

HD Matrix Switcher System

I. the product introduction:

The machine is a matrix switcher that supports signal input and output in multiple formats. The product adopts the plug-in design method, which can support customized multi-channel signal input and multi-channel signal output. The boards compatible with input and output include: HDMI, DVI format. The user can match the input and output cards according to the requirements, and realize the functions of the two formats of signals to be processed at will, and perform high-definition conversion.

The machine is a powerful matrix switcher. It can realize the arbitrary switching of any input and output, and realize the function of matrix switcher.

The matrix switcher has a simple control method, which can be controlled through chassis buttons, infrared remote control, visual control software, and central control. The communication control interface supports RS-232 serial port and TCP/IP (optional) or WEB (optional) (TCP and WEB can only choose one from two). The device is controlled through chassis buttons, infrared remote control, browser web pages, visual control software, and third-party brand central control systems. The built-in LCD on the front panel will display the operation results and working status.

The Hybrid Matrix provides a complete modular processor selection solution for multi-signal environments such as control centers, conference rooms, multimedia classrooms and more.

II. the functional characteristics:

- With the plug-in design, the user can freely select or increase or decrease the input and output signal modules;
- Input compatible with HDMI, DVI, VGA, 3G-SDI signals, output supporting HDMI, DVI, VGA formats;
- interface bandwidth 3.4Gbps (total bandwidth 10.2Gbps), support the highest resolution: 3840x2160P@30;
- The EDID learning function can read the EDID of the display device and write it into the input terminal, which greatly improves matrix compatibility;
- Support HDCP1.4 version with outstanding security and digital content protection;

- support Blu-ray DVD or other devices that require HDCP decoding;
- the card supports hot plugging, plug and play;
- with power-down memory function, with power-off field protection function;
- standard chassis button, infrared remote control, RS-232 serial port, central control, optional TCP-IP control or WEB control;
- international standard power supply support (100~240V AC, 50/60HZ), safety certification;

III. the input and output card list:

Input card	HDMIx4 INPUT	4-channel HDMI signal input
	DVIx4 INPUT	4-channel DVI signal input
	VGA-IN	4-channel VGA signal input
	SDI-IN	4-channel 3G-SDI signal input
Output card	HDMIx4 OUTPUT	4-channel HDMI signal output
	DVIx4 OUTPUT	4-channel DVI signal output
	VGA-OUT	4-channel VGA signal output

IV. various input and output card detailed parameters

4HD-in input card parameter features:

- Bandwidth up to 10.2Gbit/s (340MHz)
- Built-in HDCP management, support DVI1.0, HDMI 1.4
- The highest resolution is up to 1080p,
- 3840*2160@30Hz,
Support HDTV;
- Support DVI signal
- Digital audio synchronous transmission
- Support high color (support XV color)
- Support DuPont digital HD audio, DTS-HD audio signal
- Plug and play, easy to operate



4DVI-in input card parameter features:

- Bandwidth up to 10.2 Gbit/s (340 MHz);;
- The highest resolution is up to 1080p,
- 1920*1200@60Hz,
- Support HDTV;
- Support compatible with HDMI signals
- Support high color (support XV color)
- Plug and play, easy to operate



VGA-in input card parameter features:

- Support audio input
- Support any resolution below 1920x1200@60Hz
- Automatic detection of resolution changes
- Support image automatic adjustment
- Field configuration, plug and play, easy to operate



SDI-in input card parameter features:

- Support 1080P full HD signal
- Support audio and video synchronization transmission
- Support SMPTE259M, SMPTE292M, SMPTE424M and ITU standards
- Automatic detection of resolution changes
- Work signal indicator
- Field configuration, plug and play, easy to operate



4HD-out output card parameter characteristics

- Bandwidth up to 10.2Gbit/s (340MHz)
- Support HDMI 1.4;
- Support EDID reading and writing function;
- Support HDCP protocol;
- The highest resolution is up to 1080p. 3840*2160@30Hz, fully supports HDTV
- Support for DVI signals
- Digital audio synchronous transmission
- Support high color (support XV color)
- Support Dupi digital HD audio, DTS-HD audio signal
- Plug and play, easy to operate



4DVI-out output card parameter features:

