

# SPROLINK®

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**STUDIO INTEGRATION WITH INTERNAL STORAGE  
EMBEDDED CONTROL TERMINAL NO NEED  
EXTRA COMPUTER SAVING MAINTENANCE COST**



# MP1

## USER MANUAL

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## 1.Product Features



- Support Multi-layer Display
- Support Program Edit and Switch
- Support Videos, Images, Rolling Text Playing
- Support Mobile Phone APP Control, Built-in WIFI Hot spot
- Support LAN Control
- Support Any Signal Seamless Switch
- Support 2.5 Million Pixels Customized Resolution
- Support EDID Management
- Support Signal Hot Backup
- Support Multi-device Cascade
- Support Built-in Two Sending Cards

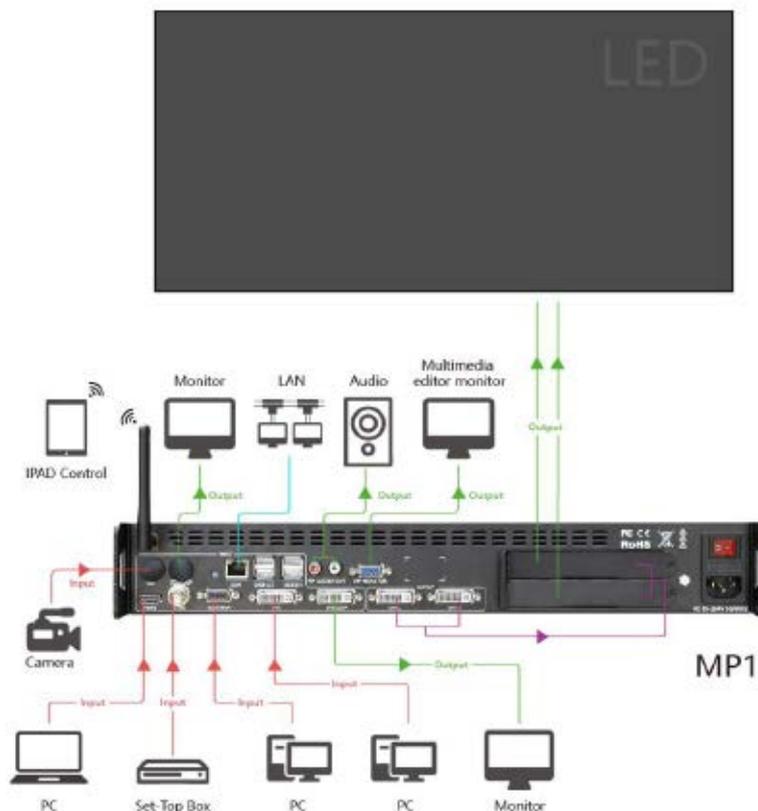
## 2. Product Introduction

Thanks for using the SPROLINK MP1 video processor, hope you can experience its outstanding performance.

MP 1 is a video processor that integrates with playback control, video processing, format conversion, size adjustment, signal switching, cascade splicing functions and so on.

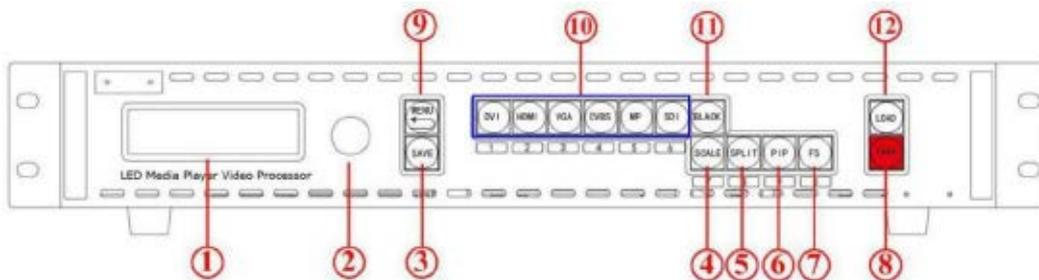
It is embedded with video playback, media server software and also support remote mobile phone APP control. MP 1 is a device that include broadcast control, using the USB disk to load the content and no need extra PC.

### MP1 WIRE CONNECTION



## 3. Hardware Overview

### 3.1. Front Panel



#### OLED Screen

1	<b>OLED Screen:</b> Display the device current status and provide interactive choices in conjunction with button on the front panel.
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#### Rotary Button

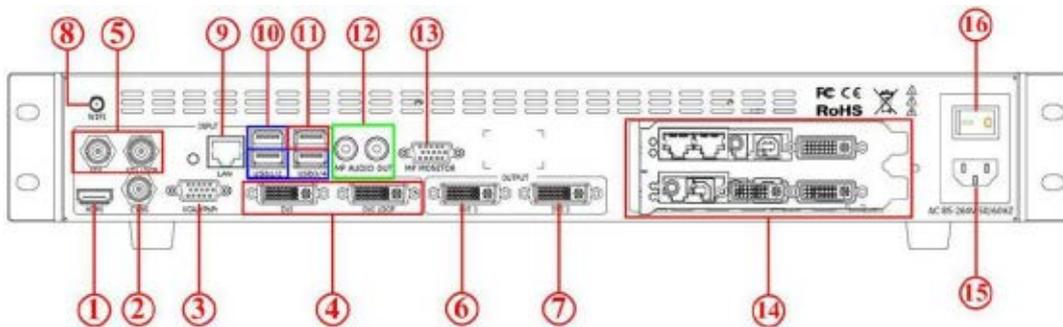
2	<b>Rotary Button:</b> This button is for menu selection and confirmation (press the knob to confirm).
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#### SAVE Button

3	<b>SAVE Button:</b> Save the current parameters as template. When press the SAVE button, the button with number 1\2\3\4\5\6\7\8\9\0 will light up, press any button and save to the corresponding channel.
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4	<p><b>SCALE Button:</b></p> <p>This button is used for size and Position adjustment (using the number button or knob to change the parameter).</p>
5	<p><b>SPLIT Button:</b></p> <p>Used for SPLIT mode and parameters setting.</p>
6	<p><b>PIP Button:</b> Push the button to enable the PIP function, also, can adjust layer A or B.</p>
7	<p><b>FS Button:</b></p> <p>Screen parameters setting button. Shortcut for switch between full size and screen size (screen size can be customized).</p>
8	<p><b>TAKE Button:</b></p> <p>In TAKE mode, the TAKE button is used to. Switch the preview to program. Long press the TAKE button about seconds to lock or unlock the TAKE mode.</p>
9	<p><b>MENU Button:</b></p> <p>Press the menu button to enter, turn the knob to choose the corresponding menu function, press the menu again, to back to the last level menu.</p>
10	<p><b>INPUT Area:</b></p> <p>The button will light on when the input source is selected. If there are two or more signal sources, the flashing button means selected (preview), the always light-on button means already in display (program).</p>
11	<p><b>BLACK Button:</b></p> <p>Press the Black button, the LED screen will light off (press again the LED screen will light on).</p>
12	<p><b>LOAD Button:</b></p> <p>Load the scene which is saved before.</p> <p>Press the LOAD button: the buttons light on 2\3\4\5\6\7\8\9\0, and you can press anyone to load the scene.</p>

