LINK-MI®

LINK-MULTIMEDIA INTERFACE

LM-TV08M

2x4 Video Wall Controller

User Manual

Catalog

Preface

- Thanks for choosing our products! For the safety of both of yourself and the equipment, please read the instruction manual carefully before using this equipment.
- Products are covered with a fragile label, please preserve it carefully which will serve as the warranty certificate.
- This product does not support lighting the screen directly, the output is connected to the HDMI port.
- Please read this guide first when you have any problems; The text has a detailed description of the device operation. If you still have questions, please contact us and we will give you a satisfactory answer as soon as possible.
- If this manual has any version changes, we will not inform you specially, thank you for your understandings and cooperation!

Notices

- Please use AC 100-240V power supply and ensure that the entire work using the same protection system.
- Can not pressurize on power lines, signal lines, communication lines and other cables. The cable should be avoided to be trampled or pressed to prevent leakage short circuit, etc...
- When the device is inserted and pulled out, the equipment needs to be cut off to avoid from damage; Damage caused by live plug is not within the scope of warranty.
- The outer surface of the equipment may have an opening for heat dissipation. Do not block these openings to avoid the risk of heat accumulation causing damage to equipment or fire.
- The working environment of equipment should pay attention to dust, moisture, especially to prevent Liquid immersion and splashing inside.
- The use of relative humidity : ≤ 80%, storage temperature: -10℃—+60℃, operating temperature: 0 ℃—+50℃
- Pay attention to anti static treatment at the whole assembly and transport process.
- The whole assembly can download or side loading, and loading without hard pressure.
- The connection line between the product and the supporting module board can not be too long, otherwise it may affect performance and image quality.

1ˢᵗ   Product Introduction

This product is a HD screen splicing processor special designed for LCD TV, ultra narrow LCD screen, projector.

A single device supports 4 to 12 HDMI Outputs (LM-TV08M is with 8 HDMI outputs) to connect with LCD TV or other display units. User can customize a variety of splicing mode according to their need.
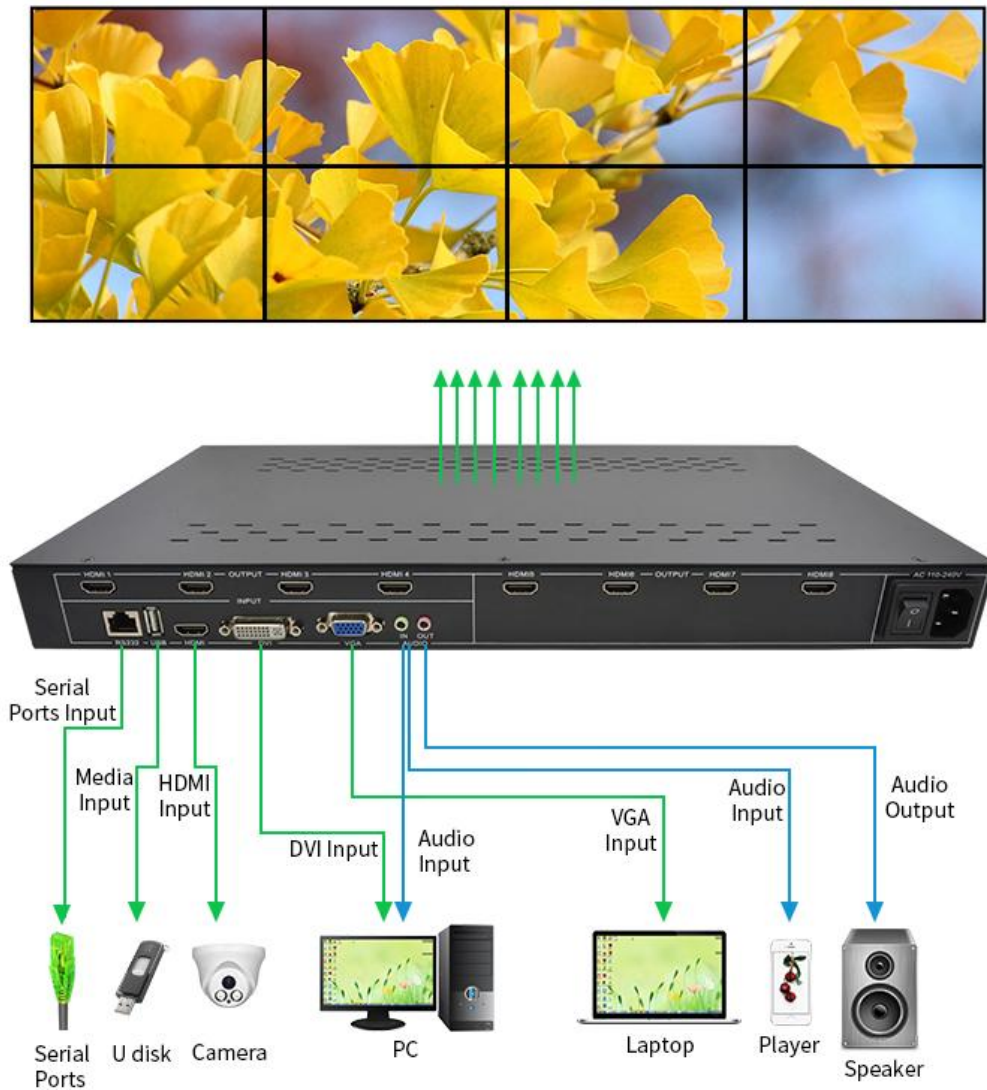
Feature:

➢ **Support Cascading Function.** Can be cascaded to achieve maximum 255 signal outputs (Need more controllers);

➢ **Support High Resolution.** Uses high definition processing chip, support **1080P** signal input and output;

➢ **Support Multiple Control Methods.** Product is designed with infrared remote control and front panel buttons. User can perform one-click quick control and full-function control by panel buttons or remote; Can also perform central control via RS-232, to make more diverse function expansion;

➢ **Support Multiple Signal Input.** Support 1 way VGA, 1 way DVI , 1 way USB, 1 way HDMI input, all input signals can be switched to large screen for splicing display;

➢ **Support Audio Input and Output,** and audio and video output synchronously;

➢ **Support 180 Degree Rotation.** Any one of the 8 splicing screens supports 180 degree rotation/flipping;

➢ **Built-in Flying Caption Function.** User can use the control software (inside the CD) via RS-232 (communication interface) to arbitrary set the caption's Flying Position, Flying Speed, Font Size, Text Color and Background Color;

➢ **Built-in Image Zoom and Cutting Function.** User can use the control software (inside the CD) or remote menu to arbitrary zoom in, zoom out, cut the image on the large screen;

➢ **Support Border Blanking Technology.** Without this technology, image will appear like being pulled out visually; Image after border blanking processing is no deformation, stretching, view more natural and real in visual;

➢ **Support USB access.** Inserting the U disk can directly decode videos, pictures, MP3, documents...etc.; no need to configure other front-end equipment, simple and practical;

➢ **Support Remote Control via Remote.** With remote, user can use all functions of splicing box, like setting, switching, adjusting; Remote control use ultra-sensitive design, remote distance is up to 7 to 10 meters.

