

FELX4ML **Quick Start**



- Modular design with flexible input & output combinations
- Multi-Display videowall splicing up to 8 mega pixels wide
- Seamless switching
- Four active and 4 duplicated outputs
- Support for up to 8 video layers
- Independent display management control
- Support for 4K@60 digital inputs and custom EDID
- Genlock In and Loop
- Control via XPOSE 2.0 or RGBlink OpenAPI

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Overview

FLEX4ML is multi-layer videowall splicing processor, standard with one 4K2K@60 digital input module which is formed by DUAL DVI, HDMI 1.4, HDMI 2.0 and DP 1.2 ports and four S-DVI (Sync) modules, supporting for 8 layers in total. The outstanding feature of FLEX4ML is the built-in splicing and presentation mode patterns which help users to make quick splitting and presentation. Besides control on board, it also support for control via RGBlink XPOSE 2.0.

System Connection

RGBlink offers solutions to demanding technical problems. Any application questions, or required further information, please contact with our customer Support Engineers.



FLEX4ML SYSTEM CONNECTION DIAGRAM



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Note:

AC Power Cable supplied as standard according to destination market.

Hardware Orientation

Front Panel



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Button Instru	ction						
MENU	MENU and EXIT	START	START and LAYOUT				
4K/Fn 1	4K input source select, turn IN1-4 to IN5-8	SAVE	SAVE SCENE				
SCALE BLACK	SCALE and BLACK out	BG 6	Background Layer selection				
Number1~0	Numbers used in SCALE, CROP,	$\frac{1 \times 1}{2} \frac{1 \times 2}{3} \frac{1 \times 3}{4} \frac{1 \times 4}{5}$	IN1/IN2/IN3/IN4 INPUT source selection				
Number 19	CUSTOM, SAVE and LOAD						
$ \begin{array}{c c} L1 \\ \hline 7 \\ \hline 8 \\ \hline 9 \\ \hline 0 \end{array} $	Layer 1-4 selection	TAKE	Load scene and TAKE to PGM				
Knob	Confirm by pushing, selecting		Displays current status of the product,				
	items by rotating		and for feature selections, provides				
			interactive choices in conjunction with				
			buttons on the front panel.				

Rear Panel



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INPUT C	CONNECTORS	OUTPUT CONNECTORS							
1	Slot for optional inputs up to 4 inputs	3	4 DVI output as standard						
2	1 slot for optional single input	4	Optional backup output slot						
Commu	Communication								
6	Genlock In/Loop	6	LAN Port and RS232 port						
POWER	POWER								
11	Power switch								
12	Power IEC-3								



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Menu Tree

Presentation	Spliting	Advanced	Lanagugage	Factory Reset
Output Resolution	Output Resolution	4K Input Module Mode	English/中文	Factory Reset
Image Select	Image Select	EDID		
	Multi-Split	Input Adjustment		
		Test Pattern		
		Scene Management		
		System Setting		
		Sychronize		



USE YOUR PRODUCT

Presentation

After the device is boot up, push MENU, rotate the knob and select <Presentation>



Output Resolution

Output Resolution: Choose Standard or Custom resolution

Standard: rotate the knob to select standard resolution.



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Custom:use 1~9 numbers to key in the width, height and frame rate.

Custom 1920×1080@60 Changing resolution of a different size will clean up the saved scene!!!

Image Select

Image Layout	>>
L1 Source	1.No BOARD
Width	1920
Height	1080
H POS	0
V POS	0
Crop	
Save Setting	
Reset Parameters	

Image Layout: Select the image layout for presentation mode. There are 15 layout patterns built-in as follows:



Change Layout will delete saved scene

L1~L4 Souce: After layout is selected, input source has be to be selected for each layer. Input 1~4 is optional source, if there is no module installed, it will show :Index.NO BOARD Input 5~8 is DUAL DVI, 6.HDMI 1.4, 7.HDMI 2.0, 8.DP 1.2 which locate on standard 4K@60 digital module.



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Layer Adjustment : After layout selection, Width, Height, Horizontal Position, Vertical Position of each layer shall be set.

Crop: crop the source width and height for each layer.

Save Setting: After layer adjustment and source crop is done, Save Setting to confirm the setting.

Reset Parameter: Cancel the above setting.

Width	1920
Height	1080
H POS	0
V POS	0
Save	
Reset	

Split

Push MENU, rotate the knob and select <Split>

Output Resolution Split Mode	>> >>
Multi-Split	>>

Output Resolution: the same as Output Resolution in Presentation Mode.

Split Mode

4K Input Module Mode>>Split Layout>>PIP Layer>>Background Souce 8.DP 1.2 (2K×1K)IH Total 4096IV Total 2304IWidth 1 2048IHeight 1 1152IBackground DetailsI



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4K Input Module Mode

The available modes for 4K input module: 2K×1K, 4K×1K, 4K×2K The choosen mode wil be valid on all 4 ports



Save Setting to confirm.

Split Layout

There are 6 background split mode available and each basic split mode comes with useful multi-picture layout.

Split Mode	Background	Multi-Picture Layout
Cross	() () () () () () () () () () () () () (
H 1/2	0 3	
V 1/2	(1) (3)	
H 1/3	1 2 3	
H 1/4	1 2 3 4	
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V 1/4	1 2 3 4	
	Ŭ	

PIP

After the split mode is selected, PIP shall be set. eg. Select split mode V 1/2 with 1 PIP layout

1			0
3	 	 	

4K Input Module Mode	>>
Split Layout	>>
PIP Layer	>>
Background Mode	V 1/2
Background Source	8.DP1 (2K×1K)
H Total	2048
V Total	2304
Heigth 1	1152
Background Details	>>
Save Setting	

PIP Layer MENU

PIP Source

Select source for each PIP layer If the chosen layout contains more than 1 PIP, PIP Source 2 shall be set. Width, Height, H Pos, V Pos Set size and postion for PIP Save Setting Save Setting to confirm above.

