Shenzhen Amoonsky Technology Co., LTD

Led Video Processor
A series product manuals

User Manual

LED Video Processor

English

Contents

Introduction

This manual contains information about how to use, install and configure the LED video processor, in addition, also relates to knowledge LED video processor and LED video systems. Users are LED video processor, please read this manual in detail.

About LED Video Processor

LED video processor is a mid-market seamless handover effects video processor, it supports high definition digital input, analog HD input, analog SD input, With up to 9 video, as well as 3-way video in the same format output, and can achieve all channels seamlessly switch.

The following lists the LED video processor supports audio and video input formats table:

DVI Input   VESA standard, the maximum 1920x1200 @ 60Hz

HDMI Input   480i / p 676i / p 720p 1080i / p 8/10/12 bit color depth

DP Input   VESA standard, the maximum 1920x1200 @ 60Hz

VGA Input   VESA standard, the maximum 1920x1200 @ 60Hz

AV Input   PAL, NTSC, PAL-M / N, SECAM

Output formats:

DVI output any resolution up to 2304x1152 @ 60Hz

VGA output any resolution up to 2304x1152 @ 60Hz

Custom resolution output

Analog audio output to any channel analog audio signals

Feature

Multi channel video input - LED Video Processor with 9 channel video input, of which 1DP, 1DVI, 2AV(CVBS), 2 VGA，2 HDMI,1 3G-SDI/1 USB（EXT.）,inputs. Basically has covered the civil and industrial use requirements. Video input switching all and can realize the fast cutting and fade switching effect.

Practical Video Output Interfaces - Processor has three video outputs. 2 video output using two DVI outputs, including a VGA output and DVI outputs share one output connector. After these three videos are programmed to send output to the LED card or monitor. DVI1 video distribution output (LOOP OUT), in a multi-machine splice is very practical, eliminating the use of video distributor, saving the user the tedious connections, reducing connection failure rate.

Seamless switching-LED Video Processor can also seamlessly switch between any channel switching ,The time adjustable from 0 to 5.0 seconds. With a fade transition effect, switch the input channel, so that the screen can be switched smoothly to the second screen. Using fast switching, switching input channels, you can instantly switch the video output.

Full output resolution-LED Video Processor designed for users with useful output resolution, the widest reach 3840 points, the highest of 1920 points, for a variety of dot matrix display. Up to 20 kinds of output resolution for users to choose, and can be adjusted to point output. And it have custom resolution.

Pre-switching technology - pre-switching technology, is switching the input signal is switched to predict in advance whether the input channel signal. This feature reduces the line is disconnected or may be due to the case of no signal input to switch directly lead to errors, improve the success rate performances.

Support PIP&POP- PIP technology unaltered state in the original image, the other input of the same or different overlay images. LED Video Processor PIP function, not only can be adjusted overlay size, location, borders, etc. You can also use this feature to achieve Picture outside Picture (POP), dual-screen display.

One key black - black screen during a performance is an essential operation, during a performance, you need to close the image output, you can use the black buttons for fast black.

Support Freeze - During playback, you may need to freeze the current picture together to achieve "pause" screen. Freeze the screen, the operator can also change the current input selection or change lines, etc., to avoid background operation affect performance results.

PART and FULL fast switching - LED Video Processor a simple and functional operation of the interception part of the screen and full-screen operation, any one input channel can be independently set different interception effect, and each channel is still able to seamlessly switch. Users can arbitrarily set the current channel interception of part of the screen size and position, and the other channels remain unchanged intercept method. When switching between channels most of its screen or full screen function follow.

MODE-LED Video Processor user presets with 4 groups, each user can store all user default setup parameters, use the LOAD preset shortcut keys you can quickly recall. Can achieve rapid field parameter backup and recall function

Equal and unequal splicing - splicing is LED Video Processor important part, which can be achieved equal splicing and unequal splicing, splicing on greatly satisfy users' needs. On multiple processors to achieve frame synchronization, 0 delay, no tail and other technologies to enable smooth performance perfect. Unequal spliced portion of the output is the same with the picture settings, the user can read the following chapters for instructions.

30bit scaling technology - LED Video Processor using a dual-core image processing engine, a single core can process 30 image scaling technology to achieve pixel output from 64 to 2560, while achieving 10 times the image to enlarge the output, ie, the maximum screen more than 25,600.

Brightness adjustment technology - LED Video Processor unique brightness adjustment function, reduce the brightness solved after layering lost, so that more true color reproduction.

Saved directly technology - Saved directly technology to solve the user's settings and manually save tedious process, that users of co-ordination or adjust parameters without the implementation of artificial save operation, LED Video Processor user parameters automatically stored in EEPROM, even if the power When turned on, the parameters before power remains in the device.

ACC & ACM image filtering - LED Video Processor using ACC and ACM image filtering engine, handling each color, nonlinear filtering effect of the lowest loss rate of the image, restore the color fidelity.

