

OVP-G 视频控制器

四画面 G6 /G10

六画面 G16 /G20 /G24 /G32

快速指南



简介

OVP-G 系列是由仰邦科技推出的 6 款操作简便、功能丰富的多画面 LED 视频控制器（拼控一体设备），共包含 G6 /G10 /G16 /G20 /G24 /G32 六款产品。集专业的 LED 显示屏控制技术与强大的视频处理能力于一体，分别集成 6/10/16/20/24/32 千兆网口输出，最大带载 393 /655 /1048 /1310 /1572 /1960 万像素。设备采用 1.5U 和 2U 标准工业机箱设计，适应各种复杂应用环境。广泛应用于商场、酒店、展览展示、会议室、电视演播中心等多种场合的 LED 显示屏。

OVP-G 系列视频切换速度快，满足大型舞台演出场合的项目要求。支持 4K×2K@60Hz 输入视频源，G24 /G32 满足 8K×2K 的超高分辨率输出，可为大型舞台 LED 背景墙提供无比清晰的图像。

1 特性

- G6 /G10支持4画面显示和任意布局，支持1路HDMI2.0和3路HDMI1.3信号源
G16 /G20 /G24 /G32支持6画面显示，支持2路HDMI2.0和4路HDMI1.3信号源
- 支持高动态范围HDR10视频源输出，色域更广、对比度更高，画面亮暗部细节全面提升，给人超清晰沉浸视觉体验
- 支持多语言菜单界面（中文、英文、俄文、越南语）
- 所有输入信号源和输出模式之间均能实现快速无缝切换或淡入淡出切换
- 支持多画面输入信号源热备份
- 标配RS232接口，便捷接入中控设备
- 标配WiFi模块，支持手机App调试和操控
- 预存16种用户模式供用户快速调用
- G6 /G10 /G16带载宽度≤8188，高度≤8188
G20 /G24 /G32带载宽度≤16376，高度≤16376
- G6 /G10 /G16 /G20采用1.5U标准工业机箱，标配2.8"彩色液晶屏（分辨率320*240）
G24 /G32采用2U标准工业机箱，标配5"彩色触控屏（分辨率800*480）

2 应用场景



3 外观

3.1 OVP-G6 /G10四画面视频控制器 (1.5U)

▶ 前面板

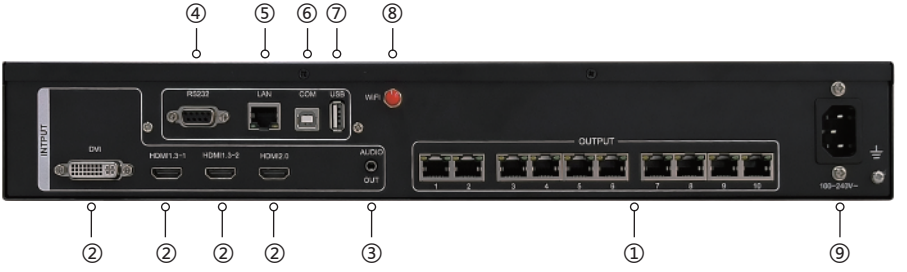


接口说明

①	电源开关
②	2.8" 彩色液晶屏，分辨率320*240

▶ 后面板

以OVP-G10为例



接口说明	
①	千兆网口：10路千兆网口输出接口，连接至接收卡
②	DVI /HDMI1.3 / HDMI2.0：视频输入接口
③	AUDIO IN /OUT：音频输入输出接口
④	RS232：中控接口
⑤	LAN：网络控制接口
⑥	COM：USB控制接口
⑦	USB2.0接口：支持U盘插入，可导出屏幕参数文件
⑧	WiFi：标配WiFi
⑨	电源：100-240V~50/60Hz