## 3.2 Back Panel



### Input Port and Output Port

1	<b>HDMI 1.3 Input:</b> Support 2560*816*60 and 2K input
2	<b>CVBS Input:</b> Support 576i and 480i input
3	<b>VGA\Ypbpr Input:</b> Support 2K input, ADVANCE->INPUT->VGA ADJUST->VGA TYPE to VGA or Ypbpr input
4	<b>DVI Input and DVI LOOP:</b> Support 2K Input and customized EDID
5	<b>SDI Input and SDI LOOP:</b> Option Module, Support 3G SDI\HD SDI\SD SDI
6	<b>DVI 1 Output:</b> The output port is connected with LCD screen or sending card.
7	<b>DVI 2 Output:</b> The output port is connected with sending card or LCD screen, and show the same content with DVI 1

### Server Port

8	<b>Wireless WIFI:</b> Enhance the WIFI signal received
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9	<b>Network Interface:</b> Use the sever to link the network
10	<b>USB Interface (Blue area have 3 USB ports) :</b> load the video from USB Disk, connect with mouse or. keyboard and so on.
11	<b>USB Interface (Red area 1 USB Port) :</b> Used for device upgrade
12	<b>Audio Output Interface:</b> Used for sever audio output
13	<b>Sever VGA Output Interface:</b> Used for editing or controlling the output images (please connect with LCD screen)
14	<b>Sending Card Slot:</b> The sending card slot can install two small sending cards and one big sending card (If you want to install the big sending card, remember to lock the middle screw ).

## Switch and Power

15	<b>IEC-Power interface:</b> AC 85-264V, 50/60HZ, Max Power 45W
16	<b>Power Switch</b>

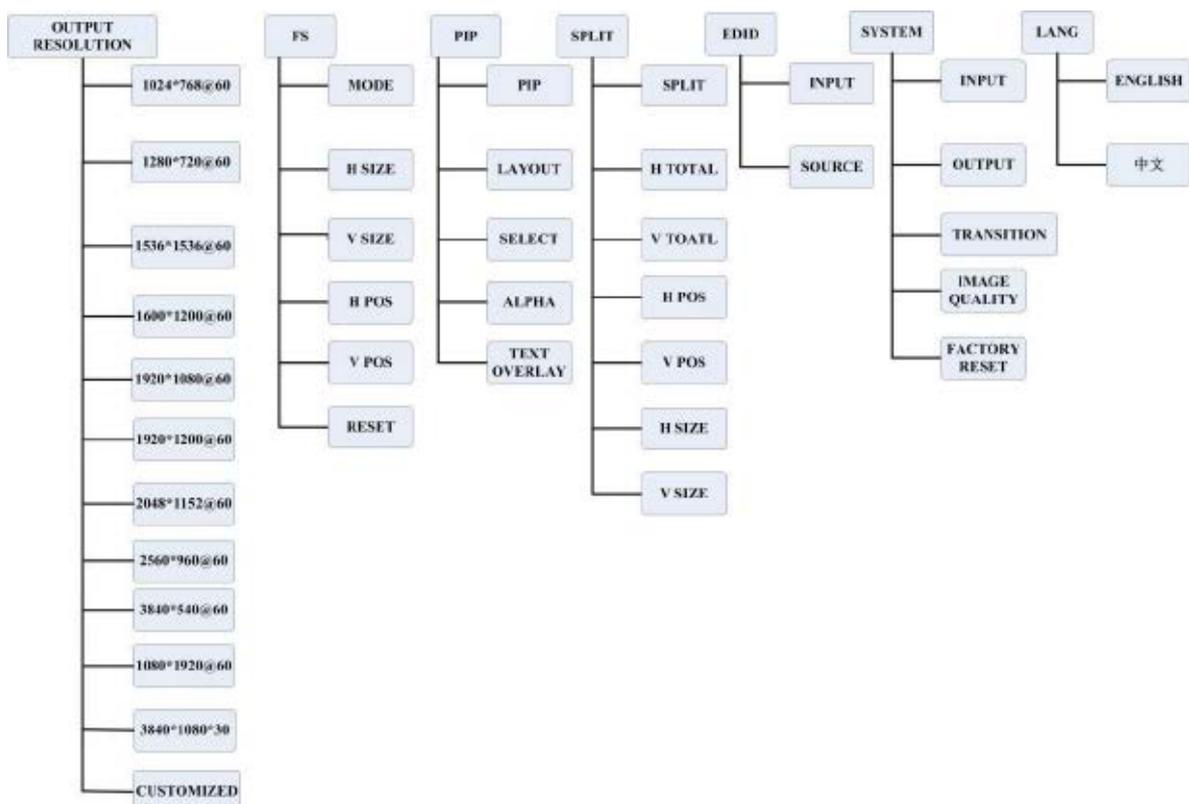
## 3.3 Shortcut Buttons

1	<b>TAKE Button:</b> Long press (about 3 seconds) the TAKE button to enable the TAKE mode, press the TAKE button to switch the signal.
2	<b>MENU Button:</b> Long press about 5 seconds to lock the MENU, press about 5 seconds again, to unlock the MENU.

## 4. Operations

- Menu Structure
- Output Format
- Screen Parameters Setting
- FS Setting
- PIP Setting
- Multi-Cascade Setting
- EDID Management
- Systems

### 4.1 Menu Structure



## 4.2 Output Format

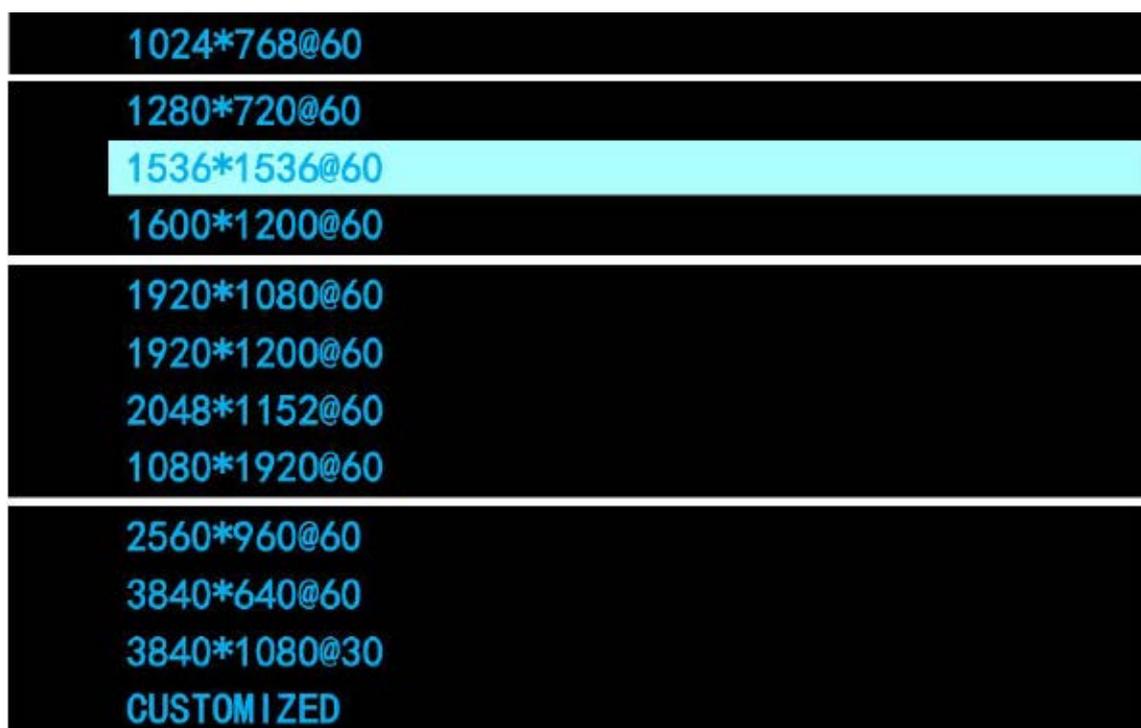
The default resolution is 1920\*1080\*60, if your LED screen is less than 1920\*1080, then press SCALE button to reach the full screen.

