



4K60Hz 3x4 Video Wall Controller

Model No.: LM-TV12P



User Manual

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Dear Customer

Thank you for purchasing this product. For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

- ◆ Make sure that all devices you will be connecting up are properly grounded.
- ◆ Make sure that the power to all the devices you will be connecting up has been turned off.
- ◆ Do not place other objects on the cable.
- ◆ Risk of electrical shock, do not open.
- ◆ To avoid damaging the product, do not dismantle it by yourself, the device should be repaired and maintained by the professional and qualified personnel in the designated service center.
- ◆ Do not place any object into the opening of the casing, otherwise, it might cause voltage or short circuit incident.
- ◆ The installation site must be well ventilated. Ensure that air vents on the equipment are not blocked.

1st Introduction

This 3x4 video wall controller support 1x HDMI 2.0 in, 1x HDMI 1.4 in and 1x DP 1.2 in, max resolution support 4K@60Hz 4:4:4 HDCP 2.2. It allows any of 3 inputs routed to the 12 HDMI outputs. Users can choose different video mode via remote like 3x4 video wall mode, PIP (picture in picture) mode etc to meet their needs .

This 4K video wall controller offers solution for home, office, digital entertainment, center, conference room, school and other digital TV use environments.

2nd Feature

- 3x4 video wall controller comes with 1x HDMI 2.0 in, 1x HDMI 1.4 in and 1x DP in; 12x HDMI out.
- Max resolution up to 4K@60Hz 4:4:4, HDCP 2.2, DP 1.2 max 4K@60Hz.
- Easy to set-up and control,support control via front buttons and remote.
- Support image rotation 90°, 180°, 270° and Mirror left and right, flip up and down.
- Support 3.5mm analog audio out.
- Support automatically adjust border function and crop image function,Display without black edges.
- Support roaming window and support input of the splicer can be resize and positioned at any position .

- Supports intelligent temperature control protection technology, making the product's heat dissipation performance more stable, reliable and durable.
- Silent smart fan, no noise at work.

3rd Package Content

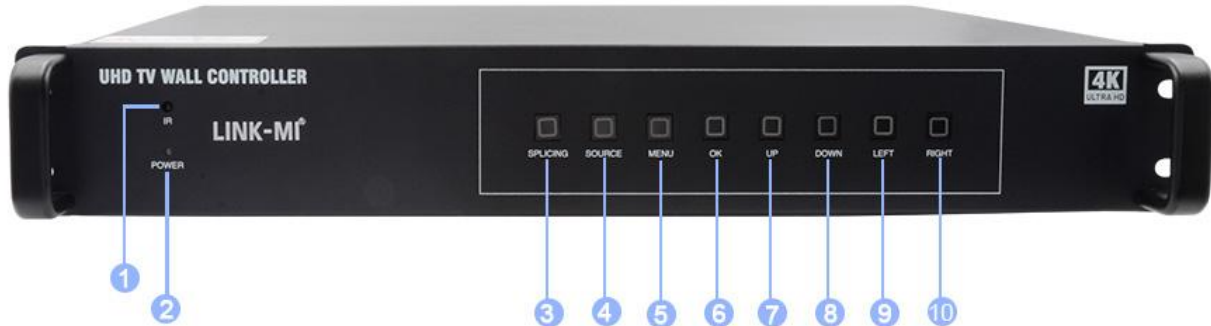
- 1) 1x Main Unit (4K 3x4 Video Wall Controller)
- 2) 1x Power Cable
- 3) 1x Remote
- 4) 1x User Manual

