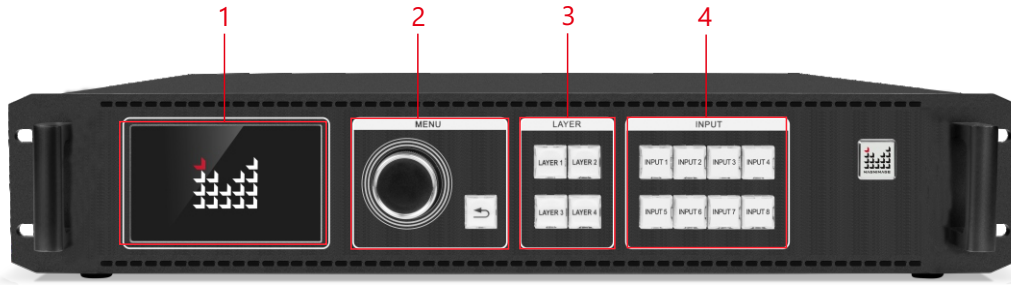# LED-F816-C3D
LED Video Control Server

MAGNIMAGE

LED-F816-C3D is an all-in-one video control server developed by Magnimage for 3D fixed installation. It is equipped with a complete video input interface, including 2×HDMI2.0, 2×DP1.2, 2×DVI, 1×Audio, 12G SDI×1,and its outputs support 16 Gigabit network ports, 2×10G optical fiber inputs/outputs (for signal input or network backup between two devices), 1 HDMI Loop, and 1 HDMI monitor. the loading capability of single port can reach 0.98M pixels(60Hz). The whole machine loading up to 15.68 million pixels, maximum width can be 16380 and maximum height can be 7680, and support customized output resolution.

LED-F816-C3D Support the function of quick light-up screen without computer software connection, greatly simplifying the setting step.
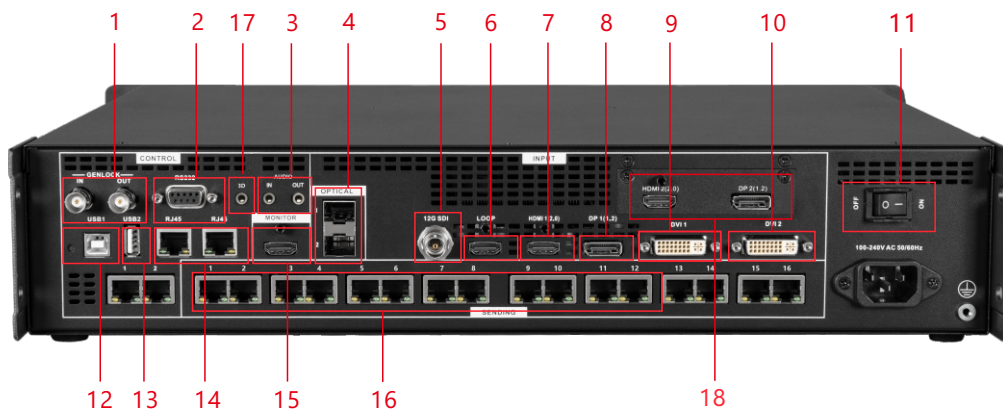
Features

- Quick light-up screen, no need computer software connection
- 16 Gigabit network output ports, and customized output resolution supportive,0.98M pixels per 1G cable
- Input EDID management
- Support 4K*2K/60Hz(HDMI2.0) or 8K*1K(DP1.2) input
- Four layers display, and full-screen roaming
- Support serial number calibration for receiving card
- Save and load preset
- Support multi-input mosaic within single controller and multi-cascade mosaic
- Support network backup within single controller and between several controllers
- Support input backup within single controller
- Seamless switching between input signals and presets
- Support caption
- 4K@60Hz RGB 4:4:4
- Supports 10bit/12bit high color depth video input