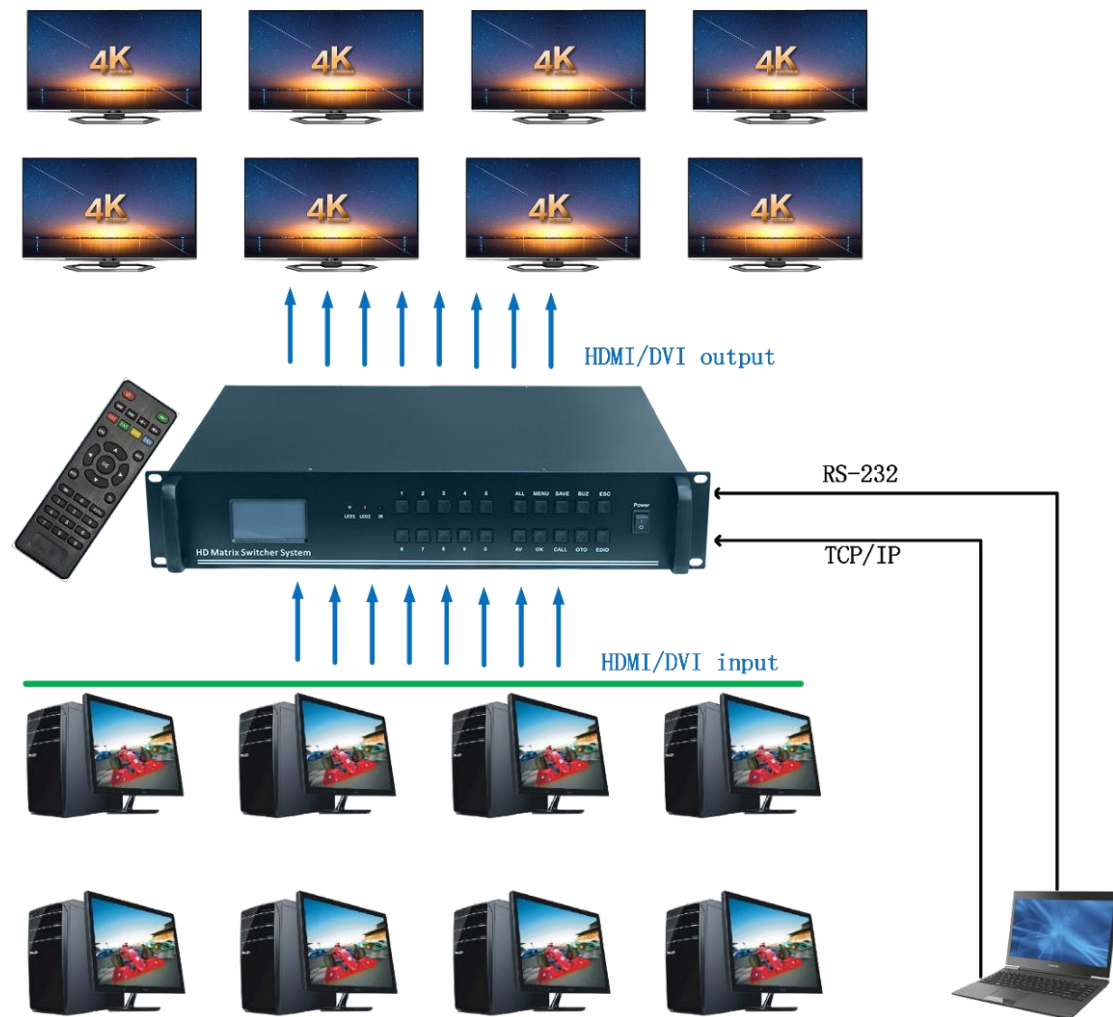
- Bandwidth up to 10.2Gbit/s (340MHz)
- The highest resolution is up to 1080p, 1920*1200@60Hz,
- Support HDTV
- Support compatible with HDMI signals



- Plug and play, easy to operate
- VGA-out output card parameter characteristics:**
- Support audio output
- Support any resolution below 1920x1200@60Hz
- Automatic detection of resolution changes
- Support image automatic adjustment
- Field configuration, plug and play, easy to operate
- Plug and play, easy to operate



V. System topology



VI. product size and picture

8x8 hybrid moment switch - standard 2U industrial chassis



16x16 Hybrid Moment Switch - Standard 3U Industrial Chassis



32x32 Hybrid Moment Switch - Standard 3U Industrial Chassis



VII. Technical parameters

Technical specifications \ model	MT0808	MT1616	MT3232
Video input			
Input	HDMI、DVI、VGA、3G-SDI		
input resistance	50 Ω		
Video output			
Output	HDMI、DVI、VGA		
Output impedance	50 Ω		
Video signal			
Video signal	HDMI、DVI、VGA		
Maximum support resolution	3840*2160@30HZ, 1920*1200@60HZ, 1920*1080@60HZ, Backward compatible		
EDID management	Support EDID reading and writing function;		
HDCP management	Support for high bandwidth digital content protection (HDCP) using DVI 1.0 and HDMI 1.4 standards.		
audio signal			
Digital audio	Support HDMI audio transmission		
Control section			
Serial control port	9-pin female RS-232 connector		
Infrared remote control	Default infrared remote control		
Front panel control	Button		
Network interface	TCP/IP by controlling PTNET (programmable panel) or WEB		
conventional			
power supply	100VAC ~ 240VAC, 50/60Hz		
temperature	-20 ~ +70°C		
humidity	10% ~ 90%		
Power consumption	25W	40W	75W
Chassis size	Length 445x wide 309x high 88	Length 483x wide 309x high 133	Length 486x wide 400x high 266
product weight	4.9Kg	6.75Kg	13.8Kg