How to set the output resolution:

Press the MENU button, turn the knob to choose output resolution, push the knob to confirm.



Turn the knob to choose resolution or CUSTOMIZED, push the knob to confirm.



After enter the CUSTOMIZED, input the resolution such as: 2880x768@60HZ, push the knob to confirm, and then the output resolution will be changed.



Press MENU button to back to home screen and check the output resolution.

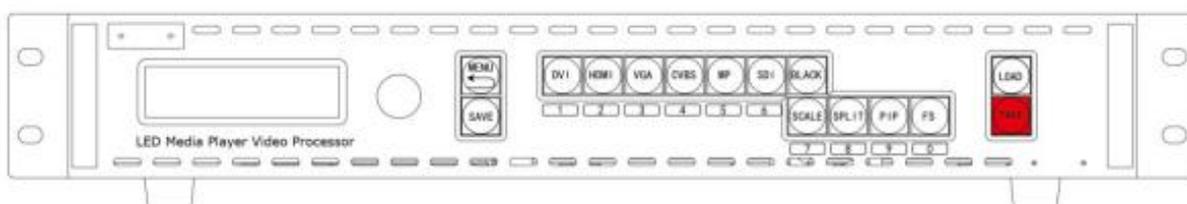


## 4.3 Screen Parameters Setting

Use the SCALE button to adjust the image size to reach full screen.

If the LED screen parameter is 1536\*1080, what should we do to reach full screen.

Press SCALE button, turn the knob to choose H SIZE and change it to 1536, push the knob to confirm.



→	H SIZE	1536
	V SIZE	1080
	H/V SIZE	1536
	H POS	0

## 4.4 PIP Setting

PIP Setting: if there are two signal sources like HDMI and DVI, and need to do PIP setting, and the LED screen size is 1920\*736. There are two ways to turn on the PIP function:

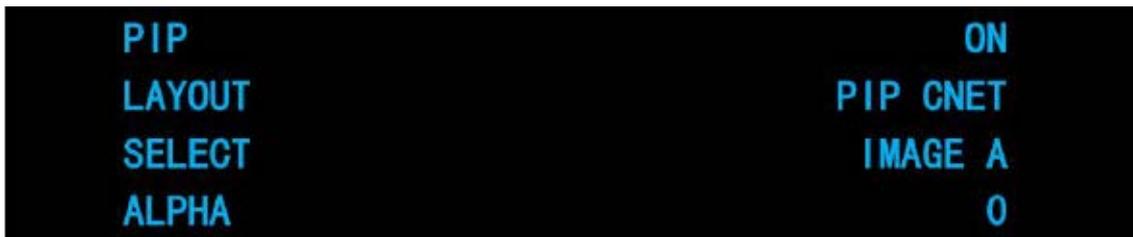
1. Press the PIP button.
2. Go to the MENU to turn on the PIP function.

→	OUTPUT FORMAT	》
	SCREEN PARAMETERS	》
	PIP	》
	SPLIT	》

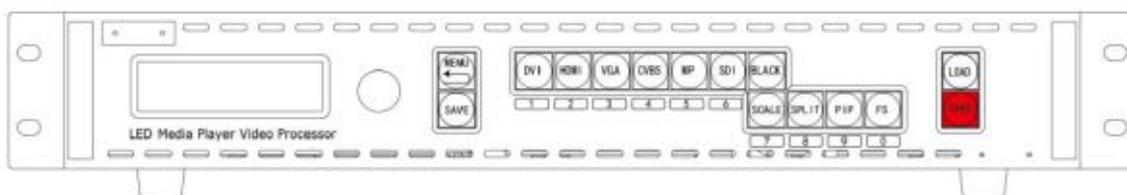
There are seven LAYOUTS available: here we take PIP CENT for example.

→	PIP	ON
	LAYOUT	PIP CENT
	SELECT	IMAGE B
	ALPHA	0

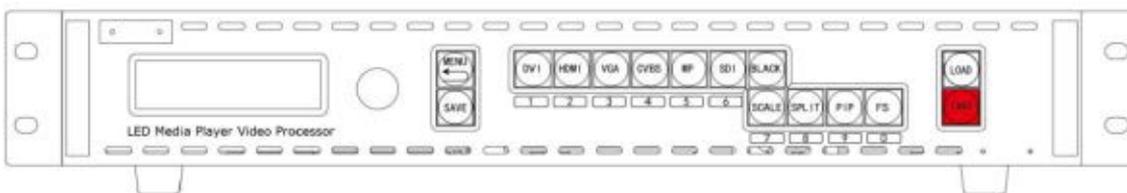
Select AB layer to adjust, layer A stand for the bottom image and layer B stand for the top image (after turn on the PIP function, the split button can use to change the layer A or layer B)



Here we choose layer A at first, press the signal button which can change to different input signal. Press SCALE button to change the layer A to 1920\*736.



After finish the layer A setting, press the SPLIT button to change it to layer B and change the input source to HDMI.

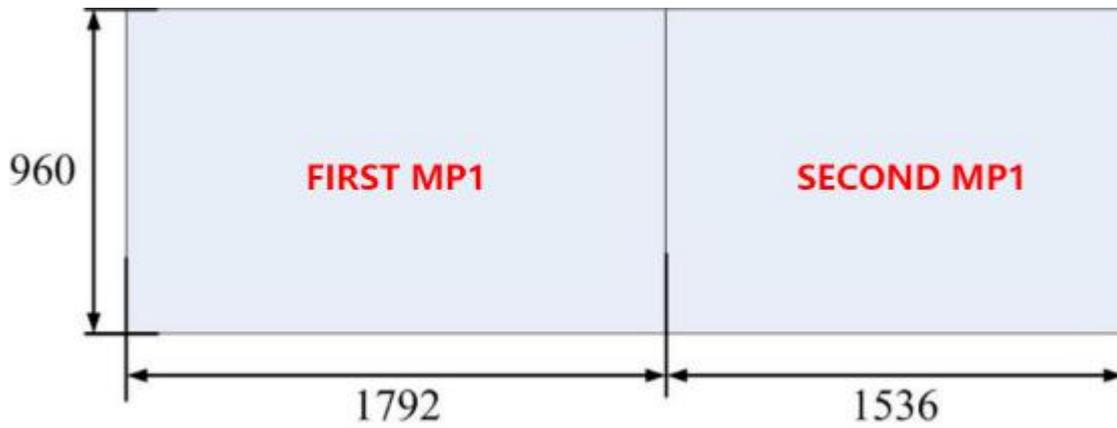


Press SCALE button to change layer B size and position.

