

OVP-M2D USER MANUAL



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Statement

Any companies or privates cannot copy, transcribe or translate part or whole content of this file without our written permission. And cannot use it on any business or benefit filed with any forms.

The specifications and information which are mentioned on the file is for reference only, if there' s update, we will not inform you. This file is only for guidance, and all information will not be for any promises.

Instruction

Safety notification

There are high voltages in this product. Non-professional maintenance personnel are not allowed to open the case or repair the device by themselves to avoid danger. The input voltage range of this product's AC power supply is 100 ~ 240V, 50/60Hz, please use the correct power supply.

This product is grounded through the power cord. In order to avoid current impact, please insert the power cord into the grounded socket before connecting the product input or output port. Protective grounding of the grounding conductor in the power cord is essential for safe operation. Before performing any hardware operations, please turn off the power of the LED video processor and discharge static electricity on your

body by touching a grounded surface. When you want to connect or disconnect any signal cable or control cable, please make sure that all power cables have been unplugged in advance.

Please use it in a clean, dry and ventilated environment. Do not put this product in high temperature and humidity environments. This product is an electronic product, please keep away from fire, water and flammable and explosive dangerous goods. If you find unusual conditions such as strange noises, smoke or odors, you should immediately unplug the power cord and contact your dealer.

About software

The software installed on this product may not be changed, decompiled, disassembled, decrypted or reverse engineered. The above acts are illegal.

Functions

Description

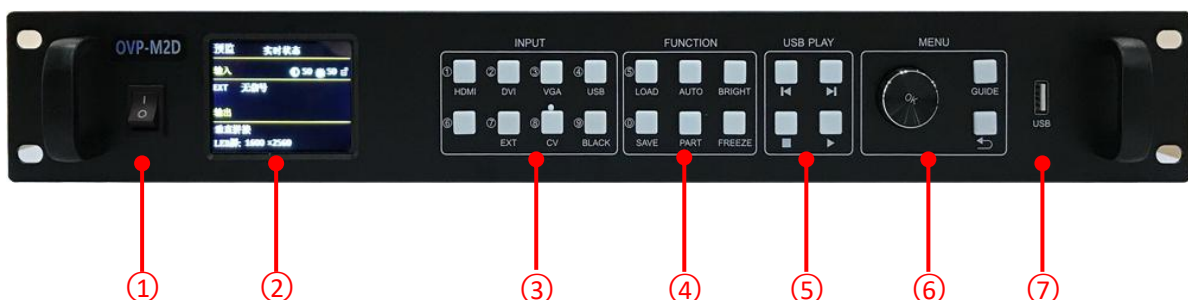
OVP-M2D video processor is a video processing equipment developed and produced by onbon for LED large-screen display, performance and rental, conference room, studio and other markets. This product adopts HD image processing technology, specially designed for the small spacing LED display screen. For the large HD resolution LED screen, point-to-point input and output can be realized. Therefore, it can effectively eliminate the jagged edge phenomenon caused by the enlargement of the image and reduce the out-of-focus fuzzy sense of the enlarged image. At the same time because of the U disk playback function, especially suitable for exhibition occasions.


Features

- ◆ Maximum resolution is 2.55 million pixels, the horizontal maximum 3840 pixels, vertical maximum 2000 pixels;
- ◆ With 5 channels HD digital and analog input interface;
- ◆ Support 2 channel digital input port DVI\HDMI custom input resolution settings;
- ◆ Support hot backup of input signal source;
- ◆ 8 user modes can be stored for users to quickly call;
- ◆ With "intelligent navigation" setting function, convenient for users to quickly set;
- ◆ Support local USB2.0 media playback;
- ◆ The device can be controlled through the panel keys, USB interface or WIFI.