4th Technical Parameters

Name	Specification (LM-TV12P)
Input Signal	
HDMI 1	HDMI 1.4, HDMI embedded audio, resolution support 640x480 to 3840x2160@30Hz
HDMI 2	HDMI 2.0, HDMI embedded audio, resolution support 640x480 to 3840x2160@30Hz
DP	DP 1.2, DP embedded audio, resolution support 640x480 to 3840x2160@60Hz
Output Signal	
HDMI 1	Support 3x4, 4x3...video wall mode, max resolution support 1920x1080@60Hz
HDMI 2	Support 3x4, 4x3...video wall mode, max resolution support 1920x1080@60Hz
HDMI 3	Support 3x4, 4x3...video wall mode, max resolution support 1920x1080@60Hz
HDMI 4	Support 3x4, 4x3...video wall mode, max resolution support 1920x1080@60Hz
...	...
HDMI 12	Support 3x4, 4x3...video wall mode, max resolution support 1920x1080@60Hz
Audio Output	3.5mm audio interface; Support left and right channel stereo, audio and video signal synchronous switching
Other	
Stitching Mode	Simple 12 stitching
Control	IR remote, front buttons
Rotation	90°, 180°, 270°
Supply Voltage	220V
Power Consumption	30W
Chassis Specification	
Product Size (mm)	420x320x68 mm (LxWxH)
Product Weight (kg)	5.7 kg

5th Panel Description

1. Front Panel






- ① IR: IR light
- ② POWER: Power light
- ③ SPLICING: Video wall mode/cancel video wall mode
- ④ SOURCE: Switch input source
- ⑤ MENU: Menu/Back to previous level
- ⑥ OK
- ⑦ UP: Up menu option
- ⑧ DOWN: Down menu option
- ⑨ LEFT: Left menu option
- ⑩ RIGHT: Right menu option

2. Rear Panel



- ① HDMI1: HDMI 1.4 input port
- ② HDMI2: HDMI 2.0 input port
- ③ DP: DP 1.2 input port
- ④ AUDIO: Analog audio out
- ⑤ HDMI 1-12 channel
- ⑥ DC 12V: Power input

3. Remote Description

OFF	Turn on the power
ON	Turn off the power
DP	Select DP
HDMI	Select HDMI1
DVI	Select HDMI2
	Volume down
	Volume up
	Image Rotate
SW/SP	Video wall/ Cancel video wall
INPUT	Switch input
←	Left menu option
→	Right menu option
↑	Up menu option
↓	Down menu option
OK	OK
MENU	Menu / Back to previous level
EXIT	EXIT
MUTE	Mute
UPGRADE	No function
NO.1-9	Select mode