Press SAVE button to save parameters, next time we can use LOAD button to load this setting.

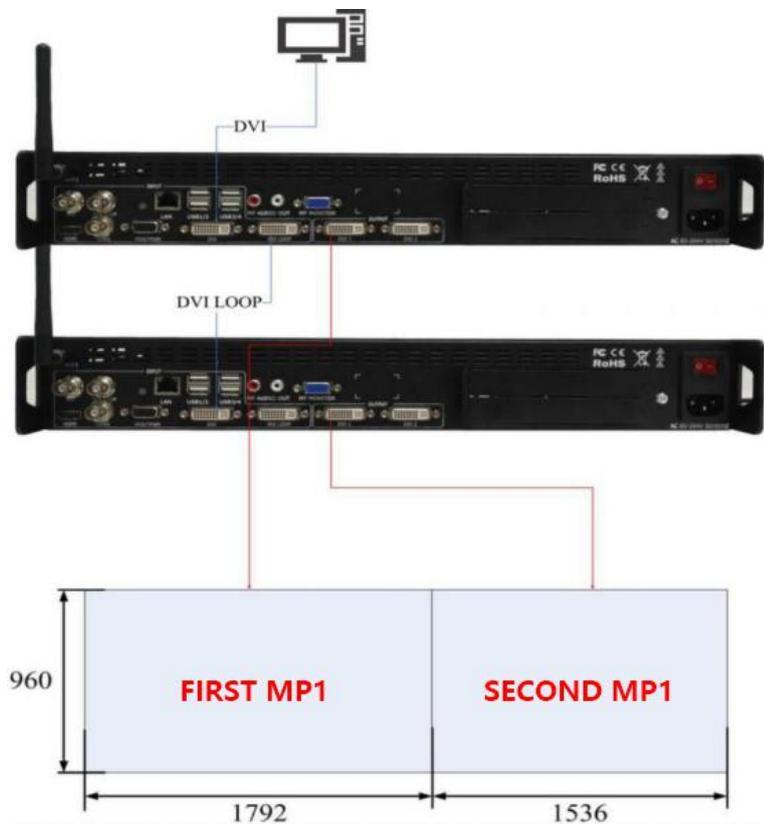
Multi-cascade:

If the LED screen resolution is 3328\*960(left screen is 1792\*960, right screen is 1536\*960). So,it needs two big sending cards to do the cascade split (with two MP 1).



## Steps:

Wire Connection: the wire connection as shown in the following picture.



Setting the first MP1 parameters

Press the SPLIT button to set it on.

→ SPLIT	ON
H TOTAL	3328
V TOTAL	960
H POS	0

Input the H TOTAL and V TOATL of the screen (the screen size is 3328\*960)

SPLIT	ON
H TOTAL	3328
V TOTAL	960
H POS	0

The H POS is 0 and the V POS is 0.

V TOTAL	960
→ H POS	0
V POS	0
H SIZE	1792

According to the left part of LED screen, the first device H SIZE is 1792 and V SIZE is 960.

V POS	0
H SIZE	1792
V SIZE	960
SAVE TO	»

Save first MP1 parameters to SAVE TO.

Set the second MP1 parameters

The second one control the right part of the screen, in order to join the left part screen to reach a complete image, the H POS should move 1792 pixels.

SPLIT	ON
H TOTAL	3328
V TOTAL	960
H POS	1792

The right part screen H SIZE is 1536 and V SIZE is 960.

→ V POS	0
H SIZE	1536
V SIZE	960
SAVE TO	»

Then press SAVE TO.

## 4.5 EDID Management

If the LED screen resolution is 1536\*1536, with MP 1 EDID Management, the PC resolution can be customized to 1536\*1536.

Operation Steps:

1. Press MENU button, turn the knob and select EDID Management.

EDID MANAGEMENT	»
ADVANCE	»
LANG/语言	ENG

2. Push the knob to confirm, select the input port DVI.



3. Change the EDID SOURCE to CUSTOM.



4. Press the knob to confirm, then change the resolution with number button.



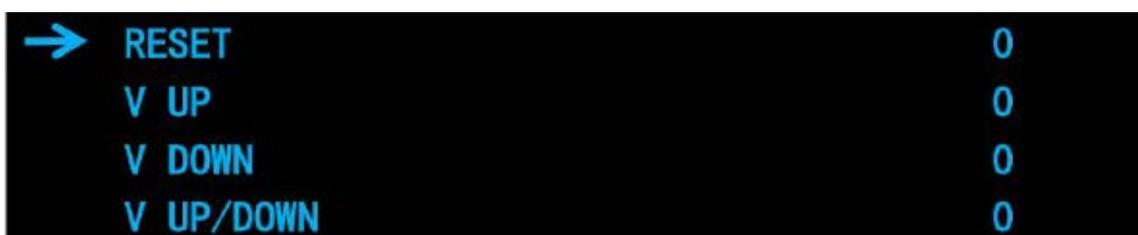
5. Some PC need to re-plug the cable to recognize the new EDID,

there are also some DVI or HDMI template available.

## 4.6 Advance Setting

### Input

ZOOM: Crop some useless edge of the image.



H LEFT	0
H RIGHT	0
H LEFT/RIGHT	0
→ CENTER	0

VGA ADJUST: adjust the VGA offset

→ AUTO ADJUST	0
H POS	0
V POS	0
CLOCK	0

ADC: adjust CVBS analog signal offsets

→ ADC AUTO ADJUST	>>
ADC RESET ALL	>>

## Output

DVI: Select the output port to DVI 1/DVI 2

Output Port Mode: Change the output to DVI or HDMI

BIT DEPTH: Adjust output BIT number

DATA RANGE: Adjust the image or video, if the led screen is not dark enough, we can adjust the DATA range.

DE ADJUST: Adjust the output

offset

→ DVI	DVI 2
DVI MODE	DVI
BIT DEPTH	8 BIT
DATA RANGE	IMAGE

DE ADJUST  
RESET



TRANSITION (Double press the MENU button also can enable this function)

DEINTERLACE: When enable the DEINTERLACE function, the I format will be removed

IMAGE ENHANCE: When enable the IMAGE ENHANCE function, the default channel is main channel, and image quality will be enhanced, but switch effect is not fade in fade out.

MODE: Variety switching effect like curtain switch, fade in fade out, cut and so on.

FADE TIME: The switch time can be set from 0-3S.

DEINTERLACE	ON[
IMAGE ENHANCE	OFF
MODE	FADE IN FADE OUT
FADE TIME	0.5s

IMAGE QUALITY: Depends on the different LED screen.

BRIGHTNESS	51
CONTRAST	55
SATURATION	50
SHARPNESS	50

Advance Setting

SN: Device Series Number

VERSION: Device Version

**HOT BACKUP:** Once the hot backup function is enabled, the first group will be set as the signal for back up. When the first group signals are lost, it will automatically switch to the second group. When the second group is lost, it will automatically switch to the third group.