2nd Specification

Name	Specifications
Input Signal	
VGA Input *1	HD15 interface Support 640x480@85Hz to 1920x1200@60Hz
HDMI Input *1	HDMI 1.4 (HDCP1.3) DVI 1.0 HDMI embedded audio
DVI Input *1	DVI-I interface (24+5) maximum resolution: support 1920x1080@60Hz
USB Input *1	✧ The standard USB2.0 interface, can be connected with the U disk and other storage devices; ✧ With video, audio and image decoding, support TXT document playback support; ✧ Round robin play, pause, fast forward, program list and other functions
Output Signal	
HDMI Output *8	✧ **8** HDMI outputs, support 2x4, 2x3, 2x2, 2x1, 1x8, 1x7, 1x6, 1x5, 1x4, 1x3, 1x2.... splicing mode; ✧ single maximum support for the 12 HDMI signal outputs **(LM-TV08M is with 8 HDMI outputs)**; ✧ maximum resolution: support 1920x1080@60Hz
Audio Output *1	3.5 audio interface, support stereo, audio and video signal switch synchronously
Others	
Control Mode	Remote Control、Front panel buttons、RS-232
Splicing Scale	Simple splicing for **8** display units
Power Supply	AC 100-240V
Chassis	
Size (cm)	44x24x4.5 cm (LxWxH)
Weight (kg)	2.97 kg

3rd Topological Graph

4th Ports and Keys

1. Rear Panel Interface Description

Input

- **DC12V**：12V Power In

Output

- **HDMI 1**：HDMI 1 Output

- **RS232**： RS232 In
- **USB**： USB Input
- **HDMI**： HDMI Input
- **DVI**： DVI Input
- **VGA**： VGA Input
- **AUDIO-IN:** Audio Input
- **AUDIO-OUT:** Audio Output

- **HDMI 2**： HDMI 2 Output
- **HDMI 3**： HDMI 3 Output
- **HDMI 4**： HDMI 4 Output
- **HDMI 5**： HDMI 5 Output
- **HDMI 6**： HDMI 6 Output
- **HDMI 7**： HDMI 7 Output
- **HDMI 8**： HDMI 8 Output

2. Front Panel Description

- **POWER:** Power Light
- **IR:** Remote Control Light

3. Remote Control Button Description

OFF	Power OFF
ON	Power ON
PC	PC-RGB Signal
HDMI	HDMI Signal
DVI	DVI Signal
🔊	Volume Up
⬛	Subtitle ON/OFF
🔊	Volume Down
SW/SP	Splicing/Single
INPUT	Signal Source Menu
←	Left
→	Right
↑	Up
↓	Down
OK	OK
MENU	MENU
EXIT	EXIT
MUTE	MUTE
UPGRADE	UPGRADE

5th   Function Description

1. 2x4 Splicing Mode Setting Up Description
(Note: This instruction takes 2x2 splicing as an example, 2x4 splicing operation is the same.)

➢   Connect input signal (HDMI, DVI, VGA) to the input port of the splicing box.
➢   Connect the HDMI output of the splicing box to display screen (no need to be in a certain order Connection).
➢   Press the "MENU" button on the Remote controller or the front panel of the equipment to call out the splicing menu, select "left" and "right" to position to the splicing menu (Press "up" and "down" to select corresponding options; Press "left" and "right" to adjust the parameters).

