LVP7+8 Quick User Guide V1.0

The LVP7+8 is a mixed video switcher/splicer/multi-window video wall processor + monitor combination for the rental application market. It supports up to 16 channels of HD and SD, analog and digital mixed inputs, and can achieve any four-picture display through four-picture application mode, as well as instantaneous seamless or fade-in/fade-out switching between input signals; LVP7+8 supports up 18 million pixels to pixel-to-pixel synchronous splicing and zoom in splicing, can realize synchronous splicing and central control of multiple different pixel pitch and screen type LED screens, The LVP7+8 has two 8-inch LCD monitors for preview monitoring of input signals and synchronous monitoring of output images. In addition, customized flight case and integrated design make the LVP7+8 ideal for the rental market.

This "LVP7+8 Quick User Guide" is designed for users to quickly use LVP7+8. For more detailed settings, adjustments and operation of LVP7+8, please refer to the "LVP7000 Series User Manual" and "LBM808 User Manual".

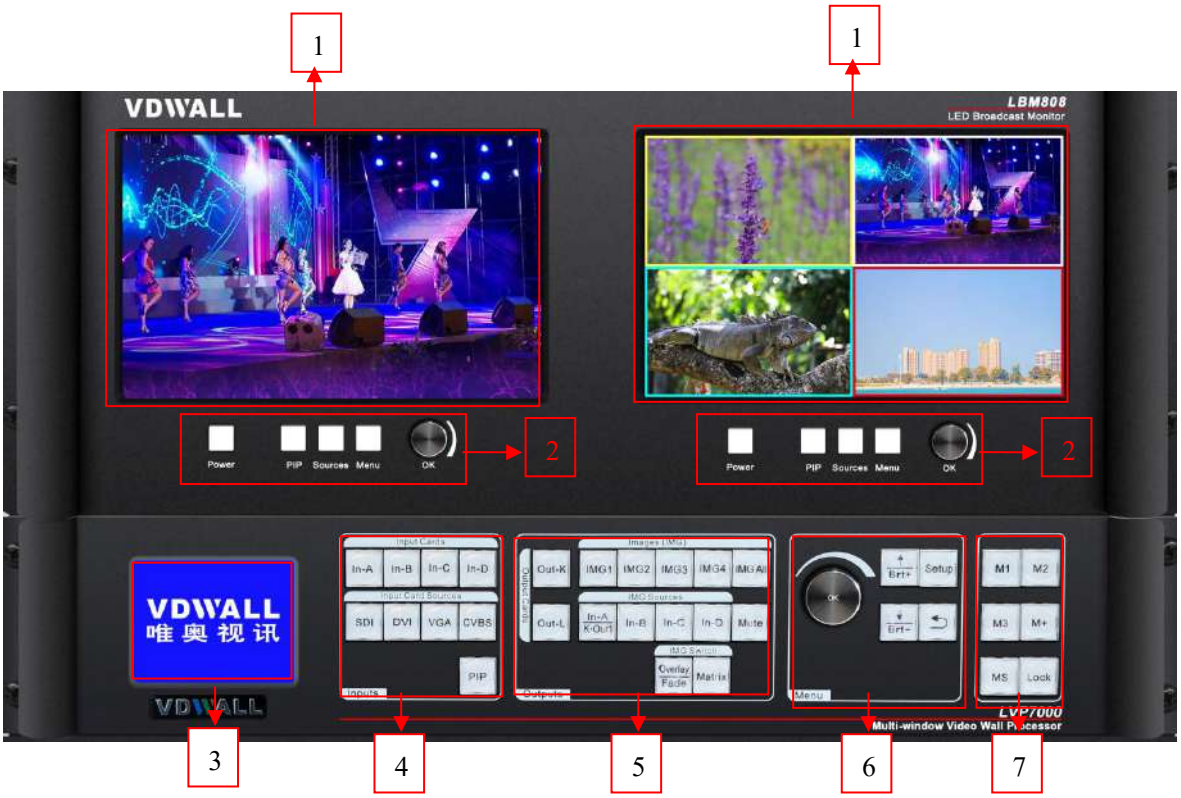
Accessories list

1.5M power cord *2	1.5M DVI cable（cable number corresponding to the number of LVP7000 input cards）	0.5M DVI cable （cable number corresponding to the number of LVP7000 output cards）
VGA-VGA+RCA adapter cable（cable number corresponding to the number of LVP7000 input cards÷2）	HDMI-DVI-D adapter *2	1.5M USB cable*1

Operation CD *1	LVP7000 User Manual *1	LBM808User Manual *1
LBM808 power adapter *1		

Front/rear panel introduction

Front panel



① screens of monitor ② Buttons and knobs of monitor ③ screen of LVP7000

④ LVP7000Input card function buttons ⑤ LVP7000 output card function buttons

⑥ LVP7000 setup buttons ⑦ LVP7000 mode buttons

The LBM808 monitor is controlled by the buttons + OSD menu. The functions of each button are as follows:

1. **Power**: Power on or off button.
2. **PIP**: turn on or off PIP, The PIP signal can be the same as or different from the main signal.
3. **Sources**: signal source selection. When PIP is on, press this button to select the PIP signal. When PIP is off, press this button to select the main signal.
4. **Menu**: press this button to enter the setup menu.
5. **Knob**: rotate the knob to select a setting or adjust parameters.
6. **OK**: press this button to confirm the operation.

