MVP-8C(N) MVP-16C MVP-32C

Multi Video Plus Modular Matrix

Description：

Multi Video Plus, MVP-8C(N) MVP-16C MVP-32C multi-format modular matrix is a HD video and audio signal management device support flexible Video I/O configuration with max 12 video inputs or min 4 outputs configuration.

The flexible configuration for the MVP-8C(N) matrix as below: 5In*3Out/ 2In*6Out/ 4In*4Out/ 6In*2Out/ 1In*1Out or more collocation format.

The flexible configuration for the MVP-16C matrix as below: 12In*4Out/ 1In*15Out/ 8In*8Out/ 3In*5Out/ 5In*3Out or more collocation format.

The flexible configuration for the MVP-32C matrix as below: 24In*8Out/ 16In*16Out/ 8In*16Out/ 1In*31Out/ 4In*12Out or more collocation format.

The units will support the HDMI/ DVI/ DP/ VGA/ YPbPr/ HDBT/ CVBS/3G HDSDI video format. With scalar output cards the system also will support seamless switching.

System is the highest resolution support 4 k, support HDMI1.4B. The matrix has a power protection at the scene. 5 inch capacitive touch screen display. WEB page interface control and firmware update. A variety of formats handshaking. The plug-in structure, easy installation and flexible. At the same time have the ethernet port and RS232 communication interface, Can be convenient of personal computers to Control system or the remote control equipment. The device for the need to switch from the digital audio professional engineering provides a unique solution.

Features:

- MVP-8C(N)C modular design on each port, max 6 input and min 2 output ports;
- MVP-16C modular design on each port, max 12 input and min 4 output ports;
- MVP-32C modular design on each port, max 24 input and min 8 output ports;
- Input cards: HDMI/ DVI/ DP/ VGA/ YPbPr/ HDBT/CVBS/ Optic/ 3G HDSDI;
- Output cards: HDMI/ DVI/ DP/ VGA/ YPbPr/ HDBT//CVBS/OPTIC/ 3G HDSDI/Scalar card;
- Up to 4K@30Hz(4:4:4);
- Support daughter card hot plug and alone power management;
- Audio matrix support the external and internal audio switch to each other，max 32 switch to each other;
- Support EDID management;
- Support field FW upgrade;
- Support 32 preset road scene and call ;
- Support RS232, LAN, IR , RS485 and Relay;
- Support Web Server for easy management, monitor and configuration;
- Support Front 5 inch capacitive touch screen display for the input and output of the resolution and EDID status;
- Support the user data backup and restore function;
- Support LAN port TCP Socket or RS232 command control;
- Web interface to support full function control, and Show all the status information of the matrix;

MVP Series 16C I/O cards

Matrix technical parameter

Type	MVP-8C (N)	MVP-16C	MVP-32C	
Size	2Urack mounted	3Urack mounted	5.5Urackmounted	
Port number	8	16	32	
Maximum AV in/out channel	7~8 are fixation output channel; 1~6 are input or output channel	13~16 are fixation output channel; 1~12 are input or output channel	25~32 are fixation output channel; 1~24 are input or output channel	
Center control	Not support	1		

number			
Power input	AC 100 - 240V 50Hz/60Hz		
Power output	⩽ 5 A		
Power dissipation	⩽ 180 W	⩽ 320 W	
Fuse standard	220 V 1.5A		
Redundant power	●		
Storage temperature/humidity	-20℃ ～ 85℃ / 20%～60%		
Operating temperature/humidity	0℃ ～ 60℃ / 10%～80%		
Altitude limit	0 ～ 2000m		
Air pressure limit	⩽ 79.5 kPa		
Signal type	TMDS		
Lever	+0.6 V ～ +1.2 V		
Maximum TMDS bandwidth	3.2G bit/s		
Maximum connector bandwidth	3.2G bit/s		
Maximum audio sampling	48kHz		
Maximum color	1080P 36 bit/px; 4K 24 bit/px		
Port impedance	50Ω / 100Ω		
Clock recovery	Auto		
DDC protocol	DDC DDC2B		
DDC lever	5 Volts p-p(TTL)		
Switching time	seamless ⩽ 1s; common⩽ 5s		
Serial port	1-bidirectional RS-232, 3PIN Phoenix (female)		
Port define	PIN 1:TX PIN 2:GND PIN 3:RX		
Baud rate	9600～115200 (default), 8 data bits, 1 stop bit, none,		
Control protocol	ASCII code		
LAN port	RJ-45		