Select the **Splice Config** as "2x2", ''3x3" or others, see picture below:
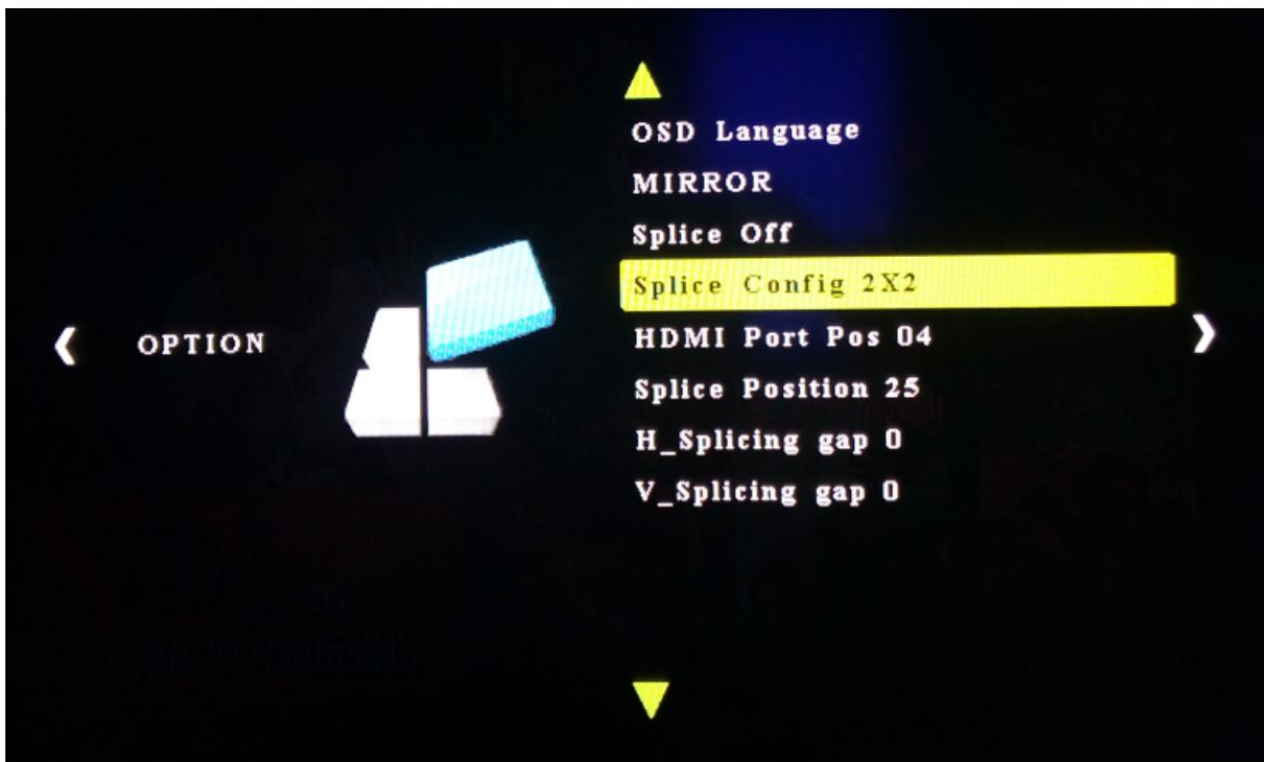
➢   Select the HDMI port and the corresponding splice location, adjust according to the tip of the upper left corner (For example: 2x2 mode, lower right corner unit HDMI ID is 1, the splicing position is 2, then need to adjust the splicing position as 4, that