LVP7000 buttons are as follows:

1. Input card selection button (**In-A**、**In-B**、**In-C**、**In-D**) :

   Select input card

2. Input card signal source selection button (**SDI**、**DVI**、**VGA**、**CVBS**)

   Select the input signal, press the **VGA** button twice to automatically adjust the VGA input signal.

3. PIP button

   turn on or off PIP function

4. Output card selection button (**Out-K**、**Out-L**) :

   Select output card

5. Output image selection button (**IMG1**、**IMG2**、**IMG3**、**IMG4**、**IMG All**)

   Select the corresponding output screen of the output card or display the corresponding screen,**IMG All**select all output images

6. Output image signal source selection button (**In-A**/**K.Out1**、**In-B**、**In-C**、**In-D**)

   Switch the signal source displayed on the output screen, and the L card output screen can also select the Out1 output of the K card as the signal source.

7. Output image on-off button (**Mute**)

   The output screen closes the function key, and when the light is on, the corresponding screen outputs a black screen.

8. Output image overlay on-off and switch time button (**Overlay**/**Fade**)

open multi-screen overlay order switching, after opening the red indicator light on the button lit up normally,can switch layer overlay order,Press **Fade** continuously can switch and adjust Fade in/ Fade out time under switcher,2 channels dual image and 4 images modes.

9. **Matrix**

   Output card matrix function button

10. Set button

    Set the processor image output parameters

    Setup、↑、↓、**Knob**、↩

    Setup: Enter the settings menu

    ↑、↓: select settings

    Knob: Rotate **Knob** set values or select parameters

    OK: Press **Knob** is **OK**, Save data

    ↩: Return to the previous menu

11. Other function setting buttons

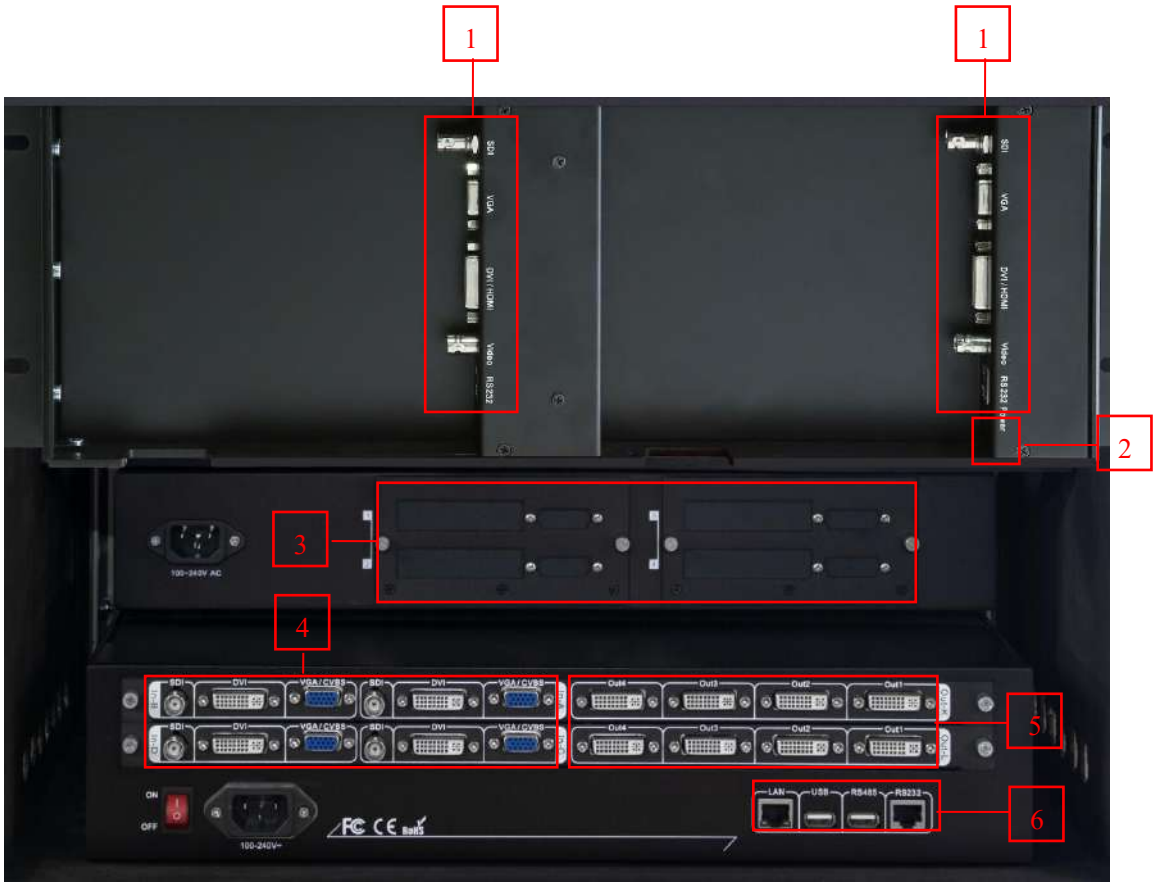
    Data show(**OK**): Show the current settings and information of the processor.

