

OVP-K video controller

OVP-K2 /K4 /K6 /K10 /K16

Quick guide



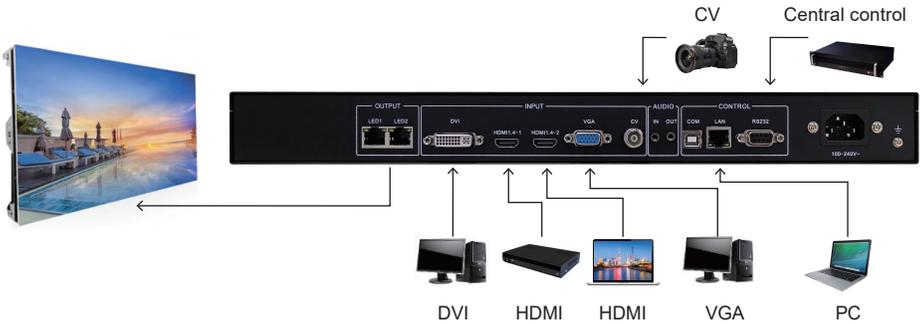
1. Description

OVP-K2 /K4 /K6 /K10 /K16 are the latest easy-to-use and feature-rich LED video controllers from shanghai ONBON Technology.Set professional LED display control technology and powerful video processing capabilities in one, respectively integrated 2/4/6/10/16 Gigabit network port output, the maximum load 1.31/2.62/3.93/6.55/9.6 million pixels.The equipment adopts 1U standard industrial chassis design to adapt to various complex application environments.Widely used in shopping malls, hotels, exhibitions, conference rooms, TV studios and other occasions of LED screen.

Features

- 320×240 LCD panel
- Support multiple language (Chinese,English,Russia,Vietnam,other language updating)
- USB2.0 in front panel, support video playback, picture playback, video and picture mixed playback modes.
- Standard RS232 control interface to access the central control equipment
- OVP-K2 support 6 channels of video input interfaces: HDMI1.4*2, DVI*1, VGA*1, CV*1, USB*1
OVP-K4 support 5 channels of video input interfaces: HDMI1.4*1, DVI*1, VGA*1, CV*1, USB*1
OVP-K6/K10/K16 support 6 channels of video input ports: HDMI2.0*2, DVI*1, VGA*1, CV*1, USB*1
OVP-K2/K4 support 1920*1080@60Hz, 4K*2K@30Hz.Width ≤3840, height ≤2500
OVP-K6/K10/K16 support 2 channels of 4K*2K@60Hz,Width ≤8000, height ≤3840
- Support external independent audio input/output
- Support window position, size adjustment and window interception functions
- Support input resolution preset and custom adjustment
- Support input adaptive signal source resolution
- Support output adaptive display parameter configuration
- Support full screen scaling, point-to-point display, screen capture modes
- Support quick start screen, simple operation can set the screen configuration
- Support one-click switching of input sources
- Support input source timing automatic switching
- 8 user modes can be pre-stored for users to call quickly
- The device can be controlled through the LCD menu, panel keys and USB port

2. Application



3. Appearance

► Front panel



Key instruction

1	On/off: Device switch
2	320×240 LCD: Display the operation menu and device status.
3	Knob[OK]: Press the knob to confirm or enter the subordinate menu. Select the knob to select a menu or adjust parameters.
4	[ESC] key: Back key to exit the current menu or operation.
5	Enter the input source key HDMI1: Press to select the HDMI1 input signal source. HDMI2: Press to select HDMI1 input signal source. USB: Press the USB key to start the USB flash drive. DVI: Press to select a DVI input signal source. VGA: Press to select a VGA input signal source. CV: Press to select the CV input signal source.
6	[BRIGHT] key: Press to enter the brightness adjustment menu. [PART] key: Switch between partial display and full-screen display.
7	USB2.0 interface: Insert U disk as input signal source for U disk playback. When the USB flash drive is playing, the user can turn the knob left or right to select the last or next program file.