HOT BACKUP	ON
BACKUP_1	DVI
BACKUP_2	HDMI
BACKUP_3	VGA

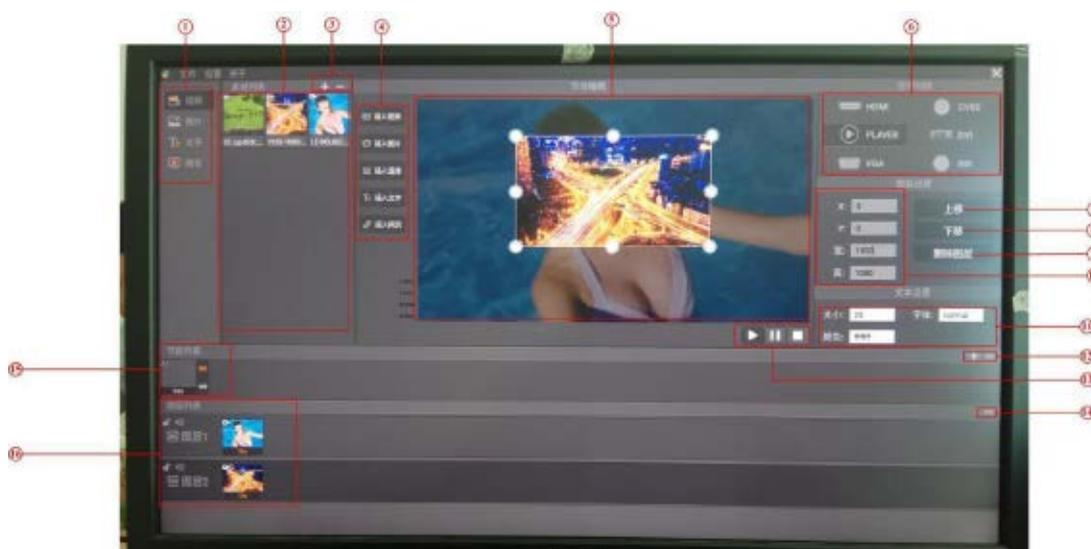
**USER BUTTON:** BLACK button can be customized

**FACTORY RESET:** Erasing data, restore factory settings

**LANGUAGE:** This Device supports English and Chinese

## 5. MP1 Player Software Introduction

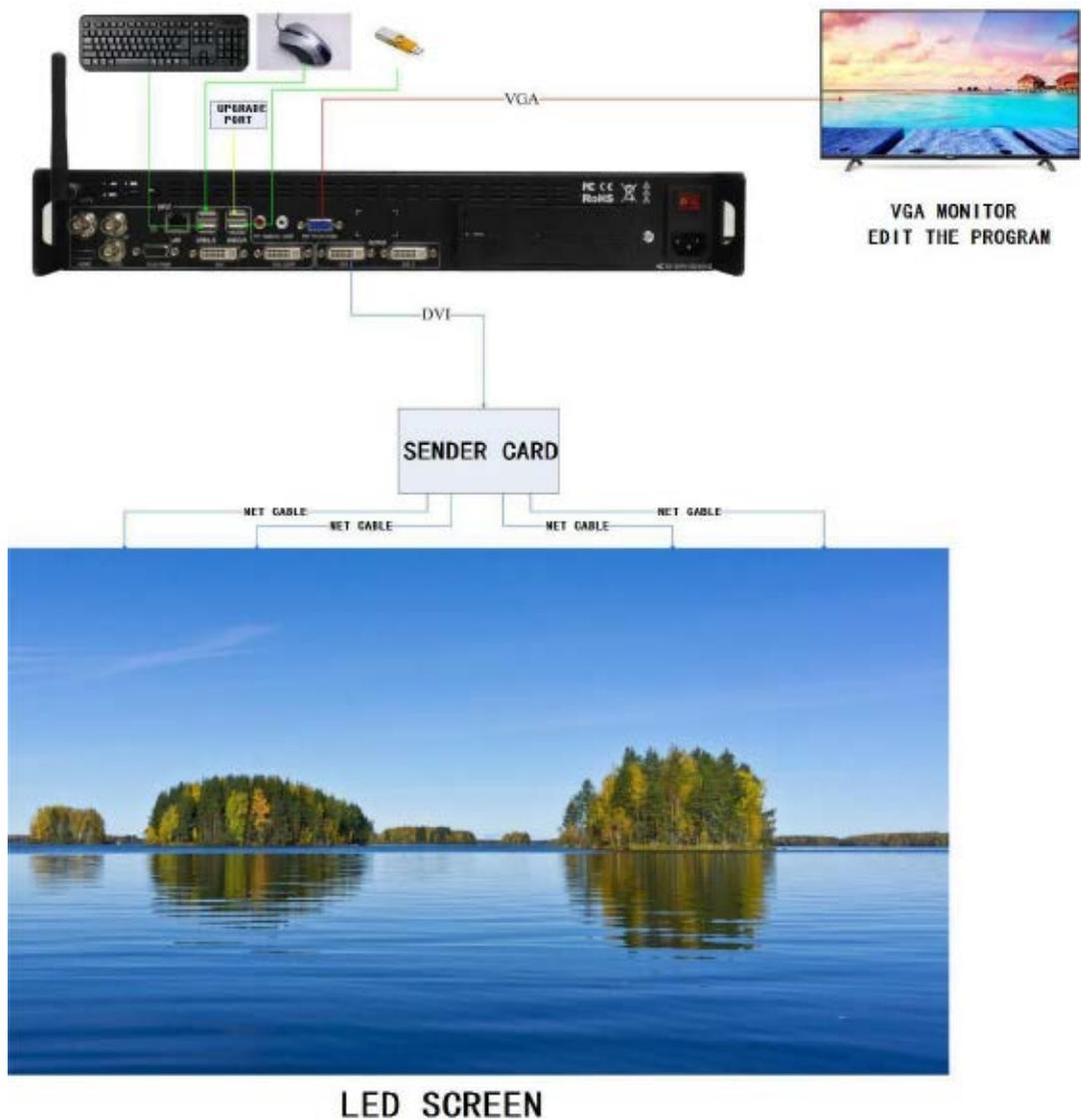
### 5.1 Software Interface



1	<b>Content Select Area:</b> Images or Videos can be chosen
2	<b>Content Preview Area:</b> Used for content preview
3	<b>Add/Delete Button for Content:</b> It is used to manually add and delete contents, if you want to automatically load content, then need to create a new Millan program folder in the USB disk, and if you want to play the video or picture, just need to copy them to the folder
4	<b>Content Insert Area:</b> Click the mouse to drag a window, then insert different. kinds of content (please select the mix arrange to add the video and image)
5	<b>Output Display Area:</b> Display the output area, click the play button to play the video.
6	<b>Signal Switch Area:</b> Click the external signal to switch, PLAYER is the software signal output
7	<b>Bring Layer to front:</b> In several layers, pick one layer to the top.
8	<b>Send Layer to Bottom:</b> In several layers, pick one layer to the bottom.
9	<b>Layer Delete:</b> Delete layer
10	<b>Layer Adjust:</b> Adjust the layer size and position
11	<b>Insert front editing area:</b> Use to modify the front size, color and so on.
12	<b>Program List Add and Delete Button:</b> Used to add new program list and delete program list
13	<b>Play and Pause:</b> Play or pause the video
14	<b>Layer Content Delete Button:</b> Delete the select layer content
15	<b>Play list Area:</b> Check the playlist and switch to different layout
16	<b>Layer Display Area:</b> Show different layer content
<b>Right click is ESC, double right click is exit the software.</b>	