    Brightness set button (**Brt+**, **Brt-**) : set the processor output brightness.

    Display mode button (**M1**, **M2**, **M3**, **M4**) : Set and call the display mode button.

    Lock button (**Lock**) : buttons lock function button, press **Lock** button three times continually to unlock.

Rear panel



① Monitor video input port and RS232 interface ② Monitor power port

③ Send card installation location ④ LVP7000 input card ⑤ LVP7000 output card

⑥ LVP7000 communication interface

Connection steps

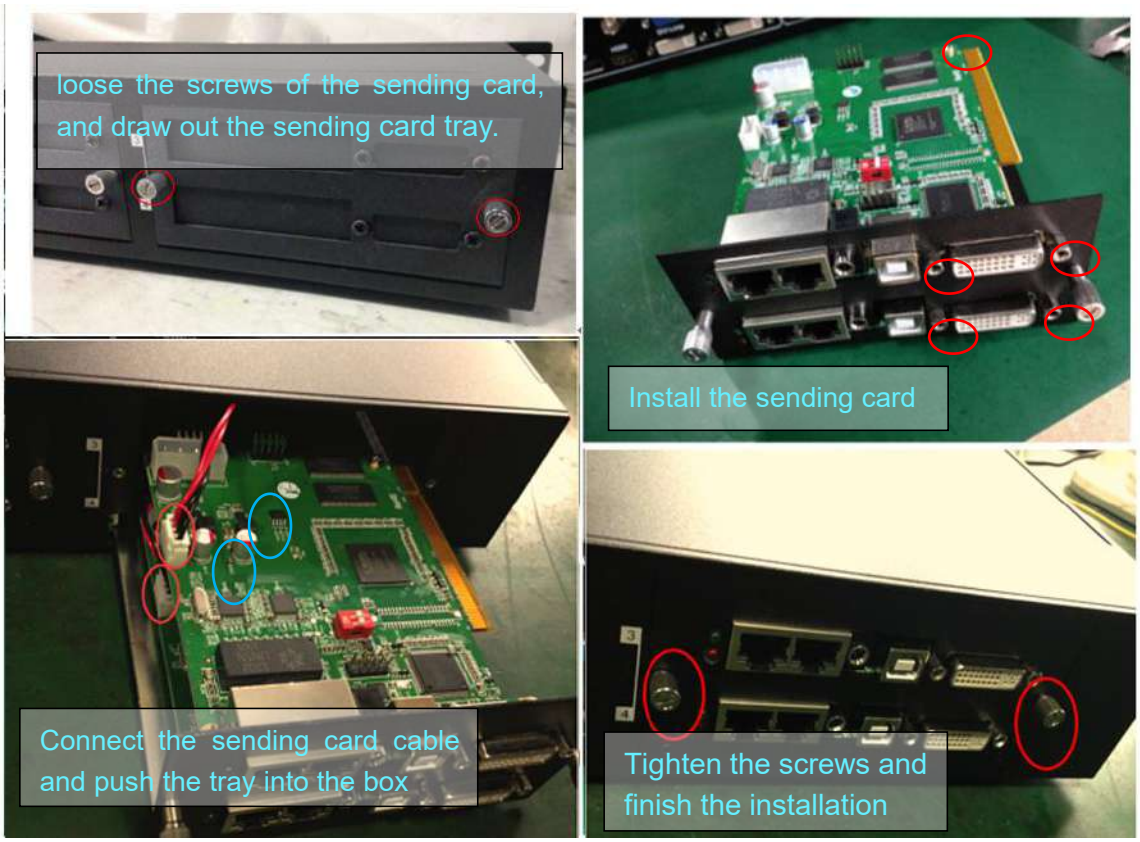
1： Sending card installation

1) Take the sending card box, loosen the screw of baffle, and pull out the sending card tray.

2) Install the sending card in the corresponding position of the sending card tray, and tighten each screw.

3) Connect the sending card +5V power supply cable and push the tray into the box.

