



### In General

This 50H is a Hybrid matrix switcher, it is furnished a 3UR chassis for 19inch rack mount, could have maximum 16ch VGA input, 8ch BNC input and 16ch VGA output, 8ch bnc output.

It can switch multiple computer signals to any output channel of matrix.

This matrix switcher offers BNC input and output for analog camera switch.

VGA switch and BNC switch are separately isolated.

This matrix takes high-bandwidth switching chips internally, ensuring clear and image-free motion; the input and output are designed with buffering, enhancing shock resistance and output capacity; significantly improving anti-interference ability and effectively extending the transmission distance.

It is equipped with intelligent control and provides an RS232 control interface.

This matrix switcher uses a new type of LCD to display the switching status of each channel of the equipment, input signal characteristics and other information, which is intuitive and convenient.

### Features & functions

- Support BNC arbitrary input and output switch during BNC
  - Support 8ch BNC input, 8ch BNC output.
  - Support VGA arbitrary input and output switch during BNC.
  - Support 16ch VGA input, 16ch VGA output
  - With dual-core processing technology and excellent overall performance, it can reasonably coordinate according to different needs when handling concurrent multiple tasks, allowing each task to complete the operation under the most ideal running conditions, thereby improving work efficiency.
  - The communication interface circuit, which is highly reliable, adopts fault-tolerant technology and has strong anti-interference ability, ensures the reliability of communication. It also has infrared remote control, manual control and RS232 control functions. Users can conveniently switch signals during the demonstration process.
  - It features power-off memory protection, LCD liquid crystal display function, and an RS232 communication interface, which enables it to be conveniently used in conjunction with computers, remote control systems, or various central control system devices.
  - Implement the distortion gain compensation technology for long-distance signal transmission;
  - Employ the digital synchronous identification processing (DSIP) technology;
  - Utilize the programmable logic array circuit (CPLD), which ensures more stable performance;
- Adopt the 350 MHz high-bandwidth chip, which has the built-in long-line driving function.

### Specifications

VGA Signal

Gain	0dB
bandwidth	350MHz(-3dB) full load
Crosstalk	(-50dB @10 MHz, -39dB @100 MHz)
switch speed	200 ns(maximum duration)
Signal type	RGBHV,RGBS,RGSB,RsGSBs, HDTV,S-video,Component video,

VGA video input

connector	15-pin VGA female connector
Minimum/maximum level	analog:0.5V- 1.0V p-P
signal intensity	1V p-p :Y Component video, s-video, composite video:0.7Vp-P:VGA(computer signal)
impedance	75 ohm
Differential gain	0.10%
Differential phase	0.2°
Multi-channel crosstalk	-45dB
Output distortion	VOUT=1.4Vp-P 50MHz 0.05%

VGA video output

connector	15-pin VGA female connector
Minimum/maximum level	analog:0.5V-1.0V p-P
impedance	75 ohm

VGA sync signal

input output signal type	RGBHV.
input level	0.5V-
output level	AGC-TTL:
Return loss	-30B@SMHz
Input impedance	510ohm
Output impedance	75
Video format	NTSC/PAL
Polarity	Positive or negative (exactly the same as the input)

Video of BNC	
Bandwidth	200MHz (-3dB),full load, @±0.1dB at 0-10MHz and @±0.6dB
Luminance and chromaticity interference	<-80dB @100KHz (full load)
Signal formats	NTSCPAL, SECAM, HDTV
signal type	composite video signal
video input	
Interface	BNC connector
Impedance	75Ω

Minimum and maximum levels	Analog signal 0.5V - 2.0Vp-P
Echo phase locking	0.3V - 0.4Vp-P
Return loss	<-50dB @5MHz
Maximum tributary offset error	15mV
Video output	
Interface	BNC connector
Impedance	75Ω
Return loss	<-50dB @5MHz
Dc compensation	up to ±5mV
Conversion type	Vertical interval
Control type	
Serial control interface	RS232
Baud rate and protocol	Baud rate: 9600, Data bits: 8 bits, Stop position: 1, There is no parity check bit
Serial control port structure	2=TX, 3=RX, 5=GND
In general	
Power supply	AC100-230V
Temperature	Storage and usage temperature: 20 °C - 70 °C
Humidity	Storage and usage humidity: 10% - 90%
Size	491.5 (L)*35.0 (D)*133.4mm (H)
Gross/Net weight	9KGS/8.0KGS

Rear panel

