



### **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, GEFFEN) 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-DVI-8-16	HK-DID-MX-DVI-16-16
HK-DID-MX-DVI-16-24	HK-DID-MX-DVI-24-24

### **Picture**







# HK-DID-MX-DVI-X-Y

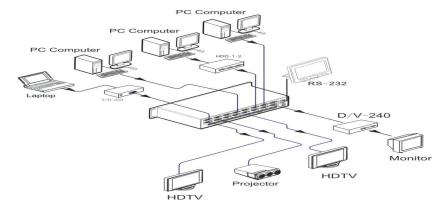
Parameter				
model		DVII8*16	DVII16*16	
		DVII16*24	DVI24*24	
	Gain	0 dB		
video	bandwidth	165MHZ,All-Digital		
	max resolution	1920x1200P@ 60_24bit		
	clock Jitter	< 0.15 Tbit		
	Rise time	<0.3Tbit (20%80%)		
video	Fall time	< 0.3Tbit (20%80%)		
	Max transmission delay	5ms(±1ms)		
	signal type	DVI-D all digital T.M.D.S signal in the DVI 1 specification		
	switch speed	200ms		
	interface	HDMI-D mother-interface		
	signal intensity	T.M.D.S +/- 0.4Vpp		
	Minimum / maximum level	T.M.D.S 2.9V/3.3V		
	impedance	50 Ω		
input	Input EDID	EDID rewritable		
	Maximum DC bias error	15mV		
	Recommended maximum input distance	Less than 36 meters, at 1920x1080,60		
		(recommended use of certified HDMI wire,		
		such as Molex TM wire)		
	output interface	DVI-D mother interface		
	Minimum / maximum level	T.M.D.S 2.9V/3.3V		
output	impedance	50 Ω		
output	maximum output distance	Less than 7 meters, at 1920x1200@60 (recommended use of certified DVI wire, such as Molex TM wire)		
	Input / output interface	5 bit 3.8mm bolt screw interface		
	gain	0dB		
	frequency response	20 Hz ~ 20 kHz,		
	Total harmonic distortion + noise	0.03% @ 1 kHz (under rated voltage)		
	The signal-to-noise ratio (S/N)	>90dB		
Sound	Stereo crosstalk	>80dB @ 1 kHz		
signal	Co state inhibitory ratio (CMRR)	>75dB @: 20 Hz ~ 20 kHz		
	Signal type	Stereophonic, balance or nonequilibrium method		
	impedance	Input: >10 K omega (balance or / unbalance method) Output: 50 omega (non equilibrium connection), 100 omega		



## HK-DID-MX-DVI-X-Y

		(equilibrium connection)	
	Maximum input level	+19.5dBu, (balance or non equilibrium)	
	Gain error	+ 0.1dB	
	Maximum output level	+19.5dBu, (balance or non equilibrium)	
interface type	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	
	Ethernet control interface	RJ-45 master interface (optional control	
		interface accessories)	
	Ethernet Control Protocol	TCP/IP	
	Ethernet control rate	Adaptive 10M or 100M, full duplex or half	
		duplex	
	control program	Switch 2.0	
	power	100VAC ~ 240VAC, 50/60 Hz,	
		international adaptive power supply	
	temperature	Storage and use temperature: -20 ~ +70	
		degree C	
Specificatio	Specificatio humidity Storage and use of hi		
ns	Chassis size (mm)	1U, 2U, 4U	
	Product weight	4.2kg	
	Average fault interval time	30000 hours	
	Warranty	1 years of free warranty, life-long	
		maintenance	

The connection between the DVI/HDMI matrix and the control system (as an example of DVI0808)



### 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.



# HK-DID-MX-DVI-X-Y