LED-760H Video processor

Overview

LED-760H, a superior approach to better visual performance for LED walls. It is a 4K x 2K/60Hz capable video processor for 4 screen splicing. With EDID and customize output management, it delivers high quality pixel-to-pixel display via its user-friendly controls. It is an ideal choice for multi-media hall, multi-purpose room, theater, studio and showroom.

Supporting all kinds of input ports, it outperforms competitor products in terms of loading capacity and broadband utilizing rate (the up-processes width is 15360, and refresh rate reaches up to 120Hz. Also, 16 selective built-in resolutions allow user to scale and match the real size of LED walls.

Input ports include DVIx2, HDMIx2, DPx1(4K). For extended inputs, user can choose 2 2K ports from VGA, DVI and SDI or 1 4K port from DP1.1 and HDMI1.4.

It accepts network linking, USB linking or RS232 linking for different control demands.

Features

- 4 screens Splicing in 1 Processor : 8DVI output ports are divided into 4 groups for horizontal splicing, vertical splicing, same size splicing, and different size splicing. A single unit up-loads, 8,000,000 pixels and accepts splicing for 4 screens. Can do horizontal / vertical, equal / unequal splicing;
- 4 windows output : On one-splicing mode, each output is capable of displaying 4 layers with any size or position;
- Multiple cascade : Machines can be cascaded to realized ultra wide display;
- Built-in Input Matrix for Seamless Switching between 8 inputs;
- Logo saving ;
- Image freezing;
- Preset saving & loading;
- Internal graphic card for testing;
- Accurate brightness control and high grey level , optimize screen effect;

- Multiple input ports: DVI*2 HDMI*2 DP*1(4K*1K) 2 extended 2K signal, Input signal source (VGA DVI SDI)or one 4K input signal (can choose DP1.1 HDMI1.4);
- EDID management & customize output resolution, include DP, DVI, HDMI, VGA;
- Rotary output : Splicing after rotary output;
- DP LOOP: 1DP LOOP (for any input signal);
- Time task manager;
- Preview switching;
- Customize output resolution;
- Image crop;
- Built-in graphic card for testing
- Support computer host control;
- USB upgrade;
- Serial port for future developing;
- Low latency (16ms@60HZ);

Operation mode

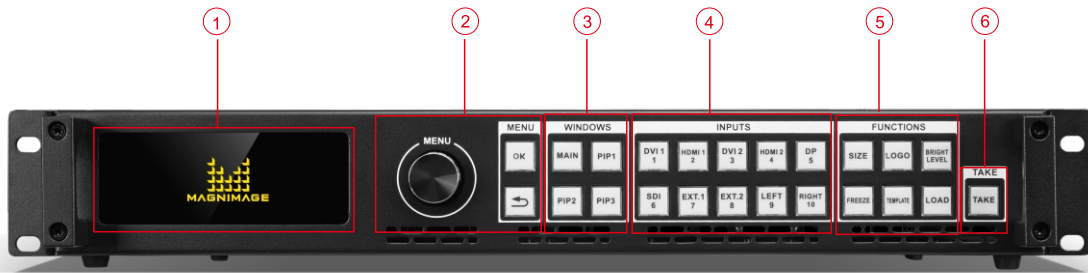2 kinds of operation: computer host control and key control.
Computer host control: connect the computer and processor via LAN or RS232 serial cable or USB. cableControl the processor by computer software.
Key control : control the processor by keys.

Upper computer interface

1-Menu display
Display operation information, in default state, press the "OK" or knob to enter the main menu states which has 16 menu items ,divided into 4 pages.

3-Layer keys
Long press the key to turn on or off the selected layer, short press the keys to select the layer, and select the input signal keys to switch signal.

5-Function shortcut keys
SIZE: Enter the size setting menu quickly;
LOGO: Turn on or off the LOGO;
BRIGHTLEVE: Adjust the brightness level;
FREEZE: Freeze the current image;
TEMPLATE: Enter the built-in temples interface;
LOAD: Enter the presets window, presets are saved by user.