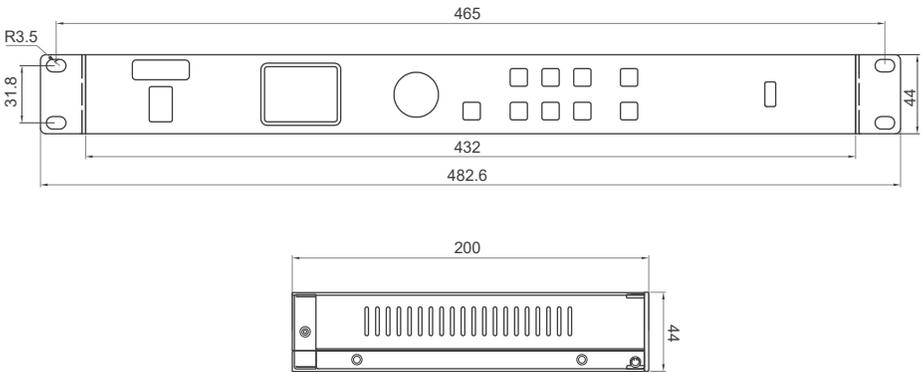
Note: OVP-K2 /K6 /K10 /K16 has two HDMI buttons on the front panel, OVP-K4 has only one HDMI button on the front panel.

► Back panel



Interface	
1	Gigabit network port: 2/4/6/10/16 channels of Gigabit network port output, connect with receiving card
2	Video input interface OVP-K2/K4:HDMI1.4 /DVI /VGA /CV OVP-K6/K10/K16:HDMI2.0 /DVI /VGA /CV
3	AUDIO IN /OUT: Audio input/output interface
4	COM: USB control
5	LAN: LAN control
6	RS232: Central control
7	Power: 100-240V~50/60Hz

4. Dimension(mm)



5. User manual

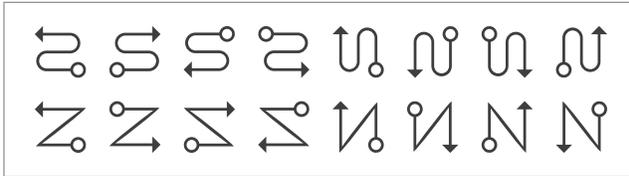
5.1 Quick debugging screen

Knob select [OK] to enter the main menu, and then select "Quick debugging screen" under "smart debugging screen" menu.



Prerequisites:

- The display screen is regular design, not a special-shaped screen.
- The cabinet is regular, and the resolution of each cabinet is the same.
- The cables between the cabinets are connected in the following ways. The cables of each network port can be connected downward in the same direction.



Operation:

Step 1: Power on OVP devices and LED screen.

Step 2: Press the knob on the main screen to enter the menu.

Step 3 :Rotate the knob and choose smart debugging screen > quick debugging screen.

Step 4: Cabinet settings, select port and screen parameters.

Step 5: Click the "send" to finish the operation.



5.2 Switch the input signal source

The user can set the specific input signal source according to the actual situation, and directly click the input signal source button corresponding to the front panel.

Input EDID

Step 1: Knob select **[OK]** to enter the main menu, and then select "Advanced " to enter the advanced menu.

Step 2: Select the input EDID in "Advanced " to enter the input EDID menu.

Step 3: After selecting parameters on the knob, select and press the **[OK]** to set the parameters.

INPUT EDID	
Width	1920
Height	1080
Refresh rate	60Hz
<input type="button" value="OK"/> <input type="button" value="Cancel"/>	
Current signal: HDMI no signal	

5.3 Image setup

Image size

Step 1: Knob select **[OK]** to enter the main menu, then select "output setting".

Step 2: Select "Image size" to set the image size.

Step 3: After selecting the parameter value, press the **[OK]** to set it.

IMAGE SIZE	
Width	1920
Height	1080
X	0
Y	0
Current crop signal: HDMI 1920x1080@60Hz	

Point-point output

No zoom, users can set horizontal and vertical offsets to display the area they want to view.

Step 1: Knob select **[OK]** to enter the main menu, and then select "Output settings".

Step 2: Select"point-to-point output" to set on or off.

Image crop

Knob select **[OK]** to enter the main menu, and then select "Crop" to enter the image crop menu:

- Switch: Set image crop function on or off, the default is off.
- Crop width: Set the overall width of the cropped image.
- Crop height: Set the overall height of the cropped image.
- Crop X: Crop the horizontal starting position of the image, the top left corner of the image as the reference point.
- Crop Y: Crop the vertical starting position of the image, the top left corner of the image as the reference point.