is the address of corresponding curtain wall. See picture below:
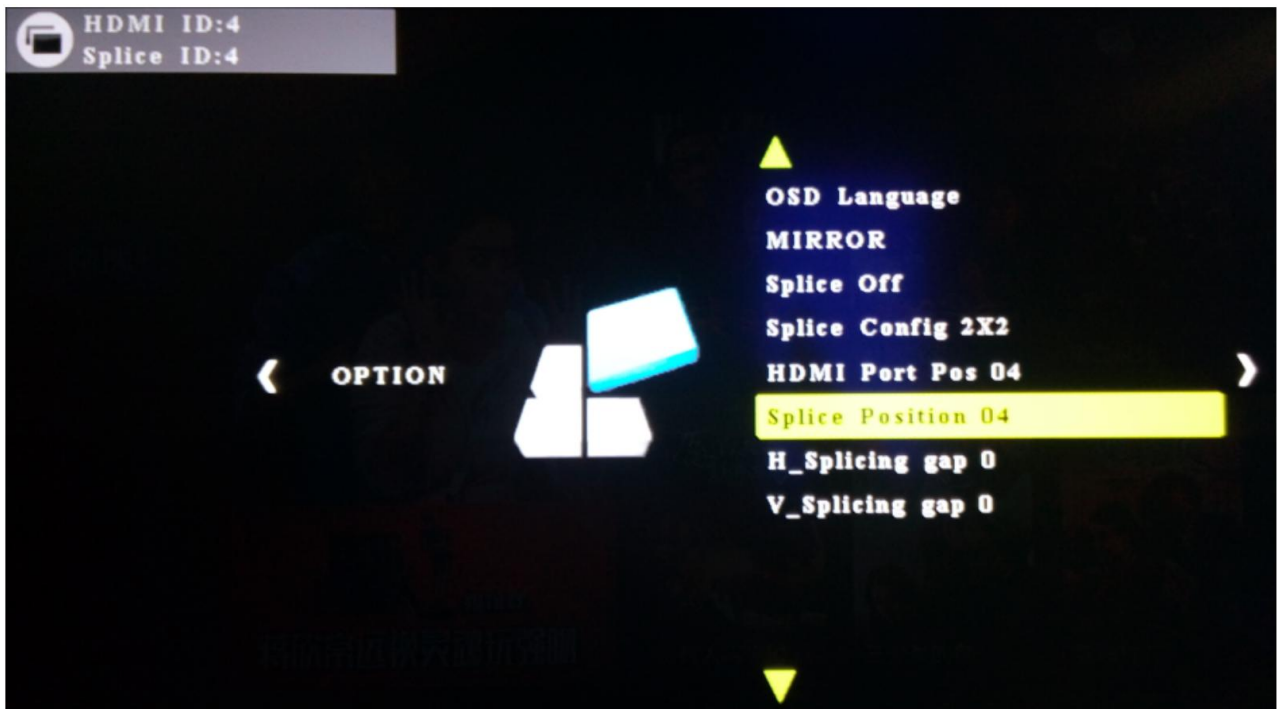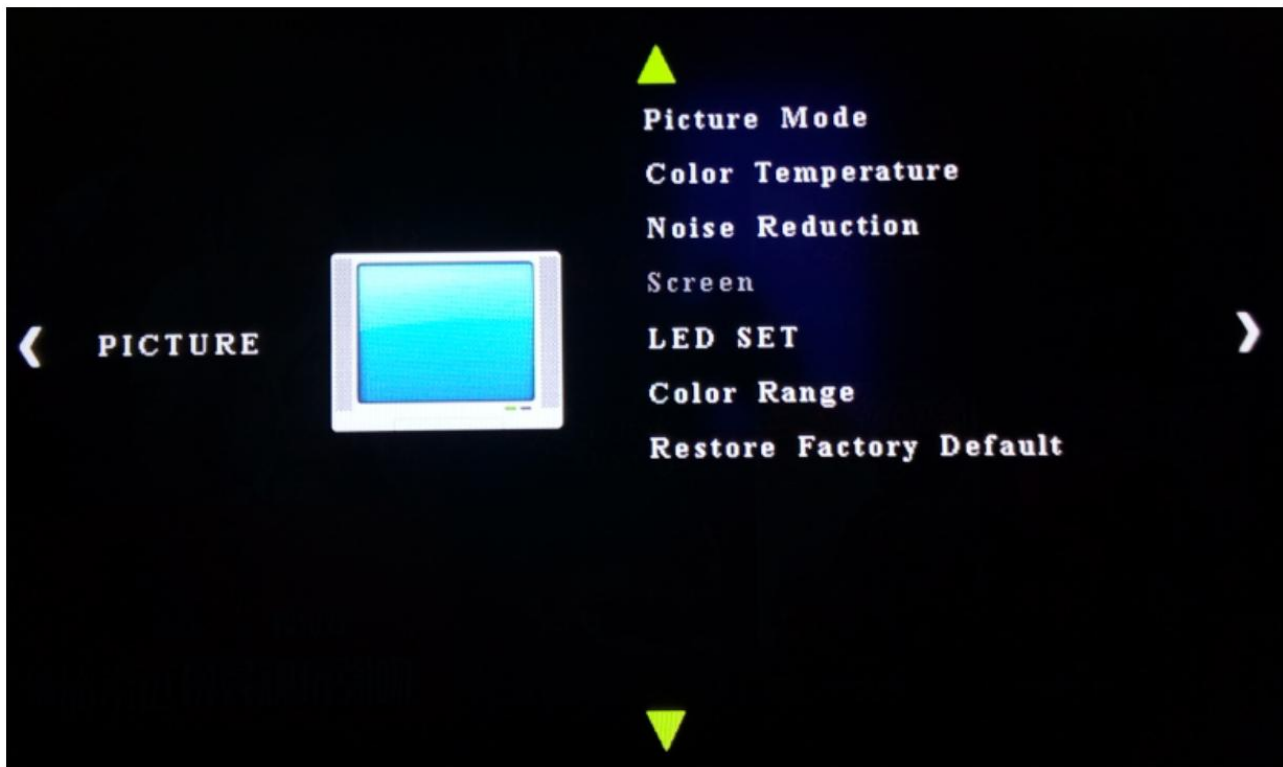
After above adjustment, set the **Splice "on",** that is the end of splicing setting. See picture below:
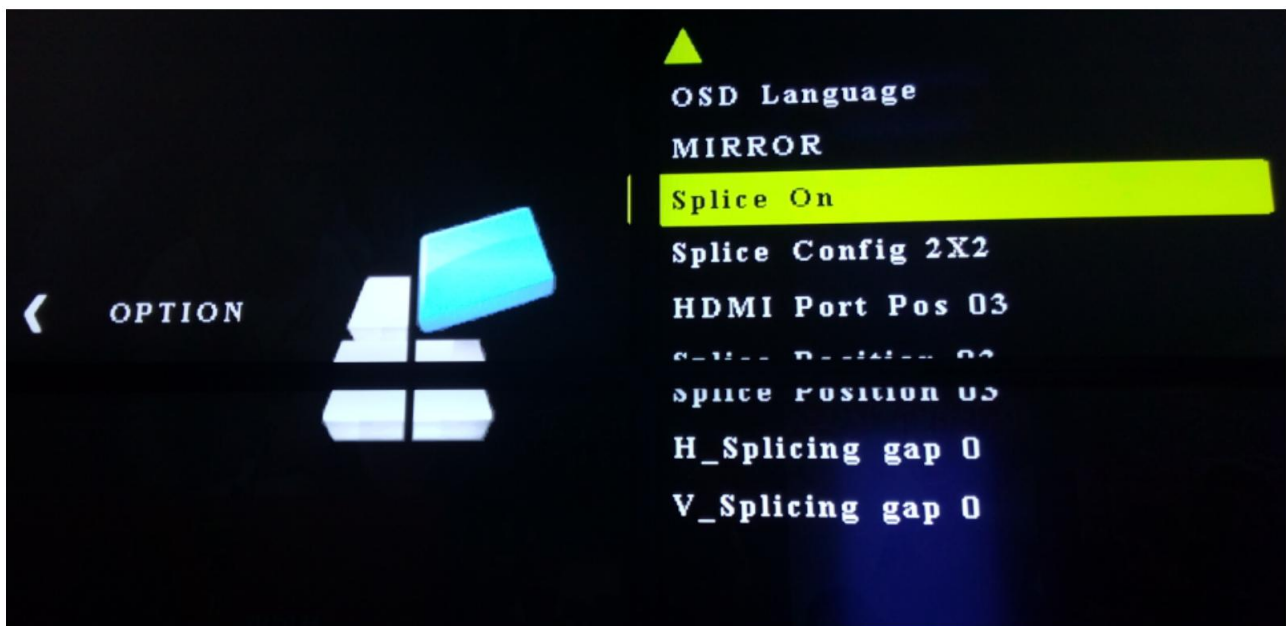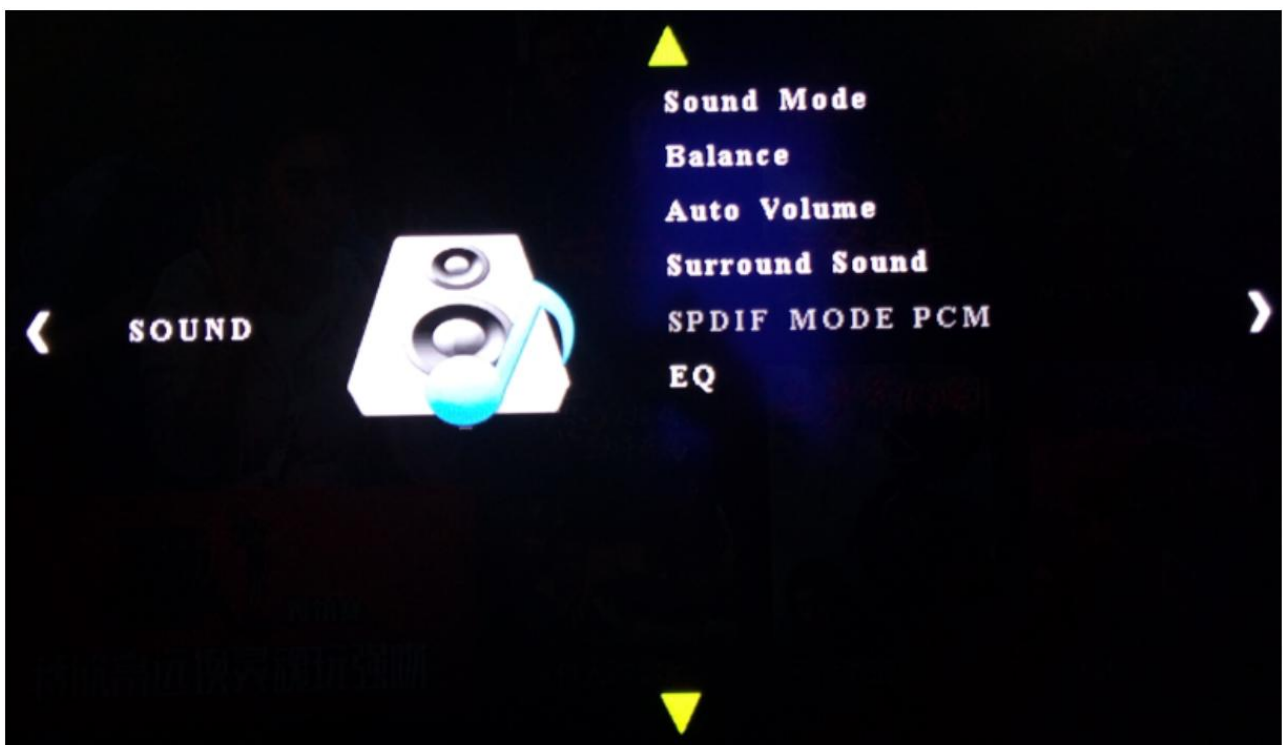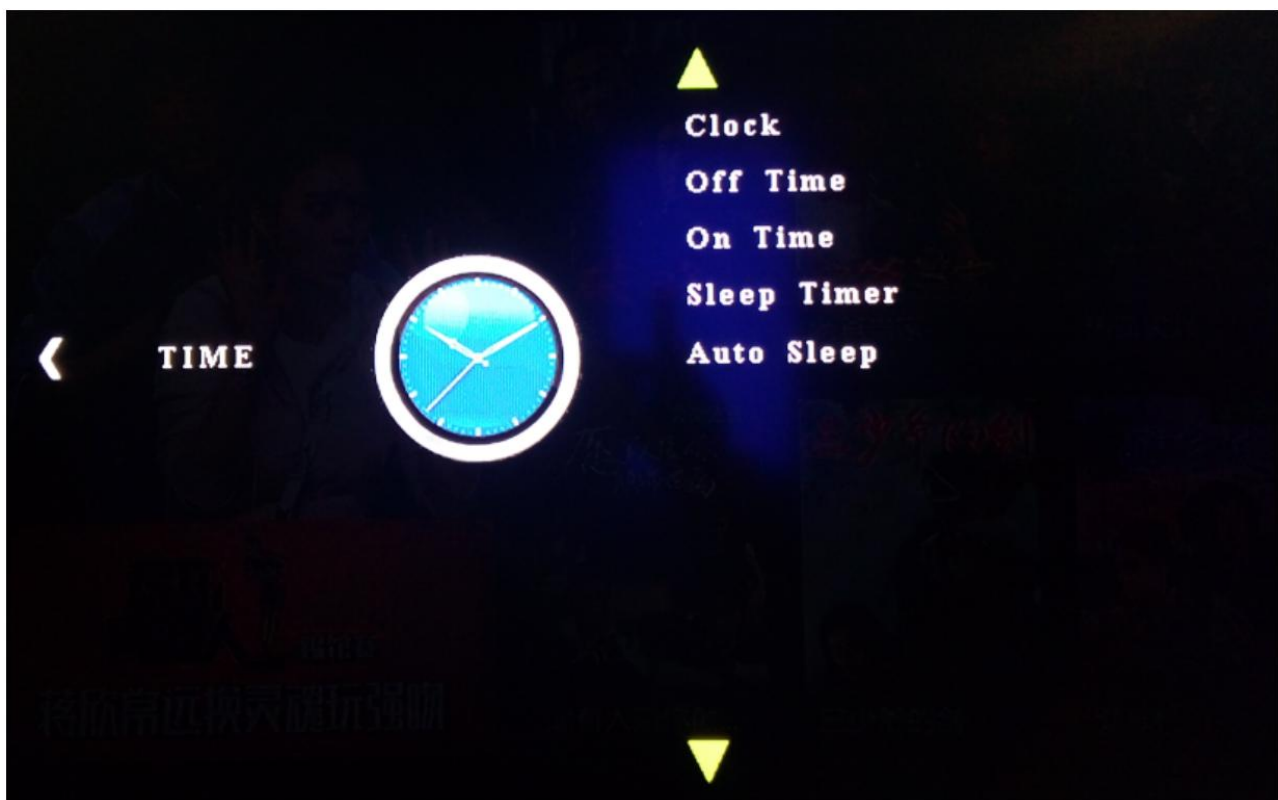