Support   Audio Output - LED Video Processor can synchronization output while inputting HDMI, SDI and USB signals，not only decode video signals, but also decode analog audio output, enabling audio and video synchronization output.

Support the upper RS232 interface control - can use computer to connect processor to use PC software to set the output resolution, brightness, audio switch, switch signal source, etc.......

Panel

Rear Panel

Figure 1-Video processor rear panel

»» AC Power Input - using IEC standard power cable video processor, the input power is 100-240 VAC, 50-60Hz.

»» Video Input - processor can receive digital video signals, the analog video signal, a CVBS video signal, the following criteria for each input interface.

● AV1, AV2: CVBS video input, BNC connector, input video support PAL, PAL-M / N, NTSC, SECAM formats. You can connect DVD players and camcorders.

● DVI, DVI-I standard interface, use the DVI-I or DVI-D cable, the video input format supports VESA standard.

● DP video input,DP standard interface, , the video input format supports VESA standard.

● HDMI1、HDMI2: HD video input, HDMI-A standard interface, support HDMI1.3 standard video inputs and VESA standards. Used to connect desktop computers and HDMI high-definition player.

● VGA1, VGA2 video input, using the standard DB-25 connector, supports the VESA standard video input for connecting a desktop computer, laptop or other VGA video output device.

»» Video Output - video output interface processor programming

● VGA output, using the standard DB-25 connector. DVI output interface with the output video format as used to connect to a monitor.

● DVI output, using the DVI-I connector, the output video format is set by the processor, two DVI outputs the same signal at the same time. Used to send the card or connected to the LED monitor.

»» Audio Ouput- Including left and right channel output, using 3.5mm universal interface.

»» RS-232 - Serial communication connector for engineering testing, the device is programmed, PC software control, communication baud rate is 115200bps.

»» LED sending card - LED sending card installation location aside, you can install one or two to send cards. When installed, the user can first open the back cover and the small bracket, mounting, internal set aside four 5V power connector, four 2.0x4PIN connectors. After installing the plug 5V power supply.
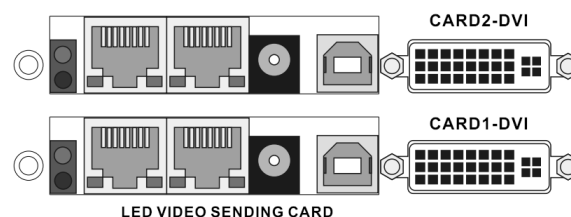

Figure 2 -LED sending card

Front Panel

Figure 3 -Front Panel

»» **LCD display** - Display menu and current information.

»» **Menu operation buttons** - Menu operation keypad with "Return key" ,Knob "confirm and adjust." The following are included on each key.

OK& ESC key, or return to the previous menu.

Knob , press the OK button to enter the menu or submenu key to confirm the function. Adjust the knob button, you can adjust the menu position or adjust the parameter value becomes small.

»» **Input Selection** - INPUT button in the region, including all of the input 8-channel switch button, the test pattern, screen freeze, black screen, VGA automatic correction function buttons. button Indicators of the button state in the region there are three kinds, namely:

»» **The button lamp flashes slowly:** Flashing interval of about one second, and has been in flashing, indicating that the channel table when no signal switching.

»» **Button light flashes quickly:** When you press the button, the button indicating rapid flashing time is about 0.3 seconds, indicates that the device is currently being tested and decodes the input video.

»» **button indicator light:** Indicates the current channel signals are connected properly or the current function is active. Here is the Enter button on regional detailed description of the function buttons

Figure 4 - Inputs

● **AV1, AV2**, CVBS video switching button.

● **HDMI1, HDMI2** button, after the corresponding panel HDMI 1, HDMI 2 video inputs.

● **VGA1, VGA2** button, VGA input switching buttons and automatic correction button (AUTO function). When the input channel for VGA1 or VGA2, repeatedly pressing VGA1 or VGA2 button VGA video processor corrects the current channel, so that the screen output is normal. VGA channel AUTO function: When the input channel for VGA1, and VGA1 have screen output, press VGA1 (AUTO) button, you can recalibrate the current VGA1 signal. VGA2 button also has the same functionality and operation.

● **DP, DVI** button, respectively, after the corresponding panel DP, DVI video inputs.

● **SDI** input, support 3G SDI input, can select SDI loop output.

● **USB** input, support USB disk, can connect USB mouse.

»» **Function button area** - function button area contains a wide mode, preset call, PIP and transition effects operating buttons can quickly achieve operating each function.

Figure 5—Function

● **PIP** button : to turn on or off the PIP function buttons. User pre-set parameters PIP menu, use the PIP shortcuts to quickly turn on or turn off the PIP function. About Pip's use, in the following sections in detail.

Tip: When PIP (Picture in Picture) feature to work, you can not use PAT button output test pattern; unusable FREEZE / BLACK button (or black screen freeze function); function and can not be used CUT and FADE function (rapid transition effects and Fade switching effect).