Panel

Front panel



Interface	
1	Power switch
2	2.8" Full color LCD (320×240)
3	Operation area ,LCD display status
	<p>INPUT area</p> <p>[DVI] ~ [USB] 8 buttons, 8 nos of input port button,can switch window : if BLACK and the LED indication light is on ,then will output black screen.</p>
4	<p>FUNCTION area</p> <p>[BRIGHT]: brightness adjustment</p> <p>[FREEZE]: image freeze</p> <p>[LOAD]: load user mode menu</p> <p>[SAVE]: fast load the user mode to save menu</p> <p>[AUTO] : VGA input image auto correction</p> <p>[PART]: Switch between local display and full screen display. .</p>
5	<p>USB PLAY area</p> <p>USB display area,including display,pause,up,down</p>
6	<p>MENU area </p> <p>Including one rotation button ,one[OK], one [GUIDE]and one []</p>
7	<p>USB interface</p> <p>USB display insert interface</p>

Back panel



Power	
voltage	100-240V 100-240V~50/60Hz

Video input port	
DVI	Computer digital signal input port
HDMI	digital HD signal input port
EXT	digital HD signal extension port
VGA	Computer analog signal input port
CV	PAL/NTSC Compound video signal input port

Video output port	
DVI1 - DVI2	DVI output port, connect the LED sending card via DVI connection cable.

Audio input output port	
HDMI audio	HDMI video input port built-in
AUDIO-IN	outside audio input port
AUDIO-OUT	Analog audio output port for the selected input signal source audio.

Control port	
COM	USB control port
WIFI	WIFI (optional)

Basic steps

Click [OK] to enter the main menu interface, and then follow the steps below to set the controller:

The first step: Set LED screen parameters (width, height, network port width and height and start) according to the size of the LED screen;

Step 2: Select the corresponding signal source according to the signal source required by the user;

Step 3: If necessary, make appropriate adjustments to the "display window";

Step 4: Select "Mode Save" or press the [SAVE] key to enter the "Mode Save" menu to save the current display mode for next recall

Note: For detailed instructions on the above four steps, please refer to the next chapter "Introduction to Main Menu".

Menu

Menu button operation

The key operation area related to the menu is the MENU area, including a knob, a confirmation key [OK], a return key [] and a [GUIDE] key.

In the initial state of the system, short press [OK] to enter the main menu setting interface. When the return key is pressed, the menu system will return to the previous menu in order until it returns to the initial state

.In the browsing state, turn [Knob] counterclockwise to move the cursor upward or left; turn [Knob] clockwise to move the cursor downward or right. When the cursor is moved to the item to be adjusted, press the [OK] key to enter the corresponding setting sub-menu. At this time, turn the [knob] counterclockwise to decrease the current parameter value; turn the [knob] clockwise to increase the current parameter value. If the adjustment is completed, short press [OK] to write the data and save it. To return to the previous menu, use the return key; until you return to the initial state. Press [GUIDE] key to quickly switch out the "smart navigation" setting interface.

Note: The [knob] cannot be turned too fast, otherwise the value adjustment will change very little and should be rotated at a constant speed.

The initial state of the main interface

During the system start up, the LCD screen will display the startup interface. After the startup is complete, the current machine status will be displayed on the screen. The initial menu of the system startup is shown in the following figure:



There are 3 areas:

Input: It shows selection info of input source, including input signal source format which is detected by system;

Output: Shows real LED screen size which is set by users;

Top right corner: Shows present contrast, brightness values and button lock status

Main menu

This equipment adopts 2.8" LCD screen (320*240), and adopts font 24*24 which can display 10 rows. There are 6 parts on menu. If you are not in menu status, please click **【OK】**, it will show:



Main menu and branch menu:

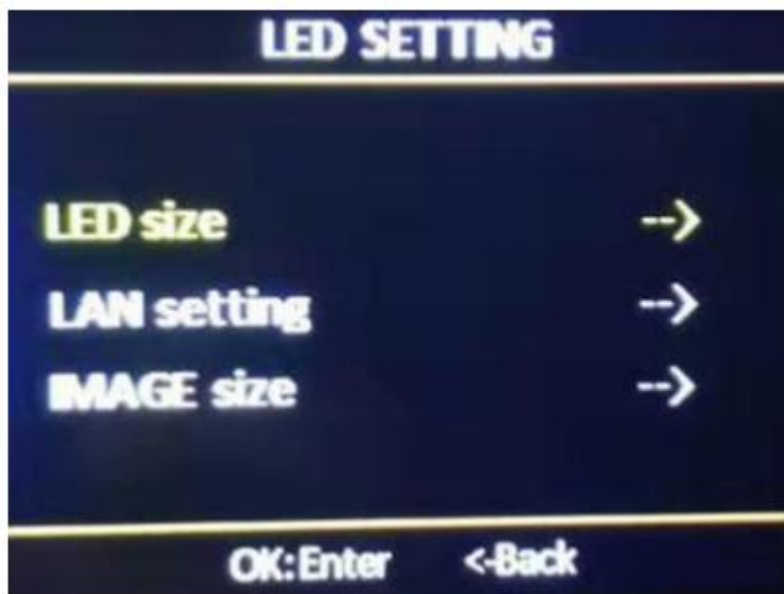
Main menu	The second and third menu
Output setup	Size of LED screen (total width and total height) LAN port output setting (LAN port LED1-LED2): horizontal width, vertical height, horizontal start, vertical start. Adjust display window(horizontal width, vertical height, horizontal start, vertical start)
Image	Brightness,contrast,saturation,sharpness,color temperature and dynamic contrast.
Crop	Switch, crop width, crop height, crop horizontal start, crop vertical start
Save mode	Mode 1-Mode 8
Load mode	Mode 1-Mode 8

Option	Input EDID (horizontal width,vertical width,refresh rate) Input hot spare (close, backup for input source) VGA setting (adjust automatically,horizontal start,vertical start) Planned tax(tax 1, tax 2...) Other setting(switch stunt, voice setting) Testing photo(close, photo 1 to photo 8) Button lock(open, close) Factory reset(ADC calibration,languages,factory reset,firmware version)
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Output setup

1. LED size

Click **[OK]** as to enter into main menu, then choose "LED setting" , as below:



After finish settings of LED size, system will be in reset status, users need to wait for a while here.

Note: Size range

LED screen width \leq 3840

LED screen height \leq 2000

LED refreshment: 60 or 50

Note: When the refresh rate of the LED screen is selected to 50, the number of loading points of the LED screen can be appropriately increased.

2. Display window

In the non-menu state, click the [OK] button to enter the main menu, led setting



- Horizontal width: the adjustment range is 120 ~ the maximum number of points can be set in the horizontal direction.
- Vertical height: the adjustment range is 68 ~ the maximum number of points can be set in the vertical direction.
- Horizontal start: The minimum value is 0, and the maximum value is the maximum number of horizontal points minus the horizontal width.
- Vertical start: The minimum value is 0, and the maximum value is the maximum number of vertical points minus the vertical height.

Note:

(1) The start bit and size of the picture in the display window can be fine-tuned to better match the LED screen display;

(2) The default screen size is the size of the LED screen. After the LED screen parameters are set, the general screen size will be determined accordingly.

3. Image quality

Click [OK] as to enter into main menu--" IMAGE QUALITY" , as below:



- Brightness: adjust range 0-100, default is 50.
- Contrast: adjust range 0-100, default is 50.
- Saturation: adjust range 0-100, default is 50.
- Sharpness: adjust range 0-10, default is 5.
- Dynamic contrast: adjust range 0-4, default is 1. 0 means closed, it' s invalid for inputting VGA signal source.
- Color temperature: "warm" , "natural" , "cold" , "custom" .
- Customized color temperature: adjusting range in RED 0-100 adjusting range in BLUE 0-100 adjusting range in GREEN 0-100

Note:You can also adjust brightness by "BRIGHT" button on board

Crop menu

Click 【OK】 as to enter into main menu--" CROP" , as below:



- Open or close CROP function, default is close.

