160P@30;
Clock Jitter	<0.15 Tbit
Risetime	<0.3Tbit（20%--80%）
Bit fall time (Falltime)	<0.3Tbit（20%--80%）
Maximum transmission	5nS(±1nS)
interface	2 HDMI ports, 3.5mm audio jack
Signal strength	T.M.D.S. +/- 0.4Vpp
Min / Max level	T.M.D.S. 2.9V/3.3V
impedance	50 Ω
EDID	N/A
Maximum DC offset error	15mV
Recommended maximum input / output distance	Input less than 35 meters, at 1600x1200 @60 hours (recommended to use certified HDMI Special wire, such as Molex TM wire)
product weight	0.5KG
Maximum power	20W

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VW-HD4I HDBaseT INPUT CARD

Features

- 4 channel high-speed RJ45 interface seamless output, 4 channel 6PIN Phoenix socket interface;
- Using CAT5e / 6 cable output the longest distance up to 1080P @ 60HZ 100M;
- Hot swap of card, audio and video signal switching together;
- Infrared serial port output, optional IO switch card, can realize infrared serial port switch;
- Compatible with HDBaseT protocol；
- Maximum supported resolution：

HDPC：1920x1200P@60；

HDTV：1920x1080P@60

Technical parameter

MODEL	VW-HD4I
Link port input / output	
interface	4 channel high-speed RJ45 and 4 channel 6PIN Phoenix
Supported protocols	HDBaseT protocol
Pixel bandwidth	165MHz,full digital
Interface bandwidth	2.25Gbps,full digital (total 6.75Gbps, each color is 2.25Gbps)
Resolution	800x600@60,1024x768@60,1280x720@60,1280x768@60,1280x800@60,1280x960@60,1280x1024@60,1360x768@60,1366x768@60,1440x900@60,1600x900@60,1600x1200@60,1920x1080P@60,1920x1200P@60,1
signal type	High-speed differential signals defined in HDBaseT protocol
Network cable power supply	With POC power supply (+ 48V), for POC Powered by our company's CAT5 series transmitter, this card input port can provide power to it through the network cable
impedance	50 Ω
EDID	default EDIDN/A (Optional)
Maximum DC offset error	15mV
Recommended maximum input / output distance	Maximum 100 meters, at 1600x1200 @ 60 (recommended to use NEXANS CAT5e / 6 special wire)
product weight	0.5KG
Maximum power	27W

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VW-IP2I IP Streaming INPUT CARD

Features

- 2 high-speed RJ45 ports；
- Use CAT5e / 6 cable to output the longest distance up to 100M;
- Support web login to set network protocol, local network parameters or remote network parameters and other parameters;
- Can receiving fixed IP address video, or automatically search for encoding devices on the network;
- Support onvif, RTP, RTSP, RTCP, TCP, UDP and other network protocols；
- Support G711a, G711u, G726 and ADPCM audio encoding;
- Support Mainstream cameras such as HIKVISION, Dahua and Huawei;
- Maximum supported resolution：1920x1080P@60Hz。

Technical parameter

MODEL	VW-IP2I
Network protocol	
Onvif，RTP，RTCP，RTSP，TCP，UDP	
video	
Network interface bandwidth	100M
Video compression	H.264 MainProfile/H.264 Baseline Profile /H.264 HighProfile
Audio compression	G711a，G711u，G726，ADPCM
Control protocol	Support standard protocol ONVIF
Maximum transmission	100ms (depending on coding delay and network transmission delay)
IP parameters	Port1 default IP: 192.168.1.100 Port2 default IP: 192.168.2.100 Port3 default IP: 192.168.1.200 Port4 default IP: 192.168.2.200
Resolution and frame rate	1920×1080@60Hz,1920×1080@30Hz,1920x1080@25Hz,1280×720@60Hz,1280x1024@60Hz,1280x960@60Hz,704x576@60Hz,704x576@30Hz,704x576@25Hz,704x480@60Hz,704x480@30Hz,704x480@25Hz,352x288@60Hz,352x288@30Hz,352x288@25Hz；
Recommended maximum input distance	100M
product weight	0.5KG
Maximum power	25W

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VW-VA4I VGA INPUT CARD

Features

- 4 channel DB15 female interface input, 3.5mm audio socket
- Support any VGA, CVBS, YPbPr signal input, can automatically identify the input signal source
- Hot swap of card, audio and video signal switching together
- Analog audio input
- Maximum supported resolution: HDPC: 1920x1200P @ 60; HDTV: 1920x1080P @ 60

Technical parameter

MODEL		**VW-VA4I**		
interface		DB15 interface, 3.5mm audio jack		
Resolution	Composite video CV	Input card: 480i / NTSC, 576i / PAL Output card: 480i / NTSC, 576i / PAL		
	Component video YPbPr	Input card: 480i / NTSC, 480P / NTSC, 576i / PAL, 576P / PAL, 1280x720 @ 50, 1280x720 @ 60,1920x1080i @ 50,1920X1080P @ 60; Output card: 1280x720 @ 60, 1920X1080P @ 60;		
	VGA video	Input card: 800x600 @ 60, 1024x768 @ 60, 1280x720 @ 60, 1280x768 @ 60, 1280x8 00 @ 60,1280x960 @ 60,1280x1024 @ 60,1360x768 @ 60,1360x1024 @ 60,1366x768 @ 60, 1440x900 @ 60, 1400x1050 @ 60, 1600x900 @ 60, 1600x1200 @ 60,1680x1050 @ 60,1920X1080P @ 60; Output card: 800x600 @ 60, 1024x768 @ 60, 1280x720 @ 60, 1280x768 @ 60, 1280x8 00 @ 60,1280x960 @ 60,1280x1024 @ 60,1360x768 @ 60,1366x768 @ 60,1440x900 @ 60,1600x900 @ 60,1600x1200 @ 60,1920x1080P @ 60,1920X1200P @ 60;		
Gain		0dB	0 dB	0 dB

bandwidth	150MHz @ -3dB	350MHz @ -3dB	380 MHz
Differential phase error	0.1°,3.58-4.43 MHz	0.1°,3.58-4.43 MHz	
Differential gain error	0.1% , 3.58-4.43 MHz	0.1%,3.58-4.43 MHz	
Signal strength	1V p-p: composite video （CVBS）	1V p-p: (Component video In Y) 0.3Vp-p: (PbPr in component video / CbCr)	0.63V p-p to 0.9 V p-p
Min / Max level	Analog signal: -2V / + 2V	Analog signal: -2V / + 2V	RGB signal: 0V / 1.0V HV signal: 0V / 5.0V
input resistance	75 Ω	75Ω	75Ω
Return loss	<-30dB@5MHz	<-30dB@5MHz	<-30dB@5MHz
product weight	0.5KG		
Maximum power	20W		

VW-SDI4I SDI INPUT CARD

Features

- 4 channel BNC female interface, 4 way BNC female interface ring out;
- Support hot plugging;
- HD / 3G SDI signal input
- Maximum supported resolution: HDPC: 1920x1200P @ 60; HDTV: 1920x1080P @ 60

Technical parameter

Model	VW-SDI4I
interface	4 channels BNC input (output), 4 channels BNC loop out

Supported protocols	SMPTE 425M, SMPTE 424M,SMPTE 292M,SMPTE 259M-C,DVB-ASI
Pixel bandwidth	2.970Gb/s，1.485Gb/s，270Mb/s，
Resolution	1920x1080@25,1920x1080P@30,1280x720@60,1280x720@50,1920X1080 P@60,1920x1080i@50,1920X1080i@60;
Support format	HD-SDI 3G-SDI
product weight	0.5KG
Maximum power	20W

VW-DV4I DVI INPUT CARD

Features

- 4 channel DVI-D interface, 3.5mm audio socket
- The longest distance up to 35 meters;
- Hot swap, support audio and video signal switching together
- Analog audio and DVI video signal input
- EDID reading function
- Using DVI1.0 protocol
- Maximum supported resolution: HDPC: 1920x1200P @ 60; HDTV: 1920x1080P @ 60

Technical parameter

Model	VW-DV4I
protocol	
DVI1.0 protocol	
video	
Gain	0dB
Pixel bandwidth	165MHz,full digital 165MHz, full digital or analog(optional)
Interface bandwidth	2.25Gbps,full digital (total 6.75Gbp s, each color is 2.25Gbps)

Resolution	800x600@60,1024x768@60,1280x720@60,1280x768@60,1280x800@60,1280x960@60,1280x1024@60,1360x768@60,1366x768@60,1440x900@60,1600x900@60,1600x1200@60,1920x1080P@60,1920x1200P@60, 1920x1080i@50,1920X1080i@60;
Clock Jitter	<0.15 Tbit
Risetime	<0.3Tbit (20%--80%)
Bit fall time (Falltime)	<0.3Tbit (20%--80%)
Maximum transmission delay	5nS(±1nS)
interface	4 x DVI-D female interface, 4 x 3.5mm Audio seat
Signal strength	T.M.D.S. +/- 0.4Vpp
Min / Max level	T.M.D.S. 2.9V/3.3V
impedance	50 Ω
EDID	default EDID and read function(Optional) — N/A
Maximum DC offset error	15mV
Recommended maximum input / output distance	Input less than 35 meters, at 1600x1200 @ 60 hours (recommended to use certified DVI dedicated cable, such as Molex TM cable)
product weight	0.5KG
Maximum power consumption	15W

VW-SF4I OPTICAL FIBER INPUT CARD

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Features

- 4x single core optical fiber inputs;
- Support hot plugging;
- Matching with optical fiber transmitter can realize input signal transmission of 300 meters (multimode) or maximum 20 kilometers (single mode)
- Optional IO switch card can realize infrared serial port switch;
- Input maximum supported resolution：： HDPC：1920x1200P@60； HDTV：1920x1080P@60

Technical parameter

Model	VW-SF4I
interface	4 high-speed single-core SC fiber interface
video	
Fiber optic interface	SC connector
Fiber type	Multimode/Single Mode(optional)
wavelength	Multimode 850nm/Single Mode: 1310 –1620nm(optional)
Interface bandwidth	Forward: 6.25Gbps, Reverse: 3.125Gbps
Bit Clock Jitter (Clock	<0.15 Tbit
Jitter)	<0.3Tbit（20%--80%）
Bit rise time	<0.3Tbit（20%--80%）
(Risetime)	OM3 multimode fiber: less than 300 meters, single mode fiber: 2 ~ 20 kilometers, at 1920x1080p @ 60
Resolution	800x600@60,1024x768@60,1280x720@60,1280x768@60,1280x800@60,1280x960@60,1280x1024@60,1360x768@60,1366x768@60,1440x900@60,1600x900@60,1600x1200@60,1920x1080P@60,1920X1200P@60,1920x1080i@50,1920X1080i@60;
product weight	0.5KG
Maximum power consumption	20W

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VW-HM4O HDMI SEAMLESS OUTPUT CARD

Features

- With 4 channels HDMI-A interface seamless output, 3.5mm audio socket
- Maximum output distance up to 7 meters
- Hot swap of card, audio and video signal switching together
- Analog audio and HDMI embedded audio can output at the same time
- EDID read function
- Compatible with HDMI1.3a standard, HDCP1.3 protocol, DVI1.0 protocol
- Maximum supported resolution: HDPC: 1920x1200P @ 60; HDTV: 1920x1080P @ 60

Technical parameter

Model	VW-HM4O
protocol	
HDMI1.3a standard, HDCP1.3 protocol, DVI1.0 protocol;	
video	
Gain	0dB
Pixel bandwidth	165MHz,full digital
Interface bandwidth	2.25Gbps,full digital (total 6.75Gbps, each color is 2.25Gbps)
Resolution	800x600@60,1024x768@60,1280x720@60,1280x768@60，1280x800@60，1280x960@60，1280x1024@60,1360x768@60,1366x768@60,1440x900@60,1600x900@60,1600x1200@60,1920x1080@25,1920x1080P@30,1920x1080P@60,1920x1200P@60,1920x1080i@50,1920X1080i@60;
Clock Jitter	<0.15 Tbit
Risetime	<0.3Tbit (20%--80%)
Bit fall time (Falltime)	<0.3Tbit (20%--80%)
Maximum transmission delay	5nS(±1nS)
interface	4 HDMI-A ports, 4 3.5mm audio jacks
Signal strength	T.M.D.S. +/- 0.4Vpp