PIP Source 1	1.NO BOARD
Width	1024
Height	1152
H Pos	512
V Pos	576
Save Setting	>>
Reset Parameter	

Background Mode

Under split mode V 1/2, there is subclassification V 2In/2 Out based on numbers of source.





V 1/2

V 2 In/2Out

Background Source

Slelect the source for background.

H Total, V total

Set total height and total width for the splicing output display.

Height 1

Set the height of the first output display.

FLEX4ML show the parameters required based on the Split mode, for example, if the split mode is V 1/3. the Width 1 (width of first output display)and Width 2 (width of second output display) shall be set; if the split mode is Cross, Height 1 and Width 1 will be shown to set.

Background Details

To Scale and Crop the background.

Width	4096
height	2304
H POS	0
V POS	0
Save Setting	
Reset Parameters	

Save Setting Save Setting to confirm above

Reset Parameters Cancel above setting.



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Multi Split Mode

EXT Input Genlock Format1920×1080@60Genlock Out Format1920×1080@60SyncONSplit Mode>>

Split Mode operation is the same as "Split Mode" in last section but there is no multi picture layout on each mode, only background split mode available in the Menu.

Split Mode	Background	Split Mode	Background
Cross	1) (2) (3) (4)	H 1/3	1 2 3
H 1/2	1 3	H 1/4	1 2 3 4
V 1/2	(1) (3)	V 1/4	1) 2 3 4



4K Input Module Mode	>>
EDID	>>
Input Adjustment	>>
Test Pattern	>>
Scene Management	>>
System Setting	>>
Synchronize	

4K Input Module Mode

4K mode: 2K×1K, 4K×1K, 4K×2K, The chosen mode is valid on all input port.

Push the mode to choose the 4K source: DUAL_DVI, HDMI 1.4 HDMI 2.0, DP 1.2





EDID

Destination: 1~8 Input Port **Source:** CUSTOM or RESET Choose CUSTOM to custome EDID Choose RESET to reset EDID.

Input Adjust

Image Quality: Adjust brightness, contrast and color temperature of each input source port.

Brightness, Contrast, Color Red, Green, Blue value:0-255 Color default mode:USER,sRGB, 5800, 6500,7500,9300

Scale: adjust each input source by scale Crop:adjust each input source by crop



Image Quality Scale	>> >>
Crop	>>
USB Control	>>

Brightness	50
Contrast	50
Color default mode	USER
Color Red	50
Color Green	50
Color Blue	50
Save Settings	
Reset Parameters	



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Test Pattern

Output Board Index: Board in FLEX4ML is EXT OS Board 1: 1-2 output port Board 2 : 3-4 output port

TP Mode: Live Image, Color Strip, Pure Color Green, Red, Blue value range: 0~255

Scene Management

Fade In Fade Out time: 0.15~10.0S Set fade in fade out time for scene switching

Output Board Index	>>
TP Mode	Live Image
Red	255
Green	255
Blue	255
Save Setting	

Fade In Fade Out Time Save To	1.0S >>
Load From	>>

Save To

Save the scene to SCENE 1-10

Save To

SCENE 5 scene Button on is ready to recall Button flashes means current scene Button off means empty scene



Load From

Load saved scene from SCENE 1-10.

Load From SCENE 5 Button on is ready to recall Button flashes means current scene Button off means empty scene

Buttons

START/LAYOUT

Short cut buttons to enter Split Mode menu when the device is used for the first time, If not, it will enter Presentation Mode

Image Layout	>>
L1 Source	1.No BOARD
Width	1920
Height	1080
H POS	0
V POS	0
Crop	
Save Setting	
Reset Parameters	

BG

On or Off background When layout is selected, push BG button to select input source.



4K/FN

Push this button to choose 4K or 2K input source. Push this button, IN 1~4 turn to IN 5~8 which are on 4K input module.

L1/L2/L3/L4

Layer selection after background is set. When the layer is select the button will flash. If there the layout chosen previously is without PIP or less PIP than 4, users can push the unlighted Layer button to open up more PIP.

IN1/IN2/IN3/IN4

Select input source 1~4, when the source is selected, the button will flash.

SCALE/BLACK

Before using SCALE/BLACK button, the button function shall be set first. Under <Advanced>-<System Setting> menu, choose SCALE/BLACK as SACLE. After Layer is selected, pushing SCALE/BLACK button will open up SCALE menu as follow:

If button function set as BLACK, pushing this button will black out the slected layer.

Width	960
Height	540
H POS	480
V POS	270
Saving Setting	
PIP Source 1	>>

SAVE

Short cut button to SAVE scene to SECEN 1-10 by pushing number buttons

TAKE/LOAD

Short cut button to Load saved scene from SECEN 1-10 by pushing number buttons and Switch (TAKE) the scene to output display.



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CONTACT INFORMATION

Warranty:

All video products are designed and tested to the highest quality standard and backed by full 3 years parts and labor warranty. Warranties are effective upon delivery date to customer and are non-transferable. RGBlink warranties are only valid to the original purchase/owner. Warranty related repairs include parts and labor, but do not include faults resulting from user negligence, special modification, lighting strikes, abuse(drop/crush), and/or other unusual damages.

The customer shall pay shipping charges when unit is returned for repair.

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