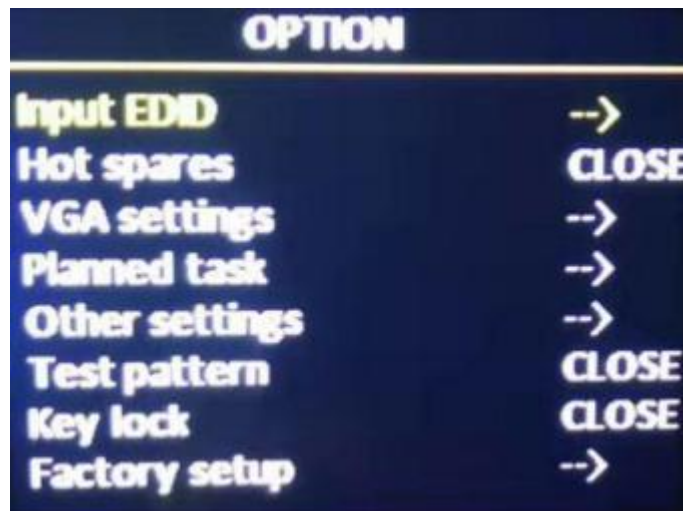
- Minimum is 128, maximum is "width of input signal" .
- Minimum is 128, maximum is "height of input signal" .
- Minimum is 0, maximum is "width of input signal" - "height of input signal" .
- Minimum is 0, maximum is "height of input signal" - "width of input signal" .

Note: (1) Crop is for input source, so crop width and height cannot bigger than the resolution of present cropped signal source.

(2) Users can select different input source by input source button on board

Option

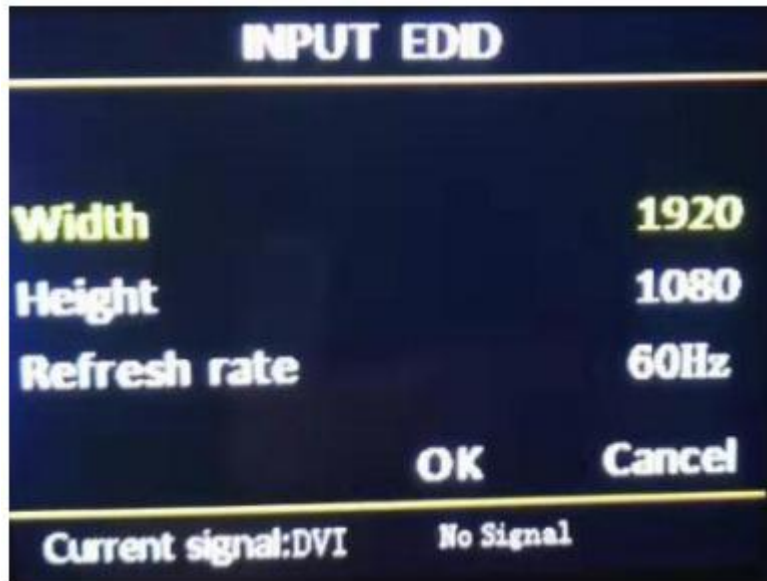
Click **【OK】** as to enter into main menu--" OPTION" , as below:



1. Input EDID

It offers EDID editing function of DVI/HDMI input signal source, means, the recommended resolution of input signal source. In WIN7 system, when the "input EDID (recommended)" is modified which is read by PC, the output resolution of PC will be modified too;But for WIN10 system, output resolution of PC won't be changed, users need to operate manually.

By "INPUT EDID" , users can get good resolution effect in the range of 4K*2K. As below:



- Width: adjust range 640-1920
- Height: adjust range 480-2500
- Refresh rate: adjust range 60 or 30

Note:

(1) The real adjust range is limited by port type and input bandwidth, for this equipment, it can reach to the highest input EDID, cause input source HDMI adopts HDMI 1.4. So, it can reach:1920*1080@60Hz.

(2) In 1920*1080@60Hz, input refresh rate should be 30Hz.