● **FADE** button, **CUT** button: Switching effect, FADE to fade transition effect, **CUT** for fast cutting effect. Users when switching input channels can pre-select the transition effect is good press the Enter button.

● **Black/ Freeze** button: the button is a composite key, can one key black or freeze the display.

● **PART** button, **FULL** button:: Part of the screen display mode, good splicing interception parameters section of the screen, press this button part of the screen to display the results. In the following sections a detailed description of the operation.A full screen mode by default, all input channels are full-screen mode display mode. When the user wants to set the mode from part to full-screen mode, simply press **FULL** button.

● **Audio** button, The key is the audio output adjustment button. By clicking and pressing the button, the audio output channel can be switched or the audio output can be closed.

● **MODE** button: To load preset scenes shortcuts. In the default state, press the **Menu** button to bring up a list of preset scenes, together with the function button menu to bring up the preset scene. Save and recall presets on the scene, in the following sections will be described in detail.
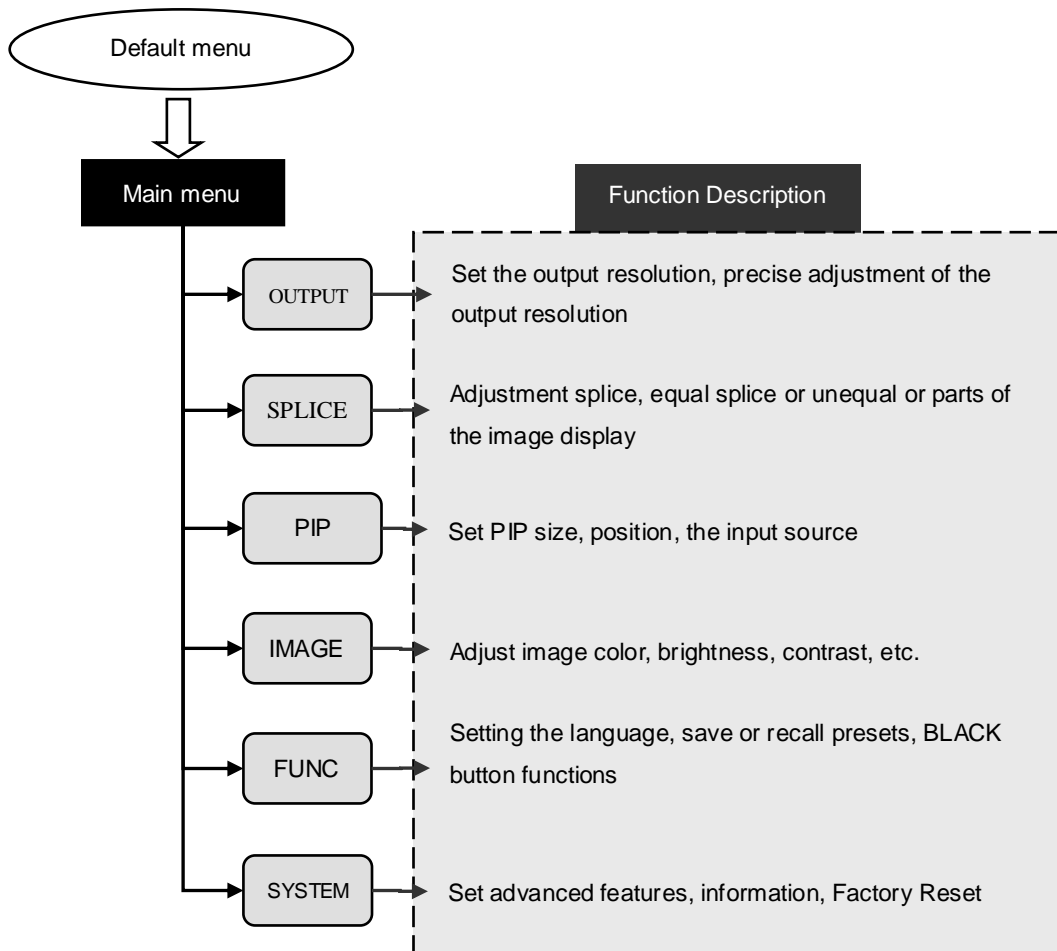
Menu System

Menu Structure

Figure 6 - Main Menu structure diagram

Operation menu

The main menu operation buttons "ESC", **knob ,OK** the man-machine interface for a 128x64 dot matrix LCD screen.