2-Operation keys
The operation keys are used to select and adjust the menu which include "OK" button and the knob. In default state ,press the "OK" button to access the menu. In menu state, it works as confirm key. Return key, return to the previous menu. Rotate knob to select menu items and adjust parameters.
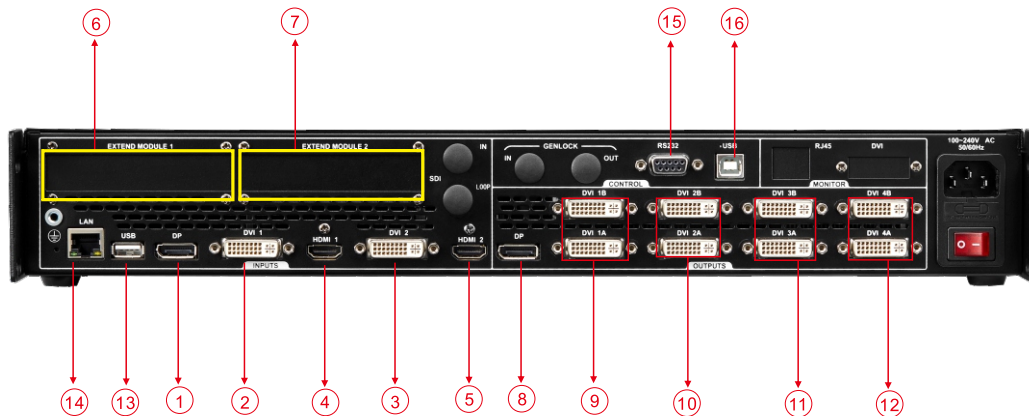
4-Input signal selection keys/number keys
Cooperate with layer keys to switch the input signal; the parameters in the menu can be setup directly by number keys.

6-TAKE function key
In switcher mode, press the "TAKE" key to realize switching between preview & program.

1--DP Input	5--HDMI2 Input	9--DVI1 Output	13--USB upgrade port
2--DVI1 Input	6--Extend module 1	10--DVI2 Output	14--Network host control port
3--DVI2 Input	7--Extend module 2	11--DVI3 Output	15--RS 232 control port
4--HDMI1 Input	8--DP loop	12--DVI4 Output	16--USB control port

Note: The extend module in yellow frame is optional.

Main characteristics and Applications

4 screens splicing in 1 processor

LED 1   LED 2   LED 3   LED 4

Dual DP input


Input signal source（DP、DVI、HDMI、VGA、SDI)
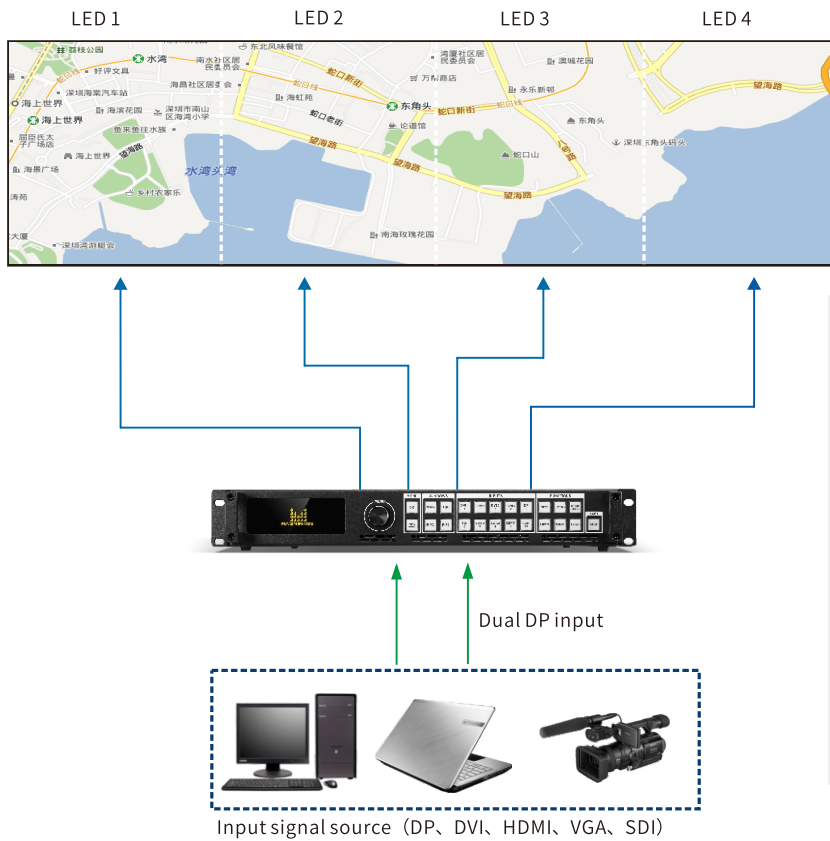
4 screens splicing in 1 processor