Min / Max level	T.M.D.S.　2.9V/3.3V	
impedance	50 Ω	
EDID	default EDID and read function (Optional)	N/A
Maximum DC offset error	15mV	
Recommended maximum input / output distance	Input less than 35 meters, at 1600x1200 @ 60 hours (recommended to use certified HDMI Special wire, such as Molex TM wire)	The output is less than 7 meters, at 1600x1200 @ 60 (It is recommended to use certified HDMI dedicated cable, such as Molex TM cable)
product weight	0.5KG	0.5KG
Maximum power	15W	15W

VW-HM2O HDMI 4K SEAMLESS OUTPUT CARD
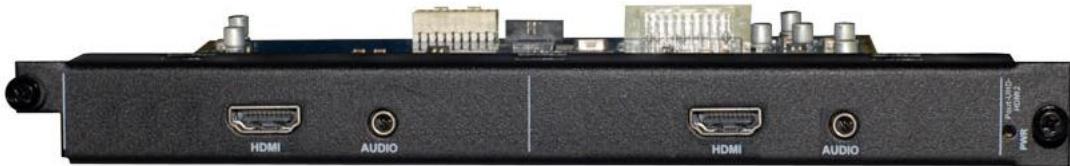
Features

- 2 channels HDMI-A interface seamless output, 3.5mm audio socket
- The longest output distance is up to 7 meters
- Hot swap, support audio and video signal switching together
- Analog audio and HDMI embedded audio can output at the same time
- EDID read function
- Maximum supported resolution: 4Kx2K @ 30

Technical parameter

MODEL	VW-HM2O
protocol	
HDMI1.4 standard, HDCP1.3 protocol, DVI1.0 protocol;	
video	
Gain	0dB
Pixel bandwidth	297MHz,full digital
Interface bandwidth	4.5Gbps full digital (13.5Gbps in total, 4.5Gbps for each color)

Resolution	800x600@60,1024x768@60,1280x720@60,1280x768@60,1280x800@60,1280x960@60,1280x1024@60,1360x768@60,1366x768@60,1600x900@60,1600x1200@60,1920x1080P@60,1920X1200P@60,3840X2160P@30；
Clock Jitter	<0.15 Tbit
Risetime	<0.3Tbit（20%--80%）
Bit fall time (Falltime)	<0.3Tbit（20%--80%）
Maximum transmission	5nS(±1nS)
interface	2 HDMI ports, 3.5mm audio jack
Signal strength	T.M.D.S. +/- 0.4Vpp
Min / Max level	T.M.D.S. 2.9V/3.3V
impedance	50 Ω
EDID	N/A
Maximum DC offset error	15mV

VW-HD4O HDBaseT SEAMLESS OUTPUT CARD

Features

- 4 channel high-speed RJ45 interface seamless output, 4 channel 6PIN Phoenix connector；
- Use CAT5e / 6 cable to output the longest distance up to 100M；
- Hot swap of card, audio and video signal switching together；
- Infrared serial port output, optional IO switch card, can realize infrared serial port switch；
- Compatible with HDBaseT protocol；
- Maximum supported resolution：

HDPC：1920x1200P@60；

HDTV：1920x1080P@60

Technical parameter

MODEL	**VW-HD4O**

Link port input / output	
interface	4 channel high-speed RJ45 and 4 channel 6PIN Phoenix
Supported protocols	HDBaseT protocol
Pixel bandwidth	165MHz,full digital
Interface bandwidth	2.25Gbps,full digital (total 6.75Gbps, each color is 2.25Gbps)
Resolution	800x600@60,1024x768@60,1280x720@60,1280x768@60,1280x800@60,1280x960@60,1280x1024@60,1360x768@60,1366x768@60,1440x900@60,1600x900@60,1600x1200@60,1920x1080P@60,1920x1200P@60,1920x1080i@50,1920X1080i@60;
signal type	High-speed differential signals defined in HDBaseT protocol
Network cable power supply	With POC power supply (+ 48V), for POC For the CAT5 series transmitter of our company, this card input port can provide power to it through the network cable.
impedance	50 Ω
EDID	Default EDIDN/A (Optional)
Recommended maximum input / output distance	Maximum 100 meters, at 1600x1200 @ 60 (recommended to use NEXANS CAT5e / 6 special wire)
product weight	0.5KG
Maximum power	22W

VW-SF4O FIBER OUTPUT CARD

Features

- 4x single core optical fiber seamless output;
- Support hot plugging;；
- Matching with optical fiber transmitter can realize the output signal of 300 meters (multi-mode) or a maximum of 20 kilometers (single-mode) transmission;
- Optional IO switch card can realize infrared serial port switch

- Input maximum supported resolution: HDPC: 1920x1200P @ 60; HDTV: 1920x1080P @ 60.

Technical parameter

MODEL	VW-SF4O
interface	4 high-speed single-core SC fiber interface
Video	
Fiber optic interface	SC connector
Fiber type	Multimode / Single Mode (optional)
wavelength	Multimode 850nm / Single Mode: 1310-1620nm (optional)
Interface bandwidth	Forward: 6.25Gbps, Reverse: 3.125Gbps
Bit Clock Jitter (Clock	Up to <0.15 Tbit
Jitter)	<0.3Tbit（20%--80%）
Bit rise time	<0.3Tbit（20%--80%）
(Risetime)	OM3 multimode fiber: less than 300 meters, single mode fiber: 2 ~ 20 kilometers, at 1920x1080p @ 60
Resolution	800x600@60,1024x768@60,1280x720@60,1280x768@60,1280x800@60,1280x960@60,1280x1024@60,1360x768@60,1366x768@60,1440x900@60,1600x900@60,1600x1200@60,1920x1080P@60,1920X1200P@60,1920x1080i@50,1920X1080i@60;
product weight	0.5KG
Maximum power	20W

VP-HM4O SEAMLESS HDMI VIDEO WALL OUTPUT CARD

Features

- 4 channel HDMI splicing output card
- Maximum resolution 1920 * 1200

- Each channel supports windows with 2 pictures, overlay, roaming, arbitrary zoom
- Audio de-embedding output

Technical parameter

Model	VP-HM4O
Protocol	
HDMI1.3a standard, HDCP1.3 protocol, DVI1.0 protocol;	
Video	
Gain	0dB
Pixel bandwidth	165MHz,full digital
Interface bandwidth	2.25Gbps full digital (total 6.75Gbps, each color is 2.25Gbps)
Resolution	800x600@60,1024x768@60,1280x720@60,1280x768@60,1280x800@60,1280x960@60,1280x1024@60,1360x768@60,1366x768@60,1600x900@60,1600x1200@60,1920x1080P@60,1920X1200P@60;
Control scale	A single unit can control a maximum of 288 screens and multiple sets of screens, which can save and quickly recall 200 plans
Clock Jitter	<0.15 Tbit
Risetime	<0.3Tbit (20%--80%)
Bit fall time (Falltime)	<0.3Tbit (20%--80%)

VP-HM2O SEAMLESS HDMI VIDEO WALL OUTPUT CARD

Features

- 2xHDMI splicing output card
- Maximum resolution 1920 * 1200
- Each channel supports windows with 4 pictures, overlay, roaming, arbitrary zoom
- Audio de-embedding output

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Technical parameter

Model	**VP-HM2O**
Protocol	
HDMI1.3a standard, HDCP1.3 protocol, DVI1.0 protocol;	
Video	
Gain	0dB
Pixel bandwidth	165MHz, full digital
Interface bandwidth	2.25Gbps full digital (total 6.75Gbps, each color is 2.25Gbps)
Resolution	800x600@60,1024x768@60,1280x720@60,1280x768@60,1280x800@6 0,1280x960@60,1280x1024@60,1360x768@60,1366x768@60,1600x90 0@60,1600x1200@60,1920x1080P@60,1920X1200P@60；
Control scale	A single unit can control a maximum of 288 screens and multiple sets of screens, and can save 200 plans
Clock Jitter	<0.15 Tbit
Risetime	<0.3Tbit (20%--80%)
Bit fall time (Falltime)	<0.3Tbit (20%--80%)

VP-DV4O SEAMLESS DVI Video wall output card

Features

- 4x DVI-D female interface output;

- With splicing function;

- The longest output distance is 7 meters;

- Support hot plugging;

- EDID reading function;

- 4-channel DVI splicing output, the maximum resolution is 1920 * 1200 @ 60HZ;

- Two windows can be opened on a single screen, and signals can be overlap, roaming, and zoomed arbitrarily.

Technical parameter

Model	VP-DV4O
Protocol	
DVI1.0 protocol	
Video	
Gain	0dB
Pixel bandwidth	165MHz, full digital
Interface bandwidth	2.25Gbps full digital (total 6.75Gbps, each color is 2.25Gbps)
Resolution	800x600@60,1024x768@60,1280x720@60,1280x768@60,1280x800@6 0,1280x960@60,1280x1024@60,1360x768@60,1366x768@60,1600x90 0@60,1600x1200@60,1920x1080P@60,1920X1200P@60；
Control scale	A single unit can control a maximum of 288 screens and multiple sets of screens, which can save and quickly recall 200 plans
Clock Jitter	<0.15 Tbit
Risetime	<0.3Tbit（20%--80%）
Bit fall time (Falltime)	<0.3Tbit（20%--80%）
Maximum transmission	5nS(±1nS)
interface	4 DVI-D ports
Signal strength	T.M.D.S. +/- 0.4Vpp
Min / Max level	T.M.D.S. 2.9V/3.3V
impedance	50 Ω
EDID	N/A
Maximum DC offset error	15mV
Recommended maximum input / output distance	The output is less than 7 meters, when 1600x1200 @ 60 (recommended to use certified DVI special wire, such as Molex TM wire)
product weight	0.5KG
Maximum power consumption	15W

VP-DV2O SEAMLESS DVI VIDEO WALL OUTPUT CARD

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Features

- 2 DVI-D female interface output;

- With splicing function;

- The longest output distance is up to 7M;

- Support hot swap;

- EDID reading function;

- 2-channel DVI splicing output, the maximum resolution up to 1920 * 1200 @ 60HZ;

- The single screen can open 4 windows, the signal can be overlap, roaming, and zoomed arbitrarily.

Technical parameter

Model	VP-DV2O
Protocol	
DVI1.0 protocol	
Video	
Gain	0dB
Pixel bandwidth	165MHz, full digital
Interface bandwidth	2.25Gbps full digital (total 6.75Gbps, each color is 2.25Gbps)
Resolution	800x600@60,1024x768@60,1280x720@60,1280x768@60,1280x800@60,1280x960@60,1280x1024@60,1360x768@60,1366x768@60,1600x900@60,1600x1200@60,1920x1080P@60,1920X1200P@60；
Control scale	A single unit can control up to 288 screens and 5 groups of screens, which can save and quickly recall 200 plans
Clock Jitter	<0.15 Tbit
Risetime	<0.3Tbit (20%--80%)
Bit fall time (Falltime)	<0.3Tbit (20%--80%)
Maximum transmission	5nS(±1nS)
interface	4 DVI-D ports
Signal strength	T.M.D.S. +/- 0.4Vpp
Min / Max level	T.M.D.S. 2.9V/3.3V
impedance	50 Ω
EDID	N/A
Maximum DC offset error	15mV
Recommended maximum input / output distance	The output is less than 7 meters, when 1600x1200 @ 60 (recommended to use certified DVI special wire, such as Molex TM wire)
product weight	0.5KG
Maximum power	15W

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VP-HD4O SEAMLESS HDBaseT VIDEO WALL OUTPUT CARD

Features

- 4 channels high-speed RJ45 interface output, 4 channels 6PIN Phoenix socket interface;

- With splicing function;

- Use CAT5e / 6 cable to output the longest distance up to 100M;

- Support hot swap;

- Infrared serial port output, optional IO switch card, can realize infrared serial port switch;

- Compatible with HDBaseT protocol;

- Has external POC power supply, POC power supply needs to be selected, models above 3636 has this function;

- 4 channel twisted pair splicing output, onboard RS232, IR interface;

- Two windows can be opened on a single screen, and signals can be overlap, roaming, and zoomed arbitrarily.