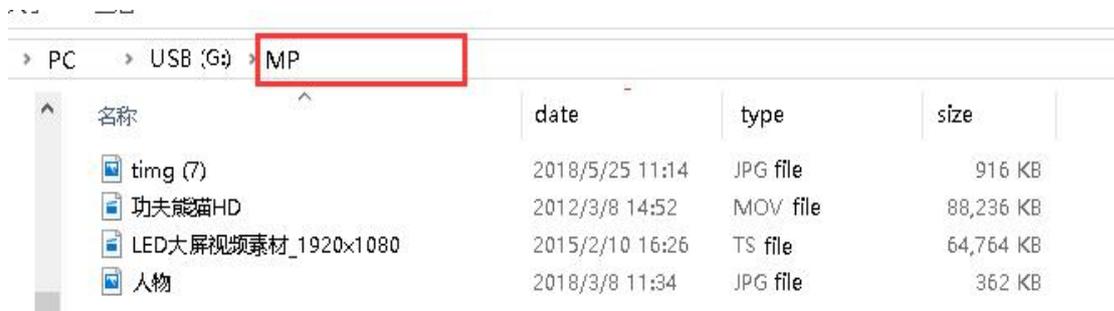
## 5.2 Wire Connection

Please connect VGA output to an LCD monitor, USB port to mouse, keyboard or USB Disk (with content inside). The DVI output is connected with sending card.



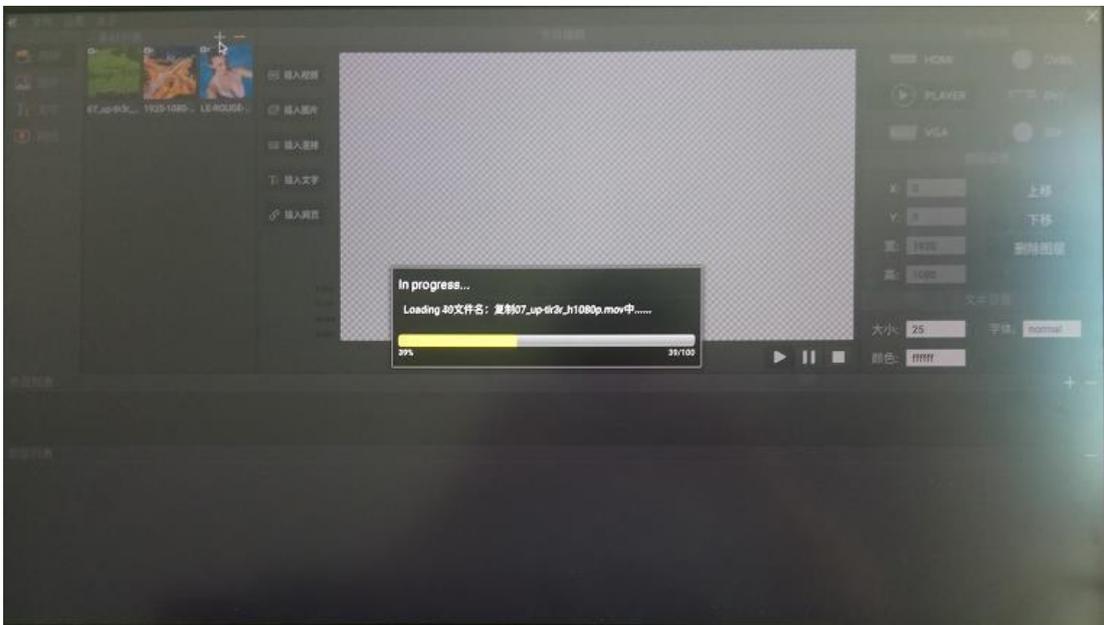
## 5.3 USB Disk with Content

Prepare a USB Disk, create MP folder then copy the videos and images into it

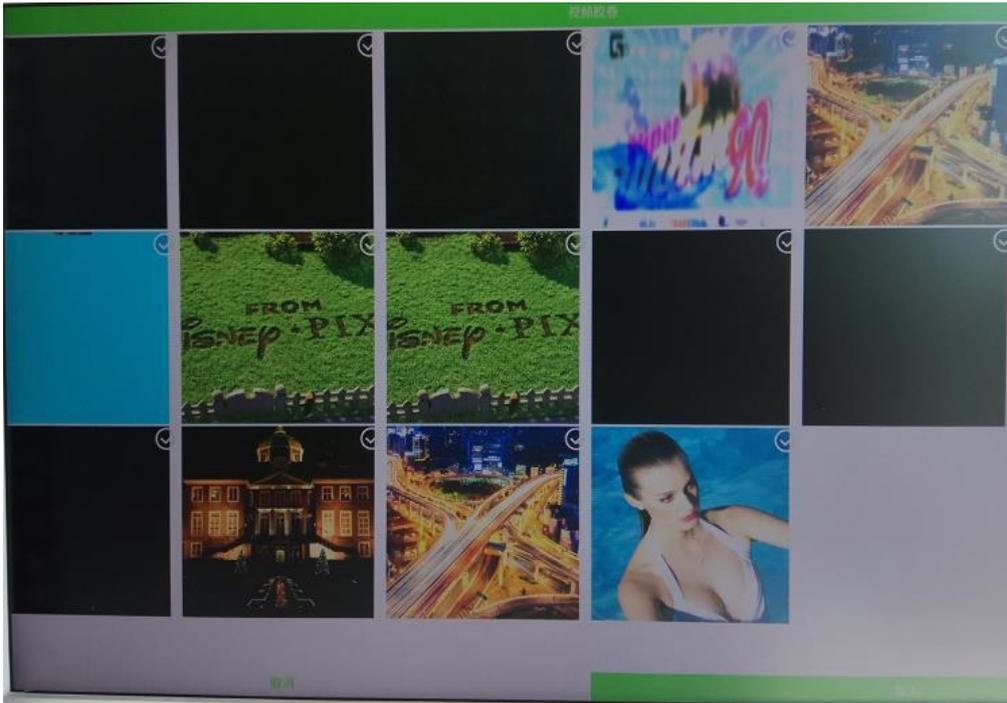


## 5.4 Load the Content

Open the MP control software , plug USB Disk to the USB port (run the software first), otherwise the images and videos will need be loaded manually.



Plug in USB Disk, wait about 30 seconds to load in contents,  
click the + icon to load in.



## 5.5 Program Edition



1. Built a new program list, as the following picture shown :

- (1) Press the Insert V.P(3) to add a new layer.
- (2) Then add the new content from Video (1) or Picture (2).
- (3) Change the layer size and position then press No.6 to play the content.

- (4) Finish the setting then press number 3 again.
- (5) If you want to add more layers, just follow the above operation.
- (6) As for the number 7 and 8, “+ ” means add new banks, “-” means close layers or banks
- (7) Number 4 means switch between different input signals, no need to use front panel to control.