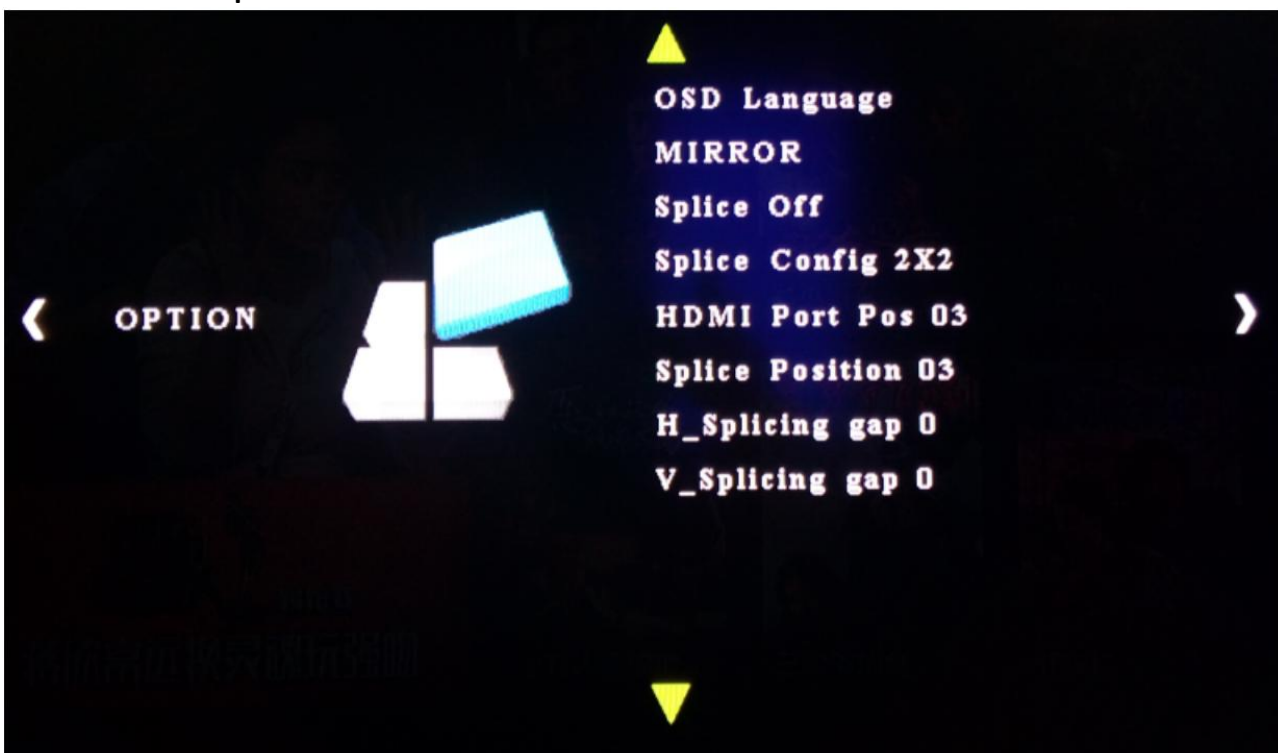## 2. Main Menu Description

Menu 1：Picture Menu

Menu 2：Audio Menu

Menu 3：Time Menu

Menu 4: Option Menu

3. Splicing Wall Setting up

➢ In the main menu, choose to enter into the Set Up menu - > Splicing Mode Set Up.
➢ Press the left and right keys to select the corresponding splicing mode.

- ➤ Select the HDMI port, and select the corresponding splicing position (curtain wall address) according to the port ID.
- ➤ Set the splicing switch to "on", then you can start the splicing.

4. Parameter Description

HDMI Port: The ID number of connected HDMI outputs should be corresponding to the splicing position to make the splicing correctly.

Splicing Position: Position in the splicing wall, that is, the address of the curtain wall.