Technical parameter

Model	VP-HD4O
Link port input / output	
Interface	4 high-speed RJ45 seats and 4 6PIN Phoenix seats
Video	
Supported protocols	HDBaseT protocol.
Pixel bandwidth	165MHz, full digital
Interface bandwidth	2.25Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps)
Resolution	800x600@60,1024x768@60,1280x720@60,1280x768@60,1280x800@60,1280x960@60,1280x1024@60,1360x768@60,1366x768@60,1600x900@60,1600x1200@60,1920x1080P@60,1920X1200P@60;
Control scale	A single unit can control up to 288 screens and multiple groups of screens, and can save and quickly recall 128 plans
Signal type	High-speed differential signals defined in HDBaseT protocol

Network cable power supply	With POC power supply (+ 48V), POC power supply needs to be used with the company's CAT5 series transmitter. This card output port can provide power to it
impedance	50 Ω
EDID	N/A
Maximum DC offset error	15mV
Recommended maximum input / output distance	Maximum 100 meters, at 1600x1200 @ 60 (recommended to use NEXANS CAT5e / 6 special wire)
product weight	0.5KG
Maximum power consumption	22W

VP-HD2O SEAMLESS HDBaseT VIDEO WALL OUTPUT CARD

Features

- 2 high-speed RJ45 interface output, 2 6PIN Phoenix connectors;
- With splicing function;
- Use CAT5e / 6 cable to output the longest distance up to 100M;
- Support hot plugging;
- Infrared serial port output, optional IO switch card, can realize infrared serial port switch;
- Compatible with HDBaseT protocol;
- Available for external POC power supply, POC power supply needs to be selected, models above 3636 has this function
- 2 channel twisted pair splicing output, onboard RS232, IR interface;
- 4 windows can be opened on a single screen, and signals can be overlap, roaming, and zoomed arbitrarily.

Technical parameter

Model	VP-HD2O
Link port input / output	
interface	2 high-speed RJ45 seats and 2 6PIN Phoenix seats
Video	
Supported protocols	HDBaseT protocol.

Pixel bandwidth	165MHz, full digital
Interface bandwidth	2.25Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps)
Resolution	800x600@60,1024x768@60,1280x720@60,1280x768@60,1280x800@6 0,1280x960@60,1280x1024@60,1360x768@60,1366x768@60,1600x900 @60,1600x1200@60,1920x1080P@60,1920X1200P@60;
Control scale	A single unit can control up to 144 screens and multiple groups of screens, and can save and save 128 plans.
signal type	High-speed differential signals defined in HDBaseT protocol
Network cable power supply	With POC power supply (+ 48V), POC power supply needs to be used with the company's CAT5 series transmitter. This card output port can provide power to it through the network cable.
impedance	50 Ω
EDID	N/A
Maximum DC offset error	15mV
Recommended maximum input / output distance	Maximum 100 meters, at 1600x1200 @ 60 (recommended to use NEXANS CAT5e / 6 special wire)
product weight	0.5KG
Maximum power	22W

VISSONIC

VIS-PSC802 Professional Scaler Switcher

Overview

VIS-PSC802 is a high-performance seamless UHD presentation switcher with multi-format signal handling. This device scales the video, extract or embed the audio, and outputs the signal through one HDMI port and one HDBaseT port , and 2x8W speaker and balanced stereo audio output simultaneously.

Feature

- Seamless switching
- Perfect 4K scaling technology
- Support HDMI 2.0,HDCP 2.2,DP 2.0
- 8 video inputs – 6 HDMI ports, 1 DP port, 1 VGA port
- 10 Audio source options for each HDMI/DP video source
- LR1,LR2,LR3,LR4,LR5,LR6,LR7,LR8,Microphone,embedded (the audio stream of HDMI source inner)
- 9 Audio source options for VGA video source
- LR1,LR2,LR3,LR4,LR5,LR6,LR7,LR8,Microphone
- 3 Microphone options by dial switch, 48V (Phantom supply), Mic, Line
- 1 HDMI and 1 HDBaseT outputs, same content on HDMI and HDBaseT out
- Up to 3840x2160@60 resolutions with input and output.
- 2x8W speaker output and balanced audio output
- Control the unit with front button,RS232 port and TCP/IP
- IR IN/OUT for HDBaseT transmission
- EDID selection，out resolution selection
- Front panel,RS232,TCP/IP (LAN 10M/100M) control
- Note, When VGA or DVI input, there is no seamless switching for this source

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Specification

Electrical parameters	
Interface	HDMI-A, DB-15, Screw Connectors, RJ45, Display Port
HDMI /DP /VGA Version	HDMI2.0,HDCP2.2,DP1.2,VESA
Bandwidth	18Gbps
Video Resolution	
Input	800x600@60Hz,1024x768@60Hz, 1280x768@60Hz,1280x800@60Hz, 1280x1024@60Hz,1360x768@60Hz, 1366x768@60Hz,1400x1050@60Hz, 1440x900@60Hz,1600x1200@60Hz, 1680x1050@60Hz, 1920x1200@60Hz. 480p,576p,720p,1920x1080i,1920x1080p, 3840x2160@24Hz/25Hz/30Hz/50Hz/60Hz, 4096x2160@24Hz/25Hz/30Hz/50Hz/60Hz. Note: This Device does not support 4:2:0 Color space
Output	1920x1080@60Hz, 3840x2160@30Hz, 3840x2160@60Hz, 1280x720@60Hz, 1024x768@60Hz, 1360x768@60Hz, 1600x1200@60Hz, 1920x1200@60Hz,
EDID option	Auto, Manual,3840x2160@60, 3840x2160@30, 1920x1080@60,1280x720@60,1920x1200@60
HDMI Amplitude	T.M.D.S +/- 0.4Vpp
Differential impedance	100±15ohm
RS232/Ethernet control	
Baud rate and protocol	Baud rate：57600, data bit：8, stop bit：1,no parity checking
Ethernet	IE10.0+,HTML5
Power	
Max Consumption	60W, 110-240VAC
Matrix Mechanical dimensions	
Size(mm)	430(L)X220(W)X44 (H)
Weight	4Kg
Other	
Operating temperature	0 to 40°C
Storage temperature	-20 to 70°C

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VIS-PSC1202 Professional Scaler Switcher

Overview

VIS-PSC1202 is a high-performance presentation scaler/switcher for HDMI and computer graphic signals. The unit scales the video, embeds the audio, and outputs the signal to two HDMI outputs with analog L/R stereo and balanced stereo audio out simultaneously.

Feature

- Perfect scaling and deinterlacing technology.
- HDCP compliance – The HDCP license agreement allows copy-protected data on the HDMI input to pass only to the HDMI outputs.
- 12 video inputs – 10 HDMI on HDMI connectors, 2 computer graphics video on 15-pin VGA connectors
- Two HDMI scaled outputs (the main output and loop output with the same contents). When 4K signal input, the unit will pass the input directly to two outputs.
- Up to 1080p/3840x2160@30 resolutions with input and output.
- Analog audio output with 3.5mm jacket and 5 pin phoenix female connector which used for balanced audio output
- Built in performance management – color, brightness, contrast and sharpness adjust
- On-Screen-Display (OSD) Menu for easy configuration
- Control the unit with front button,RS232 port and TCP/IP

Specification

Electrical parameters	
Interface	HDMI-A, DB-5, Phoenix female connector
HDMI version	HDMI1.4
Bandwidth	300MHz
Resolution	Up to 4Kx2K@30Hz,4Kx2K@60Hz-4:2:0
Clock Jitter	<0.15 Tbit (1080p@60)
RiseTime	<0.3Tbit (20%--80%)
RiseTime	<0.3Tbit (20%--80%)

Transmission Delay	5ns
Amplitude	T.M.D.S +/- 0.4Vpp
Differential impedance	100±15ohm
RS232 control	
Baud rate and protocol	Baud rate：115200,data bit：8, stop bit：1,No parity checking
Power	
Max Consumption	25W, 110-240VAC
Matrix Mechanical dimensions	
Size(mm)	430(L)X220(W)X44 (H)
Weight	3Kg
Other	
Operating temperature	0 to 40°C
Storage temperature	-20 to 70°C
Permissible humidity	10%-50%
Weight	3Kg

VIS-MV71 7x1 Multi-Viewer & Scaler
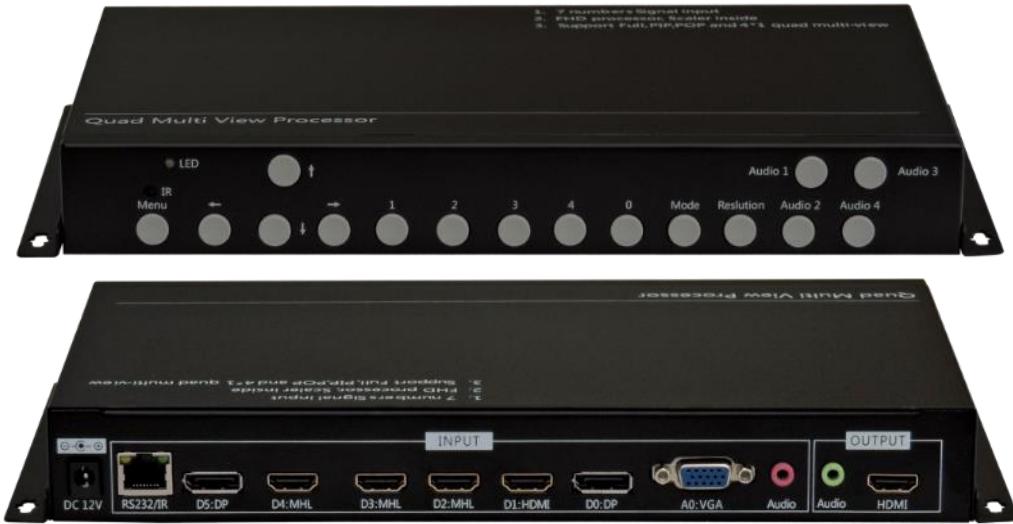
Introduction

VIS-MV71 Switch allows you to view up to four different analog and digital video sources simultaneously on one display device. Advanced viewing options include quad-mode, full-screen mode, POP (picture out picture) and PIP (picture in picture) mode.

VIS-MV71 Multi-Viewer can support 1 channel VGA, 2-way DP, 4-way HDMI video signal input, 1 Audio signal binding VGA input, all input signal can be implemented audio and video synchronization switching;

Support 1 HDMI video signal output, the output resolution and refresh rate up to 1920 * 1080 @ 60HZ; 1 channel Audio signal output can be connected to an external audio amplifier.

VIS-MV71 are mainly used in video conferencing, teaching, exhibitions, shows, games, etc. where need to use a single display unit simultaneously display multiple HD signals

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Features

- Support Quad-mode ,Full screen, and fix position POP, PIP function
- Support 1 VGA, 2-way DP, 4-way HDMI (including 3-way compatible MHL) input signal;
- Support 1 HDMI output with resolution up to 1920 * 1080 @ 60HZ;
- All input signals contain audio, support audio and video synchronous switching and four audio independent switching under quartering;
- Support control by chassis buttons, IR remote control, RS-232 control;

Model	VIS-MV71
Input	
Input port	1 VGA, 2-way DP, 4-way HDMI, 1 stereo audio
Resolution	DP supports a maximum resolution of 1920 * 1080 @ 60HZ, backward compatible; HDMI supports a maximum resolution of 1920x1080 @ 60HZ, downward compatible
audio	Input audio supports 3.5mm audio interface for bind VGA
Color depth	24bit,1677 ten thousand
POP,PIP mode	Fixed model
Output	
interface	1 channel HDMI 1.4 output connected display devices that support audio and video sync output; A 3.5mm audio left and right channel stereo, for connecting stereo
Resolution	1920 * 1080 @ 60HZ, 1280 * 720 @ 60HZ optional
Color depth	24bit,1677 ten thousand
Control mode	RS232、IR、case key
voltage	DC:12V
dimension	278mm(L)*36mm(H)*166mm(W)
weight	1.2kg
Power	Maximum 15W