Thanks to customize input/ output resolution and superior synchronization, LED-760H can realize multiple input pixel-to-pixel splicing or single input amplification.

Customize input/output resolution

With EDID management, LED-760H can customize the input resolution of DVI, HDMI and DP. There are 18 available fixed resolutions and customize output resolution function. In order to adjust pixel-to pixel display from different size LED walls, user can also set an accurate resolution.
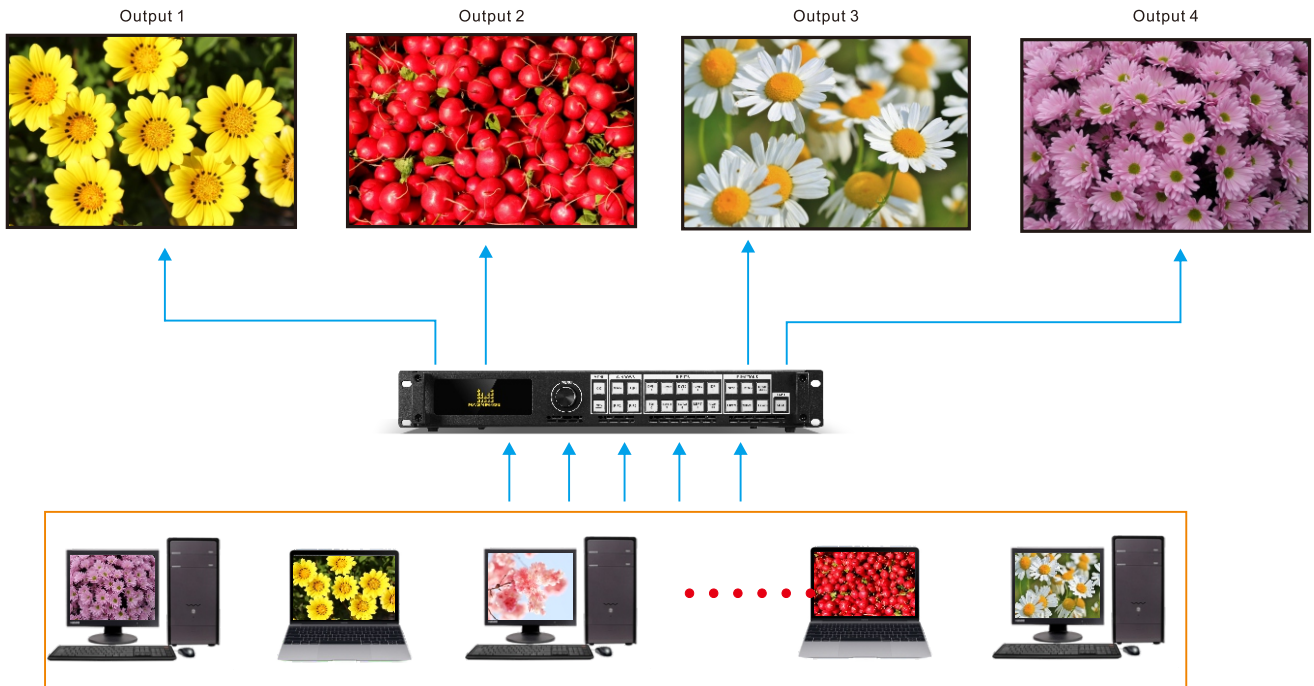
4 screens splicing in 1 processor