6th Connection



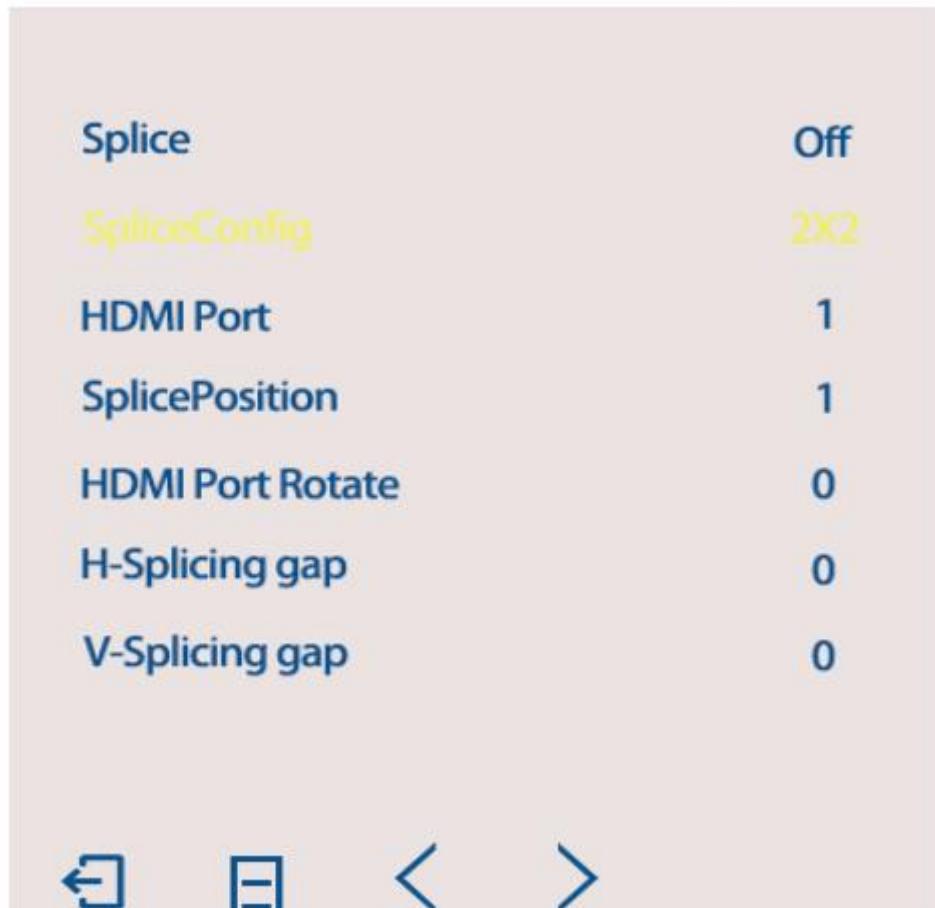
7th Installation

Take LM-TV09P (9 HDMI outputs) as sample.

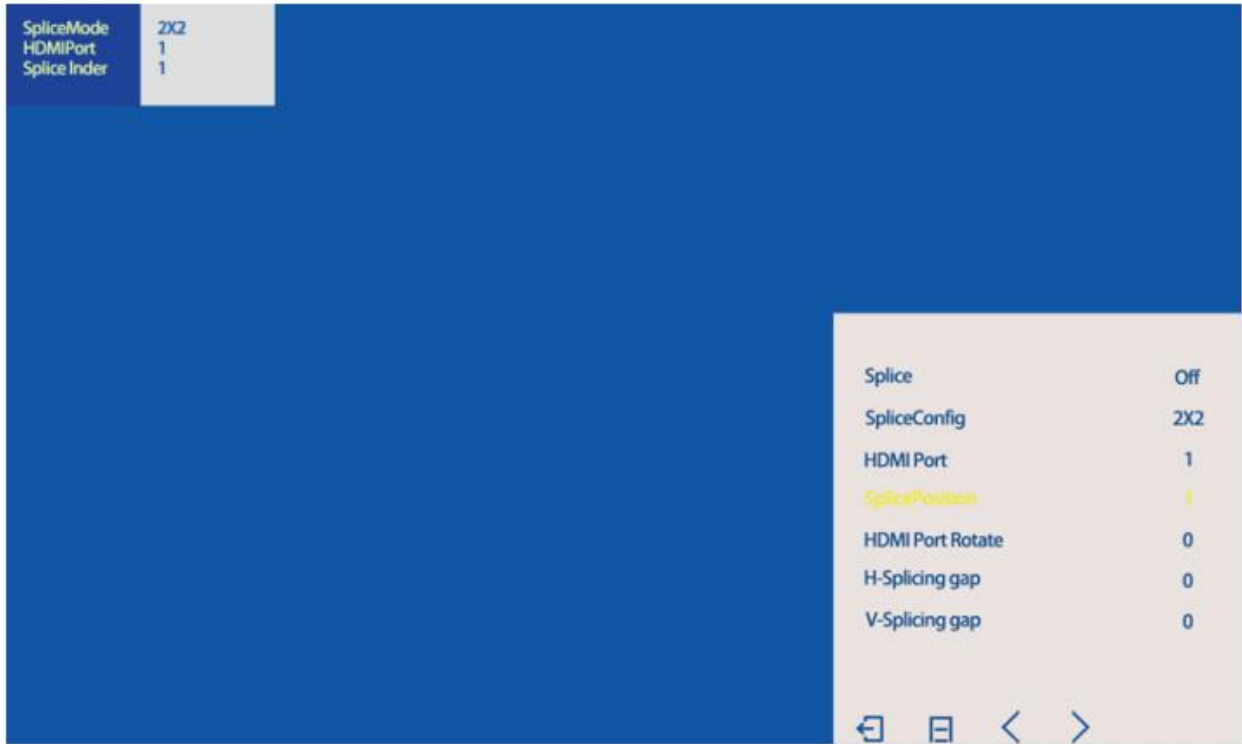
1. Connect the input source(HDMI1 /HDMI2 /DP) to the video wall controller.

2. 9 output ports connect 9 TVs.

