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
# Content

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview</td>
<td>2</td>
</tr>
<tr>
<td>Packing Configuration</td>
<td>2</td>
</tr>
<tr>
<td>Hardware Orientation</td>
<td>3</td>
</tr>
<tr>
<td>Front Panel</td>
<td>3</td>
</tr>
<tr>
<td>Rear Panel</td>
<td>4</td>
</tr>
<tr>
<td>Menu Tree</td>
<td>6</td>
</tr>
<tr>
<td><strong>USE YOUR PRODUCT</strong></td>
<td>7</td>
</tr>
<tr>
<td>Presentation</td>
<td>7</td>
</tr>
<tr>
<td>Output Resolution</td>
<td>7</td>
</tr>
<tr>
<td>Split</td>
<td>9</td>
</tr>
<tr>
<td>Split Mode</td>
<td>9</td>
</tr>
<tr>
<td>Multi Split Mode</td>
<td>13</td>
</tr>
<tr>
<td>Advanced</td>
<td>14</td>
</tr>
<tr>
<td>Buttons</td>
<td>17</td>
</tr>
<tr>
<td>START/LAYOUT</td>
<td>17</td>
</tr>
<tr>
<td>BG</td>
<td>17</td>
</tr>
<tr>
<td>4K/FN</td>
<td>18</td>
</tr>
<tr>
<td>L1/L2/L3/L4</td>
<td>18</td>
</tr>
<tr>
<td>IN1/IN2/IN3/IN4</td>
<td>18</td>
</tr>
<tr>
<td>SCALE/BLACK</td>
<td>18</td>
</tr>
<tr>
<td>SAVE</td>
<td>18</td>
</tr>
<tr>
<td>TAKE/LOAD</td>
<td>18</td>
</tr>
<tr>
<td><strong>CONTACT INFORMATION</strong></td>
<td>19</td>
</tr>
</tbody>
</table>
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.

Packing Configuration

AC Power Cord  |  HDMI to DVI Cable  |  CAT5 Cable  |  DB9-RJ11 Serial Cable

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Ph: +86 592 5771197 | support@rgblink.com | www.rgblink.com
Note:
AC Power Cable supplied as standard according to destination market.

Hardware Orientation

Front Panel
## Button Instruction

<table>
<thead>
<tr>
<th>Button</th>
<th>Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>MENU</td>
<td>MENU and EXIT</td>
</tr>
<tr>
<td>4K/Fr</td>
<td>4K input source select, turn IN1-4 to IN5-8</td>
</tr>
<tr>
<td>SCALE</td>
<td>SCALE and BLACK out</td>
</tr>
<tr>
<td>Number1~9</td>
<td>Numbers used in SCALE, CROP, CUSTOM, SAVE and LOAD</td>
</tr>
<tr>
<td>Layer 1-4 selection</td>
<td>IN1/IN2/IN3/IN4 INPUT source selection</td>
</tr>
<tr>
<td>Knob</td>
<td>Confirm by pushing, selecting items by rotating</td>
</tr>
<tr>
<td>LCD panel</td>
<td>Displays current status of the product, and for feature selections, provides interactive choices in conjunction with buttons on the front panel.</td>
</tr>
</tbody>
</table>

## Rear Panel
<table>
<thead>
<tr>
<th>INPUT CONNECTORS</th>
<th>OUTPUT CONNECTORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Slot for optional inputs up to 4 inputs</td>
<td>3 4 DVI output as standard</td>
</tr>
<tr>
<td>2 1 slot for optional single input</td>
<td>4 Optional backup output slot</td>
</tr>
</tbody>
</table>

**Communication**

| 6 Genlock In/Loop                  | 6 LAN Port and RS232 port              |

**POWER**

| 11 Power switch                   | 12 Power IEC-3                        |
Menu Tree

- **Presentation**
  - Output Resolution
  - Image Select
- **Splitting**
  - Output Resolution
  - Image Select
  - Multi-Split
- **Advanced**
  - 4K Input Module Mode
  - EDID
  - Input Adjustment
  - Test Pattern
  - Scene Management
  - System Setting
  - Synchronize
- **Language**
  - English/中文
- **Factory Reset**
  - Factory Reset
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.

Changing resolution of a different size will clean up the saved scene!!!
Custom: use 1~9 numbers to key in the width, height and frame rate.

Changing resolution of a different size will clean up the saved scene!!!

Image Select

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

L1~L4 Source: After layout is selected, input source has 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, HDMI 1.4, HDMI 2.0, DP 1.2 which locate on standard 4K@60 digital module.
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.

Split

Push MENU, rotate the knob and select <Split>

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

Split Mode

4K Input Module Mode
Split Layout >>
PPIP Layer >>
Background Source 8.DP 1.2 (2K×1K)
H Total 4096
V Total 2304
Width 1 2048
Height 1 1152
Background Details
4K Input Module Mode

The available modes for 4K input module: 2K×1K, 4K×1K, 4K×2K

The chosen mode will 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.

<table>
<thead>
<tr>
<th>Split Mode</th>
<th>Background</th>
<th>Multi-Picture Layout</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross</td>
<td><img src="cross_split.png" alt="Image" /></td>
<td><img src="cross_layout.png" alt="Image" /></td>
</tr>
<tr>
<td>H 1/2</td>
<td><img src="h12_split.png" alt="Image" /></td>
<td><img src="h12_layout.png" alt="Image" /></td>
</tr>
<tr>
<td>V 1/2</td>
<td><img src="v12_split.png" alt="Image" /></td>
<td><img src="v12_layout.png" alt="Image" /></td>
</tr>
<tr>
<td>H 1/3</td>
<td><img src="h13_split.png" alt="Image" /></td>
<td><img src="h13_layout.png" alt="Image" /></td>
</tr>
<tr>
<td>H 1/4</td>
<td><img src="h14_split.png" alt="Image" /></td>
<td><img src="h14_layout.png" alt="Image" /></td>
</tr>
</tbody>
</table>
PIP
After the split mode is selected, PIP shall be set.
eg. Select split mode V 1/2 with 1 PIP layout

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
Heigh 1 1152
Background Details >>
Save Setting

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 position for PIP
Save Setting
Save Setting to confirm above.

Background Mode

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

Save Setting
Save Setting to confirm above

Reset Parameters
Cancel above setting.
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.

<table>
<thead>
<tr>
<th>Split Mode</th>
<th>Background</th>
<th>Split Mode</th>
<th>Background</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross</td>
<td><img src="image1" alt="Cross Background" /></td>
<td>H 1/3</td>
<td><img src="image2" alt="H 1/3 Background" /></td>
</tr>
<tr>
<td>H 1/2</td>
<td><img src="image3" alt="H 1/2 Background" /></td>
<td>H 1/4</td>
<td><img src="image4" alt="H 1/4 Background" /></td>
</tr>
<tr>
<td>V 1/2</td>
<td><img src="image5" alt="V 1/2 Background" /></td>
<td>V 1/4</td>
<td><img src="image6" alt="V 1/4 Background" /></td>
</tr>
</tbody>
</table>
Advanced

4K Input Module Mode

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

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 customize 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
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: 0.15~10.05
Set fade in fade out time for scene switching

Save To

Save the scene to SCENE 1-10

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.

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

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 selected layer.

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.
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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