- Support local USB flash drive for reading and loading configuration files
- Built-in loop function for RJ45 control port, no need local area network, easy to control for cascade operation
- Customized Input/Output Resolution
- Zoom and image crop
- Support monitor output
- High-level cable connection
- Free cable connection
- Smart sequencing
- Support optical port backup
- Support audio input/output
- Support RS232 and central control
- Support time task function and timed brightness
- Support connection with C-Link series receiving card
- Supports 120Hz continuous 3D display and around 60Hz/up and down 3D display
- Support the local USB flash drive to read and load configuration files

✏ Panel Introduction

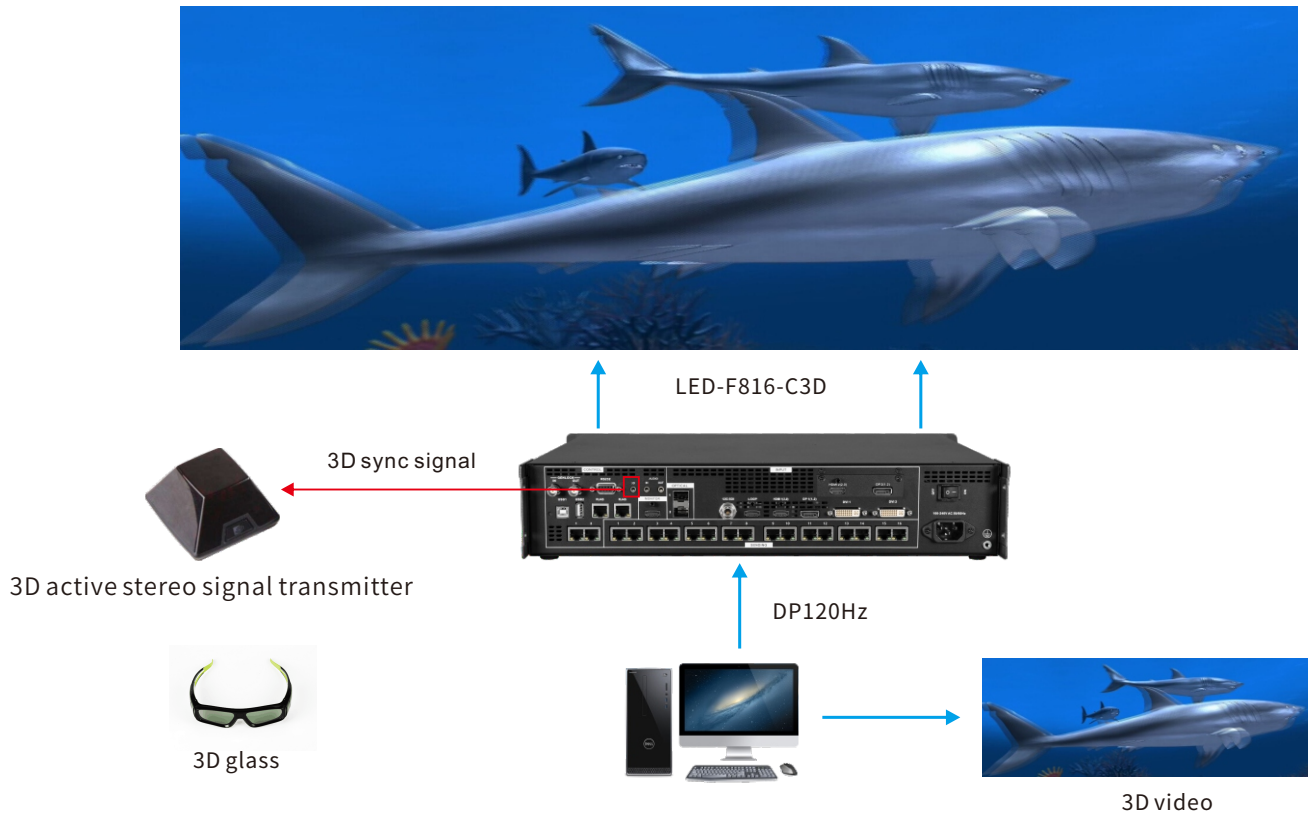| 1 | LCD display | 2 | Knob/Return bottom | 3 | Layer selection bottom | 4 | Input signal selection bottom |