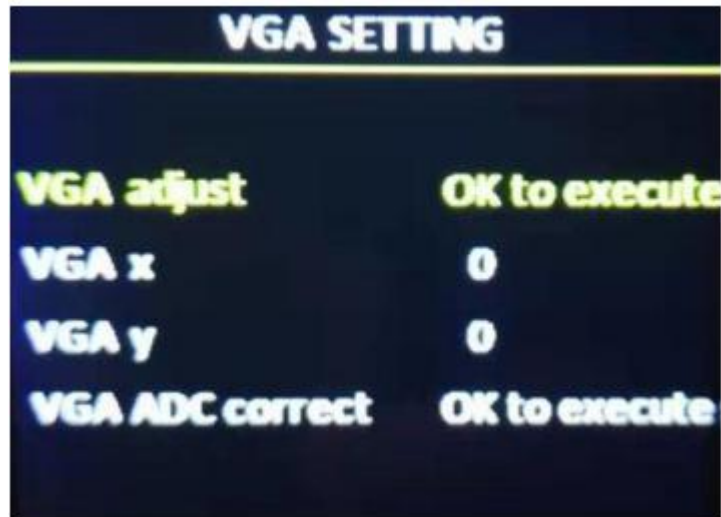
2.Input hot spare

Select "input hot spare" in "OPTION" , users can choose different backup signal source. So, if some of image input signal is lost, system can switch to backup signal source

Immediately

3. VGA setting

Select "VGA SETTING" ,as below:



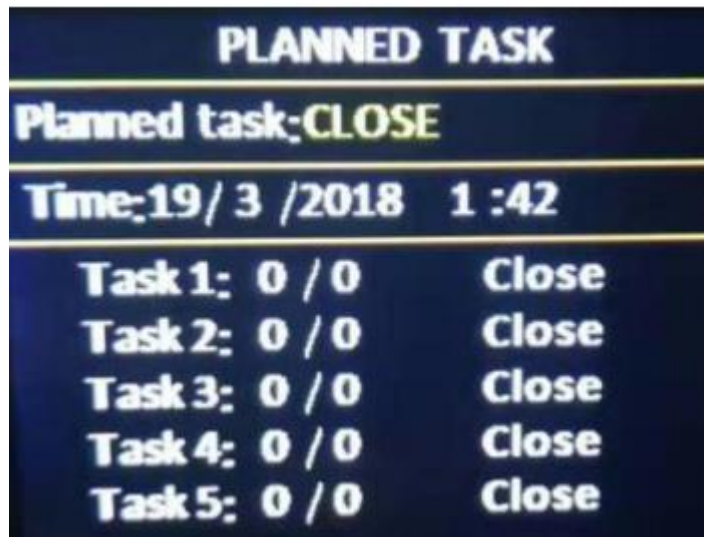
- VGA X: adjust range 0-300.
- VGA Y: adjust range 0-300.

Note:

- (1) Adjust range of VGA X and VGA Y is decided by system.
- (2) When there' s excursion of VGA input signal in display, users can click "Auto adjust" as to display correctly. And if "Auto adjust" is invalid, users can adjust "VGA horizontal start" and "VGA vertical start" manually.
- (3) If the screen of GA input signal source is a little darker, users can adjust by "VGA ADC" or "DV ADC"

4.PLANNED TASK

PLANNED TASK Choose "PLANNED TASK" in "OPTION"



Note:

- (1) Users must do calibration for the clock in system, then, you can use PLANNED TASK function, calibration will be done by PC software.
- (2) Users can set many tasks, use different user mode in different time (users need to save user modes first), task setting will be done by PC software.
- (3) When users opened the function of PLANNED task and it's valid, you can open or close at any time by LCD menu.

5. Other setting

- **Switch stunt:** "switch seamless" and "fade over"
- **Voice setting:** Including switch button and volume setting.