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Display mode

The quad multi-viewer have 9 display modes.
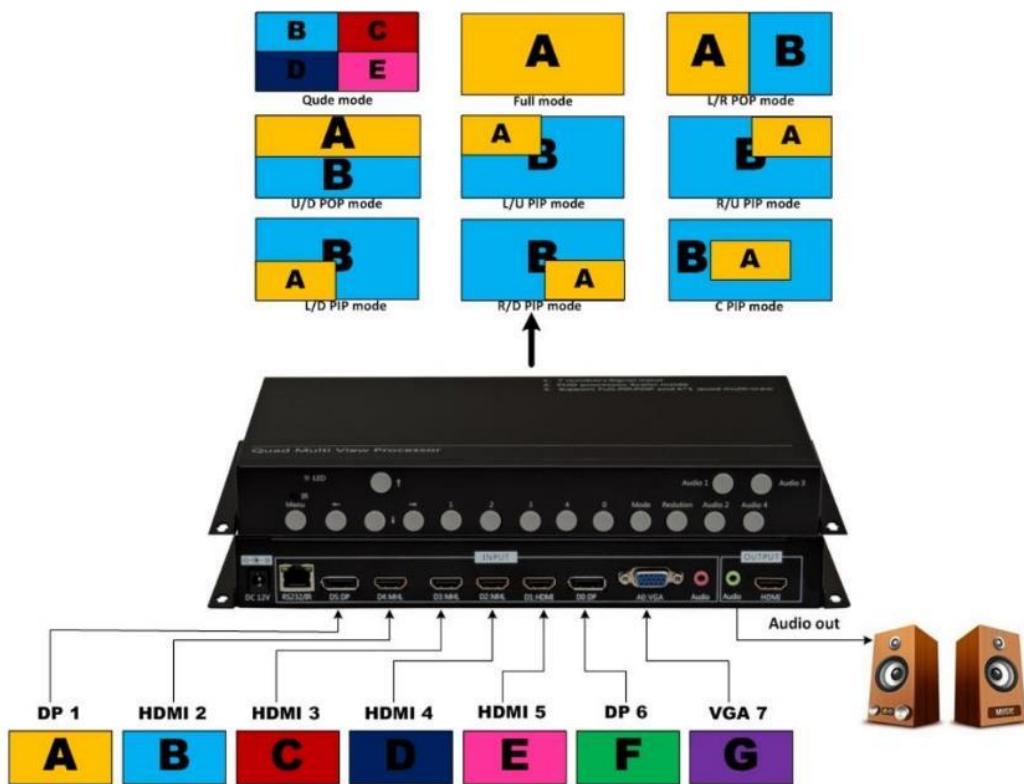
Diagram

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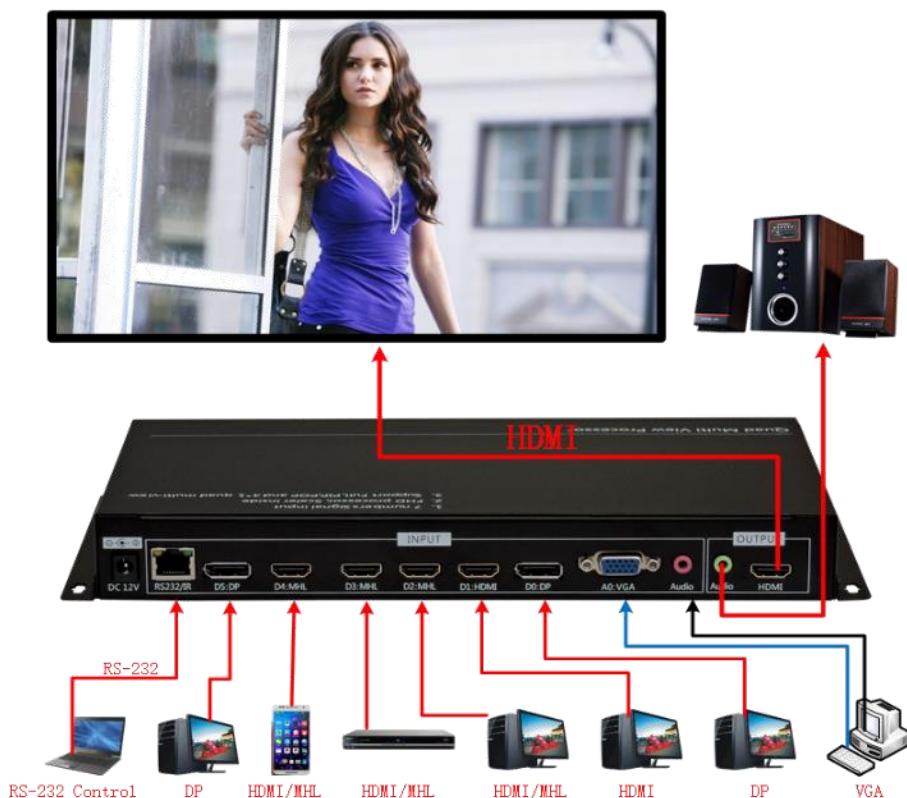
VIS-PHD44/88/1616 UHD4Kx2K HDMI Matrix

Overview:

PHD series HDMI matrix is professional switcher routs UHD 4Kx2K HDMI signals to any outputs in need. It provides high peak data transfer rate and perfectly supports synchronous switching of HDMI signals, the robust industrial design makes it able to be a signal management center for high definition signal transmission. It can be widely used in command control center, multi-screen systems, conference room, high definition medical or education teaching etc.

Features

Support 4 HDMI inputs and 4 HDMI outputs

Support 3 GHz video formats up to 4k × 2k at 24 Hz/25 Hz/30 Hz, in addition to all mandatory HDMI 3D TV formats.

HDCP and DVI compliant

Supports 10/100Mbps Ethernet network connection

Supports Baud rates up to 115200bps

No loss and no delay HDMI Crosspoint switch

Support HDMI 1.4 protocol

Flexible control: front key panel with LCD, RS232 bus, TCP/IP control with RJ45 interface

Input HDMI cable lengths up to 30 meters

Mode saving function, can save and load 32 different scenes.

Supports default HDMI EDID and learns the EDID of displays

Easy installation with rack-mounting design

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System Diagram

Application

Specification

Model	VIS-PHD44
Input type	HDMI
Output type	HDMI
Video Protocol	HDMI 1.4, HDCP 1.3, compliant to DVI1.0
Maximum resolution	Up to 4kx2k at 24 Hz/25Hz/30Hz
HDMI interface	Type A, 19 pin, female
Serial Interface	RS-232 IN, DB9, Female; RS-232 OUT, DB9, Male
Input cable length	Adaptive equalizer for cable lengths up to 30 meters
Output cable length	≤ 15m
RJ45 control protocol	TCP/IP
Ethernet rate	Self-adaptive 10M/100M
Storage environment	Temperature: -20°C ~ +70°C, humidity: 10%~90%
Work environment	Temperature: -20°C ~ +70°C, humidity: 10%~90%
Power supply	AC 110~240V
Maximum power dissipation	10W
Dimensions(WxDxH)	1U(436.8X280X44.5)mm
Weight	About 2.3Kg
MTBF	30,000 hours
Warranty	One year warranty and lifetime maintenance

VIS-Quad41 4x1 Multi-Viewer and 12x1 switcher

with KVM control

Overview

VIS-Quad41 multiviewer and switcher is a high-performance image processor, and it's main function is turn 4 BNC、VGA、HDMI input signal into 1 HD HDMI and VGA signal, which make 4 digital signal display in one HD screen unit synchronously and HDMI signal with USB(like mouse、keyboard) can be switched synchronously. VIS-Quad41 multi-viewer and switcher support various kinds display unit with HDMI, such as: projector、LCD、DLP、plasma、full color LED.

VIS-Quad41 multiviewer and switcher is chief applied to video conference、teaching、display and demonstration、stock ect, where need single display unit display multi HD signal synchronously, and it generally used in the market at present.

Meanwhile,VIS-Quad41 multiviewer and switcher is the only product that add USB synchronous switch, so when case or IR controller switch to fully display one signal ,correspondingly, USB of computer host also synchronous switch.It meet the demand of video conference which need with mouse and keyboard synchronously.

Features

- Support single display unit display 4 HD or analog signal synchronously under Quad mode;
- Support 4 composite video、4VGA、4 HDMI, 12 input signals under full screen mode;
- Support 1 VGA and 1 HDMI synchronic output;
- 4 input USB signal,2 output USB, and USB connect mouse and keyboard;
- Support KVM function, that is USB、mouse、keyboard with video synchronous switch;
- Compatibility all kinds of input resolution and support output resolution of 1920*1080;
- Size and position of image can be adjust arbitrarily, and other functions, such as: windowing、superposition、roaming、PIP、POP.
- Support regulatory image transparency, therefore you can see base picture though upper image;
- Can be commonly used in any nation in the the world due to support ultra wide input alternating voltage of 90V to 264V;
- It's draw bench case is standard dimension of 1U ,so it can be put on normal equipment cabinet;

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- Can be controlled by case key、IR、RS-232 serial port and center control.
- High quality HD quad video multiplexers is especially customized generate for video engineering;

Specification

Model	VIS-Quad41
HDMI/DVI　input	
Input port	4BNC、4VGA、4HDMI、4USB
Resolution	Support 1920*1080 ultrahigh highest resolution and downward compatibility all kinds of resolutions
Color depth	24bit,1677 ten thousand
Zoom and display	unlimited
Video input	
Identify pattern	automatic
Image adjust	Move、transformate、brightness、contrast、color temperature;
output	
interface	1 HDMI、1VGA synchronic output;2USB connected mouse、keyboard or other equipment
Resolution	1920*1080/60HZ,can customize downward this resolution
frequency	60HZ
Color depth	24bit,1677 ten thousand
Control mode	RS232、IR、case key
Cotrol software	HD video multiplexers professional control sofeware
voltage	AC　90~260V
dimension	442mm(L)*45mm(H)*242mm(W)
Power	No more than 15w

Display mode

4 HDMI or VGA image signal display in one screen unit in quartering at the same time,can simultaneously monitor

4 HD HDMI or VGA signal ,as following:

Fully display one signal

It can switch to fully display whichever input signal like HDMI、VGA and BNC though switching control. As following:

USB switch under quartering mode

It realize mouse、keyboard KVM division function though control software or UA1、UA2、UA3 and UA4 keys, that is can control and operate whichever host under quartering mode by means of a set of mouse and keyboard.

Full screen and USB synchronous switch

When you choose fully display certain HDMI or VGA,USB video signal also switch to this image signal which binding with it,so you can operate the host binding with fully display image through USB mouse、keyboard；

Other mode

By control software,it can achieve other multi individual display mode,like PIP、POP、window overlap、roaming、any size, any position；

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Thirds division mode   custom mode   PIP mode

Diagram
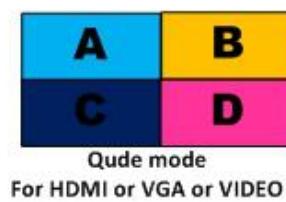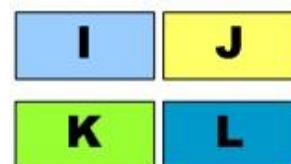
VIS-QuadKVM 7x1 Multi-Viewer&KVM

Introduction

VIS-QuadKVM is a high-performance image switch and it's main function is to make 4 HD or analog signal display in one UHD 4K display unit synchronously under Quad mode and Full screen, PIP and POP mode.

It has 1x VGA、2 xDP、4xHDMI signal input. The highest DP input signal can support 3840*2160@60HZ,the highest HDMI input signal can support 3840*2160@30HZ and the highest output resolution can reach to 3840*2160@60HZ.

VIS-QUADKVM switcher support 1 channel HDMI 2.0 output, the output resolution and refresh rate up to 3840x2160 @ 60HZ, the output refresh rate of high-definition 4K video multiplexers is the highest on the market at present. Meanwhile, if input 4signal of 1920 * 1080, 4K display unit may display under quartering , point-to-point display 4-way high-definition signals, 4 full HD 1080P video signal can be completely uncompressed displayed on a 4K display unit, and there is no any distinguish between 4 image signal connect a 1080P display unit with single1080P signal link a 1080P display unit.

Meanwhile, VIS-QUADKVM video multiplexers can also supports USB synchronous switch HD video multiplexers, switch to a computer signal display full screen by a case key or remote control , the corresponding host computer's USB also synchronous switch, which realize the need of achieving synchronous switch mouse, keyboard of video conferencing.

VIS-QUADKVM HD video multiplexers is use a relatively large number in standard products currently on the market ,products are mainly used in video conferencing, teaching, exhibitions   ect ,where need to use single display

unit simultaneously display multiple HD signals workplace.