1	Genlock input/output	2	RS232 control port	3	Audio input/output	4	Optical input/output
5	12G SDI input	6	HDMI1（2.0）loop	7	HDMI1（2.0）input	8	DP1（1.2）input
9	DVI1 input	10	DVI2 input	11	Power switch	12	USB（control）
13	USB（Upgrade）	14	RJ45-1+RJ45-2（control）	15	HDMI monitor output	16	16 Gigabit network output port
17	3D Output	18	HDMI2（2.0）+DP2（1.2）				

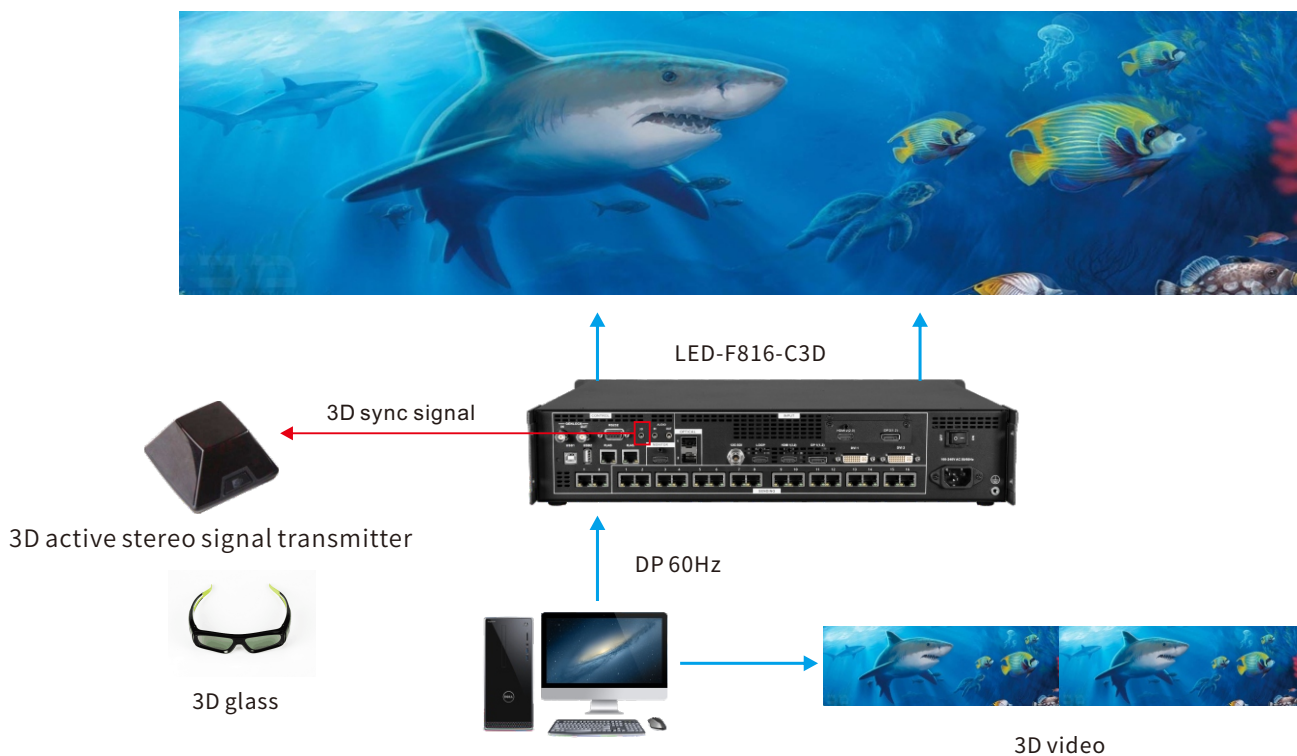# ✎ **Main Features and Characteristics**

⊡ 3D Display-1

With the 3D active stereo signal transmitter, active glasses, and normal receiving card, customers can easily enjoy the continuous, non-flickering, non-ghosting 3D display effect on LED screen with 120Hz.