LED 1   LED 2

LED 3   LED 4

Input signal source（DP、DVI、HDMI、VGA、SDI)
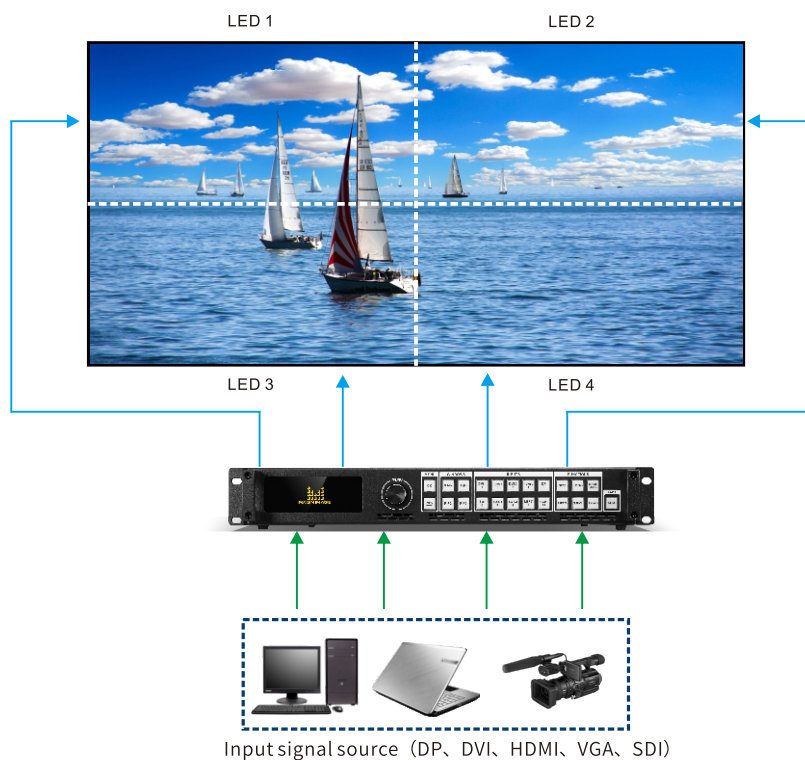
4 screens splicing in 1 processor
Horizontal splicing, vertical splicing, same size splicing, or different size splicing.