3.2 OVP-G16 /G20六画面视频控制器（1.5U机箱）

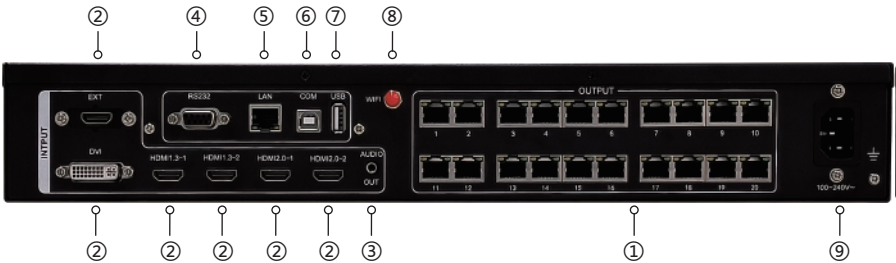
▶ 前面板



接口说明	
①	电源开关
②	2.8" 彩色液晶屏，分辨率320*240
③	旋钮 [OK] 键：按下旋钮，表示确认或者进入下级菜单。选择旋钮表示选择菜单或调节参数
④	[↶]键：返回键，退出当前菜单或操作
⑤	[MODE]键：按下进入模式调用菜单

▶ 后面板

以OVP-G20为例



接口说明	
①	千兆网口：20路千兆网口输出接口，连接至接收卡
②	EXT /DVI /HDMI1.3 / HDMI2.0：视频输入接口
③	AUDIO IN /OUT：音频输入输出接口
④	RS232：中控接口
⑤	LAN：网络控制接口
⑥	COM：USB控制接口
⑦	USB2.0接口：支持U盘插入，可导出屏幕参数文件
⑧	WiFi：标配WiFi
⑨	电源：100-240V~50/60Hz

3.3 OVP-G24/G32六画面视频控制器（2U机箱）

▶ 前面板



接口说明	
1	电源开关
2	5" 彩色触控屏，分辨率800*480

▶ 后面板

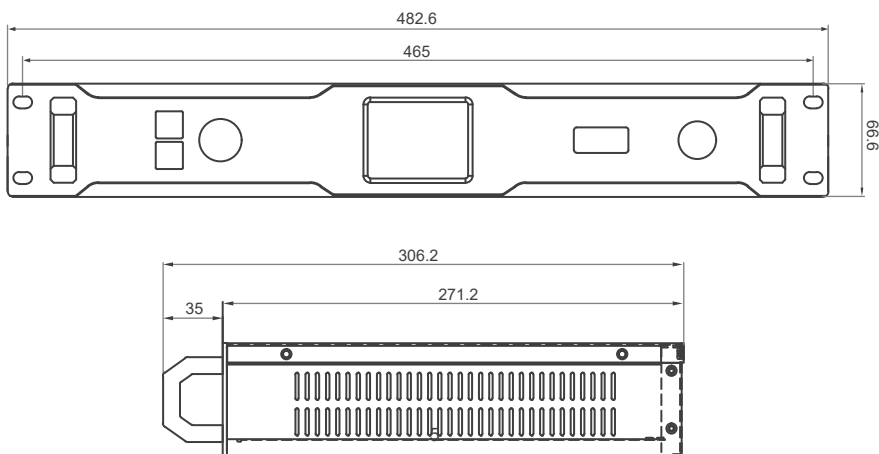
以OVP-G32为例



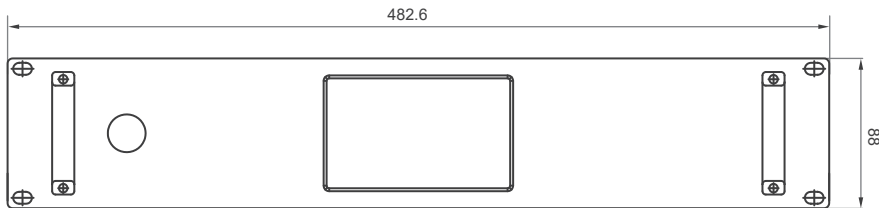
接口说明	
①	千兆网口： 32路千兆网口输出接口，连接至接收卡
②	EXT /DVI /HDMI1.3 / HDMI2.0： 视频输入接口
③	AUDIO IN /OUT： 音频输入输出接口
④	WiFi： 标配WiFi
⑤	RS232： 中控接口
⑥	LAN： 网络控制接口
⑦	COM： USB控制接口
⑧	USB2.0接口： 支持U盘插入，可导出屏幕参数文件
⑨	电源： 100-240V~50/60Hz