6. Testing photo

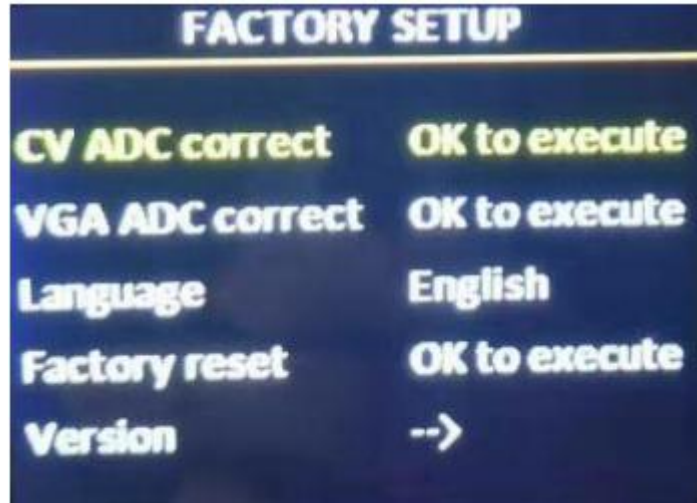
There are 8 testing photos, photo 1-photo 8, default is "close" .

7. Button lock

Default is "close" , when "button lock" is in open status, all the buttons will be useless except 【OK】 .

8. Factory setup

Choose "FACTORY SETUP" in "OPTION" , as below:



- **ADC correct:** Usually, "VGA\CV correct" was done before selling in our factory.
- **Language:** " Chinese" and "English" , default is Chinese.
- **Factory reset:** Reset to default value.
- **Firmware version:** Check present hardware version, factory date.

USER MODE SAVE AND SWITCH

Mode save

Press "SAVE" on board, as below:

Select the save mode you want, then, click [OK] .

Note:

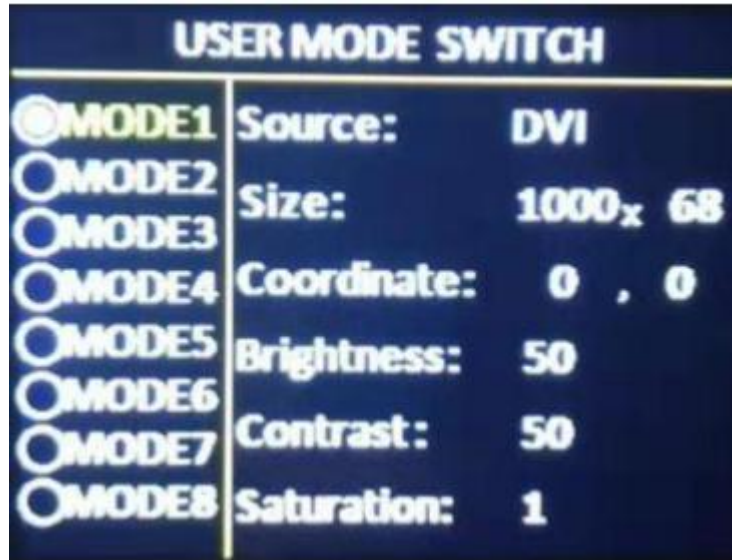
(1) If the circle is solid, means the present mode data is already there; If the circle is hollow, means the present mode data is not there.

(2) Maximum 8 user modes, it saves image size, position, status and brightness, contrast.

(3) If users changed splicing mode, the saved user modes will be deleted.

User mode switch

Press "LOAD" on board, as below:



USER MODE SWITCH		
<input checked="" type="radio"/> MODE1	Source:	DVI
<input type="radio"/> MODE2	Size:	1000x 68
<input type="radio"/> MODE3		
<input type="radio"/> MODE4	Coordinate:	0 , 0
<input type="radio"/> MODE5	Brightness:	50
<input type="radio"/> MODE6		
<input type="radio"/> MODE7	Contrast:	50
<input type="radio"/> MODE8	Saturation:	1