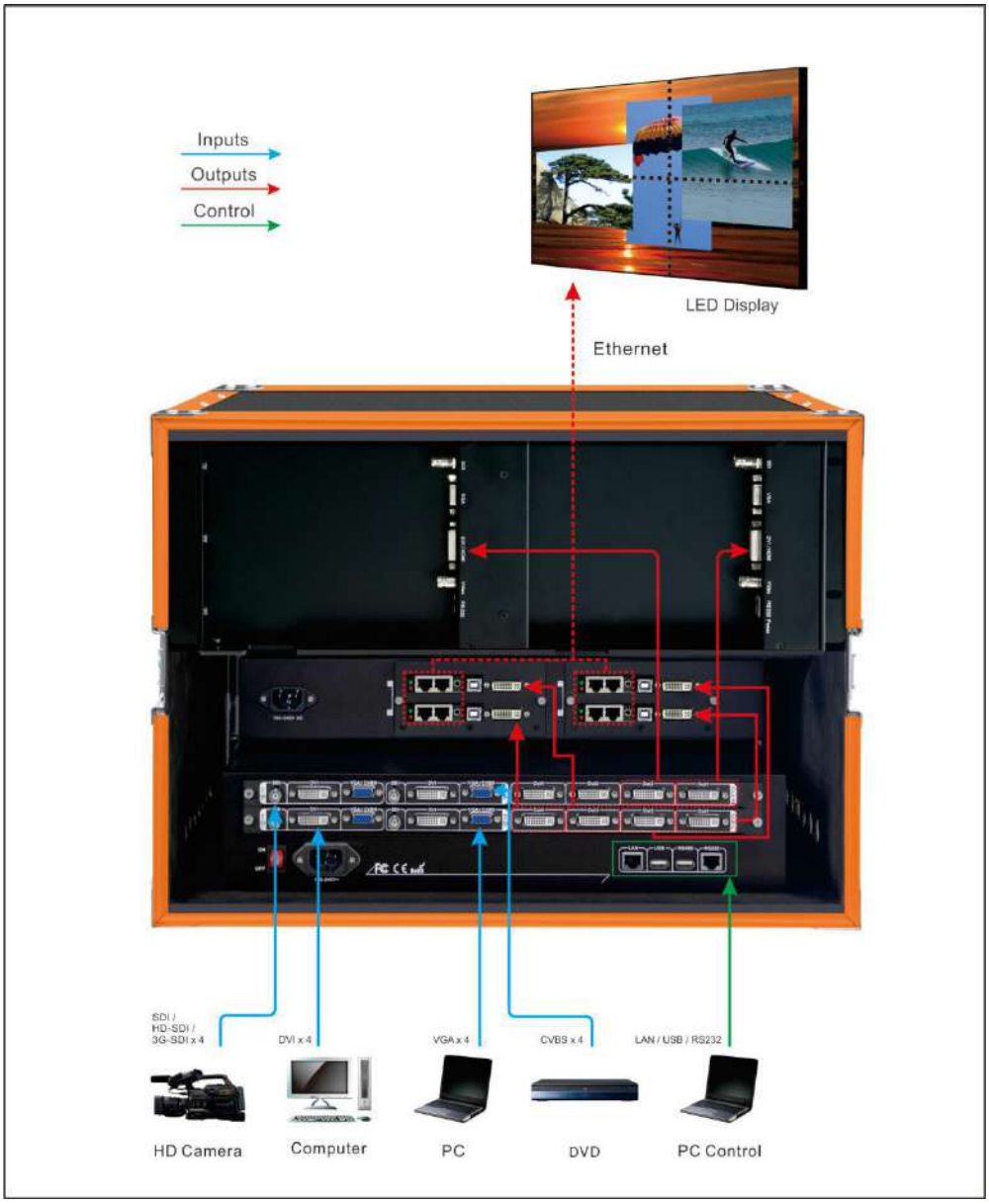
4) Tighten the screw of baffle to complete the sending card installation.



2: Input and output signal connections

1) Connect the output signal of the video source to the video input port corresponding to the LVP7000. Note that the input signal is preferentially connected to different input cards.
2) DVI monitor output of LVP7000 (such as K-Out1) connected to LBM808 monitor DVI input interface
3) LVP7000 DVI OUT output→Sending card DVI input interface
4) Sending card network cable→LED screen receiving card
5) Finally plug in the power cord

   Please refer to the following diagram:



arrange the various wires, please refer to the following figure:

3：Power on

1) Make sure that the input and output signals are connected correctly.

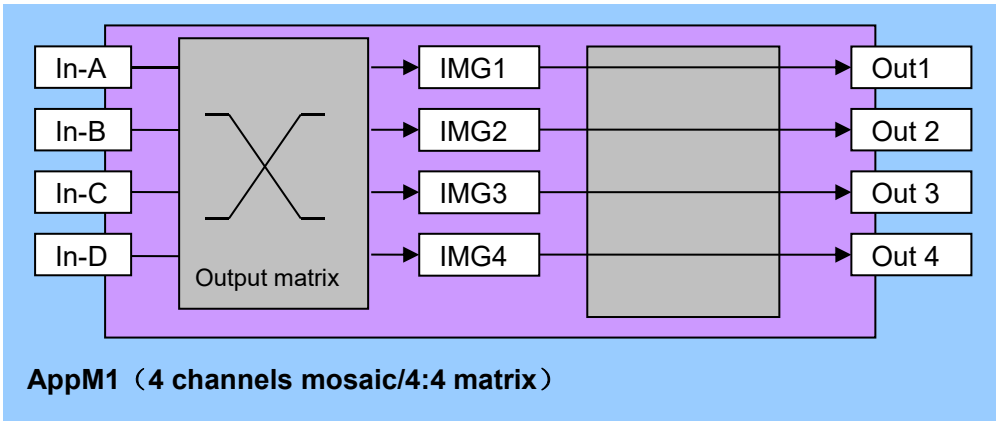
2) Plug in the **LVP7+8** power cord, turn on the power switch, and power on each device.