LAN data rate	10/100BaseT, half/full duplex	
Ethernet support protocol	ICMP, ARP, IP, TCP, UDP, DHCP, HTTP	
Update port	RJ45	
Update way	browser	
Cooling system	Cool wind	

Cards technical parameter

Card version	Type	Video signal type	Resolution			Seamless switching	EDID/ HDCP	Control signal/ POE	Audio embedded	Status
			HDTV	VESA	4K					
MVPS-I-HDMI	I	HDMI	●	●	●	×	●	×	●	Sale
MVPS-O-HDMI	O	HDMI	●	●	●	×	●	×	●	Sale
MVPS-I-HDBT1	I	HDBT	●	●	●	×	●	●	●	Sale
MVPS-O-HDBT1	O	HDBT	●	●	●	×	●	●	●	Sale
MVPS-I-HDBT2	I	HDBT	●	●	●	×	●	●	●	Sale
MVPS-O-HDBT2	O	HDBT	●	●	●	×	●	●	●	Sale
MVPS-I-VGA-	I	VGA	●	●	×	×	×	×	●	Sale
MVPS-I-YPBPR	I	YPbPr	●	×	×	×	×	×	●	Sale
MVPS-I-CVBS	I	CVBS	●	×	×	×	×	×	●	Sale
MVPS-I-DVI	I	DVI	●	●	×	×	●	×	●	Sale
MVPS-I-SDI	I	3G SDI	●	×	×	×	●	×	●	Sale
MVPS-I-DP	I	DP	●	●	●	×	○	×	●	
MVPS-I-OPTIC	I	Optic	●	●	●	×	●	○	●	Sale
MVPS-O-HDMI-S	O	HDMI-S	●	●	●	●	●	×	●	Sale
MVPS-O-DVI-S	O	DVI-S	●	●	●	●	●	×	●	Sale
MVPS-O-DP-S	O	DP-S	●	●	●	●	●	×	●	
MVPS-O-SDI-S	O	3G SDI-S	●	×	×	●	×	×	●	Sale
MVPS-O-HDBT-S	O	HDBaseT-S	●	●	●	●	●	●	●	Sale
MVPS-O-OPTIC-S	O	Optic-S	●	●	●	●	●	○	●	Sale

MVPS-O-VGA-S	O	VGAS	●	×	×	●	×	×	●	Sale
MVPS-O-YPBPR-S	O	YPBPR-S	●	×	×	●	×	×	●	Sale
MVPS-O-CVBS-S	O	CVBS-S	●	×	×	●	×	×	●	Sale

note:

- "I"means input card ,"O"means output card
- ● : support all character
- ○ : support portion character
- × : not support
- HDTV resolution：480i、576i、720p、1080i、1080p
- VESA resolution：800×600 ~ 1920×1200
- 4k resolution：3840×2160

card description

HDBaseT card

MVP-8C(N)/MVP-16C/MVP-32C HDBaseT cards can be used to transmit video/audio/RS232/power with a single CAT 6 shielding cable as long as 90 meters. HDBaseT cards also have the function of embed/de-embedded audio, audio in the cards can be switched separately. HDBaseT cards support EDID management and support standard HDCP. Cards support RS232 pass through.