4 independent outputs

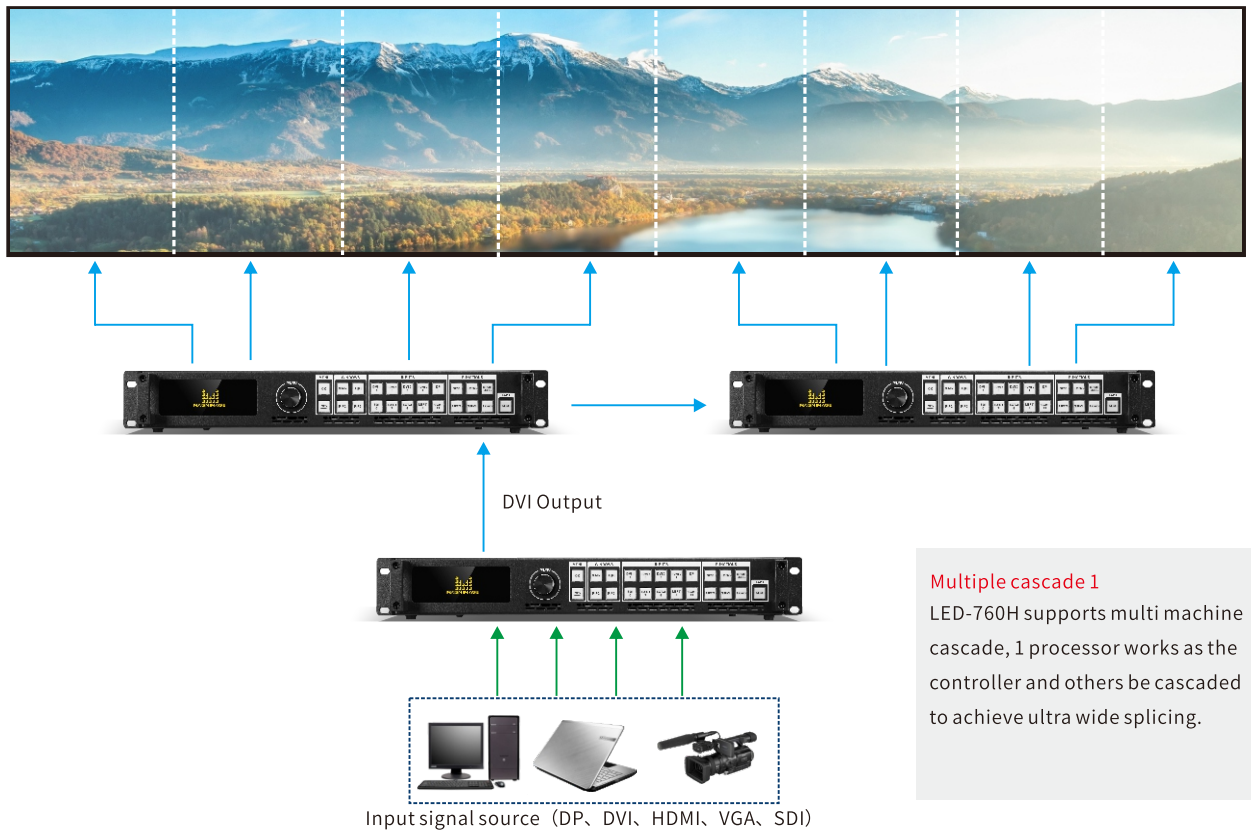| Output 1	Output 2	Output 3	Output 4

4 independent outputs

Maximum 8 inputs, LED-760H can be used as matrix of 8 inputs and 4 outputs. It can also control 4 different screen with independent content. Any input can be quickly switched to any output without black or signal break-off.

Multiple cascade 1

DVI Output

Multiple cascade 1

LED-760H supports multi machine cascade, 1 processor works as the controller and others be cascaded to achieve ultra wide splicing.

Input signal source（DP、DVI、HDMI、VGA、SDI)
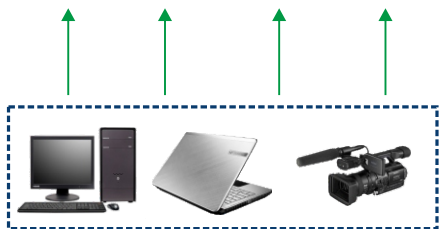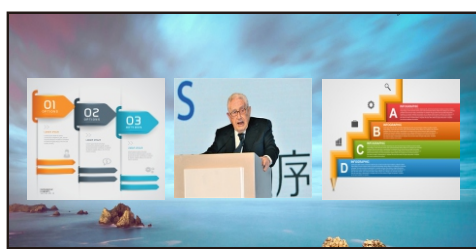
Multiple cascade 2

video server(multiple output for graphics card)