Features

- Supports one 1 VGA, 2 DP, 4 HDMI (including 3-way compatible MHL) input signal, the input resolution up to 3840 * 2160 @ 60HZ, downward compatible;
- Supports one HDMI 2.0 output, the output resolution up to 3840 * 2160 @ 60HZ;
- Support point-to-point simultaneous display 4-way 1920 * 1080 full HD signal;
- Input and output signal wide support audio, also support 3.5mm headphone jack and the left and right channel stereo output;
- 2 USB signal output, USB connection support mouse and keyboard, and USB with image synchronous switch;
- Support Quad mode and Full screen, PIP and POP mode.
- Wide support 90V ~ 264V AC input, can be commonly used to any country worldwide;
- Support front panel, infrared remote control, RS232 serial control

Specification

| Model	VIS-QuadKVM
Input	
Input port	1VGA、2DP、4HDMI、4USB、1right and left channel audio
Resolution	DP support highest resolution of 3840*2160@60HZ and downward compatibility
	HDMI support highest resolution of 3840*2160@30HZ and downward compatibility
Color depth	24bit,1677 ten thousand
PIP POP mode	Fixed model
Output	
interface	1 HDMI2.0 connect display device and support video、audio sync output;
	One 3.5 mm audio right and left stereo
	2 USB 2.0,one connect mouse the other connect keyboard
Resolution	Canchoose3840*2160/60HZ,3840*2160@30HZ,1920*1080@60HZ,1280*720@60HZ
Color depth	24bit,1677 ten thousand
Control mode	RS232、IR、case key
Control software	Not available
voltage	AC　90~260V
dimension	441mm(L)*44mm(H)*239mm(W)
Power	No more than 15w

audio	Audio input supports 3.5mm audio interface input, for Binding VGA;

Display mode

The quad multi-viewer have 9 display modes.
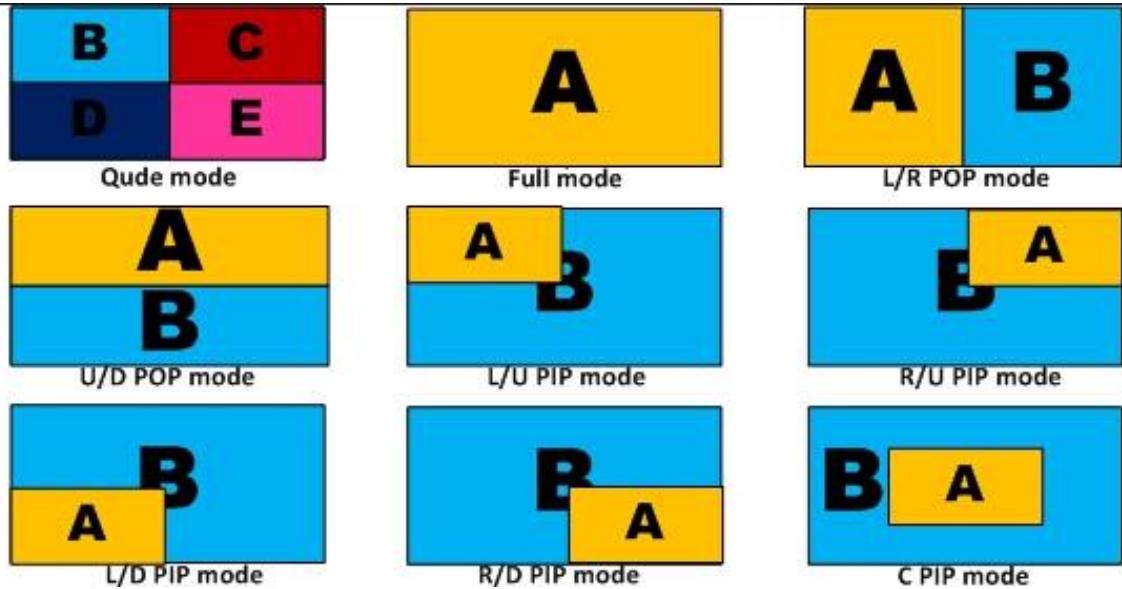
Diagram
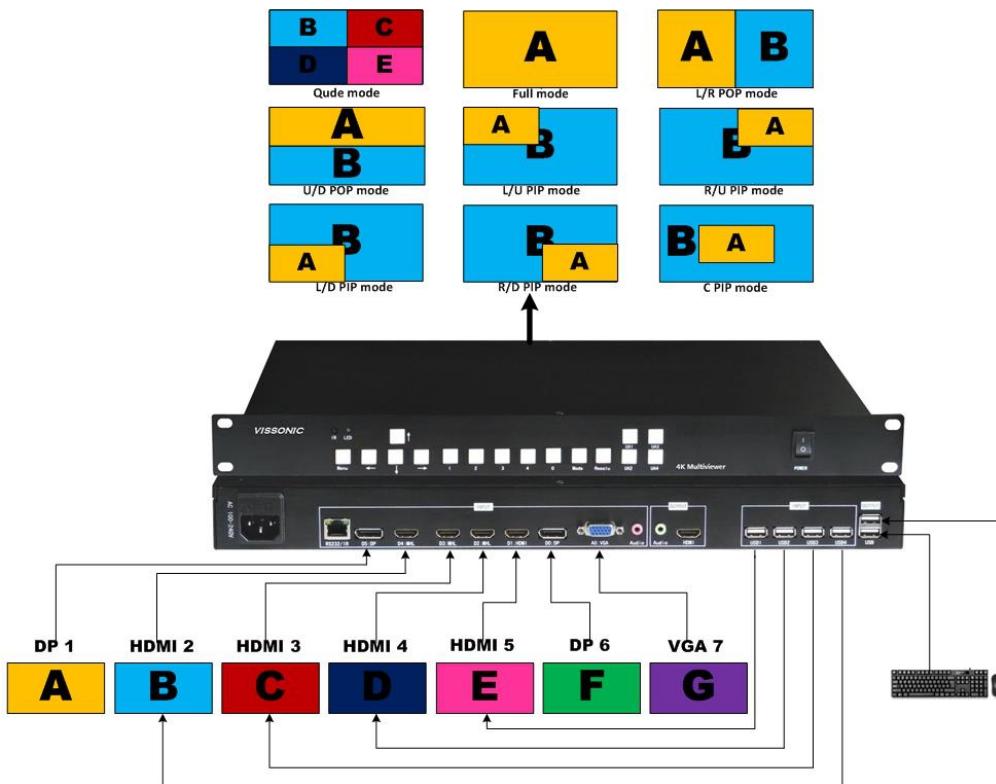
VIS-MDW series 4K video wall Multi-Angle controller

True 4K@60Hz
Ultra HD Signal

Overview

VISSONIC VIS-MDW series is a 4K resolution multi-screen multi-directional stitching processor. It can support the splicing process of the screen rotated 90 degrees.

This device can easily and quickly configure the display screen placed at a special angle, without affecting the normal display of the screen, and can support a specially designed ultra-clear display pattern.

Widely used in mall advertising, outdoor scenes, hotels, clubs, restaurants and other places

Feature

- Support horizontal or vertical splicing of screens of different sizes at the same time

- Any output port can be set to 90 degrees, 180 degrees, 270 degrees flip

- Can intercept any part of the input signal for display

- Support HDMI signal input with resolution and refresh rate up to 3840x2160@60HZ

- The output signal can be up to 1920x1080@60Hz

- Support arbitrary cropping

- Professional control software with simple operation

- EDID Management

Order information:

VIS-MDW-4..........................4 outputs video wall controller(1U)

VIS-MDW-6..........................6 outputs video wall controller(1U)

VIS-MDW-12........................12 outputs video wall controller(2U)

VIS-MDW-25........................25 outputs video wall controller(2U)

**Picture Effect it can do:**
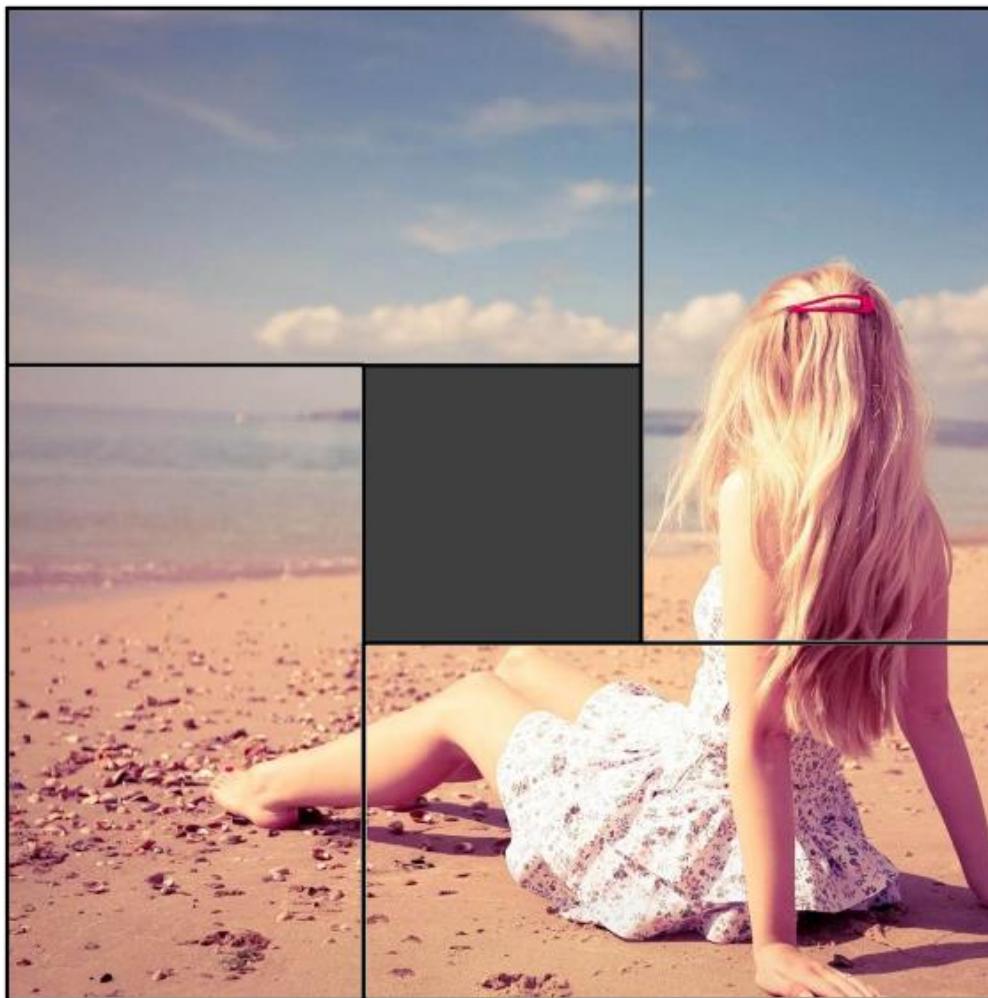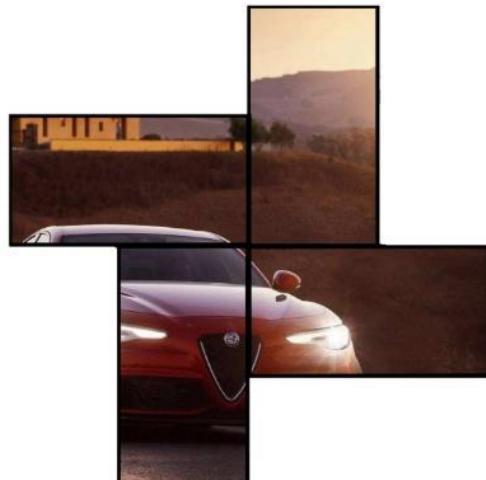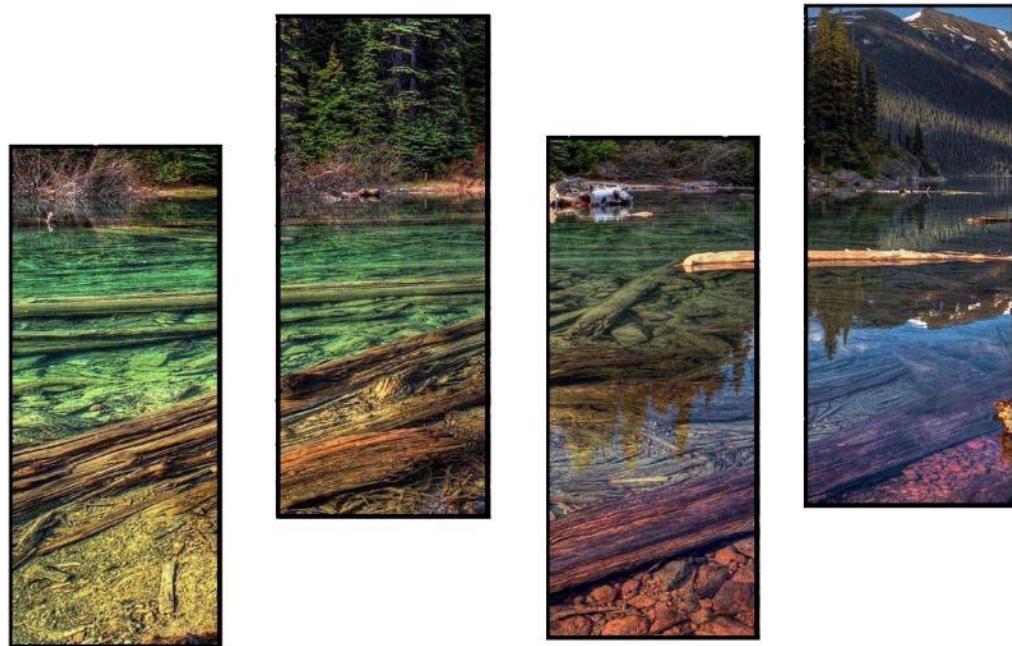
Regular splicing function