Technical parameters

The board type	HDBT1 input	HDBT2 input	HDBT1 output	HDBT2 output
number/Signal types	A HDBaseT audio and video signals and control signals			
The connector type	RJ-45 8P line terminal			
Recommend the	STP CAT6/CAT6A and above			

cable type				
1080P Maximum transmission distance	≤ 60m		≤ 90m	
4KMaximum transmission distance	≤ 30m(CAT6A)		≤ 60m（CAT6A）	
Support video standard	HDTV 1080p @60Hz；VESA 1920×1200；4K 30Hz			
Support color space	RGB；YCbCr(4:2:2) YCbCr(4:4:4)			
Seamless switching	No support			
EDID management	DDC channels, EDID manager			
HDCP management	Settings HDCP authorization or not			
Board type	HDBT1 input	HDBT2 input	HDBT1 output	HDBT2 output
Audio embedded	embedded		De-embedded	
Port hot plug	support			
Power supply	Single channel transceiver power supply DC +28V or standard PSE			
Storage temperature/humidity	-20℃ ～ 85℃/ 5%～40% RH			
Work temperature/humidity	0℃ ～ 50℃/ 10%～70% RH			
Note	Support RS232 pass through, terminal blocks, more flow			

Appearance of the structure

HDBT1 input/HDBT2input as shown in the figure

HDBT1 output/HDBT2 output as shown in the figure

Light is state

light	describe	function
STA	Signal light	Always off — The corresponding channel has no signal input Normally on - the corresponding channel has signal input
PWR	Power light	Always off - corresponding interface card does not work, power off. Normally on - board electricity work accordingly

HDMI cards

The HDMI interface card can embed separated audio, support audio embedded solution, audio can be switched independently (break away). Support HDCP2.2, Input card support EDID information update operations and output card support EDID read operations, which make the EDID management more effective.

Technical parameters

The board type	HDMI input	HDMI output	
number/Signal types	A HDMI signal	A HDMI signal	
The connector type	HDMI Type A terminal	HDMI Type A terminal	
Recommend the cable type	The standard 26AWG HDMI 2.0		
Maximum transmission distance	≤ 10m		
Support video standard	HDTV 1080p @60Hz；VESA 1920×1200；4K@60Hz		

Support color space	RGB；YCbCr(4:2:2) YCbCr(4:4:4)
Seamless switching	Not support Support
EDID management	DDC channels, EDID manager
HDCP management	Settings HDCP authorization or not
Audio embedded	embedded De-embedded
Port hot plug	support
Power supply	DC +5V 0.25A(1.25W)
Storage temperature/humidity	-20℃ ～ 85℃ / 5%～40% RH
operating temperature/humidity	0℃ ～ 50℃ / 10%～70% RH

Appearance of the structure

HDMI input as shown in the figure

HDMI output as shown in the figure

Technical parameters

light	describe	function
STA	Signal light	Always off — The corresponding channel no signal input Normally on - the corresponding channel signal input
PWR	Power light	Always off - corresponding interface card does not work, power off Normally on - board electricity work accordingly

DVI card

Technical parameter

The board type	MVPS-I1-DVI	MVPS-O1-DVI-S
number/Signal types	1 channel DVI-D signal	
The connector type	DVI-I 24+5	
Recommend the cable type	Standard 26AWG	
Maximum transmission distance	⩽ 10m	⩽ 10m
Support video standard	HDTV 1080p @60Hz; VESA 1920×1200	1080p/720p60Hz
Support color space	RGB; YCbCr(4:2:2) YCbCr(4:4:4)	
Seamless switching	Not support	Support
EDID management	DDC channels, EDID manager	Not support
HDCP management	Settings HDCP authorization or not	Not support
Audio embedded	embedded	De-embedded

Port hot plug	Support
Power supply	DC +5V 0.25A(1.25W)
Storage temperature/humidity	-10℃ ～ 70℃ / 5%～40% RH
operating temperature/humidity	0℃ ～ 50℃ / 10%～70% RH

Appearance of the structure

DVI input as shown in the figure

DVI output as shown in the figure

Technical parameters

light	describe	function
STA	Signal light	Always off — The corresponding channel no signal input Normally on - the corresponding channel signal

		input
PWR	Power light	Always off - corresponding interface card does not work, power off Normally on - board electricity work accordingly