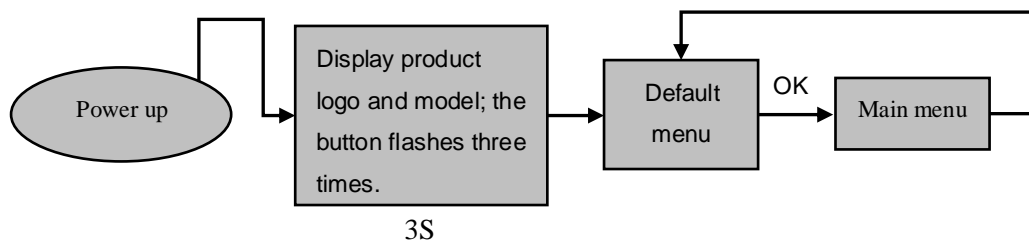Boot process equipment is as follows:

Figure 7- processor boot process and enter the main menu

Default Menu

The default menu after the device starts, LCD screen interface, shown above, the input source, the input source connected state, the input source is connected, the output resolution, mosaic mode, brightness and output audio channels and other information, shows the processing the main parameters menu system.
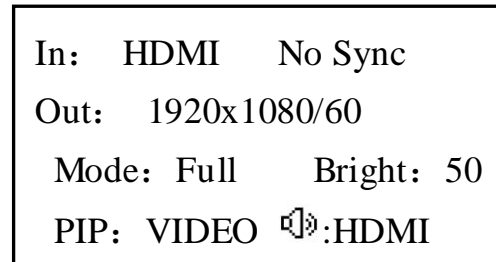
```
In： HDMI    No Sync
Out：  1920x1080/60
  Mode：Full     Bright：50
PIP：VIDEO  🔊:HDMI
```

Figure 8 - Default menu

Main Menu

The Main Menu is an important parameter adjustment user interface, almost all of the settings can be done in the main menu. In the following sections there will be a detailed description of the operation and settings for each function.
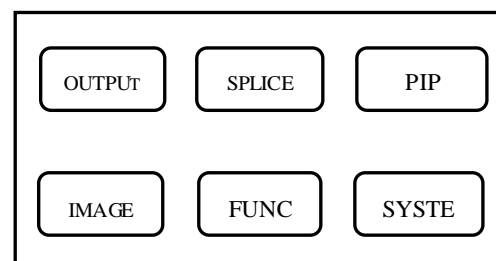
```
OUTPUT    SPLICE    PIP

IMAGE    FUNC    SYSTE
```

Figure 9 - Main menu

Setting and Operation

Language

Before using LED video processor, make sure the language you wish to use, if not, please follow the operation to complete.

Default Menu → Main Menu → FUNC → Language
默认菜单→主菜单→功能→语言

Above is the menu operation path, use the button to enter the language settings menu you can select the language.

Reset

When using LED video processor may not be confirmed because of errors or problems arise when setting these parameters, you can enter the menu, make overall reset. Here is the process of resetting the machine.

Default Menu → Main Menu → SYSTEM → Reset All →OK

After the reset, all user parameters back to factory state, users with caution.
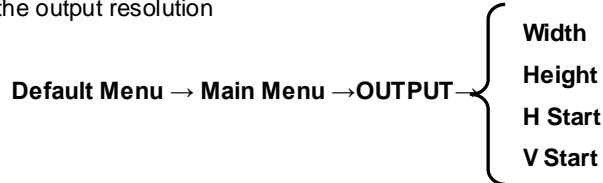
Output Resolution

Using different resolution display or LED screen, to achieve point-to-point output, it is necessary to set the output resolution and the resolution of precise adjustment.

1. select a larger than screen resolution

Default Menu → Main Menu →OUTPUT → Output resolution→ confirmed

2. to fine-tune the output resolution

Default Menu → Main Menu →OUTPUT→
- **Width**
- **Height**
- **H Start**
- **V Start**

> Tip: You reset the output resolution, the system will reset all parameters menu splicing to ensure data consistency. Accurate adjustment of the user is smaller than the resolution of only the currently selected resolution when the resolution is equal to the exact adjustment of the currently selected resolution, the horizontal and vertical start value start value can not be adjusted.

Switching Effect

Processor with two Switching Effect, Fast switching, fade in fade out and corresponding **CUT or FADE** button.

CUT (Fast switching): when the input video switch, switch-free stay.

FADE (fade in fade out): when the input video switcher, both before and after the video image fusion, the switching process smoother over.

The user can set to switch effects following two operations

1. press **CUT** or **FADE** button, press the button, the button indicator lights to alert the user of the current state of transition effects.

2.to enter the menu settings

Default Menu → Main Menu → FUNC →Seamless

Fade time settings

Fade time can be controlled fade switching state of the time, the processor provides 0.5 seconds to 1.5 seconds fade time setting switch. Enter the menu settings as follows

Default Menu → Main Menu → FUNC →Fade Time

Black and Freeze settings

Black and screen freezes shared the FREEZE / BLACK button, in the menu system is displayed as "BLACK button." It is set as follows

Default Menu → Main Menu →FUNC → BLACK FUNC

Once set up, simply press FREEZE / BLACK button to achieving a black screen or screen freeze

> **NOTE:** When FREEZE / BLACK button role, you can not use the Enter button or the PIP function.