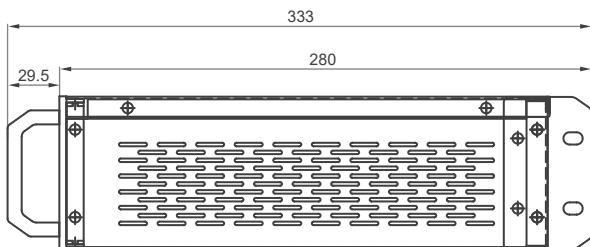
4 设备尺寸(mm)

4.1 OVP-G6 /G10 /G16 /G20, 1.5U机箱



4.2 OVP-G24 /G32, 2U机箱





5 产品使用

说明：OVP-G6/G10/G16/G20 为液晶屏 + 旋钮组合操作方式，G24/G32 为液晶屏触摸操作方式。以下产品使用说明以液晶屏 + 旋钮组合操作方式为例来进行介绍。

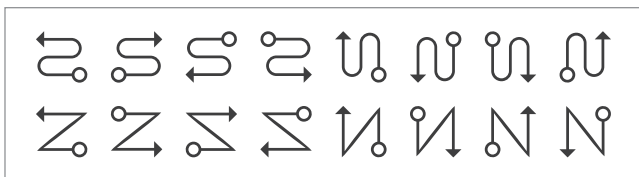
5.1 快捷点屏

旋钮选择【OK】键进入主菜单,然后选择“智能调屏”下的“快捷点屏”。



前提条件：

- 显示屏为规则的显示屏，非异形屏。
- 显示屏箱体为规则箱体，且各箱体分辨率大小一致。
- 显示屏箱体之间的连线为以下几种方式，每个网口的走线能顺着同一个方向向下连接，不能随意走线。



操作步骤：

- 步骤 1：对 OVP 设备和 LED 显示屏进行上电操作；
- 步骤 2：在主界面按下旋钮进入菜单界面；
- 步骤 3：旋转旋钮选择“智能调屏 → 快捷点屏”，进入“快捷点屏”界面；
- 步骤 4：根据界面引导分三步进行“箱体设置”、“选择网口”、“屏参设置”；
- 步骤 5：点击“发送”按钮后完成操作。



5.2 输入信号源切换

用户根据使用情况自行设置具体的输入信号源，可通过旋钮选择【OK】键进入主菜单，然后进入“信源切换”选择对应的输入信号源，即可设置完成。

输入分辨率设置

步骤 1：旋钮选择【OK】键进入主菜单，然后进入“信源切换”选择对应的输入信号源；

步骤 2：在“信源切换”里选择“EDID 设置”，进入输入分辨率操作；

步骤 3：旋钮选择参数后，再旋钮选中“保存”后短按【OK】键进行设置。



5.3 画面设置

画面布局

步骤 1：旋钮选择【OK】键进入主菜单，然后进入“设置”→“画面布局”；

步骤 2：旋钮选择对应画面后，短按【OK】键进入参数设置界面；

步骤 3：旋钮选择参数值后，短按【OK】键进行设置。



图像截取

步骤 1：旋钮选择【OK】键进入主菜单，然后进入“设置”→“输入截取”；

步骤 2：旋钮选择对应信源后，然后选择【+】图标，短按【OK】键进入“输入截取”；

步骤 3：旋钮选择参数值后，短按【OK】键进行设置。

步骤 4：设置完成后，选择“确定”按钮并短按【OK】键进行设置。



- X: 截取画面的横向起始位置,以画面的左上角为参考点。
- Y: 截取画面的纵向起始位置,以画面的左上角为参考点。
- 宽: 设置截取的画面的整体宽度。
- 高: 设置截取的画面的整体高度。

5.4 图像效果

步骤 1: 旋钮选择【OK】键进入主菜单, 然后进入“设置→图像效果”;