Optic card

Technical parameter

The board type	MVPS-I1-Optic	MVPS-O1-Optic
number/Signal types	1-core Multi Mode Fiber Video Extender	
The connector type	LC fiber optic port	
Recommend the cable type	2-core one mode G652.D or Multi Mode OM3	
Maximum transmission distance	single mode≤1500m or multi mode≤300m	
Support video standard	HDTV 1080p @60Hz; VESA 1920×1200	
Support color space	RGB; YCbCr(4:2:2) YCbCr(4:4:4)	
Seamless switching	Not support	Support
EDID management	Not support	
HDCP management	Not support	
Audio embedded	embedded	De-embedded
Port hot plug	Support	
Power supply	Not support	
Storage temperature/humidity	0℃ ～ 60℃ / 5%～40% RH	
operating temperature/humi	0℃ ～ 45℃ / 10%～70% RH	

dity	

Appearance of the structure

Optic input as shown in the figure

Optic output as shown in the figure

Technical parameters

light	describe	function
STA	Signal light	Always off — The corresponding channel no signal input Normally on - the corresponding channel signal input
PWR	Power light	Always off - corresponding interface card does not work, power off Normally on - board electricity work accordingly

SDI card

Technical parameter

The board type	MVPS-I1-3GSDI	MVPS-O1-3GSDI-S
number/Signal types	1channel SD/HD/3G - SDI siganl	
The connector type	BNC	
Recommend the cable type	75-5 RG6/RG59	
Maximum transmission distance	RG6 ⩽ 120m; RG59 ⩽ 80m	
Support video standard	SMPTE-259M/ 274M/292M/296M/ 372M/424M/425M	
Support color space	RGB; YCbCr(4:2:2) YCbCr(4:4:4)	
Seamless switching	Not support	Support
EDID management	Not support	
HDCP management	Not support	
Audio embedded	embedded	De-embedded
Port hot plug	support	
Power supply	Not support	
Storage temperature/humidity	0℃ ～ 60℃ / 5%～40% RH	
operating temperature/humidity	0℃ ～ 50℃ / 10%～70% RH	

Appearance of the structure

SDI input as shown in the figure

SDI output as shown in the figure

Technical parameters

light	describe	function
STA	Signal light	Always off — The corresponding channel no signal input Normally on - the corresponding channel signal input
PWR	Power light	Always off - corresponding interface card does not work, power off Normally on - board electricity work accordingly

CVBS card

Technical parameter

The board type	MVPS-I1-CVBS	MVPS-O1-CVBS
number/Signal types	1 channel CVBS signal	
The connector type	BNC	
Recommend the cable type	Standard 26AWG	
Maximum transmission distance	⩽ 10m	
Support video standard	NTSC/PAL	
Support color space	RGB	
Seamless switching	Not support	Support
EDID management	Not support	
HDCP management	Not support	
Audio embedded	embedded	De-embedded
Port hot plug	Support	
Power supply	Not support	
Storage temperature/humidity	0℃ ～ 60℃ / 5%～40% RH	
operating temperature/humidity	0℃ ～ 50℃ / 10%～70% RH	

Appearance of the structure

CVBS input as shown in the figure

CVBS output as shown in the figure

Technical parameters

light	describe	function
STA	Signal light	Always off — The corresponding channel no signal input Normally on - the corresponding channel signal input
PWR	Power light	Always off - corresponding interface card does not work, power off Normally on - board electricity work accordingly

YPBPR card

Technical parameter

The board type	MVPS-I1-YPBPR	MVPS-O1-YPBPR-S

number/Signal types	1 channel YPBPR signal	
The connector type	DB15	
Recommend the cable type	Standard 26AWG	
Maximum transmission distance	⩽ 10m	
Support video standard	SJT 11333-2006	
Support color space	RGB	
Seamless switching	Not support	Support
EDID management	Not support	
HDCP management	Not support	
Audio embedded	embedded	De-embedded
Port hot plug	Not support	
Power supply	Support	
Storage temperature/humidity	0℃ ～ 60℃ / 5%～40% RH	
operating temperature/humidity	0℃ ～ 50℃ / 10%～70% RH	