Splicing applications

LED Video Processor has a powerful splicing, enabling hardware splicing 10x10 processors to achieve frame synchronization. There introduce it's equal splicing and unequal

Equal Splicing

For example the following parameters of the LED screen wall

Device Name	Specification	Parameter	Other
LED unit	P3.9	Resolution 128x128	
LED screen	20x16 unit	Resolution 2560x2048	
LED sending card	XX	Support resolution 1280x1024	
LED video processor	LED Video Processor	Support resolution 2304x1152	
NOTE: In calculating the LED video wall, try using the resolution calculation, in order to avoid errors!			

From the above parameters that can be divided into four equal portions LED screen area, a resolution of 1280x1024, respectively, these four named Display1, Display 2, Display 3, Display 4, corresponding to the processor P1, P2, P3, P4, send card named S1, S2, S3, S4. Below is a schematic connection
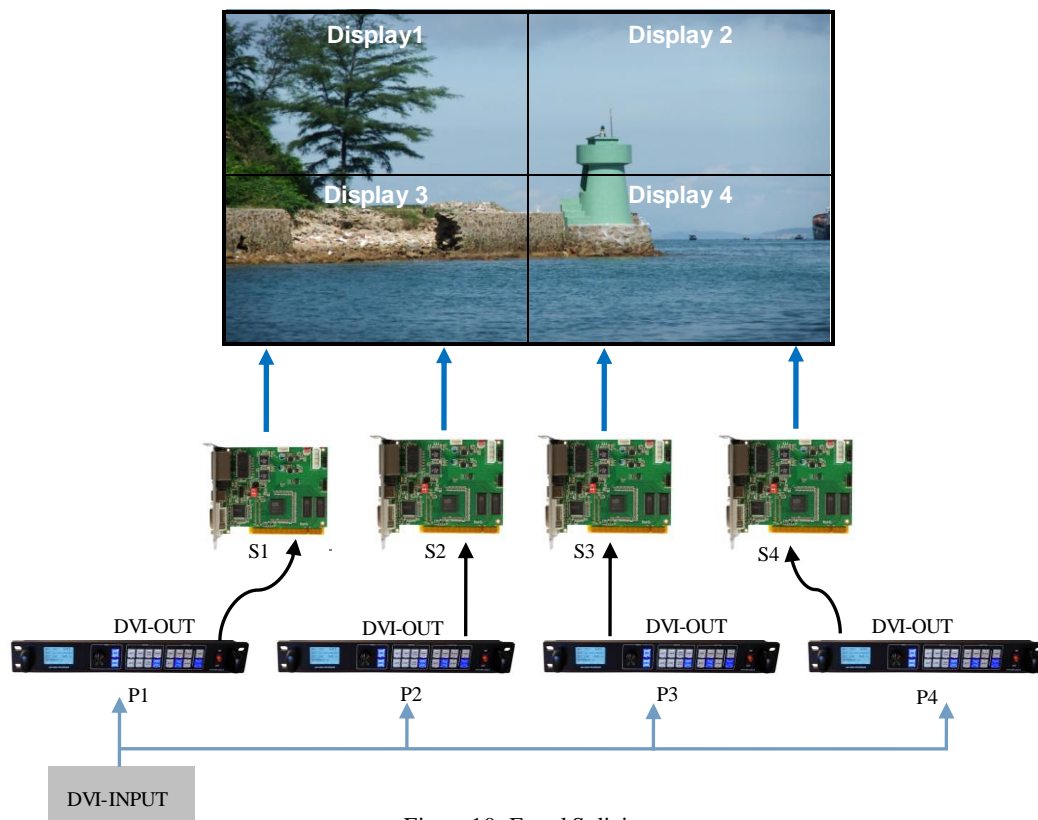

Figure 10 - Equal Splicing

Steps:

1. Refer to Figure 13 for all connected devices.

2. LED screen software will adjust Display1 ~ Display 4 respectively into four separate display area. (For details, please refer to the relevant suppliers of LED system operation)

3. are provided P1 ~ P4 video processor parameters. Since the processor comes with 1280x1024 / 60 resolution, so no need to further fine-tune. All of the following parameters, only the splice location is not the same.

Processor P1、P2、P3、P4：

1. Set the output resolution

        Default Menu → Main Menu → OUTPUT →Resolution→1280x1024 60Hz

2. Set the splicing parameters

        Default Menu → Main Menu →SPLICE→ MODE →V-Wall

        Default Menu → Main Menu →SPLICE→ Pattern → Equal

        Default Menu → Main Menu →SPLICE→V-Wall Sync → On

        Default Menu → Main Menu →SPLICE→Parameters→H Units→2

        Default Menu → Main Menu →SPLICE→Parameters→V Units→2

Processor P1： Splice position

        Default Menu → Main Menu →SPLICE→Parameters→Position→1

Processor P2： Splice position

        Default Menu → Main Menu →SPLICE→Parameters→Position→2

Processor P3： Splice position

        Default Menu → Main Menu →SPLICE→Parameters→Position→3

Processor P4： Splice position

        Default Menu → Main Menu →SPLICE→Parameters→Position→4

> **NOTE:** splicing synchronization open, cut and fade function is disable.

