## Using digital network to upgrade video matrix switching technology

B-3

# 4K matrix and transmitter

Video conference and security monitoring often need to call and switch signals, and the workflow is time-consuming and labor-intensive. So we have developed and manufactured cost-effective PHD video switching matrix.

It's easier to switch a little of video signals, but what about lots of video signal sources? PHD video Matrix makes video signal management faster and easier.

Equipped with high-performance processing chip and high fault-tolerant code, it can work continuously for 7x24 hours, cater to the current mainstream video resolution and backward compatible with 4Kx2K adaptive resolution.

### Fast switching and strong performance

Fully digital switching can maximize the switching response, and PHD video matrix response logic is IP point-to-point switching. The digital signal input transmission is nearly lossless, presenting accurate color reproduction of the transmitted picture, no video dragging and perfect synchronisation of audio and video.

The strong performance is not only reflected in the video transmission, but also in the powerful pre-stored switching mode. The device can store multiple sets of switching plans, and switch in different scenes or emergency scenes with one click, making the video switching more time-saving and fast.

Rs232, central control software and other fast switching control methods enrich the user's operating experience.

### Low power consumption and power-off memory

Thanks to hardware and logic optimization, the maximum power of the device can be fully loaded with only 20W. It has power-off memory function. It can automatically remember the state and signal source when the power is turned off by chance. PHD video matrix can automatically resume switching and display instead of resetting the switch when the power supply is restored.

### Enterprise-level and long-distance transmission

Industrial grade all metal chassis can be used for 1U or 2U rack. Built-in transmission enhancement function, it can transmit 30 meters of input signals without external signal amplification, saving cost and wiring work for project construction.  PHD Video Matrix, which is suitable for most of displays, such as DVD, projector, splicing screen, TV, etc., can transmit 3D video resource. The built-in firmware upgrade can be updated online in real time, which can expand the use of more devices through firmware update.


Transportation center
&
Large display
Command center
&
Control Room
Application scenario

# 4K

## Professional video switching matrix with fast switching

Stable, strong and reliable performance
The switching is fast, and every frame is smooth

### VIS-PHD44

4x4 4K HDMI matrix

- 4 channel input and 4 channel output
- Up to 4Kx2K@60HZ
- Software control and online upgrade
- Full digital switching technology and high-performance processing algorithm
- HDMI2.0 and HDCP1.4 protocol
- The signal can be converted by an adapter and compatible with DVI1.0 standard
- HDMI output with analog audio extraction

### VIS-PHD88

8x8 4K HDMI matrix

- 8 channel input and 8 channel output
- Up to 4Kx2K@60HZ
- Software control and online upgrade
- Full digital switching technology and high-performance processing algorithm
- HDMI2.0 and HDCP1.4 protocol
- The signal can be converted by an adapter and compatible with DVI1.0 standard
- HDMI output with analog audio extraction

### VIS-PHD1616

16x16 4K HDMI matrix

- 16 channel input and 16 channel output
- Up to 4Kx2K@60HZ
- Software control and online upgrade
- Full digital switching technology and high-performance processing algorithm
- HDMI2.0 and HDCP1.4 protocol
- The signal can be converted by an adapter and compatible with DVI1.0 standard
- HDMI output with analog audio extraction

## VIS-HE7

### HDbaseT extender for 70m

- Uncompressed full-digital transmission box
- 4K video can be transmitted up to 40 meters
- 1080P video can be transmitted 70m away
- RS232 and IR bidirectional control and bidirectional POC power supply
- HDMI1.4 and HDCP1.4 protocol
- The signal can be converted by an adapter and compatible with DVI1.0 standard

## VIS-HE10

### HDbaseT extender for 100m

- Uncompressed full-digital transmission box
- 4K video can be transmitted up to 70m
- 1080P video can be transmitted 100m away
- RS232 and IR bidirectional control and bidirectional POC power supply
- HDMI1.4 and HDCP1.4 protocol
- The signal can be converted by an adapter and compatible with DVI1.0 standard

## VIS-HE20

### HDMI/VGA to HDbaseT Wallplate

- Flush-mounting wall video transmission box
- Separate or joint transmission of video and audio
- Video and control signals can be transmitted 100m
- RS232 and IR bidirectional control and bidirectional POC power supply
- HDMI1.3 and HDCP1.3 protocol
- The signal can be converted by an adapter and compatible with DVI1.0 standard

1. VIS-PHD44
   4K HDMI matrix
2. VIS-CDC
   Full HD camera
3. DVD
4. All-in-one PC
5. Power amplifier
6. Prejector
7. PC
8. HD display