Appearance of the structure

YPBPR input as shown in the figure

YPBPR output as shown in the figure

Technical parameters

light	describe	function
STA	Signal light	Always off — The corresponding channel no signal input Normally on - the corresponding channel signal input
PWR	Power light	Always off - corresponding interface card does not work, power off Normally on - board electricity work accordingly

VGA card

Technical parameter

The board type	MVPI-1-VGA	MVPI-1-VGA-S
number/Signal types	1 channel VGA signal	
The connector type	DB15	
Recommend the cable type	Standard 26AWG	

Maximum transmission distance	⩽ 10m	
Support video standard	VESA/ HDTV	
Support color space	RGB	
Seamless switching	Not support	Support
EDID management	Not support	
HDCP management	Not support	
Audio embedded	embedded	De-embedded
Port hot plug	Support	
Power supply	Not support	
Storage temperature/humidity	0℃ ～ 60℃ / 5%～40% RH	
operating temperature/humidity	0℃ ～ 50℃ / 10%～70% RH	

Appearance of the structure

VGA input as shown in the figure

VGA output as shown in the figure

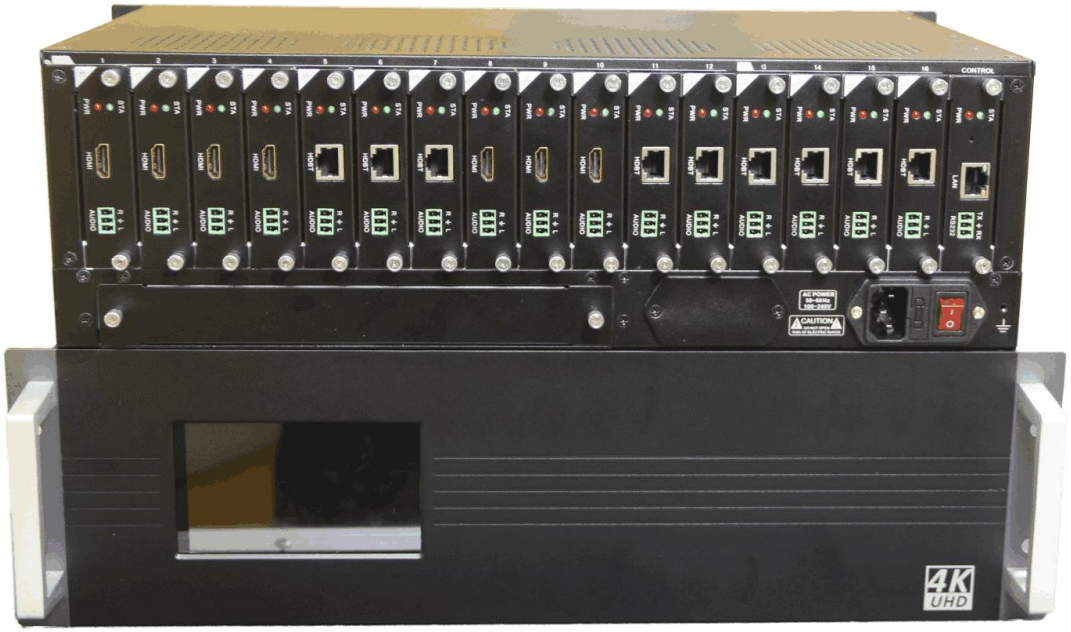
Technical parameters

light	describe	function
STA	Signal light	Always off — The corresponding channel no signal input Normally on - the corresponding channel signal input
PWR	Power light	Always off - corresponding interface card does not work, power off Normally on - board electricity work accordingly

Meeting Room Application

MVP-8C

MCP-16C



MVP-32C