Unequal Splicing

For example the following parameters of the LED screen wall

Device Name	Specification	Parameter	Other
LED unit	P4.81	Resolution 128x128	
LED screen	21x7 unit	Resolution 2688x896	
LED sending card	XX	Support resolution 2048x640 Two card connected 2048x1280	
LED video processor	LED Video Processor	Support resolution 2304x1152	
NOTE: In calculating the LED video wall, try using the resolution calculation, in order to avoid errors!			

From the above parameters that can be divided into four LED screen unequal area, resolution of 1408x512, 1280x512, 1408x384, 1280x384, respectively, these four named Display1, Display3, sending cards corresponding S1, S2, corresponding to the video processor P1; Display2, Display4, sending cards corresponding to S3, S4, corresponds to the video processor P2. Below is a connection
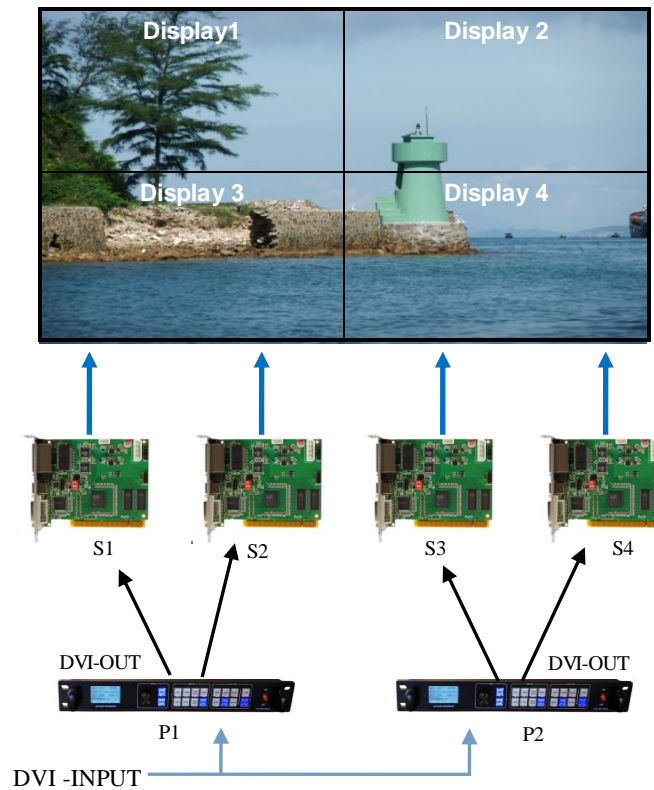
Figure 11 -Unequal Splicing

Steps:

1.Refer to Figure 14 Connect all devices.

2.Sending card S1 and S2 cascade, S3 and S4 cascade. Respectively adjustment LED screen software Display 1 and Display 3 into a complete display area, Display 2 and Display 4 set another full display area. (For details, please refer to the relevant suppliers of LED system operation)

3.Are provided P1 ~ P2 video processor parameters.

Processor P1：

1.Setting resolution

    Default Menu → Main Menu → OUTPUT →Resolution→1440x900@60Hz

    Default Menu → Main Menu → OUTPUT→Width→1408

    Default Menu → Main Menu → OUTPUT→Height→896

2. Setting splice

    Default Menu → Main Menu →SPLICE→ MODE →V-Wall

    Default Menu → Main Menu →SPLICE→ Pattern →Unequal

    Default Menu → Main Menu →SPLICE→V-Wall Sync →On

    Default Menu → Main Menu →SPLICE→Parameters→ H Total→2688

    Default Menu → Main Menu →SPLICE→Parameters→ V Total→896

    Default Menu → Main Menu →SPLICE→Parameters→ H Start→0

    Default Menu → Main Menu →SPLICE→Parameters→ V Start→0

Processor P2：

1.Setting resolution

   Default Menu → Main Menu → OUTPUT →Resolution→1440x900@60Hz

   Default Menu → Main Menu → OUTPUT→Width→1280

   Default Menu → Main Menu → OUTPUT→Height→896

2. Setting splice

   Default Menu → Main Menu →SPLICE→ MODE →V-Wall

   Default Menu → Main Menu →SPLICE→ Pattern →Unequal

   Default Menu → Main Menu →SPLICE→V-Wall Sync →On

   Default Menu → Main Menu →SPLICE→Parameters→ H Total→2688

   Default Menu → Main Menu →SPLICE→Parameters→ V Total→896

   Default Menu → Main Menu →SPLICE→Parameters→ H Start→1408

   Default Menu → Main Menu →SPLICE→Parameters→ V Start→0

NOTE: splicing synchronization open, cut and fade function disable.