步骤 2: 旋钮选择“画质”或“色温”菜单, 然后短按【OK】键进入;

步骤 3: 旋钮选择参数值后, 短按【OK】键进行设置。



5.5 用户模式保存与调用

模式保存

步骤 1: 旋钮选择【OK】键进入主菜单;

步骤 2: 旋钮选择右下角图标后短按【OK】键展开菜单列表, 然后选择“保存”菜单后短按【OK】键进入;

步骤 3: 旋转【旋钮】选择 1 个模式后, 短按【OK】键保存该模式。



模式调用

步骤 1: 旋钮选择【OK】键进入主菜单;

步骤 2: 旋钮选择右下角图标后短按【OK】键展开菜单列表, 然后选择“调用”菜单后短按【OK】键进入;

步骤 3: 旋转【旋钮】选择 1 个模式后, 短按【OK】键调用该模式。



常见问题

问题现象	检查、调校项目明细
液晶屏幕无显示, 无图像输出。	<ul style="list-style-type: none">● 检查电源线是否接触不良。● 检查电源开关是否为打开。
液晶屏有信息显示, 但没有图像输出。	<ul style="list-style-type: none">● 检查是否正确连接输入信号, 并且已经切换到对应的信号源。● 检查显示终端是否支持本设备输出分辨率及刷新率。● 检查亮度和对比度是否设置得太低。
LED 屏上图像不能全屏显示。	<ul style="list-style-type: none">● 检查“LED 屏宽度、LED 屏高度”是否与 LED 屏分辨率一致。进入“图像输出”菜单设置参数。
LED 屏图像居中显示, 四周有黑边。	<ul style="list-style-type: none">● 使用电脑显卡作为 VGA/DVI/HDMI 输入源, 偶尔会出现这个异常现象。如果是 VGA 信号源, 在 BXsetpro 调试软件中打开“VGA 校正”进行调整。如果是 DVI/HDMI 信号源, 在显卡控制面板点击“调整桌面尺寸和设置”, 选择“全屏”。
面板按键功能操作无响应。	<ul style="list-style-type: none">● 查看液晶屏提示信息按键锁是否处于锁定状态 ()。此时, 进入主菜单, 在“高级”菜单里设置按键锁为解锁状态即可 ()。