Arbitrary cropping

Picture cropping from any input source
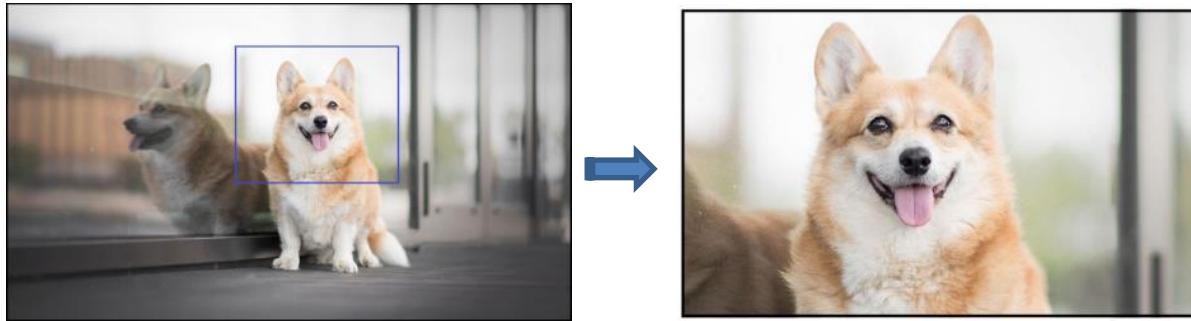
Visual control software

All functions can be simply operating on software by user friendly interface

VISSONIC
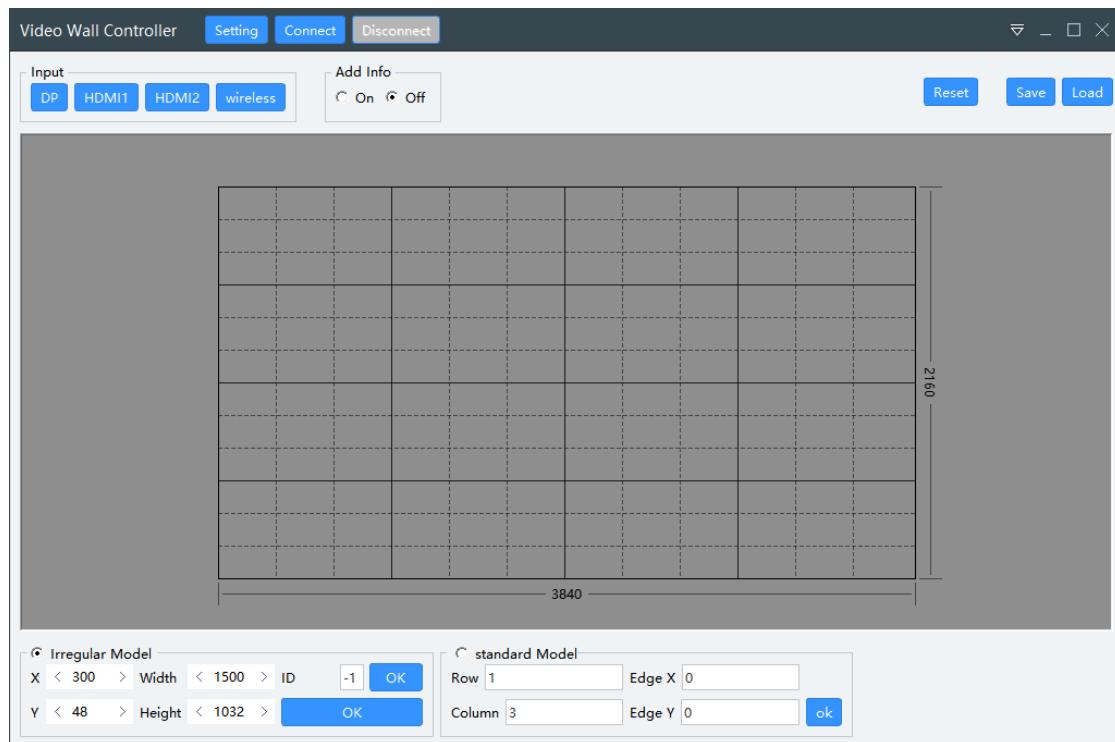
Diagram
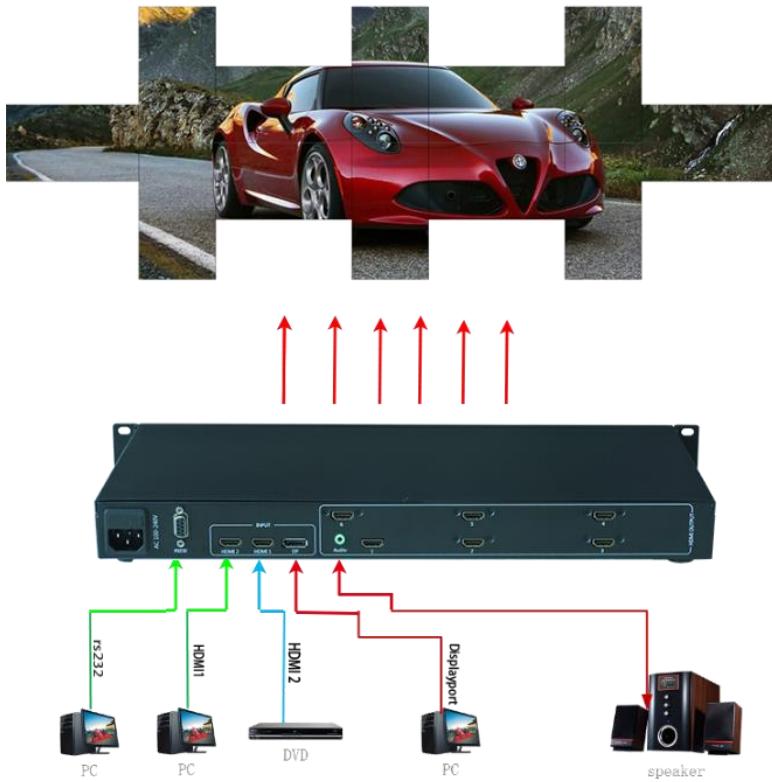
Specifications

Name	specification
Input	
input interface	1 channel HDMI2.0, 1 channel DP, 1 channel HDMI1.4 signal;
Resolution	HDMI and DP support a maximum resolution of 3840*2160@60HZ, backward compatible;
Output	
Output Interface	Customized 2 to 12 HDMI 1.3 output connection display devices, support audio and video synchronization output; A 3.5mm audio left and right channel stereo for stereo sound;
Output resolution	1920x1080@60HZ;
Color depth	24bit, 16.77 million colors
control method	Chassis button, software control;
Input voltage	AC voltage 100-220V;
Display mode	Alien stitching and standard stitching modes, etc.
Product Size（1U）	440mm (length) x240mm (deep) x43mm (height)
Product Size（2U）	442mm (length) x242mm (deep) x45mm (height)
Net weight	（1U）3.0KG、（2U）3.0KG
Power consumption	20W maximum

Application

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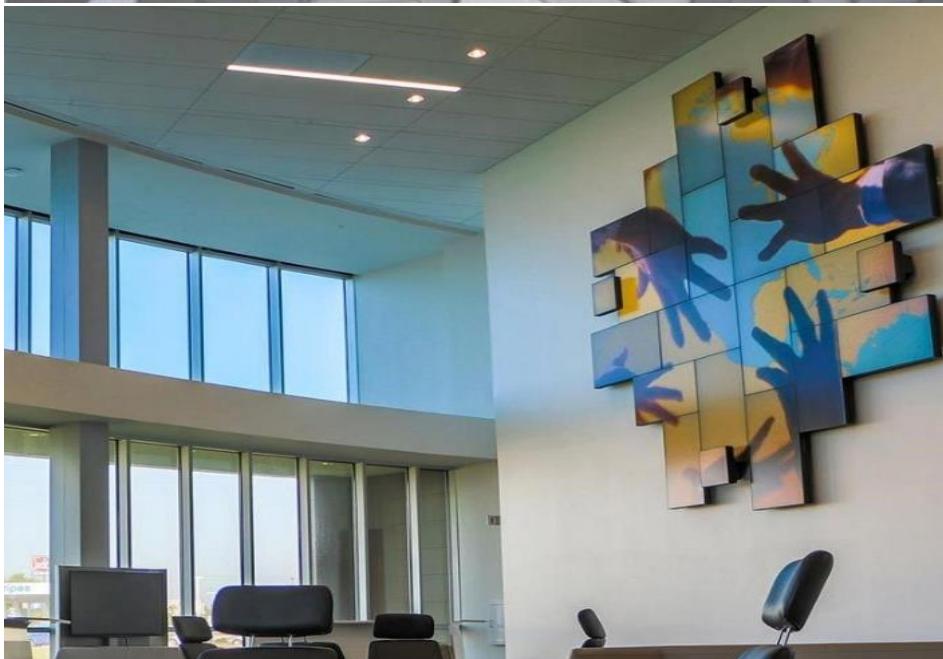
VIS-UHD0808-VW 8x8 Seamless 4K UHD Matrix and Video Wall Processor

Overview

VIS-UHD0808-VW is a high-performance seamless UHD matrix switcher with 8x HDMI inputs and 8x HDMI outputs. Audio extract or insert can also be enabled on this device. IR matrix routing on this video matrix is followed with video routing. VIS-UHD0808-VW support one or more video wall with RS232 command

Feature

- Support HDMI 2.0/HDCP 2.2
- HDMI video output resolution up to 3840x2160@60
- Support seamless switching
- Support video wall
- Support IR matrix
- Support HDMI audio extract
- Support external LR audio insert on HDMI stream
- Support EDID management
- Front panel,RS232,TCP/IP (LAN 10M/100M), software & Web GUI control

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Specification

Electrical parameter	
Interface	HDMI-A
HDMI /DP /VGA Version	HDMI2.0,HDCP2.2
Bandwidth	18Gbps
Input	800x600@60Hz,1024x768@60Hz, 1280x768@60Hz, 1280x800@60Hz,1280x1024@60Hz,1360x768@60Hz, 1366x768@60Hz,1400x1050@60Hz,1440x900@60Hz, 1600x1200@60Hz,1680x1050@60Hz, 1920x1200@60Hz,480p,576p,720p,1920x1080i, 1920x1080p,3840x2160@24Hz/25Hz/30Hz/50Hz/60Hz, 4096x2160@24Hz/25Hz/30Hz/50Hz/60Hz.
Output	3840x2160@60Hz, 3840x2160@50Hz, 3840x2160@30Hz, 3840x2160@25Hz, 1920x1200@60Hz,1920x1080@60Hz, 1920x1080@50Hz,1600x1200@60Hz, 1400x1050@60Hz,1366x768@60Hz, 1360x768@60Hz, 1280x1024@60Hz, 1280x768@60Hz, 1280x720@60Hz, 1280x720@50Hz, 1024x768@60Hz
HDMI Amplitude	T.M.D.S +/- 0.4Vpp
Differential impedance	100±15ohm
RS232/Ethernet control	
Baud rate and protocol	Baud rate：9600, data bit：8, stop bit：1,no parity checking
Ethernet	IE10.0+,HTML5
Power	
Max Consumption	100W, 110-240VAC
Matrix Mechanical dimensions	
Size(mm)	430(L)X300(W)X44 (H)
Weight	5Kg
Operating temperature	0 to 40°C
Storage temperature	-20 to 70°C
Permissible humidity	10%-50%

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VIS-VW4 Mini 4 Picture Video Wall Processor

Overview

The VW4 is designed to be performed as video wall processor, with its compact but versatile features, you can easily to realize video wall picture in many ways to manage the digital signal input, on the display like LCD, Plasma, TV etc.