Capture

Interception of part of the screen function is unequal extension splicing function. In actual use, may be used to intercept the partial screen display, displays only a partial area of input channels. Such as the Windows user interface, users simply DVI1 channel video playback window, the other input channel to full screen. Processor provides users with two control keys, as shown below.

    FULL   PART

Figure 12 -Capture

Setting：

1.Select the channel you want to capture part of the screen, such as DVI1;

2. To enter the menu settings unequal splicing parameters (equivalent to capture part of the screen parameters), the total pixel values and the start value is adjusted by visual inspection is completed.

   Default Menu → Main Menu →SPLICE→ MODE →V-Wall

   Default Menu → Main Menu →SPLICE→ Pattern →Unequal

   Default Menu → Main Menu →SPLICE→V-Wall Sync → off

   Default Menu → Main Menu →SPLICE→ Parameters→ H Total→4200

   Default Menu → Main Menu →SPLICE→ Parameters→ V Total→3000

   Default Menu → Main Menu →SPLICE→ Parameters→ H Start→0

   Default Menu → Main Menu →SPLICE→ Parameters→ V Start→0

When switching the channel, as long as you want to advance channel selection **FULL** or **PART** effect effect, the device will automatically save the current output for the input channel effects, that is, each input channel display mode can be different.

13

PIP

PIP is the use of digital technology to display two programs on the same screen. That is the normal viewing of the main screen, while the insertion of one or more sub-picture compressed in order to appreciate the main screen while monitoring other channels. When operating in PIP mode mode, the user must provide at least two of the input signal, and the PIP menu settings accordingly. PIP function can be realized outside-picture effects, namely POP, PBP is a special application of the PIP.

Steps:

1.Turn on PIP, there are two ways to open, one by **PIP** button, the second is in the menu system

Default Menu → Main Menu → PIP →PIP mode→ PIP

NOTE: When the PIP is enabled, cut and fade function can not be used.

2.Set the input source, the processor of the main channel and PIP channel, the same type of input source can not be achieved PIP function, so users can refer to the following table PIP source conflict table.

Default Menu → Main Menu →PIP → PIP setup →Input

Table 3 - PIP Source conflict table

		Main Channel									
		AV1	AV2	HDMI1	HDMI2	VGA1	VGA2	DP	DVI	SDI	USB
PIP Channel	AV1	√	×	√	√	√	√	√	√	√	√
	AV2	×	√	√	√	√	√	√	√	√	√
	HDMI1	√	√	√	×	√	√	√	×	√	×
	HDMI2	√	√	×	√	√	√	√	×	√	×
	VGA1	√	√	√	√	√	×	√	√	√	√
	VGA2	√	√	√	√	×	√	√	√	√	√
	DP	√	√	√	√	√	√	√	√	√	√
	DVI	√	√	×	×	√	√	√	√	√	×
	SDI	√	√	√	√	√	√	√	√	√	√
	USB	√	√	×	×	√	√	√	×	√	√

3.Size and position parameters, specific parameters set by the user, the user can also adjust the PIP border transparency.

Default Menu → Main Menu → PIP→PIP setup→ H Start

Default Menu → Main Menu → PIP→PIP setup→ V Start

Default Menu → Main Menu → PIP→PIP setup→ Width

Default Menu → Main Menu → PIP→PIP setup→ Height

Keying

Keying is an extension of the PIP function, which is accomplished by the PIP channel input color image minus the red, green, blue, black, and white colors to get results. Keying function can be used for some simple effects processing and overlay subtitles. Easy setting operation, please refer to the setup.

For example, Figure 16A is a picture-channel playback of video for PPT, 16B is the main input channels, 16C is a matting effect.
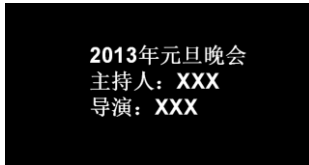
| Figure 13A-PIP Chanel | 13B-Main Chanel | 13C-Output |

Setting step：

Default Menu → Main Menu → PIP → PIP mode →Keying

Default Menu → Main Menu → PIP→ Keying Setup→ Input→ DVI

Default Menu → Main Menu → PIP→ Keying Setup→ Chroma Key→ Black

Mode

Preset is to facilitate users to use quickly recall commonly used in a variety of scenarios, reducing the user when the operation is repeated complicated settings, improve work efficiency. Each contains a preset mode signal channel mode, the display mode of various parameters, image quality settings. Processor provides 4 preset save space, here to save and recall preset mode operation.

Save Mode

When the user adjust all the parameters, to enter to save the current preset

Default Menu → Main Menu → FUNC→ Preset→Save Mode → Preset [1] → confirm

In saving mode submenu have Preset [1] to Preset [4], four storage space, the user can choose. Storage space is empty, the right of the status display for ☆, when the state has been saved had the right argument appears as ★. Users can also cover save.

Recall Mode

Recall preset parameters have two operating modes, keyboard shortcuts and menu calls

1.Use **MODE** button

In the default menu state, press the **MODE** button to call up the menu to enter the preset scene. Use the knob buttons to select the saved preset scene, press **MENU** button to confirm.