3. Use remote or press front button MENU to select splicing menu,(User can use LEFT, RIGHT, UP and DOWN choose splicing mode), set mode to 3x3.

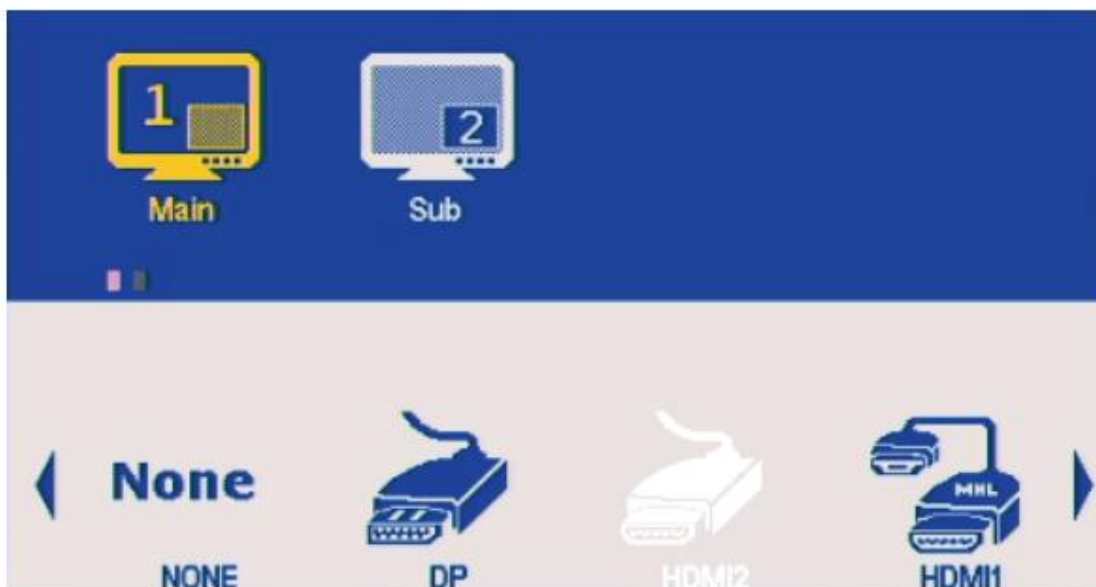


4. Select HDMI port NO. And splicing NO. And adjust according to the prompts in the upper left corner of the screen (for example: 3x3 mode, set the first screen HDMI port to 1 and the Splice Position number is 1 ,and the upper left corner will show : Splice Mode 3x3, HDMI port 1 and SpliceIndex 1)



5. The other 8 screens setting are the same.

6. Press SOURNU+ LEFT/RIGHT key to choose and switch input signal. If via remote can Press INPUT+ LEFT/RIGHT key)



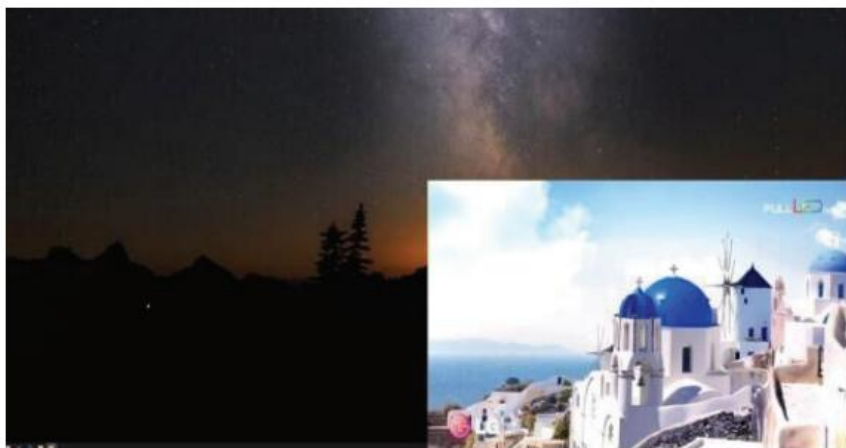
8th Roaming Window settings

1. Press MENU+LET/RIGHT key into roaming window mode. Then press HIGH/LOW key select Roaming windows mode and press OK to choose ,the roaming windows mode support 1 P, 2PLR , 2PTR, PIP, 4P mode .