LED-F816-C3D

3D sync signal

3D active stereo signal transmitter

DP120Hz

3D glass
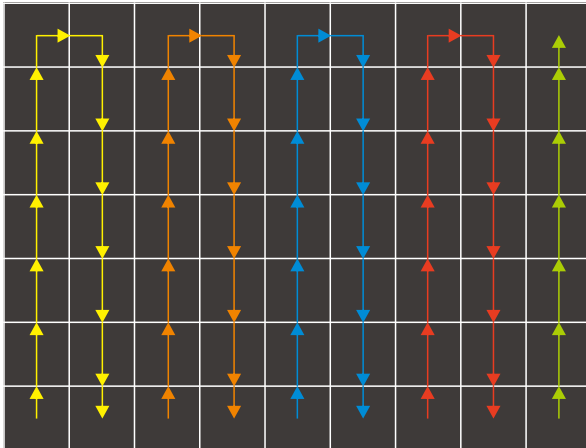
3D video

⊡ 3D Display-2

With the 3D active stereo signal transmitter, active glasses, and normal receiving card, customers can easily enjoy the continuous, non-flickering, non-ghosting 3D display effect on LED screen for left and right or up and down with 60Hz.
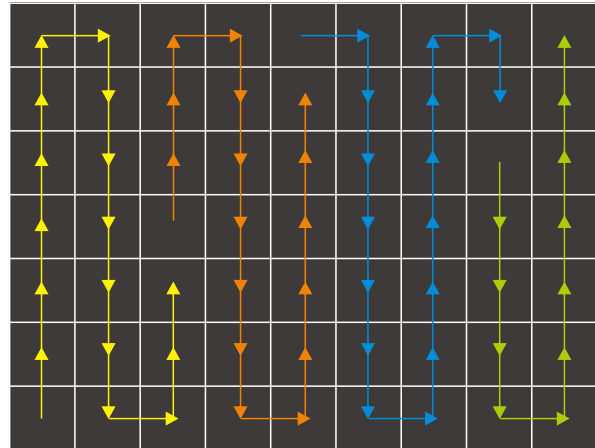
LED-F816-C3D

3D sync signal

3D active stereo signal transmitter

DP 60Hz

3D glass

3D video

◿ Main Features and Characteristics

▢ Free cable connection

Each grid can be used according to the actual number of grid points in the box, and neither folding nor leaving the grid empty takes up the grid area, which is no longer limited to a single grid area that must be a rectangle, thus effectively increasing the utilization rate of the grid port without wasting the performance of the equipment.
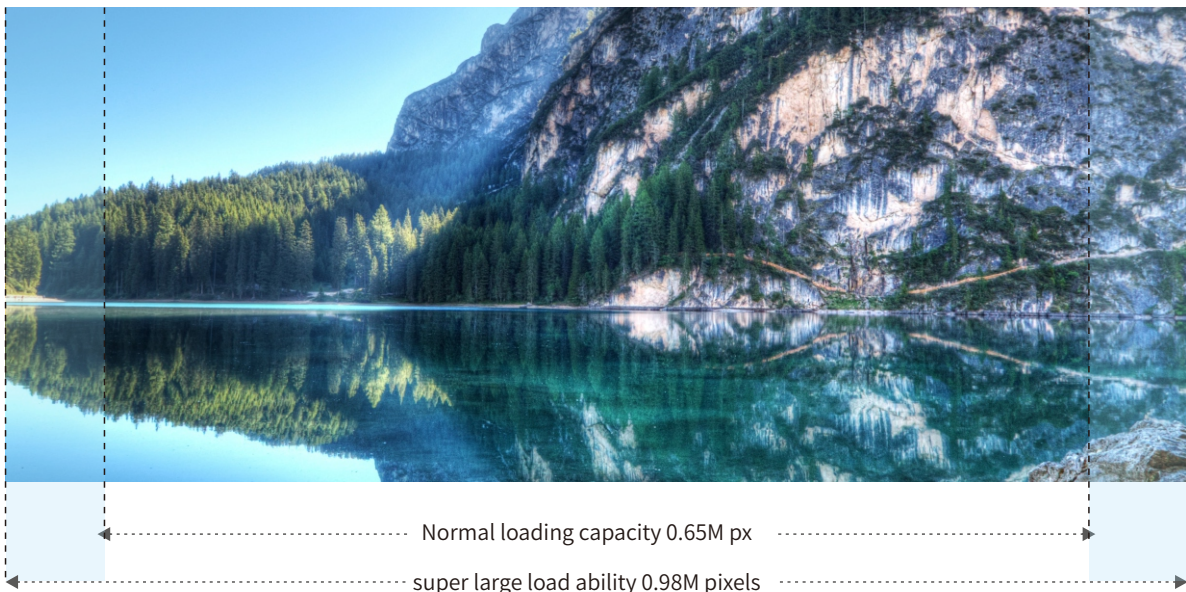