2.Setting in menu

Default Menu → Main Menu → FUNC→ Preset→ Read Mode →Preset [1]→confirm

Pre-Switching

Pre-switching function can help users predict the source to be switched is connected properly, reduce misuse live performances. Details as follows:

1. Into the pre-switching operation menu

When **CUT** or **FADE** button lights up, repeatedly pressing the **FADE** button or **CUT** button, LCD screen will prompt the user to enter the signal pre-switching state.

```
CUR:    DVI
PRE:    VGA1    NoSync
TRANS FADE: 0.5S
      Press EXIT to exit!
```

Figure 14-Pre-Switching

2.To select the input source to be switched, press **FADE** or **CUT** button or button switch.

In the pre-switching, press CV1 ~ SDI one button point, **FADE** or **CUT** button or key indicator flashes quickly, prompting the user to press the flashing **CUT** or **FADE** button switch.

> **NOTE:** The same type of signal can not be pre-selected, otherwise it will prompt "invalid channel!" Conflict pre-selected signal PIP input signal and the same conflict, a detailed check list of the PIP conflict.

Brightness and Contrast

Processor technology unique brightness, contrast adjustment, adjust color reproduction and high brightness after the picture level without loss. Adjust the brightness, it is best to adjust the brightness and contrast with, ensure perfect output effect. There are two ways to adjust the brightness

1.Use shortcut keys to adjust the brightness

In the default menu, press the **Menu** button control ← button, in order to reduce the brightness, press → to increase the brightness. At this point the brightness values will change the default menu.

2.enter the image brightness and contrast settings menu

> **Default Menu → Main Menu→IMAGE→Brightness→50**
>
> **Default Menu → Main Menu→IMAGE→Contrast→50**

Key Lock

key lock function for the user in a complex environment to avoid misuse or others inadvertently

Lock

Enter the system menu, enable key lock function

> **Default Menu → Main Menu→SYSTEM →Keypad Lock →on**

Unlock

Press the **FADE** button last 2 second, processor automatically unlocked.

VGA Adjust

Under normal circumstances, switch to the VGA input source, the processor will automatically correct input source color, image size and position. If the processor does not automatically corrected successfully, the user can manually correct implementation.

1.Use AUTO to adjust

When the input source is switched to the VGA input, VGA button is pressed again, the system will self-correct input source.

2.Enter menu to adjust

Switching to the VGA input state, enter the menu

> **Default Menu → Main Menu→ SYSTEM→VGA Setting →Auto Adjust →confirm**

If automatic calibration is unsuccessful, you can try manually correct

> **Default Menu → Main Menu→ SYSTEM→VGA Setting →H Position**
>
> **Default Menu → Main Menu→ SYSTEM→VGA Setting →V Position**

NOTE: When no VGA signal input, the system prompts not correct.

※USB playback settings

USB input: can connect the mouse operation, the left mouse button is determined, the right key mouse button is back. Long press the left mouse button can popped the next level menus.

USB storage content can be stored to internal storage < 8GB memory >,or external storage < maximum support 64GB>.

Operation steps:

A. Copy content

Insert the U disk into the computer, create a "Superplayer" folder in the U disk, and copy the content of the play to the folder. If want played sequentially, the title of the program can be named in order of ABCD or 12345; If you want to play PPT, you need to set the PPT to auto play, and the setting method refers to the excel operation instruction.

If you want to copy the USB disk contents to internal memory, please enter the File explorer, choice the corresponding folder location, click the left mouse button and press 2-3 seconds, When the sub-menu has popped out, select copy, and enter the target folder location, also click the left mouse button and press 2-3 seconds, When the sub-menu has popped out, select paste, Choose a foreground running or background running, wait the end of the running is done.

B. Setup option

According the needs, select the corresponding language

　Enter the main menu - Setting - Language & input - choice of the corresponding language ;

Setting the default boot-strap parameter.

　By the setting, you can choose to default boot-strap from the USB disk or the machine flash, First read the default parameter content to play.

Setting steps　　Superplayer　→　Setting　→　Play Mode　→

USB Or FLASH　→　Save And Play
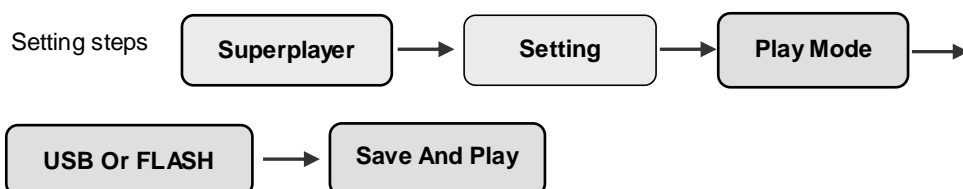
　If the play content has a picture, you can enter the setting option..window top right corner have show time，can select the display time.