

## Product Name

Screen matrix switcher

## Describe

Matrix switcher is a high-performance intelligent matrix switch device designed for switching of audio and video signals. It switches all audio and video input signals synchronously or asynchronously to any channel in audio and video output channel.

## Application

Matrix switcher is mainly used in radio and television engineering, multimedia conference hall, large screen display project, TV teaching, command and control center and other occasions. This product with off site protection, LCD display, audio and video synchronization or separation of switching and other functions, and has RS232 communication interface, can be easy with personal computer, remote control system or a variety of remote control equipment (such as AMX, GEFEN) with the use of.

## Characteristic

The maximum support for 16 input-output cards this matrix can be excellent to transmit HDMI video and multichannel digital audio signals through the HDMI line to the display device. It can also support extended HDMI audio separation

All HDTV resolution of 1080p/60 is compatible with the resolution of up to 1920\*1200 PC.

Long line input automatic equalization ensures that each input can be compensated automatically and independently, due to long distance transmission or loss of signal caused by low quality village.

Support HDMI 1.3A, HDCP 1.3, and DVI 1 protocol. Support high color depth, as well as up to 2.25Gbps rate;

HDCP compatibility - ensure that the media with content protection can normally display the cooperative use of other HDCP compatible devices;

With key panel operation, support RS-485 extension keyboard operation;

It has the function of memory loss, and it has the function of field protection.

Have RS232 communication interface, can be convenient and computer remote control system, or a variety of remote control equipment

## Product Model

HK-DID-MX-VGA-4-4

HK-DID-MX-VGA-8-8

HK-DID-MX-VGA-16-16

HK-DID-MX-VGA-24-24

## Picture



**Parameter**

model		VGA4*4	VGA8*8
		VGA16*16	VGA24*24
video	Gain	0 dB	
	bandwidth	250MHZ,(-3dB), full load	
	Multichannel crosstalk and crosstalk	-60dB @10 MHz, -39dB @100 MHz	
	signal type	RGBHV, RGBS, RGsB, RsGsBs, high definition television (HDTV), component video, S-video, composite video (signal)	
	switch speed	200ms	
input	interface	15-pin HD mother-interface	
	signal intensity	1V p-p:Y component video, S-video, composite video; 0.7V p-p:VGA (computer signal); 0.3V p-p:R-Y and B-Y component video, S-video	
	Minimum / maximum level	Analog signals: 0.5V ~ 2.0V P-P	
	Echo loss	<-40dB@5MHz	
	Maximum DC bias error	15mV	
	Horizontal frequency response	15 kHz ~ 145 kHz	
	Vertical frequency response	30 Hz ~ 170 Hz	
output	output interface	15-pin HD mother interface	
	Minimum / maximum level	2.0V p-p	
	impedance	75 Ω	
	Echo loss	<-40dB@5MHz	
	DC compensation	Maximum + 5mV	
Synchronous signal	Input / output signal types	RGBHV, RGBS, RGsB, RsGsBs, composite video, component video	
	Video production	NTSC 3.58, NTSC 4.43, PAL, SECAM	
	Input level	0.5V- 5.0V P-P: 4.0V P-P normal	
	Output level	AGC-TTL: 5Vp-p, unterminated	
	Input impedance	510 Ω	
	The output impedance	75 Ω	
	Maximum transmission	delay level: 90ns vertical: 160ns	
	Maximum rise / fall time	4ns	
polar	Positive or negative (consistent with input)		
Sound signal	Input / output interface	2-16 bit 3.8mm bolt screw interface	
	gain	0dB	

	frequency response	20 Hz ~ 20 kHz,
	Total harmonic distortion + noise	0.01% @ 1 kHz (under rated voltage)
	The signal-to-noise ratio (S/N)	>90dB
	Stereo crosstalk	>80dB @ 1 kHz
	Co state inhibitory ratio (CMRR)	>75dB @: 20 Hz ~ 20 kHz
	Signal type	Stereophonic, balance or non equilibrium method
	impedance	Input: >10 K omega (balance or / unbalance method) Output: 50 omega (non equilibrium connection), 100 omega (equilibrium connection)
	Maximum input level	+19.5dBu, (balance or non equilibrium)
	Gain error	+ 0.1dB
	Maximum output level	+19.5dBu, (balance or non equilibrium)
control	Serial control interface	RS-232, 9- pin D interface
	Baud rate and agreement	9600,data bit:8 bit,stop bit:1,no parity check bit;
	Serial control port structure	2 = TX, 3 = RX, 5 = GND
	control program	Switch 2.0
Specifications	power	100VAC ~ 240VAC, 50/60 Hz, international adaptive power supply
	temperature	Storage and use temperature: -20 ~ +70 degree C
	humidity	Storage and use of humidity: 10% ~ 90%
	Product weight	4.2kg
	Average fault interval time	30000 hours
	Warranty	1 years of free warranty, life-long maintenance
	signal type	RGBHV, RGBS, RGsB, RsGsBs, high definition television (HDTV), component video, S-video, composite video (signal)
	switch speed	200ns

### Safe operation guide

In order to ensure the reliable use of the equipment and the safety of the personnel, in the installation, use and maintenance, please follow the following items:

1. When the equipment is installed, the ground wire in the power line should be

ensured to be in good condition. Do not use the two core plug. Ensure that the input power of the equipment is 100V-240V 50/60Hz AC.

2. Do not put the equipment in a too cold or overheated place.
3. Keep good ventilation in the working environment so that the heat can be discharged in time when the equipment is working, so as to avoid damage to the equipment.
4. The total power supply of the equipment should be closed when it is not used for a long time in a wet condensation environment or for a long time.
5. The AC power supply line of the equipment must be removed from the AC socket before the following operation.
  - A. any part of the equipment that is removed or reloaded.
  - B. any electrical plug or other connection of the disconnected or reconnected equipment.
6. There are high pressure components in the equipment, and the non professionals are not allowed to disassemble the equipment without permission to avoid the danger of electric shock. Not to maintain private maintenance, so as not to increase the degree of damage to the equipment.
7. Do not spill any corrosive chemicals or liquids on the equipment or near it.