CROP	
Switch	关闭
Crop width	5
Crop height	53
Crop x	0
Crop y	0
Current crop signal: HDMI 1920x1080@60Hz	

5.4 USB display

Supports three modes: video playback, picture playback, video and picture mixed playback.

Step 1: Insert the USB flash drive with playback content (video or picture) into the USB port on the front panel.

Step 2: Press the USB key on the front panel to pop up the "Select file type to play" window. The user can select "Video", "Picture", "mix" to play the file.

Step 3: After selecting the play mode, press the [OK] to enter the playlist knob and select the file to play, then press [OK] to play the file.

When the USB flash drive is playing, the user can turn the knob left or right to select the last or next program file.

5.5 Image quality

Step 1: Knob select [OK] to enter the main menu, and then select "Image effect" to enter the image effect menu.

Step 2: After selecting the parameter value, press [OK] to set it.

IMAGE QUALITY	
Brightness	1
Sharpness	5
Contrast	53
Saturation	50
Dynamic contrast	1
Color temperature	→
OK:Enter ↩:Back	

5.6 User mode save and switch

Mode save

Step 1: Knob select [OK] to enter the main menu, select "mode save" to enter the mode save menu.

Step 2: Select the mode you want to save and press the [OK] to set it.

MODE SAVE	
●MODE1	Source: DVI
○MODE2	Size: 1024x1024
○MODE3	Coordinate: 0, 0
○MODE4	Brightness: 53
○MODE5	Contrast: 53
○MODE6	Saturation: 12
○MODE7	

User mode switch

Step 1: Knob select [OK] to enter the main menu, select "Mode switch" to enter the menu.

Step 2: Turn [knob] to select the user mode and press [OK] to set.

USER MODE SWITCH	
○MODE1	Source: DVI
○MODE2	Size: 1024x1024
●MODE3	Coordinate: 0, 0
○MODE4	Brightness: 53
○MODE5	Contrast: 53
○MODE6	Saturation: 1
○MODE7	

FAQ

Problem	Check and adjust project details
No display or image output on the LCD screen	<ul style="list-style-type: none"> ● Check whether the power cable is in poor connection. ● Check whether the power switch is on.
Info display but no image output on the LCD screen	<ul style="list-style-type: none"> ● Check whether the input signal is correctly connected and switched to the corresponding signal source. ● Check whether the display terminal supports the output resolution and refresh rate of the device. ● Check whether the brightness and contrast are set too low.
The image on the LED screen cannot be displayed in full screen	<ul style="list-style-type: none"> ● Check whether "LED screen width, LED screen height" is consistent with the LED screen resolution. Set parameters in the "Image Output" menu .
The LED screen image is displayed in the center with black edges around it	<ul style="list-style-type: none"> ● Using a computer graphics card as a VGA/DVI/HDMI input source, this anomaly occasionally occurs. If it is a VGA signal source, open "VGA correction" in the BXsetpro debugging software to adjust it. For a DVI/HDMI signal source, click " adjust desktop size and settings "on the graphics card control panel and select "full screen".
Panel buttons do not respond to operation	<ul style="list-style-type: none"> ● Check whether the key lock is locked () on the LCD. At this time, enter the main menu, set the key lock to unlock in the "Advanced" menu ().

Safety notice

This product has high pressure, non-professional maintenance personnel are not allowed to open the chassis or maintain the equipment by themselves, so as to avoid danger.

The input voltage range of AC power supply of this product is 100~240VAC 50/60Hz, please use the correct power supply.

This product is grounded through the power cable. To avoid current shocks, insert the power cable into a ground socket before connecting the input or output ports of the product. The protective grounding of the ground conductor in the power cable is essential for safe operation.

When you want to connect or unplug any signal or control cable, please turn off the LED video controller power first.

Please use in a clean, dry and ventilated environment. Do not put this product into a high temperature, humid environment.

This product is an electronic product. Please keep away from fire, water and inflammable and explosive dangerous goods.

If you find strange noise, smoke or odor and other abnormal conditions, should immediately unplug the power plug.