The input signal types: HDMI, VGA, Composite video, moreover, the decoded video like RMVB, audio and Photos can be processed through USB. Output HDMI port to meet the most common interface on the display to support up to 1080P.

Features

It supports 4 channel HDMI output, connect to 4 pcs LCD, DLP, Plasma etc terminal display, to build a complete picture on it. Can be customized to 2x2, 1x4, 4x1 etc mode. Input signals support 1x Composite video, 1x HDMI, 1x VGA and 1x USB.

All-type-format signal--- including composite video, VGA, DVI, HDMI etc.
Advanced full digital chipset process --- Built-in conversion for analog/digital, interlaced/progressive, resolution, aspect ratio and refresh rate.

HDCP compliant---HDMI 1.3, HDCP protection

High precise picture margin stitching technology—Compare to normal video wall processor, it has unique physical margin decrease technology, to make the whole picture display in right dimension but not be processed into distortion picture.

Perfect Picture

Picture in distrotion

Specification

Type	Content
HDMI input	
Interface	HDMI（support HDCP1.3 and DVI1.0）
Resolution	Up to 1920*1080@60Hz
Color	24bit,16.77M
VGA input	
Interface	DB15
Resolution	800*600 to 1920*1080@60Hz
AV input	
Interface	RCA
Identification	Auto
Standard	PAL,NTSC
USB	
Video	RM、RMVB、AVI、WMV、MOV、MP4、FLV、MPG、DAT、MPEG etc, resolution up to 1080P
Audio	MP3、WMA、FLAC and so on
Picture	JPG、BMP、PNG
Text	TXT
Audio in	VGA video
Audio output	With Output video
HDMI output	1024*768@60hz,720P@60Hz,1080P@60Hz
Control	Remote,button,RS232
Dimension	260mm(L)x150mm(W)x44mm(H)

VIS-VW10 Picture Video Wall Processor

Overview

The VW10 is designed to be performed as video wall processor, with its compact but versatile features, you can easily to realize video wall picture in many ways to manage the digital signal input, on the display like LCD, Plasma, TV etc.

The input signal types: HDMI, VGA, Composite video, moreover, the decoded video like RMVB, audio and Photos can be processed through USB. Output HDMI port to meet the most common interface on the display to support up to 1080P.

Features

1.Multi-screen model

   User can increase or reduce output modules due to VIS-VW10 adopt modular design. And single machine can 25 maximum HDMI joint signal output with compatibility DVI protocol. It can realize unlimited joint through cascade connection; According to user demand , single machine can be customized various kinds of multi-screen patterns such as 2*2、3*3、1*2、2*3、3*2、2*4、4*2、2*5、5*2 ect.

2.Input signal

   It can support 4 input signal in total consist of 1 composite video、1 VGA 、1 HDMI、1 USB; and HDMI and USB interface with audio and video decoding function, composite video and VGA signal add relevant audio interface. What's more ,all input video signal can switch to with audio output in synchronization .Following is the interface diagram:

3.Mirror function

Compare with common multi-screen processor, VIS-VW10 can realize 180°mirror overturn function toward each single display unit. It will be sharply decreasing the gap of LCD joint, which make image more vivid if LCD TV overturn 180°toward above row when user joint ordinary LCD TV. Following shown:

Before overturn

After overturn

4.Edge blanking function

Without edge blank function, all joint display unit have frame gap, which make image pull rip up in vision and feeling unnatural; Image more natural and lively without transformation and draw after edge blank process. Following are comparison diagram;


Without edge blanking function

After edge blanking process

5.USB transmit function

Product can support USB transmit and joint function. After finishing LCD joint basic function, user can set merely video or image joint pattern play. It's simple and useful, no need extra allocation a computer or other broadcast equipment, only we need to do is insert a U disk at USB interface in our product multi-screen process.

● USB can support common video、image、MP3、TXT document;
● Can play select video or unselect
● All video can support play in order or cycle、pause、speed、program list
● 6 Key Function
● Realize shortcut switch VIDEO、USB、HDMI、VGA;
● Shortcut switch between joint and unjointed
● Adjust the wide and high of edge blanking
● Output volume control
● Adjust brightness、contrast ratio、color saturation
● Setting the Speed of USB 、next song 、program choose
● The other function of multi-screen processor

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6.Diagram
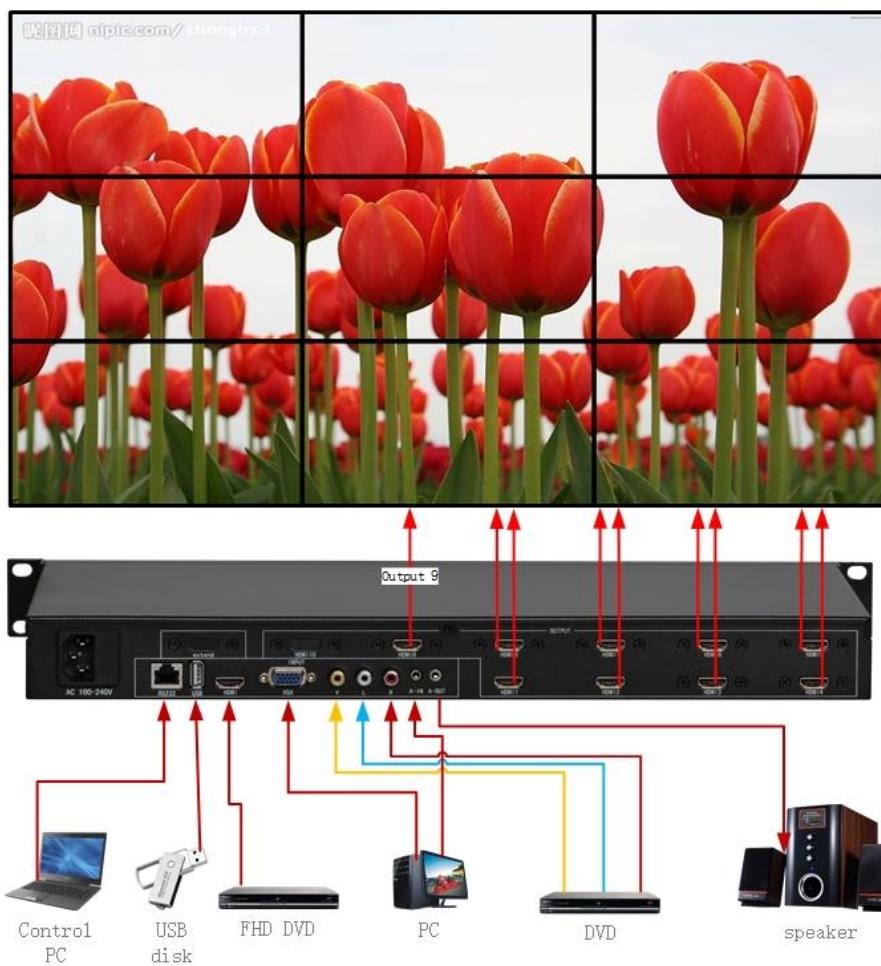
7. Customizable multi-screen joint(Following are part of customizing pattern)

2x2 Splice
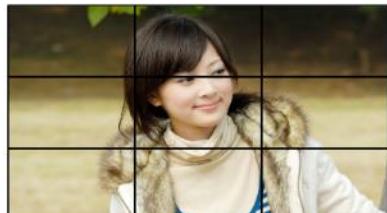
3x3 Splice

3x2 Splice

2x4 Splice

2x3 Splice

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4x1 Splice

5x2 Splice

Specification

Name	Specification
Input signal	
VGA	HD15 interface and link with 1 audio interface of 3.5 Support 640*480/85HZ to 1920*1200/60HZ
HDMI	HDMI 1.4(HDCP 1.3) DVI 1.0 ,HDMI embed audio
Video	Automatic identification the system of NTSC、 PAL and SECAM,link with 1 audio interface of 3.5
USB	Standard interface of 2.0,can insert U disk, embed audio; Support video、 image、 MP3、 TXT
Output signal	
HDMI interface	4 HDMI output, support joint pattern of 2*2,1*4,4*1; Support customizing output signal of 2 to 25; 1920*1080P/60HZ、 1280*720、 60HZ;
Audio	3.5 Audio interface, support left and right channels and stereo, AV signal switch synchronously
others	
Control mode	RS232、 IR 、 case key
Power supply	AC: 100 to 240 V
Joint pattern	Quad standard joint,single machine customize joint of 2 to 25
Power	20W
Case size	
Dimensions(1U)	1U 19 inch standard crate,442mm(L)*45mm(H)*242mm(W)
Weight(1U)	2.5KG

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VIS-HE20 HDMI/VGA to HDBaseT Wallplate
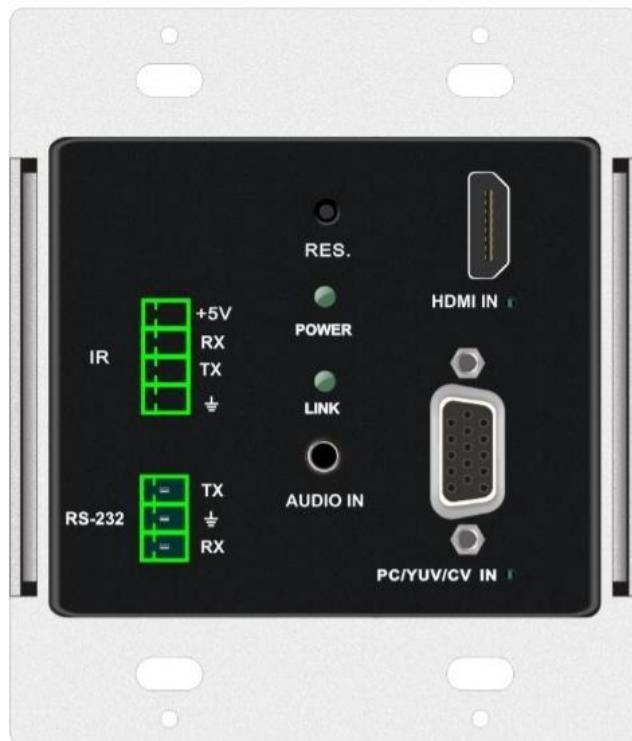

Overview:

VIS-HE20 embedded wall panel transmitter using HDBaseT technology to transmit video, audio and control signals (can be used with the matrix), and HDBaseT series interface products are fully compatible. Support CVBS, YPbPr, VGA, DVI, HDMI signal transmission and IR, RS232 pass through function, DC 12V / 2A power supply and support POC power supply.

This product is mainly used in radio and television engineering, multimedia conference hall, TV teaching, command and control center and other occasions.

Features

- Support CV, YPbPr, VGA, DVI, HDMI video and audio signal transmission;
- Support the input source signal automatically switches the adaptive function;
- Support output resolution adjustable, up to 1080P @ 60;
- Support IR, RS-232 pass through function;
- Use CAT5 UTP cable to transmit (up to 100M).
- Support POC power supply function.