3) Power on each source device

LVP7000 Common application mode description:

4 channels splicing or 4:4 matrix

Mode description



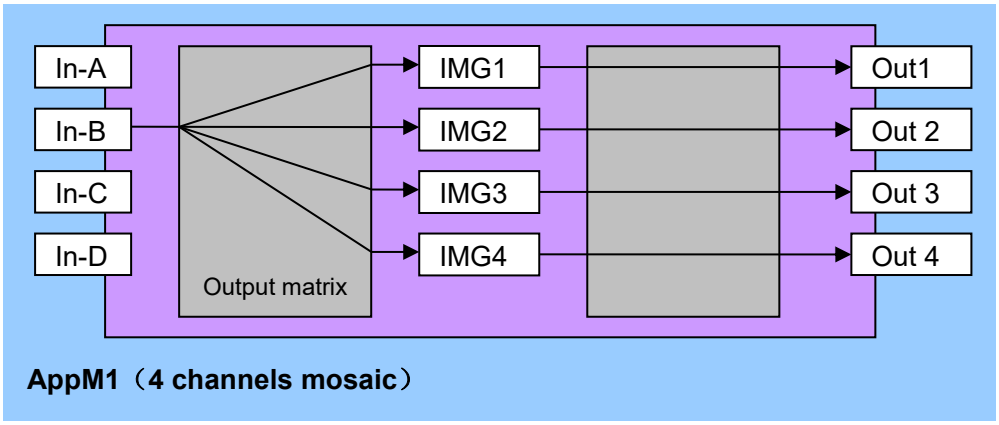
LVP7000 output card application mode1 sketch map

In this application mode,

In this application mode, after the matrix switching mode is turned on by Matrix, each output image (IMG1, IMG2, IMG3, IMG4) can select any input card signal (In-A, In-B, In-C, In- D).

In particular, when both IMG1, IMG 2, IMG 3, and IMG 4 select the same input card source, each picture can be separately zoom in and to be applied as a 4-output image splicer.

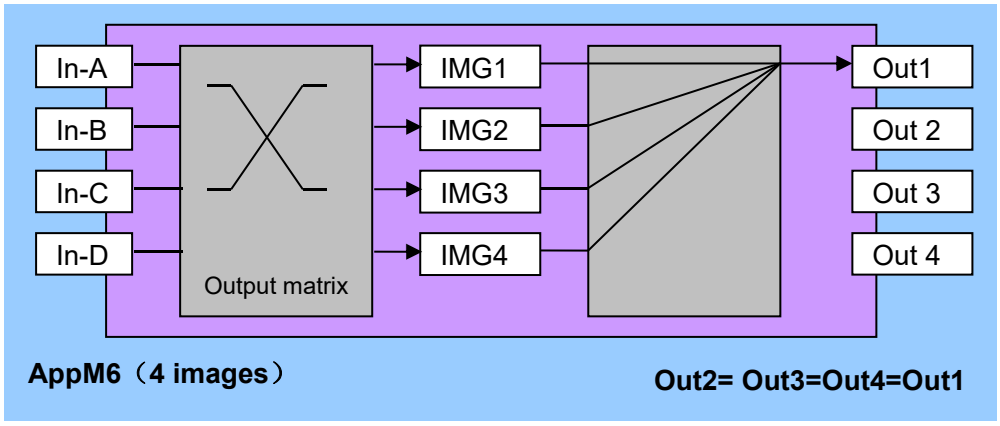
The application mode is mainly applied to 4 inputs and 4 outputs seamless matrix switching or 4 output zoom in and splicing.



output card application mode1 4 channels splicing sketch map

4 images application

Mode description



LVP7000 application mode6 sketch map

Under the application mode, press **Matrix** button to open matrix switch mode, then every one of output image （IMG1、IMG2、IMG3、IMG4） can select anyone of input card signal （In-A、In-B、In-C、In-D）.

Press **Overlap** button to open layer overlay mode, press relative output image button to let the output image display on top layer.

Through press **Fade** button to set the fade in fade out switch time of output image, then achieve seamless and fade in fade out switching effect.(Fade switch effect is only used to Out1 port).

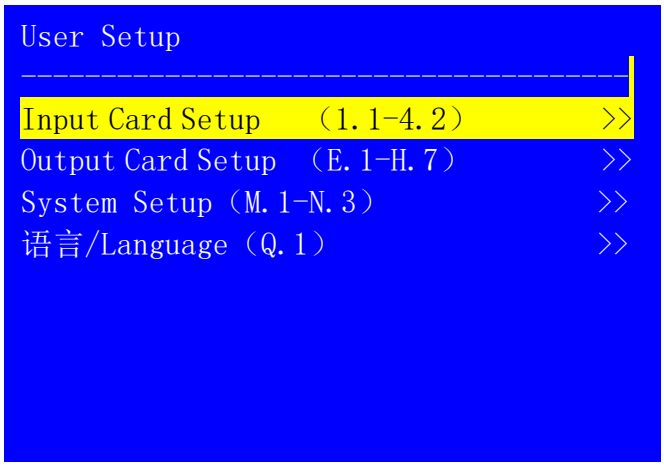
Otherwise, when output card work under the application mode, can call display mode M16 directly to achieve 4 images preview function.