5. Frame Blanking Description

Under **OPTION** menu, find the **"H_Splicing gap"** / **"V_Splicing gap"** to make frame blanking setting (For example: horizontal splicing gap is 20mm, then adjust the **"H_Splicing gap"** : +20mm). See picture below:
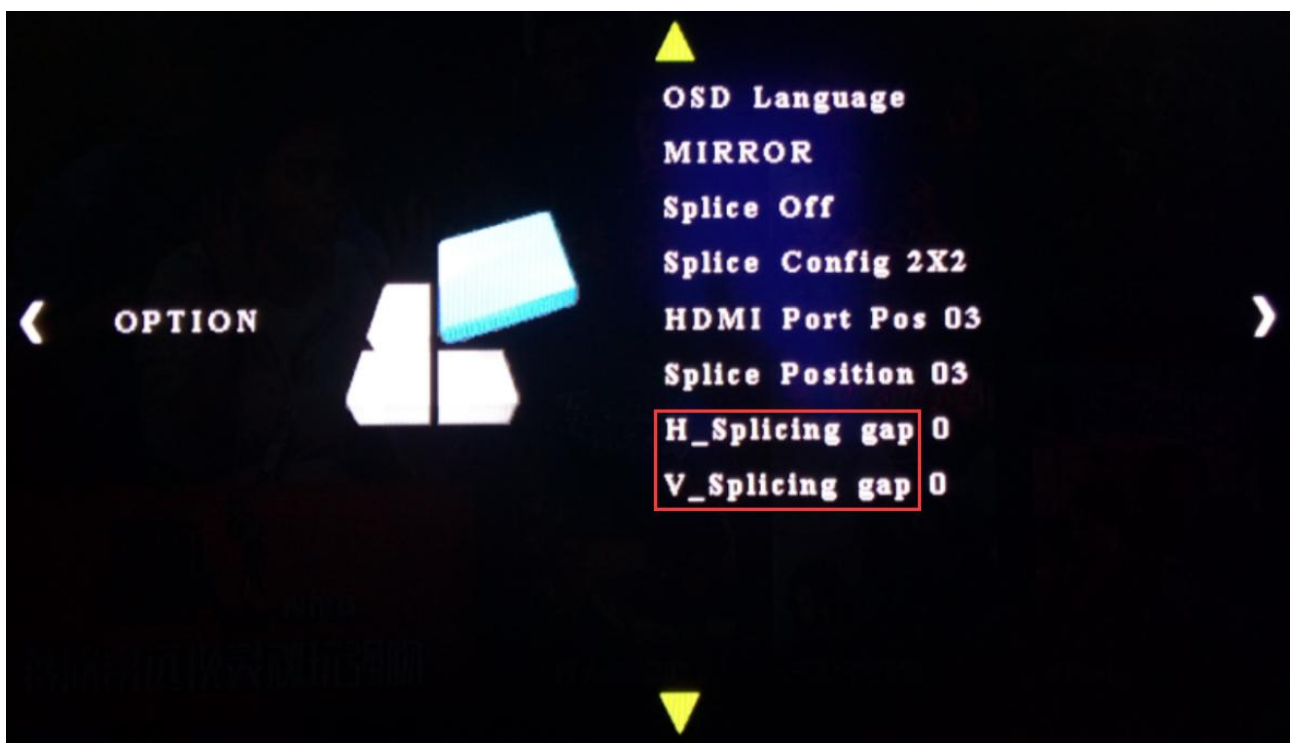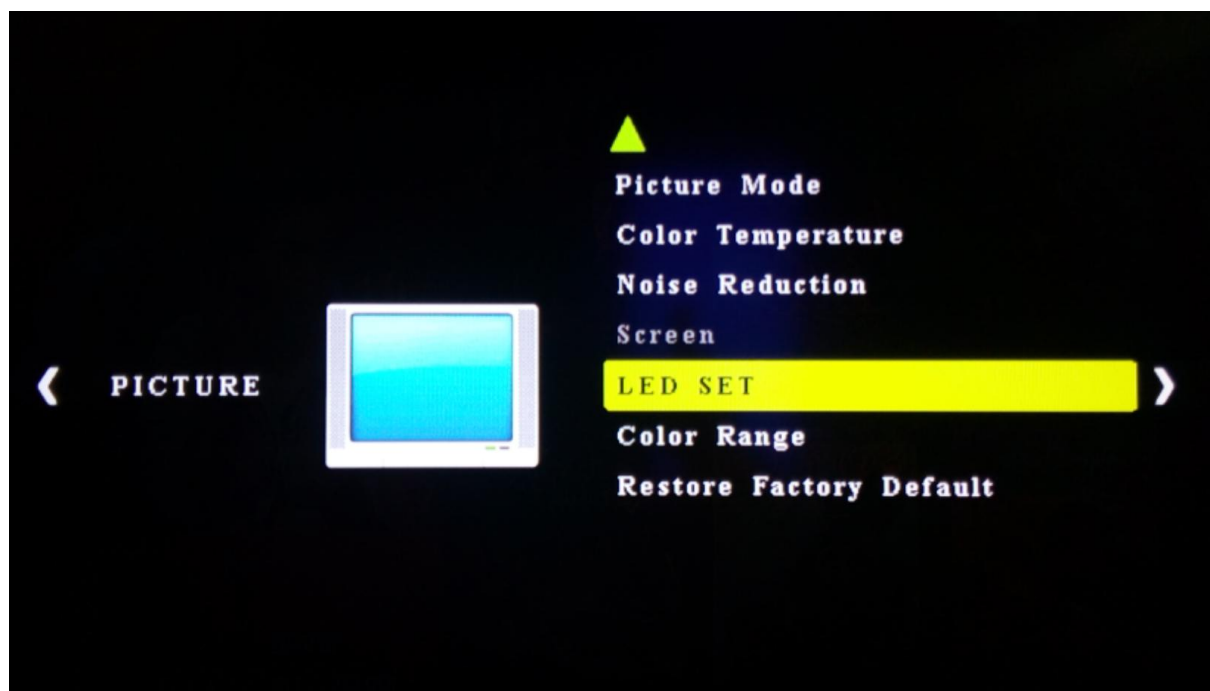

6. Screen Flipping Description

In the setting menu, select the corresponding HDMI port number, and then select the mirror menu, press the "right" button to flip.
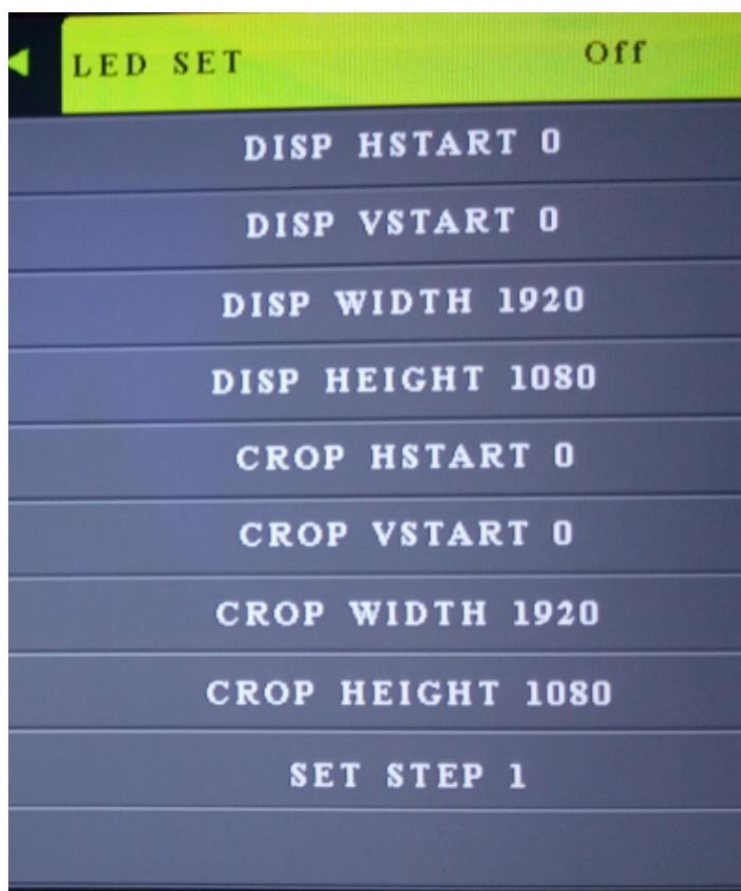
7. LED Setting Function