## 5.6 Add Text

Add the Texts, as the following picture shown:



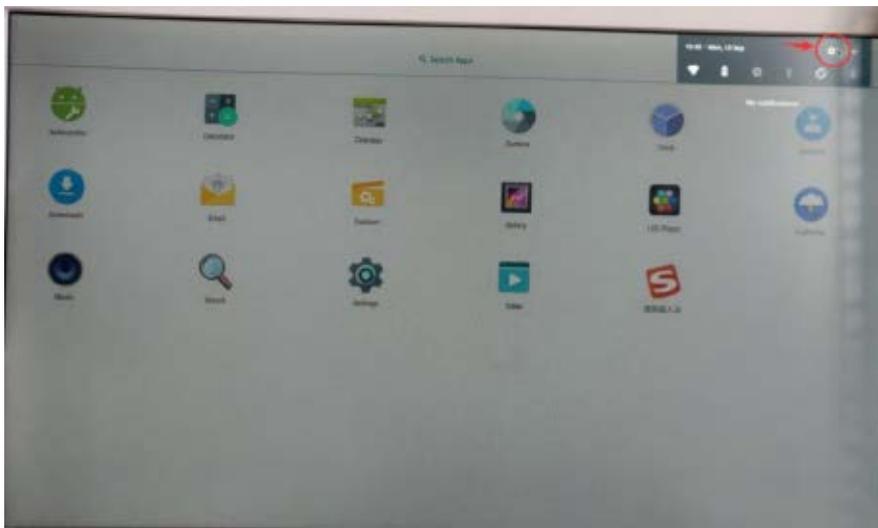
- (1). Select the Insert Text (1) to add new text.
- (2). Use the mouse to drag a new banner, then click “+” (2) to add new text.
- (3). Number 3 is to change the text features.
- (4). Number 4 is the broadcast function button.

## 6. Mobile Phone APP Control

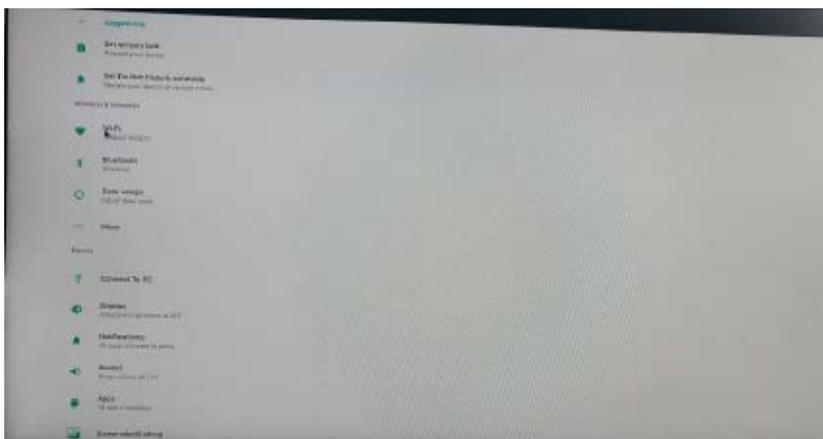
### 6.1 Internet Connection

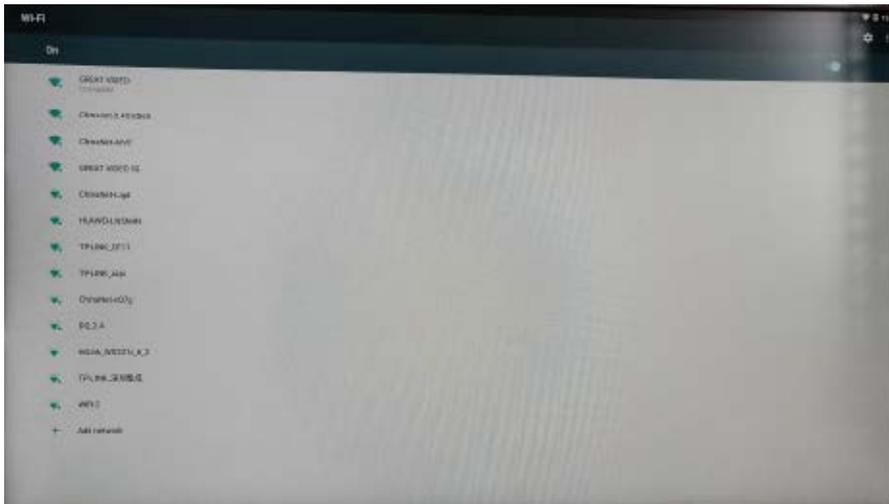
Device support LAN control and they should be in the same network segment.