System Diagram
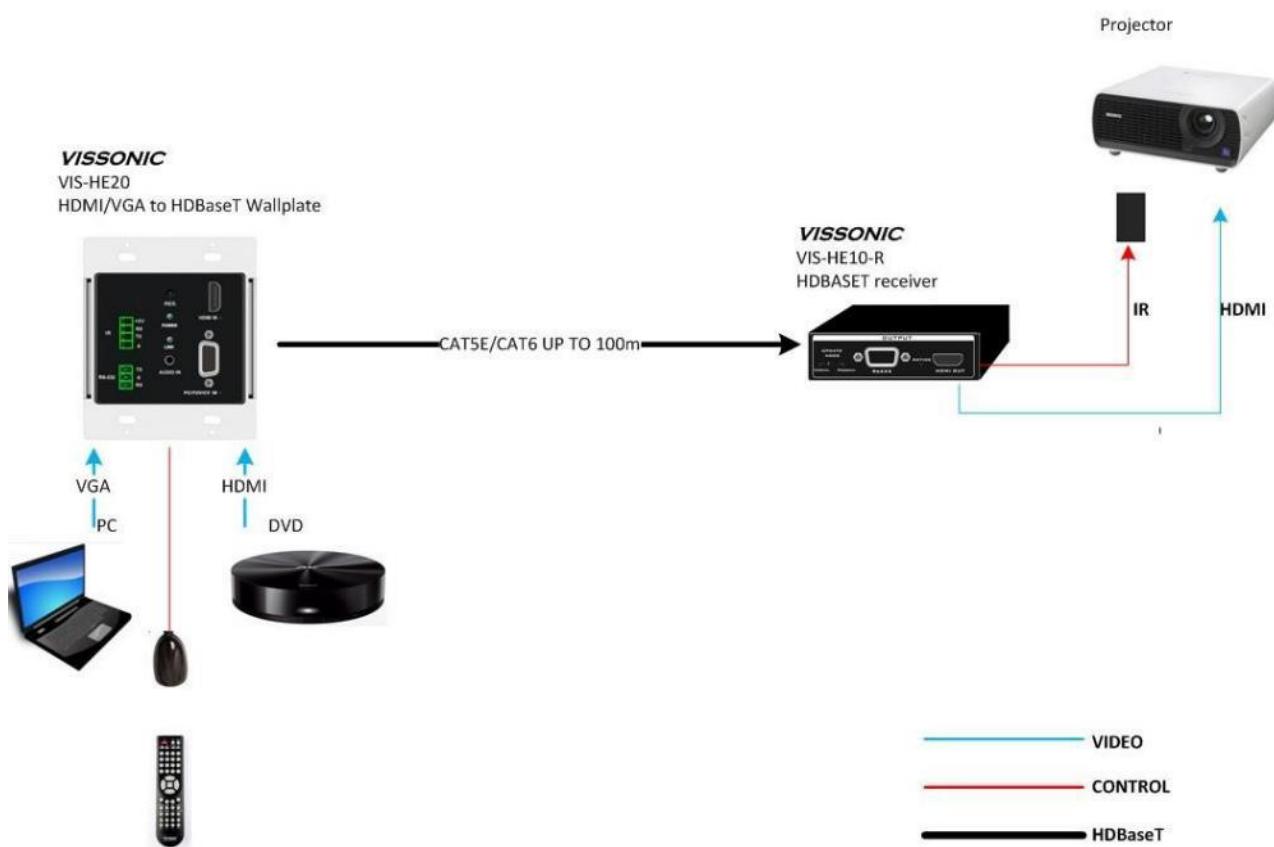
Application

Specification

Model / Specification	VIS-HE20
Analog Video Input	
Interface	VGA PORT

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Model Specification	VIS-HE20			
Signal type	CV	YPbPr	Y/C	VGA
Gain	0dB	0 dB	0dB	0 dB
Bandwidth	150MHz @ -3dB	350MHz @ -3dB	150MHz @ -3dB	380 MHz
Differential phase error	0.1°,3.58-4.43 MHz	0.1°,3.58-4.43 MHz	0.1°,3.58-4.43 MHz	
Differential gain error	0.1% , 3.58-4.43 MHz	0.1% , 3.58-4.43 MHz	0.1% , 3.58-4.43 MHz	
Signal strength	1V p-p：（CVBS）	1V p-p：（Y part） 0.3Vp-p: (PbPr/CbCr part)	1V p-p：S terminal(Y/C)	0.63V p-p to 0.9 V p-p
Minimum / maximum level	Analog signal: -2V/+2V	Analog signal: -2V/+2V	Analog signal: -2V/+2V	RGB Signal :0V/1.0V HV Signal：0V/5.0V
input resistance	75 Ω	75Ω	75 Ω	75Ω
Return loss	<-30dB@5MHz	<-30dB@5MHz		<-30dB@5MHz
HDMI input				
Protocol	HDMI1.3a,DVI1.0,HDCP1.3			
Pixel bandwidth	Pixel bandwidth 165MHz,full digital			
Interface bandwidth	2.25Gbps,full digital（Total 6.75Gbps，each color 2.25Gbps）			
Max. Resolution	PC 1920x1200@60_24bit HDTV 1920x1080P@60_36bit			
Clock Jitter	<0.15 Tbit			
Risetime	<0.3Tbit (20%--80%)			
Falltime	<0.3Tbit (20%--80%)			
Signal type	HDMI 1.3a /DVI 1.0 define HDM/DVI-D full digital T.M.D.S. signal			
Interface	HDMI-A (Type A connector)			
Signal strength	T.M.D.S. 3.3V p-p			
Minimum / maximum level	T.M.D.S. 2.9V/3.3V			
Resistance	50 Ω			
Maximum DC offset error	+/-15mV			
Recommended maximum input distance	Less than 15m under 1920x1080 with quality cable			
Input EDID	Use the system default EDID			
RS-232				

Model Specification	VIS-HE20
Interface	Input 3PIN-3.81mm
Signal type	Digital
Level type	RS232 level
Signal direction	Two-way communication
Baud rate	Min:4800bps Max:115200bps
Data bit	8 bits
Stop bit	1 bit
Correction bit	None
Flow control	None
Level delay	500 ns
Level peak	+/-15V
IR signal	
Interface	Input/output：4PIN-3.81mm phoenix
Signal type	Input：digital output：digital
Output level type	PLL level
Wavelength	850nm
Input level carrier frequency	38KHz
Link input/output	
Interface	RJ45 port
Support Protocol	HDBaseT protocol; full support HDMI1.4 protocol 3D part, including support for all HDMI1.4 agreement in the mainstream 3D display mode, but does not include 3D_1080P @ 120Hz, backward compatible with HDMI1.3 standard, HDCP1.3 protocol, DVI1. 0 protocol.
PIXEL bandwidth	Pixel bandwidth 225MHz,full digital
Interface bandwidth	6.75bps（RGB:2.25 Gbps/per lane）
Max. Resolution	Normal-PC：1600x1200P@60_24bit，HDPC： 1920x1200P@60_24bit； HDTV：1920x1080P@60_36bit； 3D Format：1920x 1080P@24_36bit。
Signal type	HDBaseT protocol defined in the high-speed differential signal
Max. input/output distance	Max.100m with 1920x1080@60hz with CAT5E/CAT6/CAT7
Specification	
Power supply	+12V
Temperature	-20°～ +70°C
Humidity	10% ～90%

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VIS-HE10 HDBaseT extender for 100m

Overview:

The **VIS-HE10** HDMI Extender over cat5e/cat6 is to extend the HDMI signal over long distances to a compatible display. It is designed to convert HDMI signal to standard HDBaseT signal and transmit by Cat5e/6 cable. It also transmit Bi-directional Infrared signal together with the HDMI signal, capable of controlling the source in the device side out to 100 meters, or from source to device, RS232 pass through makes it more convenient to be controlled.

Features

Allow HDMI signal/IR transmit up to 100 meter over Cat5e/6 cable
HDMI signal from 1080P to 4Kx2K, 3D video format support, HDCP compliance
IR signal/RS232 pass through together with HDMI over Cat5e/6 cable bi-directionally for remote control
Ultra Light&thin case design for easy installing

System Diagram

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Application

Surveillance Center

LCD Wall

TV Store

Karaoke
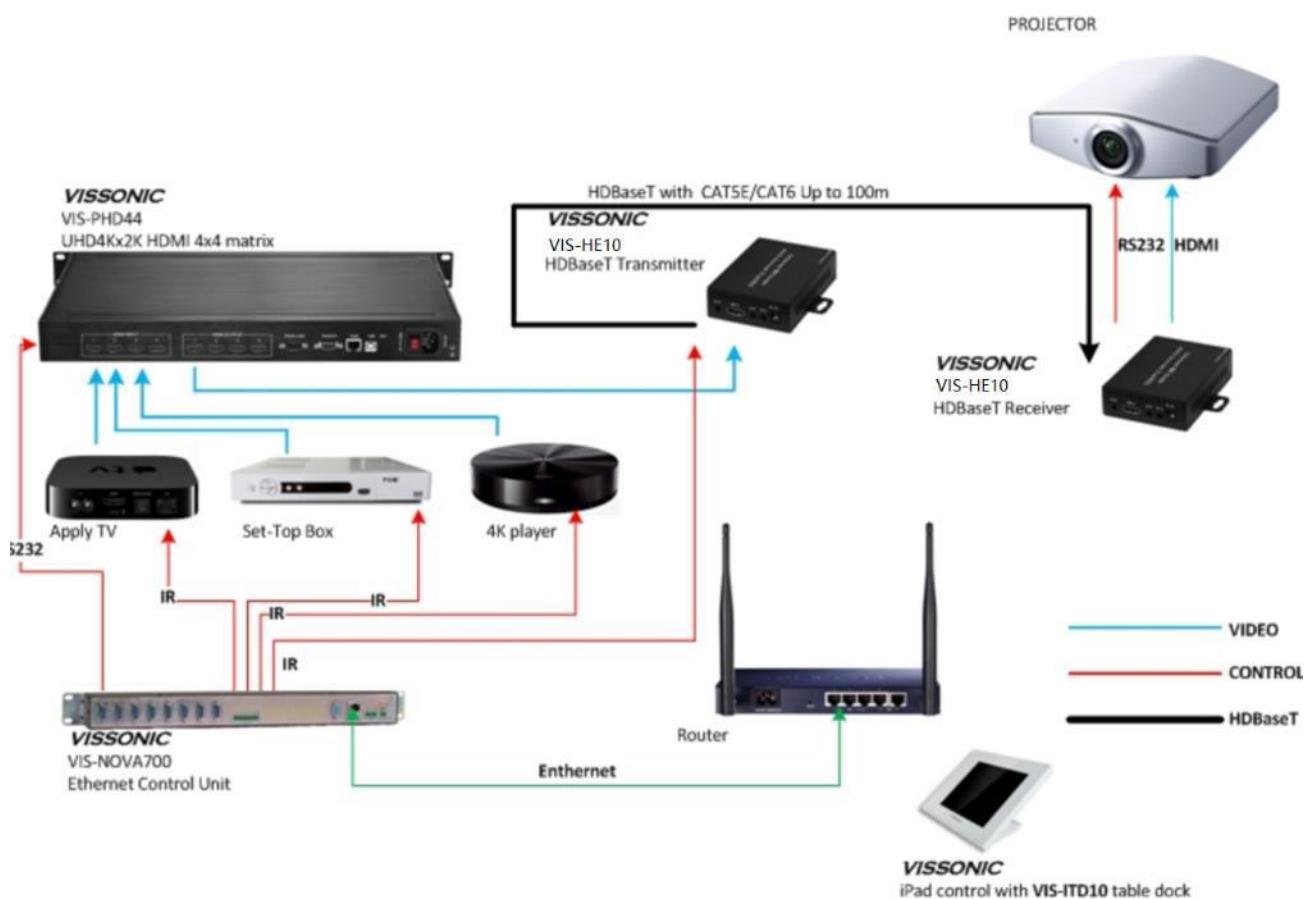
Specification

HDMI video interface	
Protocol support	HDMI1.4, HDCP1.3，EDID1.4
Pixel bandwidth	330MHz
Interface bandwidth	10.2Gbps
Maximum resolutions	1900x1200@60Hz，3840X2160@30Hz
	HDTV: 1920x1080P@60Hz BD:4Kx2K@30Hz
Signal type	HDMI 1.4 / T.M.D.S.
IN/OUT interface	HDMI type A, female; HDBaseT
Signal amplitude	T.M.D.S. +/- 0.4Vpp
Min/Max Voltage	T.M.D.S. 2.9V/3.3V
Input impedance	100Ω
Dimensions	135mmX75mmX15mm
Control interface	
Serial	RS232 (3PIN 3.5mm)
Baud	110-115200bps
IR control	IR (3.5MM)
IR frequency	38K
ETHERNET	RJ45
Transmission Distance	Up to 100m by CAT5e/6
Power supply	18V DC
Maximum dissipation	18W

About VISSONIC Electronics Limited

Our mission is to develop and manufacture the most comprehensive and innovative audio visual products for our clients. We provide the best performance/price ratio products because it could give you satisfaction just from the time you use them, we believe the good design with cutting edge technology on products will provide value to all our partners and end users. Listen to your demands, we fulfill it.

VISSONIC