This product supports LED Clipping and Screenshot Function with Rolling Subtitles. Under the **PICTURE** menu, select the **LED SET** to
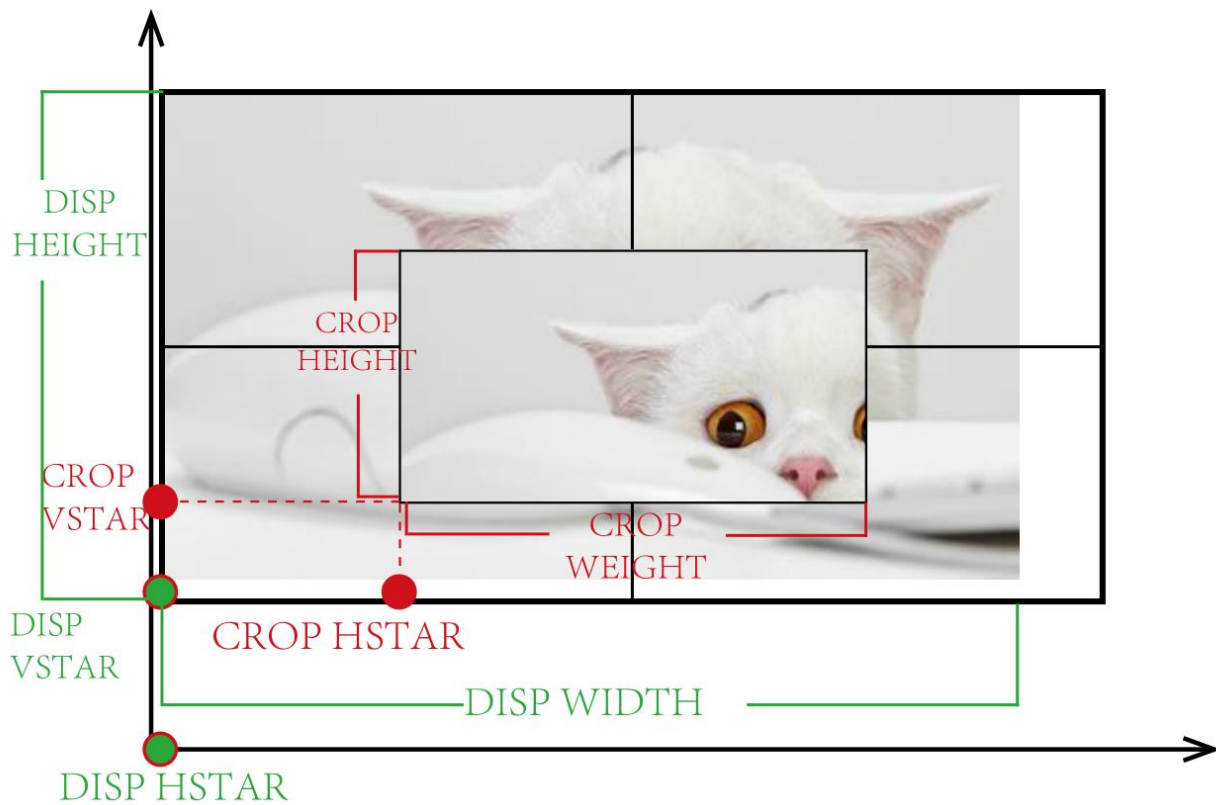
enter the LED function. See picture below.

Under **LED SET** menu, user can set corresponding LED function like image zoom in/out and cutting. See picture below:

LED Setting

LED Image Scaling

DISP HSTAR: Select the X axis starting point for the zoomed image
DISP VSTAR: Select the Y axis starting point for the zoomed image
DISP WIDTH: Select the width of the zoomed image
DISP HEIGHT: Select the height of the zoomed image

LED Image Clipping

CROP HSTAR: Select the X axis coordinates for the cutting position
CROP VSTAR: Select the Y axis coordinates for the cutting position
CROP WIDTH: Select cutting height
CROP HEIGHT: Select cutting weight

8. Flying Subtitle Description

➢ This product has built-in scrolling subtitle function, can directly send scrolling subtitle to large screen, no need additional LED subtitle scrolling screen. See picture below:

Welcome to use the subtitle function

➢ Connect the RS232 cable to the RS232 interface of the product, open corresponding rolling subtitle software to set rolling subtitle; In this software, user can make all subtitle function settings, such as text location, text size, font speed, text color, background color...etc; Can also adjust LED function, LED image scaling and LED images cutting function, see below picture:
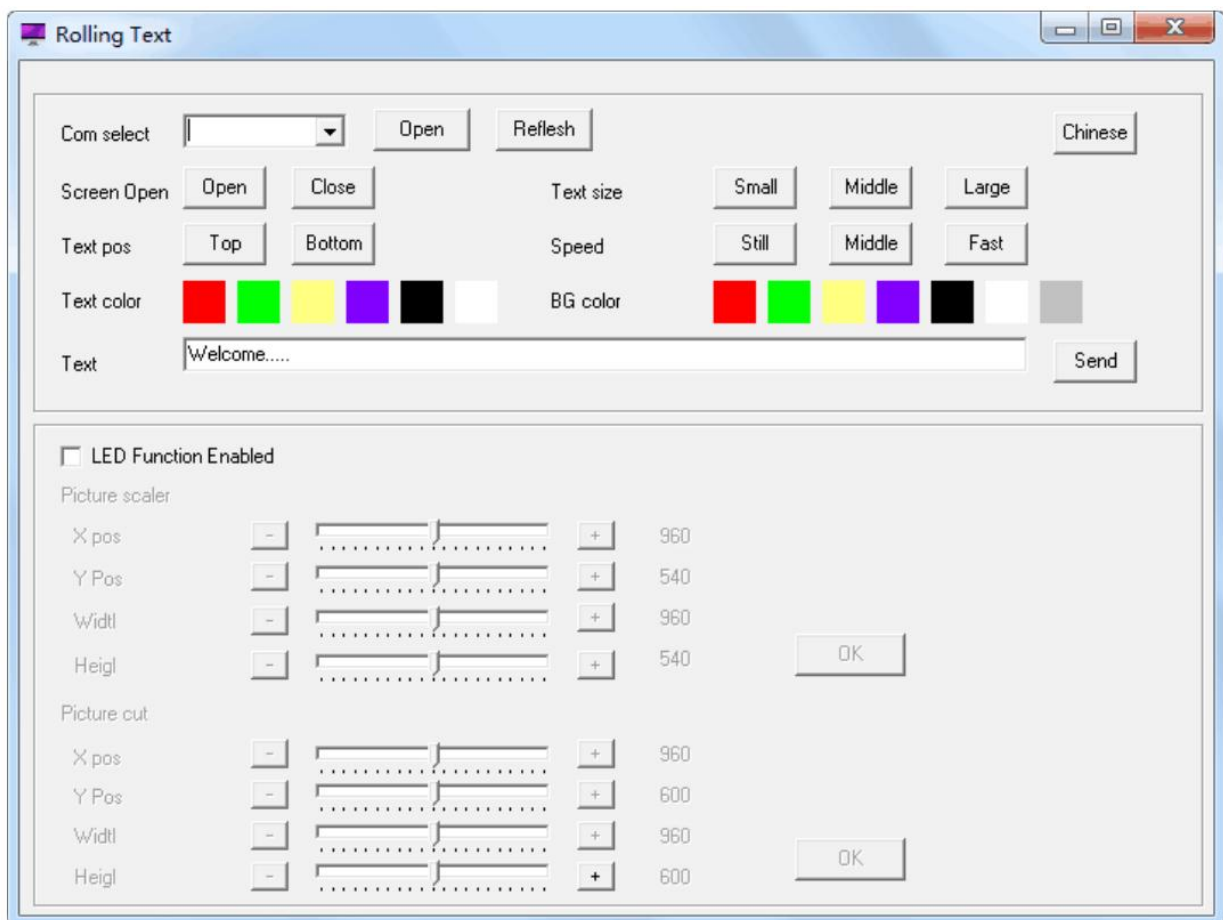
6th Common Problems and Solution

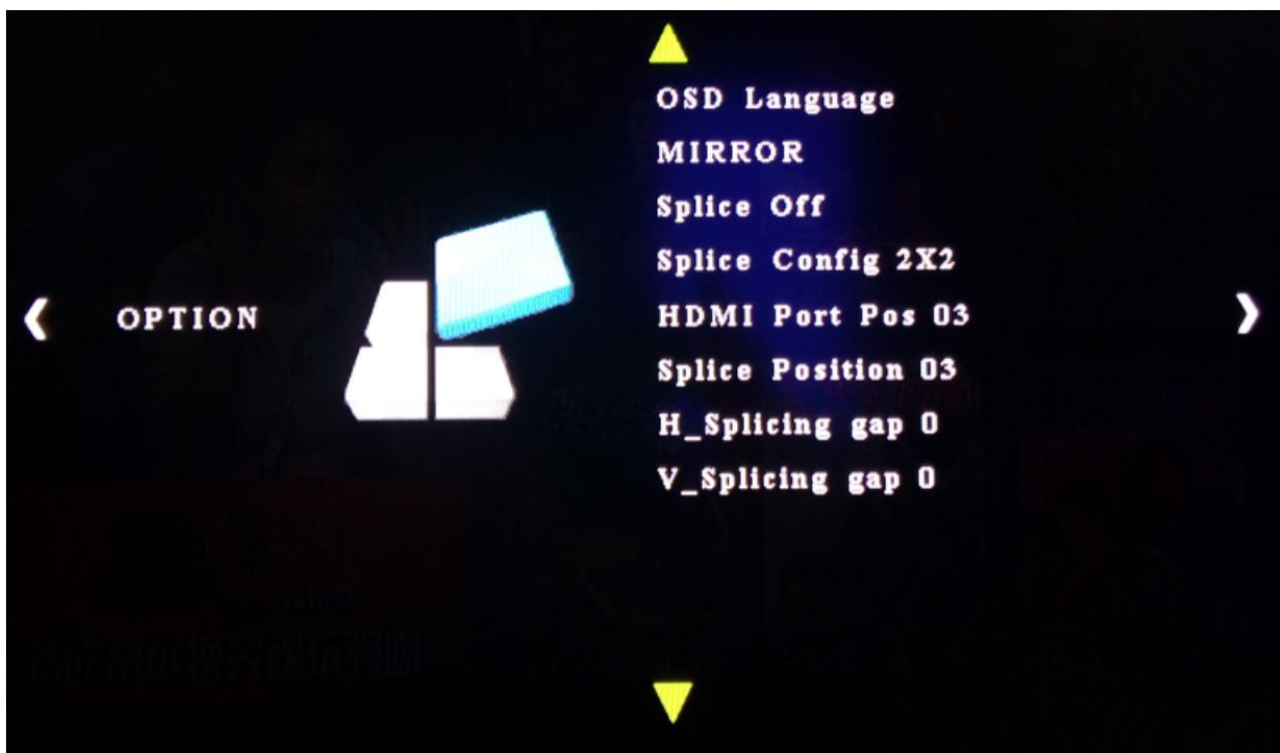**1. When the wiring is completed and started up the device, screen shows "no signal".**
a. Please check whether the signal cable is plugged in.
b. Try restart the device to recapture the signal.
c. Try to replace the signal cable.

2. The remote does not respond to the splicing box.
a. Check if the remote is abnormal (Check if you have installed batteries inside the remote).
b. Check whether the distance is too far, and if there are obstacles in the middle.

3. When the wiring is completed and started up the device, it's found that the image on the screen is not correct.
a. Check whether the Splice Configure and Position settings are correct in the splicing settings.
b. Check whether the serial number of the screen corresponds to the serial number of the splicing in the splicing settings.

4. When the wiring is completed and started up the device, it's found that the image on the screen is very Blurred / Misty Screen / Double Image

a. Check whether the input and output signal cable is normal.
b. Check whether the display units works normally.

5. When the menu is not available (No menu pop-up).
a. Check if the caption function is off (The menu will be unavailable when caption function is on)

7th   Guarantee Description

Note: From the date of purchase, user enjoy one year free warranty service, not contain the mail delivery fees. Free warranty service, details are as follows:

1. Mechanical failure caused by accidental/man-made damage, unauthorized repair, improper storage..etc. are not included within the scope of the warranty.
2. The product is covered with fragile label, we have the right to refuse to provide warranty service if it was broken.

SHENZHEN LINK-MI TECHNOLOGY CO., LTD.