CAT5e
HDMI
Audio

## Standalone matrix

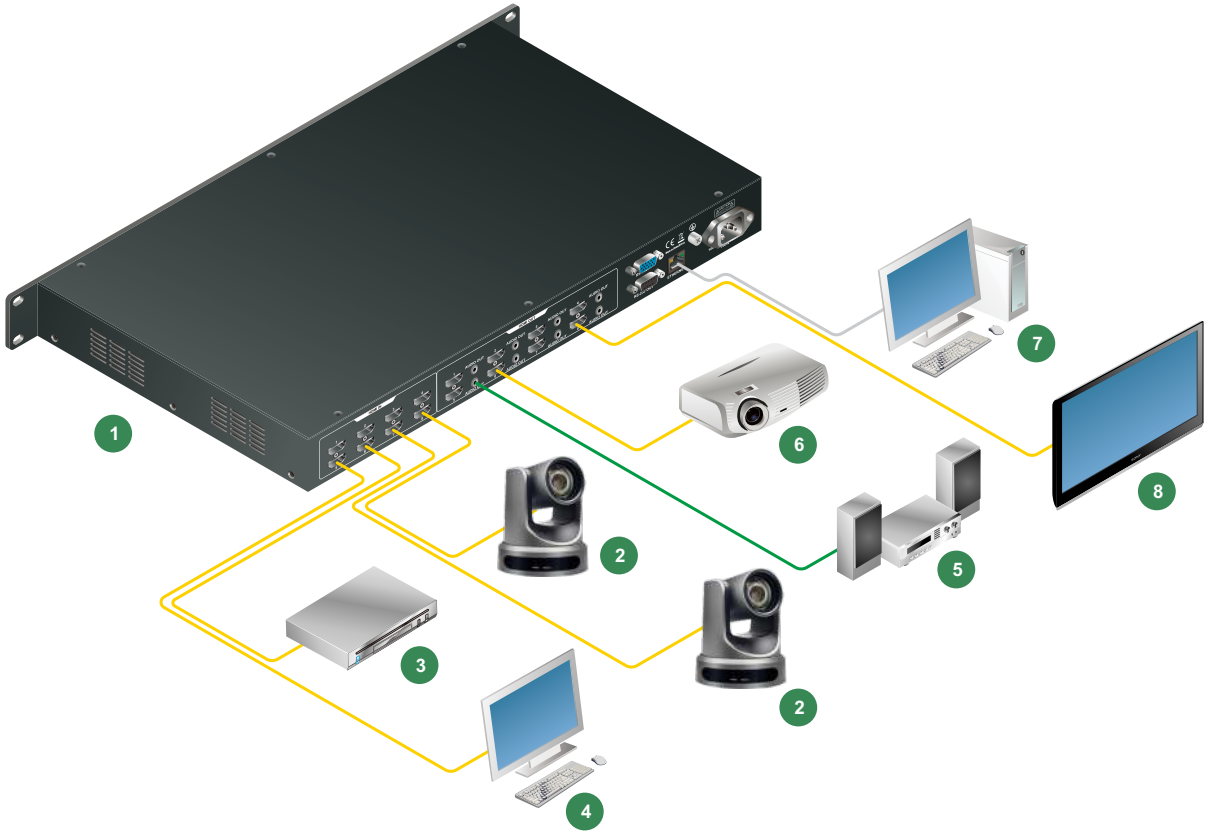
Compared to hybrid matrix, PHD video matrix is more cost-effective.  Selecting the HDMI port on the market as the main transmission port, the device is compatible with lots of video transmission protocol to solve the complex problem of video port types. When the display device has no HDMI port, the user can choose the adapter for ports conversion, such as VGA to HDMI, DVI to HDMI, DP to HDMI, etc.

## Easy to use

The device can be used after power-on and connect with input/output cable without complicated settings. There are rich control ways, such as by button, by software and by central control. Graphical software control can set lots of switching modes with quick management to solve the traditional matrix switching complex problem. For example, using the EDID function that delivers control commands to the screen switches input into output. With intelligent heat dissipation treatment, the device can work for 7x24 hours and automatically adjust according to the current transmission bandwidth and task.

## Featured functions

**Management:** Professional visualized management of signal sources and detailed switching using software.
**Operation:** Equipped with LCD display and buttons, it can still switch accurately under dim lighting environment.
**Compatible:** Digital video ports conversion of multiple protocols.



# B-4 Seamless matrix and video wall processor

## VIS-UHD0808-VW

4K UHD matrix and video wall processor

- Support HDMI 2.0/HDCP 2.2
- HDMI video output resolution up to 3840x2160@60
- Support seamless switching
- Video wall splicing function
- Support IR matrix
- HDMI audio can extract
- External LR audio insert on HDMI stream
- EDID management
- Front panel,RS232,TCP/IP (LAN 10M/100M), software & Web GUI control


## VIS-PSC1202

Professional scaler switcher

- Perfect scaling and deinterlacing technology
- HDCP compliance
- Up to 1080p/3840x2160@30 resolutions with input and output
- Analog audio output with 3.5mm jacket and 5 pin phoenix female connector
- Built in performance management – color, brightness, contrast and sharpness adjust
- On-Screen-Display (OSD) Menu for easy configuration
- Control the unit with front button, RS232 port and TCP/IP


## VIS-Quad41

4x1 multi-viewer and 12x1 switcher with KVM

- Single display unit display 4 HD or analog signal synchronously under Quad mode
- Support KVM function, that is USB、mouse、keyboard with video synchronous switch
- Compatibility all kinds of input resolution and support output resolution of 1920*1080
- Size and position of image can be adjust arbitrarily, and other functions, such as: windowing、superposition、roaming、PIP、POP
- Can be controlled by case key、IR、RS-232 serial port and center control.
- High quality HD quad video

# B-4 Seamless matrix and video wall processor

## VIS-QuadKVM

7x1 multi-viewer with KVM

- With one 1 VGA, 2 DP, 4 HDMI (including 3-way compatible MHL) input signal, the input resolution up to 3840 * 2160 @ 60HZ, downward compatible
- With one HDMI 2.0 output, the output resolution up to 3840*2160 @ 60HZ
- Point-to-point simultaneous display 4-way 1920*1080 full HD signal
- 2 USB signal output, USB connection support mouse and keyboard, and USB with image synchronous switch
- Support Quad mode and Full screen, PIP and POP mode

## VIS-MV71

7x1 multi-viewer & scaler

- With Quad-mode ,Full screen, and fix position POP, PIP function
- 1 VGA, 2-way DP, 4-way HDMI (including 3-way compatible MHL) input signal
- 1 HDMI output with resolution up to 1920 * 1080 @ 60HZ
- All input signals contain audio, support audio and video synchronous switching and four audio independent switching under quartering
- Control by chassis buttons, IR remote control, RS-232 control