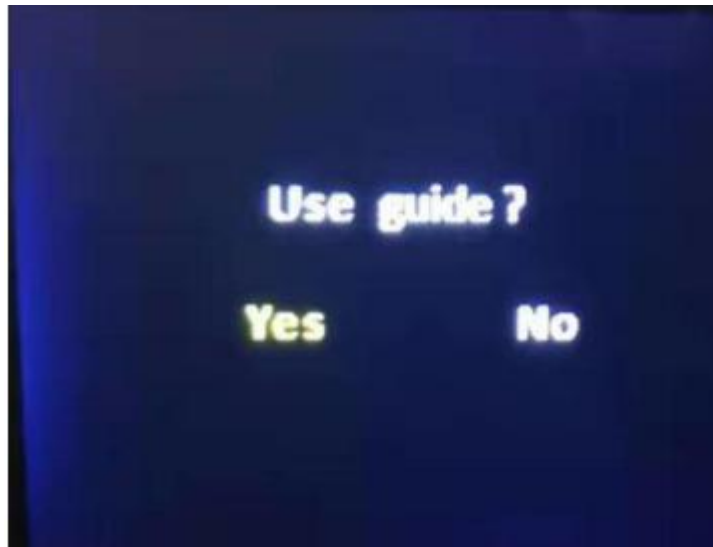
Note:

(1) Can be switch only if you saved before.

(2) If you already save, you can use it by pressing 1-8 numbers.

Intelligent guiding



It' s for the users who use it at the first time. And set for LED screen by 3 steps. It' s very simple, convenient and useful. Press "【GUIDE】", as below::



Users only need to choose "Yes" , and follow the steps.

FAQ

This is a professional equipment, users should be professional on it. When you meet some problems, please try to check with below info. And if you still cannot solve, please contact with local agent or contact with us directly.

Problem	solutions
There' s no display or image output in LCD screen.	<ul style="list-style-type: none"> ● Please check power supply cable. ● Please check ON/OFF button of power supply.
There' s display on LCD screen, but do not have image output.	<ul style="list-style-type: none"> ● Please check that it is connecting input signal and already switch to the relative signal source. ● Please check that the display terminal supports output resolution and refresh rate of this equipment. ● Please check the settings of brightness and contrast. ● Please try to reset this equipment, factory reset.
Image cannot show on full LED display.	<ul style="list-style-type: none"> ● Please check LED screen width and height value is the same with LED screen resolution or not. Users can set LED screen parameters on "IMAGE OUTPUT" in menu.
VGA input image is not in middle.	<ul style="list-style-type: none"> ● Continuously press "AUTO" button on board until it shows correctly.(When you do auto adjust, please use full screen without black frame signal)
Image is in middle, but there' s black frame.	<ul style="list-style-type: none"> ● This problem occurs because you use VGA, DVI, HDMI port which are outputted from PC video card.
No response for buttons on board.	<ul style="list-style-type: none"> ● Please check the button lock is open or not (). Press rotate button as to enter into main menu, close  in "OPTION" ..

Parameters

Image input	
VGA×1	VESA: UXGA@60Hz downward compatible
HDMI×1	VESA, HDMI 1.4
DVI×1	VESA, compatible with HDMI 1.4
EXT×1	EXT input(DVI or 3G-SID/wireless screen cast is optional)
CV×1	Support PAL \ NTSC compound video
USB×1	USB2.0, support 1080p@30fps or 720p@60fps content

Image output	
DVI×2	Horizontal splicing: width≤3840, height≤2000, total pixels:≤2.55million pixels Fixed outputting frame frequency 60Hz, support pixel-pixel splicing in the above range

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Audio input/output	
Audio input×1	3.5mm audio port
Audio output ×1	3.5mm audio port

Details	
Input voltage	100-240V~50/60Hz
Maximum power	≤50W
Working temperature	-30°C~70°C
Environmental humidity	15%~85%
Operation	Panel buttons, LAN, USB, PC software,
Dimension	482.6mm×230mm×66.6mm
Case design	1.5U case
Weight	≤3Kg

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Public Wechat



ONBON APP