安全须知

本产品内有高压, 非专业维修人员不得打开机箱或者自行对本设备进行维修, 以免发生危险。

本产品交流电源的输入电压范围是100~240VAC 50/60Hz, 请您使用正确的电源。

本产品通过电源线接地。为了避免电流冲击, 在连接产品输入或输出端口前请将电源线插入接有地线的插座。电源线中接地导体的保护性接地在安全操作中是必不可少的。

当您连接或者拔除任何信号线或者控制线时, 请先关闭LED视频控制器电源。

请在干净、干燥、通风的环境中使用, 不要将本产品放入高温、潮湿等环境中使用。

本产品为电子类产品, 请远离火源、水源以及易燃、易爆的危险品。

如发现有怪异噪音、冒烟或异味等异常情况, 应立即拔掉电源插头。

OVP-G video controller

4 windows G6 /G10

6 windows G16 /G20 /G24 /G32

Quick guide



Description

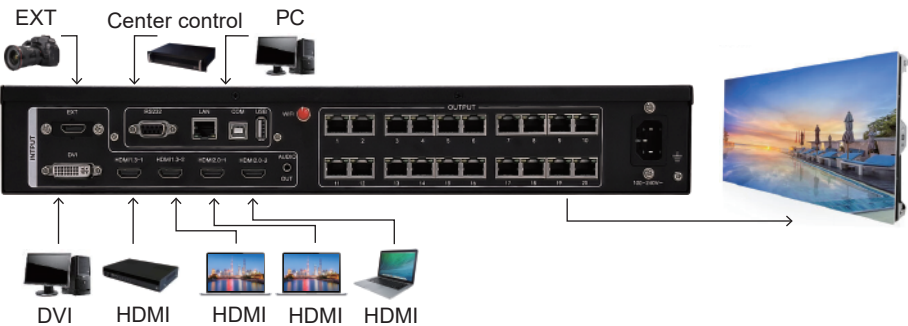
OVP-G series are the easy to use and rich features multi-windows LED video controllers (splicing control devices) from Shanghai Onbon Technology, including G6 /G10 /G16 /G20 /G24 /G32 products. It integrates professional LED display control technology and powerful video processing capability, respectively integrates 6/10/16/20/24/32 Gigabit network port output, and carries a maximum of 3.93/6.55/10.48/13.1/15.72/19.6 million pixels. The equipment adopts 1.5U and 2U standard industrial case design, adapting to various complex application environments. Widely used in shopping malls, hotels, exhibitions, conference rooms, TV broadcasting centers and other occasions of LED display screen.

OVP-G series video switching speed is fast, to meet the requirements of large-scale stage performance occasions. OVP-G series supports 4K×2K@60Hz input video source, G24 /G32 support 8K×2K ultra-high resolution output.

1 Features

- G6 /G10 supports 4 windows display and arbitrary layout, supports 1 channel of HDMI 2.0 and 3 channel of HDMI 1.3 signal sources.
G16 /G20 /G24 /G32 support 6 windows display, support 2 channels of HDMI 2.0 and 4 channels of HDMI 1.3 signal source.
- Support high dynamic range HDR10 video source output, wider color gamut, higher contrast, brightness and darkness details of the picture are fully improved, users enjoy a super clear immersive visual experience.
- Support multi-language menu interface (Chinese, English, Russian, Vietnamese)
- Fast and seamless switching between all input sources and output modes or fade-in/fade-out switching
- Supports hot backup of multi-window input signal sources.
- RS232 interface onboard, convenient access to the center control equipment
- WiFi onboard, Support App operation
- 16 pre-stored user modes for users to quickly call up
- G6 /G10 /G16 loaded width ≤ 8188, height ≤ 8188
G20 /G24 /G32 loaded width ≤ 16376, height ≤ 16376
- G6 /G10 /G16 /G20 adopts 1.5U standard industrial case with 2.8" full color LCD screen (resolution 320*240)
G24 /G32 adopts 2U standard industrial case, equipped with 5"full color touch screen (resolution 800*480)

2 Application



3 Appearance

3.1 OVP-G6 /G10 windows video controller (1.5U)

► Front panel

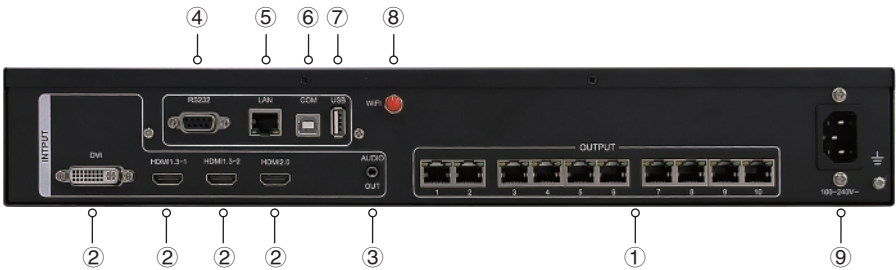


Interface

①	Power switch
②	2.8" full color LCD screen, resolution 320*240

► Back panel

Take OVP-G10 as an example



Interface	
①	Gigabit network: 10 channels of Gigabit network output, connect to receiving card
②	DVI /HDMI1.3 /HDMI2.0: video input interface
③	AUDIO IN /OUT: audio input and output interface
④	RS232: center control interface
⑤	LAN: network interface
⑥	COM: USB control
⑦	USB2.0: support USB insert and export screen parameters file
⑧	WiFi: WiFi onboard
⑨	Power: 100-240V~50/60Hz