The application mode is mainly used as 4 images processor or single output fade in fade out switcher.

Common operation instructions

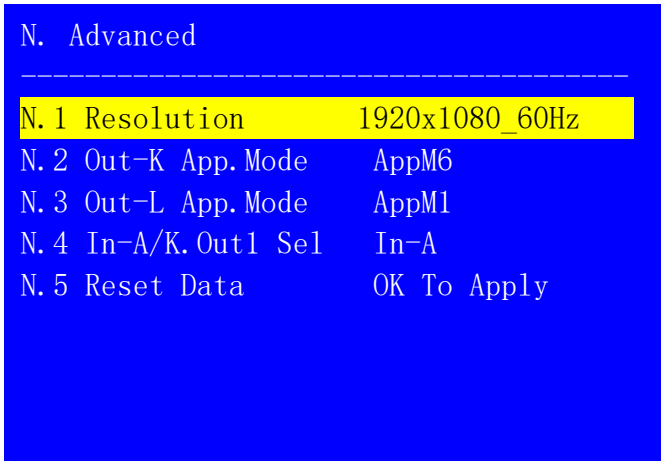
1. Output resolution, output application mode settings

1) After the LVP7000 is started, press the **Setup** button to enter the user setting main menu. As shown in the figure below, select the menu by pressing the ⇧, ⇩ keys in the menu, and then press the knob (**OK**) to enter the following menu “System Settings” → "advanced".



LVP7000 main menu setup

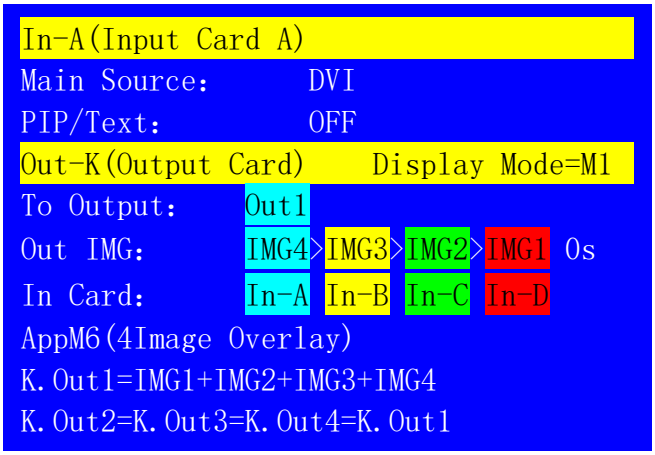
2) In the "Advanced" menu, set the output resolution and the application mode of each board in turn, then press the OK device to automatically restart in the "N.5 Reset Data" menu, and the changed parameters will take effect.



System advanced menu setup

2. LCD introduction

After the LVP7000 is automatically restarted, the LVP7000 LCD panel displays the application mode as AppM1 (switcher), as shown in the figure below.



system default operation interface

3. Input card related operations

Signal selection:

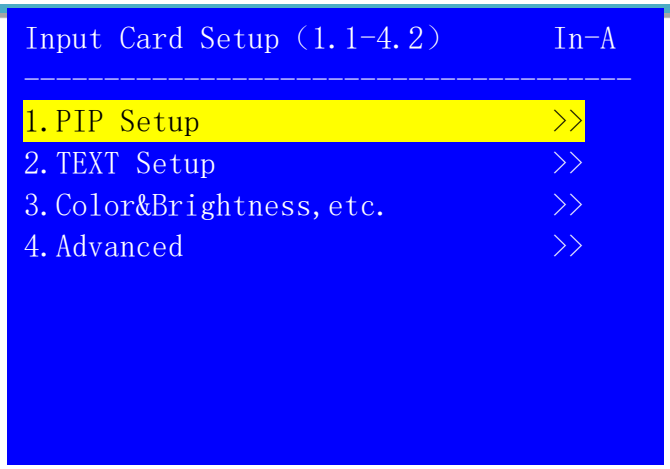
press the input card button (**In-A**、**In-B**、**In-C**、**In-D**) , Select the input card you want to operate, and then press the input card source button (**SDI**、**DVI**、**VGA**、**CVBS**) to switch signal.

VGA input auto correction:

When the current input card signal source is a valid VGA input signal, press the button**VGA**enterVGA automatic calibration confirmation menu, press**VGA** button again for VGA auto correction,press exit menu.

PIP function:

Press the input card button (**In-A**、**In-B**、**In-C**、**In-D**) , then press**PIP**Enter the PIP preparation state, and then press the input card source button (**SDI**、**DVI**、**VGA**、**CVBS**) Select the PIP signal. If you need to set the location of the PIP and text overlay, you can enter the setup menu to operate.



Input card setup

4. Output card related operations

Output card matrix switch:

Press **Matrix** button the indicator light on the button lit up, meantime the indicator light on **Overlap** button is closed, it indicates processor has entered output card matrix switch mode, firstly press **Out-K** or **Out-L** button to select a output card, then press image buttons (**IMG1**、**IMG 2**、**IMG 3**、**IMG 4**、**IMG All**) to select output image, then press image signal source button (**In-A**、**In-B**、**In-C**、**In-D**) to select the input channel you need.