Display Mode	PIP
LR Ratio	0
PIP Position	USER
PIP User H Position	49
PIP User V Position	59
PIP Transparency	1
PIP Size	6
DisplayModeSave	1
DisplayModeSlect	1



2. Press OK button to enter PIP mode.



3. Press SOURNU +left /right keys to select the input signal or (remote INPUT+ left/ right key) to switch the first screen signal to HDMI 1 Press OK to select the first window, so that the icon runs to the switching signal and press left and right to adjust to the switch Confirm the signal with OK.



(USER can adjust the PIP position, transparency and size by remote.also can save display mode to 1-9.then next time you can press 1-9 key use saved mode directly.)

9th Video mode

1P MODE :

1	2
3	4

2x2 video wall

2PLR : Left screen(screen 1 and 3) 2x1 video wall
Right screen(screen 2 and 4) 2x1 video wall

1	1
2	2

Left/Right 2x1

1	2
3	4

Screen number

 **Source**

 **Another Source**

2PTR : Up screen(screen 1 and 2) 1x2 video wall
Down screen(screen 3 and 4) 1x2 video wall

1	2
1	2

Hight/Low 1x2

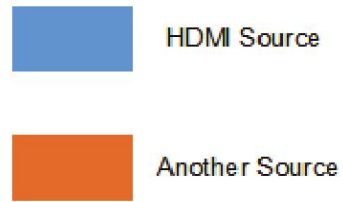
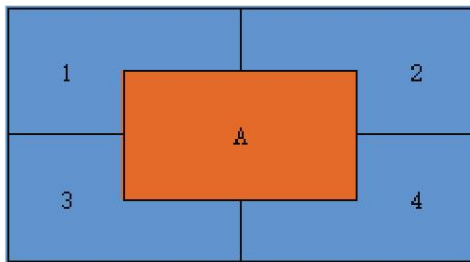
1	2
3	4

Screen number

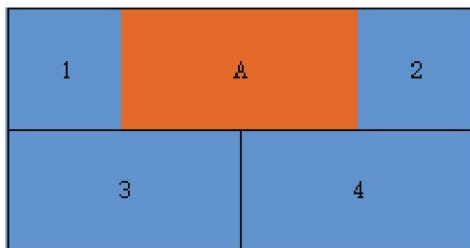
 **Source**

 **Another Source**

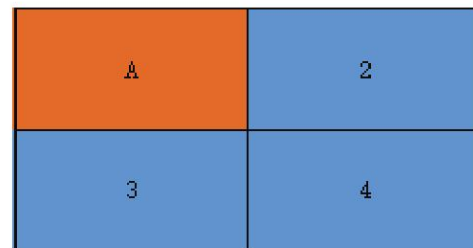
PIP : Picture in Picture



PIP



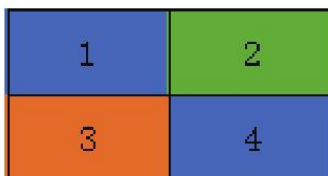
PIP



PIP

(Under PIP mode,User can use remote control to move the picture A position)

4P mode :