1. Double right click to close the software, move the mouse to the top to select the setting icon.

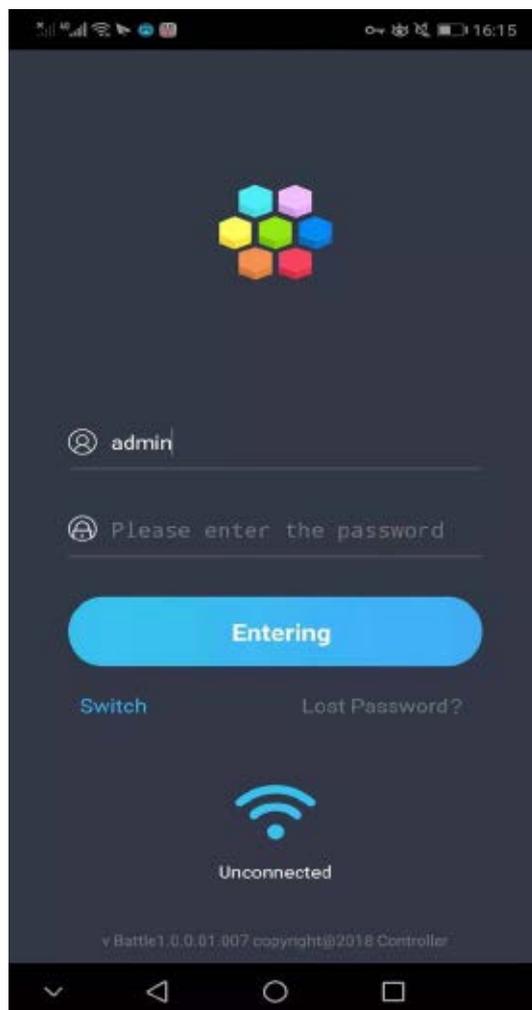


2. Select WLAN setting to connect your WIFI signal



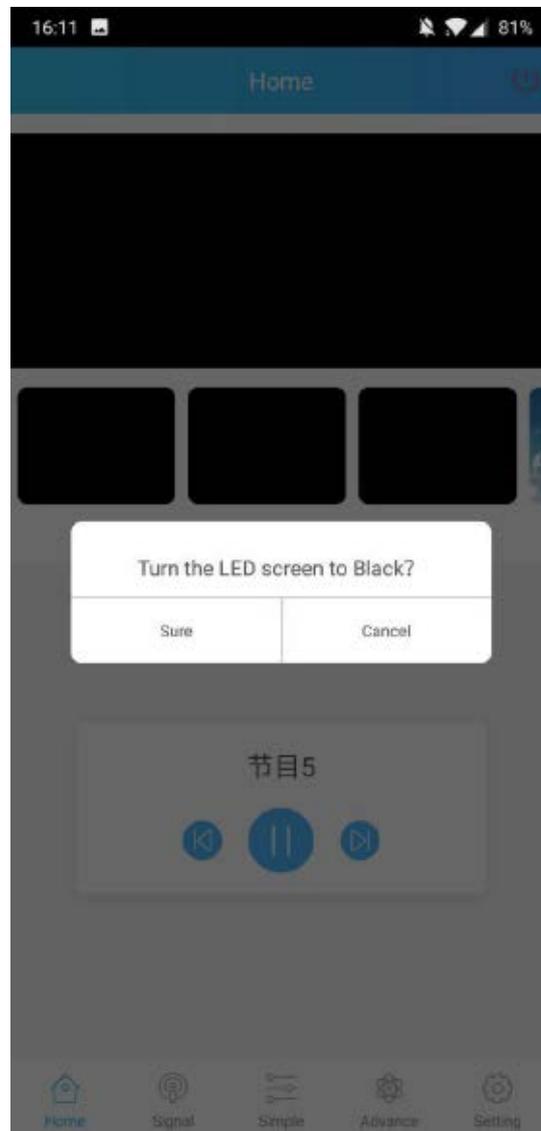


Log In: The software default account and password is admin, search the IP then login (if there are several devices need to be controlled, just switch the device to control).



## 6.2 Home Page

Use to switch on/off the LED screen and brightness adjustment.



## 6.3 Signal Switch Interface

Switch signal between internal and external source, PLAYER is the software channel source.



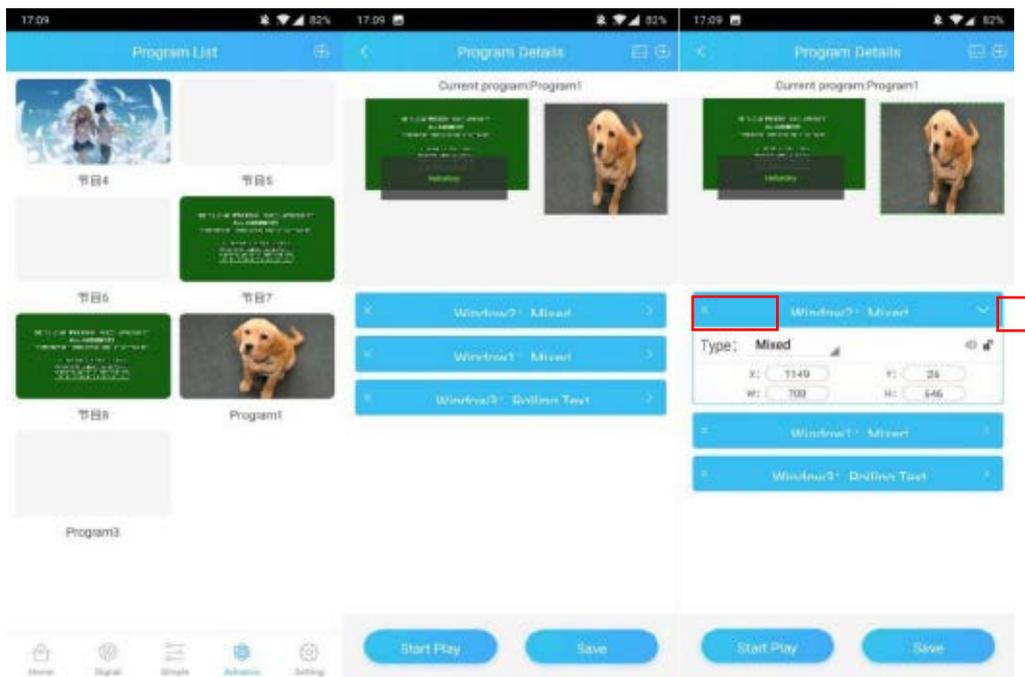
## 6.4 Simple Layout

Click “+” icon to add new project, enter the project and click “+” icon to add content (long click the project folder or content, then move to the left to delete).



**Advance Layout Setting:** Use for multi-image setting.

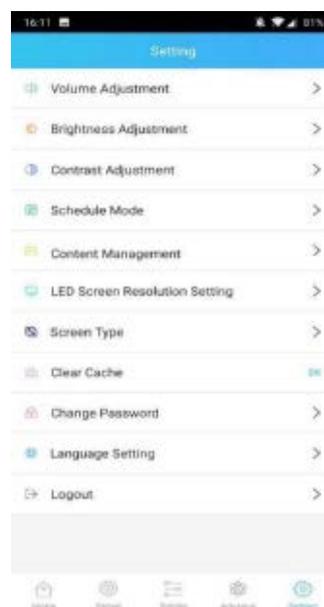
1. Click “+” icon to add program list.
2. After finish the program list, click “+” icon to add software interface.
3. Click the arrow to adjust the window size.
4. Click the pop-up window to add the content



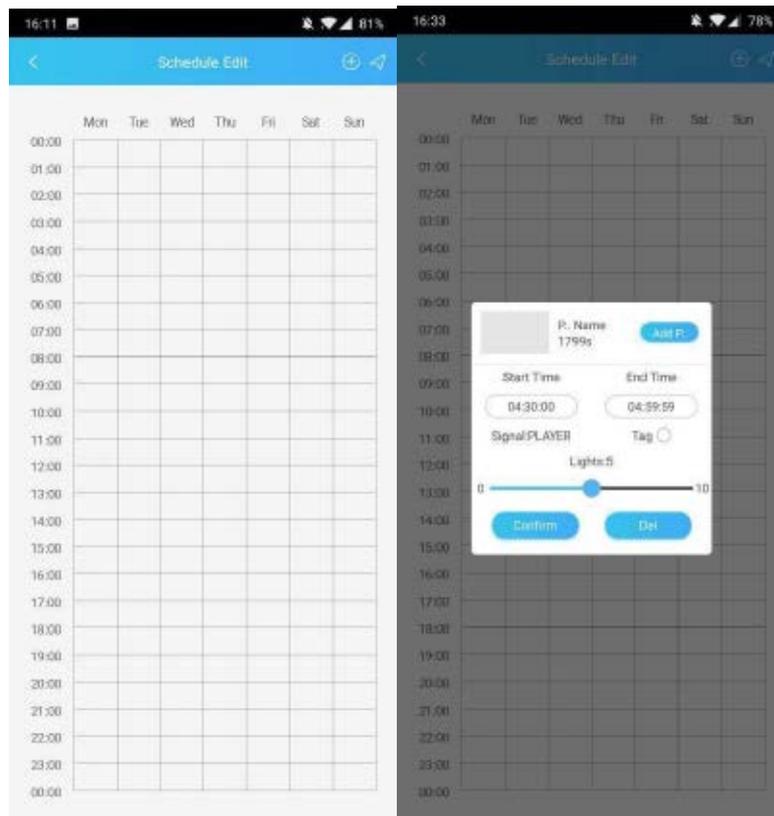
## 6.5 Setting

The volume, brightness, content manage and the schedule mode can be set as timing playing.

## 6.6 Schedule Mode



1. Timing Playing
2. Add the program (click the “+” icon)
3. Click the time to set the start time and end time.



# SPROLINK<sup>®</sup>

CREATIVE VIDEO REVOLUTION

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