Multiple cascade 2
With the help of graphic card of video server, multiple LED-760Hs are able to realized ultra wide splicing.
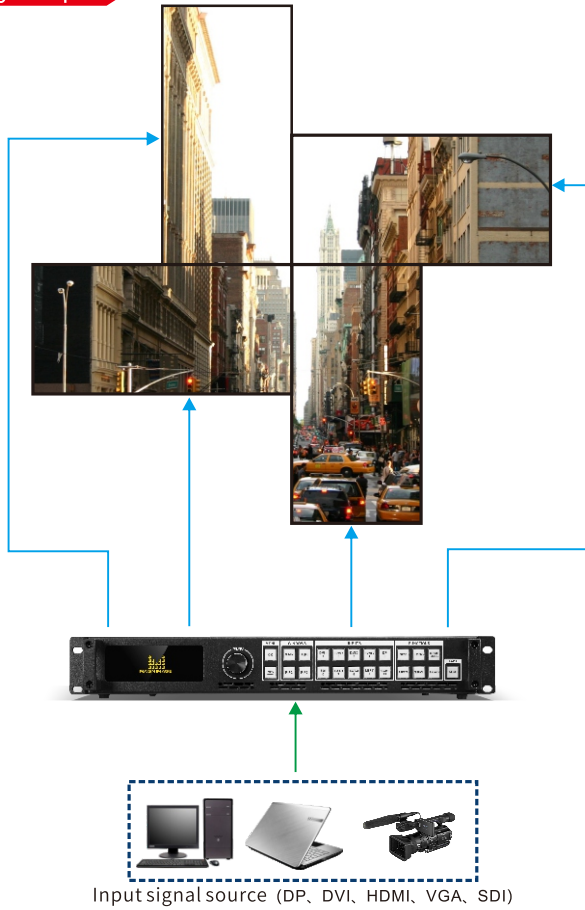
4 layers output

4 layers output
In the non-splicing mode, each port is able to display 4 independent pictures. Input signal, size and position of these 4 pictures can be changed.

Input signal source（DP、DVI、HDMI、VGA、SDI）

4 main outputs of LED-760H can be spliced after rotation. Based on the rotation, the images can also be up-and-down reversed or left-and-right reversed.

Input signal source（DP、DVI、HDMI、VGA、SDI）

Technical Specifications

Input Indication

Port	Quantity	Resolution
DVI	2	VESA standard，165 MHZ bandwidth
DP	1	Displayport1.1，3840×1080/60Hz、3840×2160/30Hz Customized output resolution
HDMI	2	HDMI 1.3

Extend module specification

Mode	Quantity	Resolution
DVI	DVI×1、DVILOOP×1	VESA standard，165 MHZ bandwidth
VGA	VGA×1、VGALOOP×1	VESA standard
SDI	SDI×1、SDILOOP×1	480i/60Hz　576i/50Hz　720p/60Hz　1080i/50Hz/60Hz　　1080p/50Hz/60Hz(3G SDI)
DP1.1	DP×1、DVI×1	3840×1080/60Hz、3840×2160/30Hz Customized output resolution
HDMI1.4	HDMI×1、DVI×1	3840×1080/60Hz、3840×2160/30Hz Customized output resolution

2 extended 2K signal, Input signal source (VGA DVI SDI)or one 4K input signal(can choose DP1.1 HDMI1.4)

Output Indication

Port	Quantity	Resolution(for each DVI output)
DVI	4×2	1024×768/60Hz 1280×1024/60Hz 1024×768/120Hz 1280×720/60Hz 1440×900/60Hz 1600×1200/60Hz 1600×1200/60Hz- Reduced 1680×1050/60Hz 1920×1080/60Hz 1920×1080/50Hz 2176×1168/60Hz 1920×1200/60Hz 1936×1280/60Hz 2048×1152/60Hz 1024×1280/60Hz 1536×1536/60Hz 1280×720/59.94Hz 1920×1080/59.94Hz Customized output resolution : maximum width 3840 or maximum height 2160.
DP Loop	1	Loop out any input signal

Console Specification

Power supply	100~240V AC 50/60Hz
Power consumption	55W
Product dimension	482.6×452×66.75mm
Net Weight	6.0kg