Output card output image overlay mode operation:

Press **Overlap** button the indicator light on the button lit up, the indicator light on **Matrix** is closed, it indicates processor has entered overlay mode setup status, firstly press **Out-K** or **Out-L** button to select a output card, then press image button (**IMG1**、**IMG 2**、**IMG 3**、**IMG 4**) can change the overlay relationship of output image, the image be selected become on top layer.**Note**: the function is only valid in 2 channels dual image, multi-image application mode.

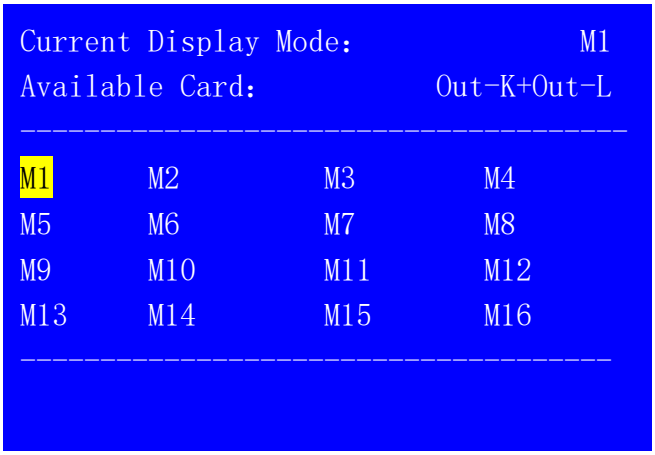
Output card image overlay switch time: When the indicator light on **Overlap** button lit up, processor has entered overlay mode setup status, continually press **Fade** button can adjust the switch time of overlay sequence of every output image, fade in fade out has 5 switch time, 1s, 2s, 3s, 4s, 5s, 0s is seamless switching. The function is only valid in 2 channels dual image, multi-image application mode.

Output card display mode setup:

Display mode from 1 to 16, total 16 sets, display mode 1, 2 and 3 can be directly call by press mode button **M1**, **M2** and **M3**, meantime the indicator light on the button lit up, display mode 4 to 16 need to be called in mode call menu, press **M+** button to open mode menu, rotate knob to select mode, meantime the indicator light on the button lit up.

MS is display mode copy button, can copy the parameters status in one display mode to another display mode.

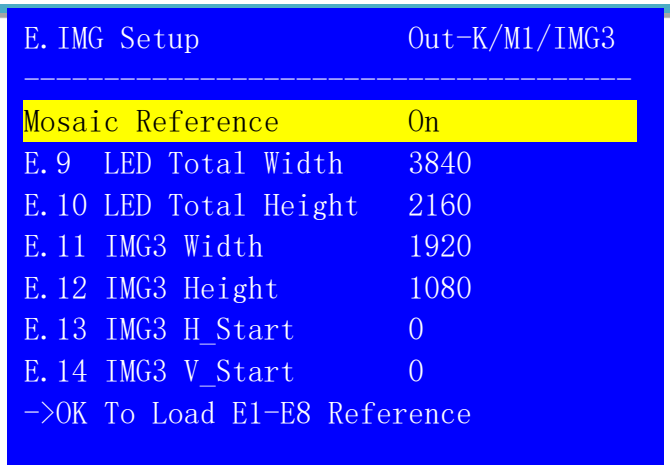
In the display mode setting menu that press **M+** to enter, you can press ⇧ to select the calling mode of the display mode (the display mode is applied to the board) for single output card call or dual output card simultaneous call.



Display mode call menu

5. Output screen parameter setting

press **Setup** to enter the user setting menu, then use the ⇧, ⇩ keys to select the menu, press the **knob** button (**OK** button) to enter the following menu "System Settings" → "Output Card Settings" → "IMG Setup" menu.In the menu press display mode button (for example **M1**, **M2**) to select current display mode, press output card button (**Out-K**, **Out-L**) to select output card, press ⇧,⇩ button to select relative menu option, rotate knob to change current parameter, press knob (OK button) to save parameter.



Splicing reference calculation

For AppM1 (4 channels splicing or 4:4 matrix), LVP7000 also can use splicing reference calculation to do fast splicing, when current menu in E.8 option press ⇓ button continually to enter the menu.

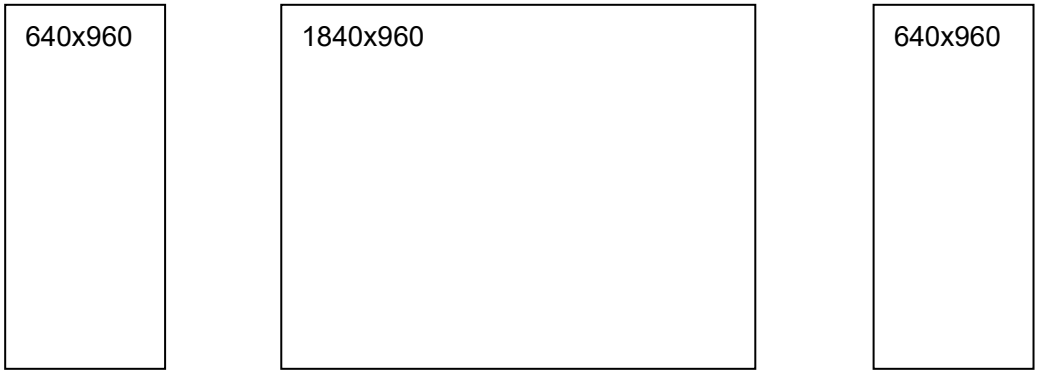
The operation method of splicing reference calculation:

1. Rotate **knob** to open splicing reference calculation;
2. In the menu E.9-E.10 input the total width and height of whole LED screen;
3. In the menu E.11-E.14 input the size and location of LED screen the output port connect (mean relative IMG);
4. Select ->OK To Load E1-E8 Reference option press **OK** button, then in the menu of output card IMG data will be covered, press **OK** button, the current parameter in menu E.1-E.8 update as automatic calculation parameter, meantime the right side of every relative setup option displays the parameter value of calculation;

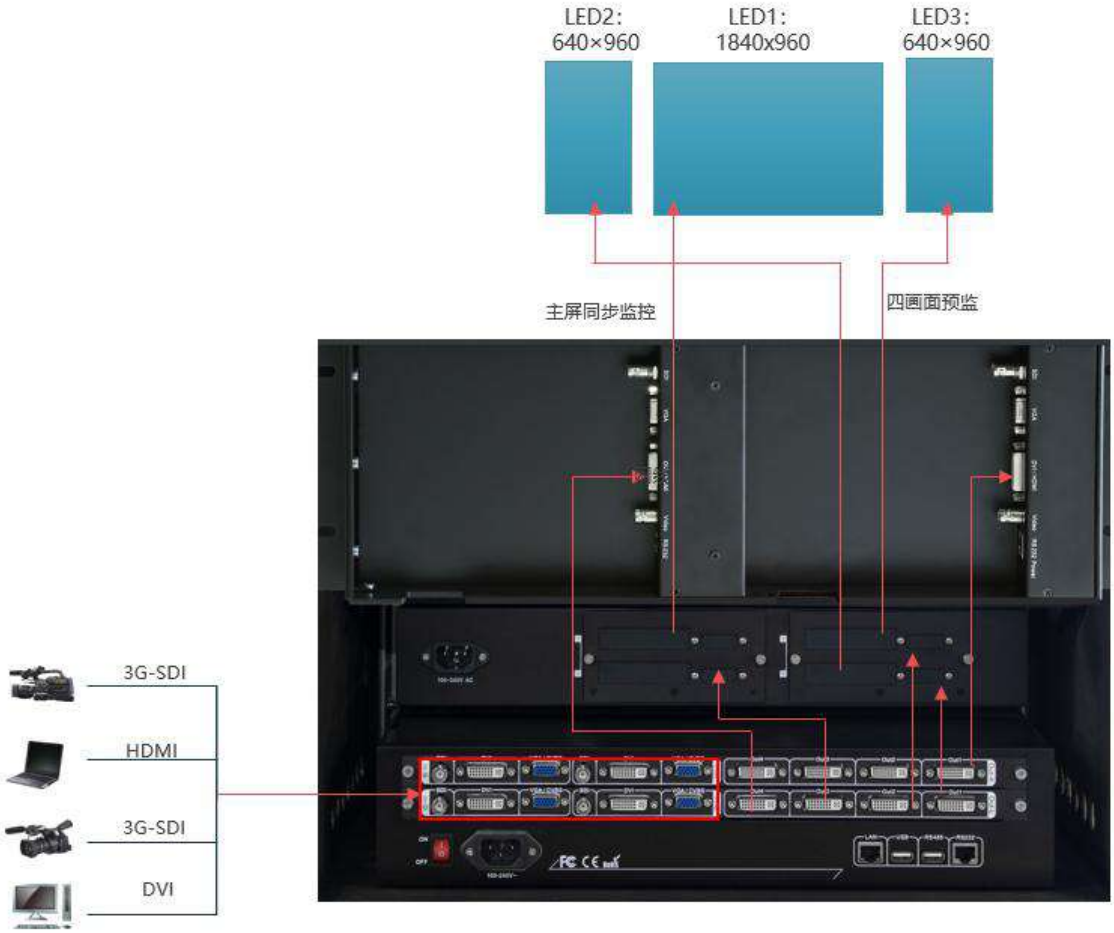
Application example:

There are three LED screens on the stage, the resolution is 640x960, 1840x960, 640x960, there are 4 signal sources such as camera, laptop and desktop computer, use one LVP7+8 , LVP7000 (4 input cards, 2 output cards).

Realize the display : 1. Three screens display different images, and a total screen is displayed as a whole. One-button seamless switching between two display effects can be realized by mode call; 2. One monitor previews four input signal images, one monitor synchronously. monitors the large screen output signal.



Connection Diagram:



display effect:

Display three different images

Display a total image

Monitor display effect

Appendix: modified record

Version	Time	Description	Draft
V1.0	2018.11.9	Initial Release	Lts