3.2 OVP-G16 /G20 windows video controller (1.5U case)

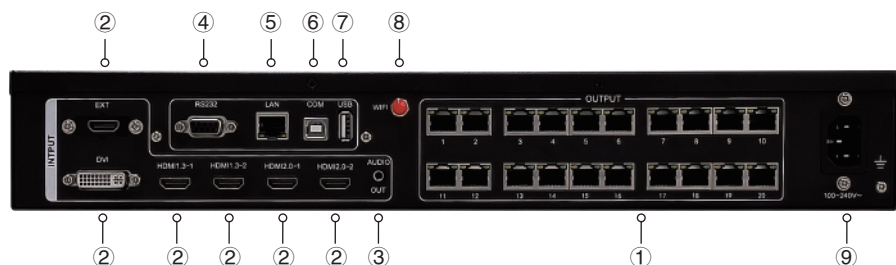
► Front panel



Interface	
①	Power switch
②	2.8" full color LCD screen, resolution 320*240
③	Knob [OK]: Press the knob to confirm or enter the subordinate menu. Select the knob to select a menu or adjust parameters
④	[↵] Back key to exit the current menu or operation
⑤	[MODE]: Press to enter the mode recall menu

► Back panel

Take OVP-G20 as an example



Interface	
①	Gigabit network: 20 Gigabit Ethernet port output, connect to the receiver card
②	EXT /DVI /HDMI1.3 /HDMI2.0: video input interface
③	AUDIO IN /OUT: audio input and output interface
④	RS232: center control interface
⑤	LAN: network control interface
⑥	COM: USB control interface
⑦	USB2.0: support USB insert and export screen parameters file
⑧	WiFi: WiFi onboard
⑨	Power: 100-240V~50/60Hz

3.3 OVP-G24/G32 6 windows video controller (2U case)

► Front panel



Interface	
1	Power switch
2	5" full color touch screen, resolution 800*480

► Back panel

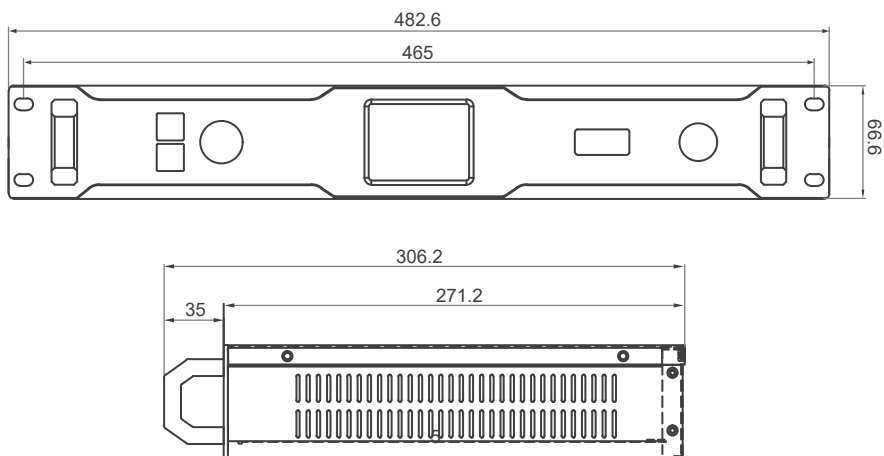
Take OVP-G32 as an example



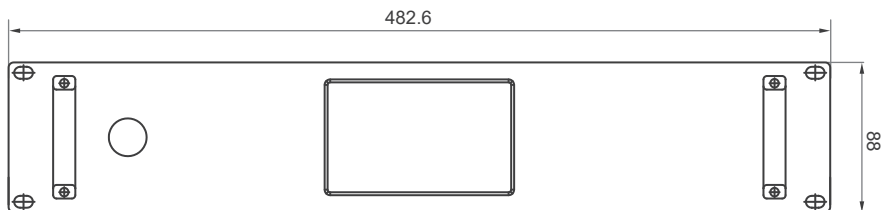
Interface	
①	Gigabit network: 32 Gigabit Ethernet port output, connect to the receiver card
②	EXT /DVI /HDMI1.3 /HDMI2.0: video input interface
③	AUDIO IN /OUT: audio input and output interface
④	WiFi: WiFi onboard
⑤	RS232: center control interface
⑥	LAN: network control interface
⑦	COM: USB control interface
⑧	USB2.0: support USB insert and export screen parameters file
⑨	Power: 100-240V~50/60Hz