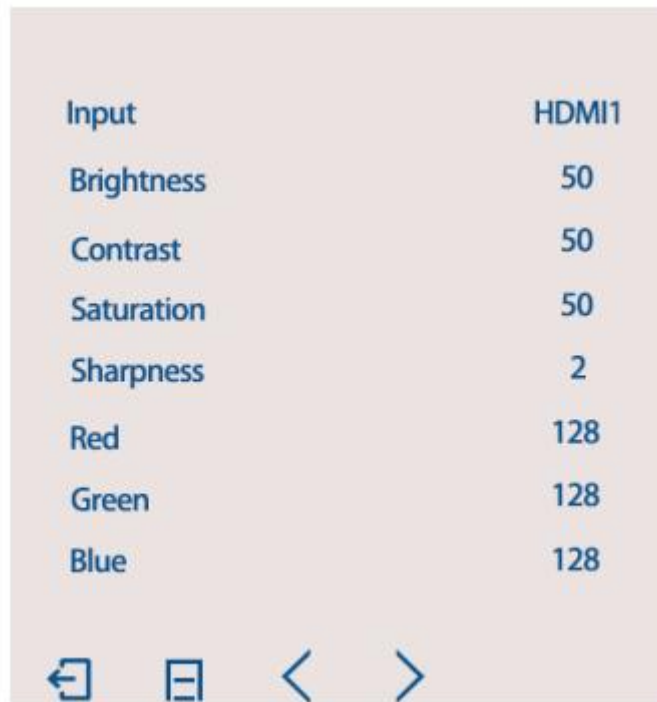


4P mode



10th Main Menu instructions

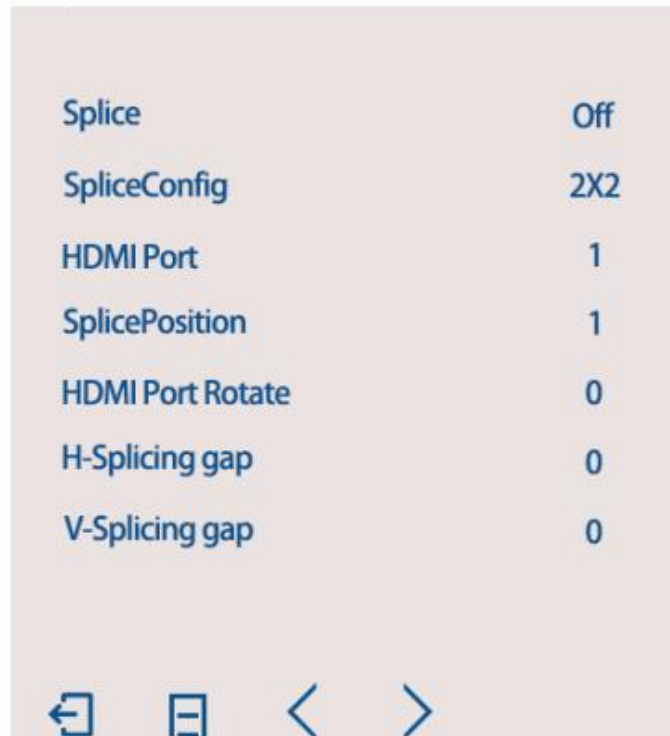
1. Image menu: adjust brightness, chroma, contrast.



Input	HDMI1
Brightness	50
Contrast	50
Saturation	50
Sharpness	2
Red	128
Green	128
Blue	128

Navigation icons: back, home, left arrow, right arrow

2. Setup menu: Set splicing mode, splicing position, border blanking; border blanking function: this function only takes effect when the screen is in splicing state, the default value is zero, and adjusting the size of this value can remove part of the border image



3. Image menu: Image rotation, adjust screen scale mode, automatic dormancy;
image rotation: can rotate 90 degrees , 180 degrees , 270 degrees, left and right mirror,
up and down mirror flip. Proportional pattern: support 16:9 4:3 5:4 1: 1.



4. Time menu: Set language, restore factory settings, panel key light turn on/off.



5. Cutting Black Edge: Adjusts the horizontal vertical position only in the 1 P(3x3 video wall mode) splicing state, sets the image width height .



11th **Trouble shooting**

No Image

1. Verify the input source is powered on and connected with controller box.
2. To confirm display device is turned on and connected with controller box .
3. Check the system connection status.
4. Check the cable is intact.
5. Try restarting the device to re-catch the signal.
6. Try to use another input source.
7. Check if select a correct signal.

No response use remote

1. Check if there is any abnormality in the remote control and whether there is a battery.
2. Check if the distance is too far and if there are any obstacles in the middle.

Image out of order

1. Check whether the row and column positions are set correctly.
2. Check whether the screen serial number is consistent with the controller box HDMI outputs.

Image blurred

1. Re - plug the connector to prevent the socket interface is bad.

2.Wire quality (HDMI cable requirements in line with HDMI 1.4 standard)

3.Check the screen and the input source.

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