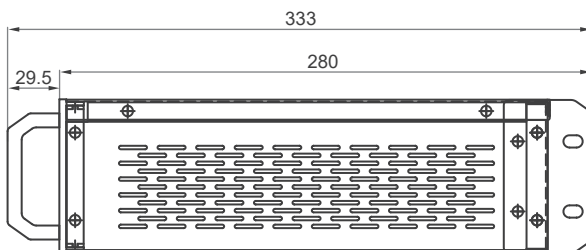
4 Dimension(mm)

4.1 OVP-G6 /G10 /G16 /G20, 1.5U case



4.2 OVP-G24 /G32, 2U case



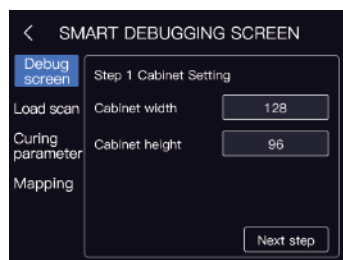


5 User manual

Instruction: OVP-G6/G10/G16/G20 are operated by LCD+knob, G24/G32 are operated by LCD touch screen. The following instruction based on the LCD+knob.

5.1 Smart debugging screen

Knob select [OK] to enter the main menu, and then select “Smart debugging screen” under “smart debugging screen” menu.



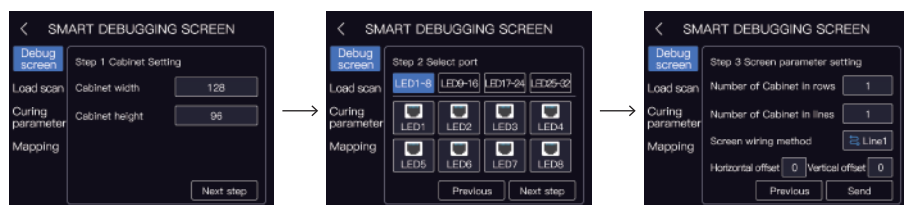
Prerequisites:

- 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 setting

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 settings in the “signal switch” to enter the EDID menu.

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



5.3 Screen setup

Screen layout

Step 1: Knob to select [OK] and enter the main menu, then select “screen setup → screen layout”.

Step 2: Knob to select the corresponding screen, short press the [OK] enter the parameter setting.

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



Input intercept

Step 1: Knob select [OK] to enter the main menu, and then select “Intercept” to enter the image intercept menu.

Step 2: After selecting the corresponding signal source with the knob, then select and press [OK] to enter “Input Intercept”.

Step 3: After the knob selects the parameter value, press the [OK] button to set.

Step 4: After finish the setting, select the “OK” button and press the [OK] to set.



- Intercept X: Intercept the horizontal starting position of the image, the top left corner of the image as the reference point.
- Intercept Y: Intercept the vertical starting position of the image, the top left corner of the image as the reference point.
- Intercept width: Set the overall width of the intercept image.
- Intercept height: Set the overall height of the intercept image.

5.4 Image quality

Step 1: Select [OK] button to enter the main menu, and then enter “Settings → Image quality”.

Step 2: Select “quality” or “color temperature” menu, and then press [OK] to enter.


Step 3: Select the parameter value, and then press [OK] to set.



5.5 User mode save and invocation

Mode save

Step 1: Knob select [OK] to enter the main menu.


Step 2: Select the  in the lower right corner of the knob and press [OK] to expand the menu list, then select the “save” menu and press [OK] to enter.

Step 3: Select the mode you want to save and press the [OK] to set it.



User mode invocation



Step 1: Knob select [OK] to enter the main menu.

Step 2: Select the  in the lower right corner of the knob and press [OK] to expand the menu list, then select the “invocation” menu and press [OK] to enter.

Step 3: Select the mode you want to save and press the [OK] to set it.



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.