Traditional cable connection
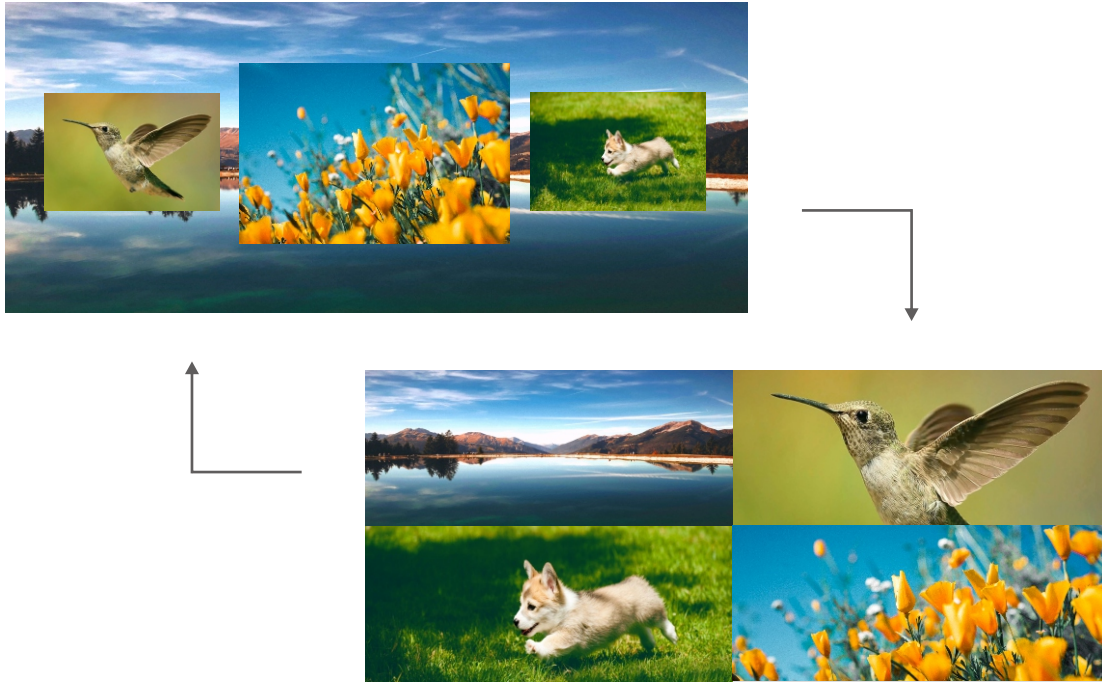

Free cable connection

▢ super large load ability

 Breaking through the tradition with unique super large loading function,the loading capability of single port can reach 0.98M pixels(60Hz).

Normal loading capacity 0.65M px

super large load ability 0.98M pixels

◿ Main Features and Characteristics

▢ 4 layers seamless switching

4 independent layers, freely adjustable; seamless switching between input sources and presets (4 layers to 4 layers); small projects handled at once, only Layer 3 and Layer 4 deinterlacing.

▢ Scrolling caption

Edit text content, size, color, scrolling speed and background color through software.
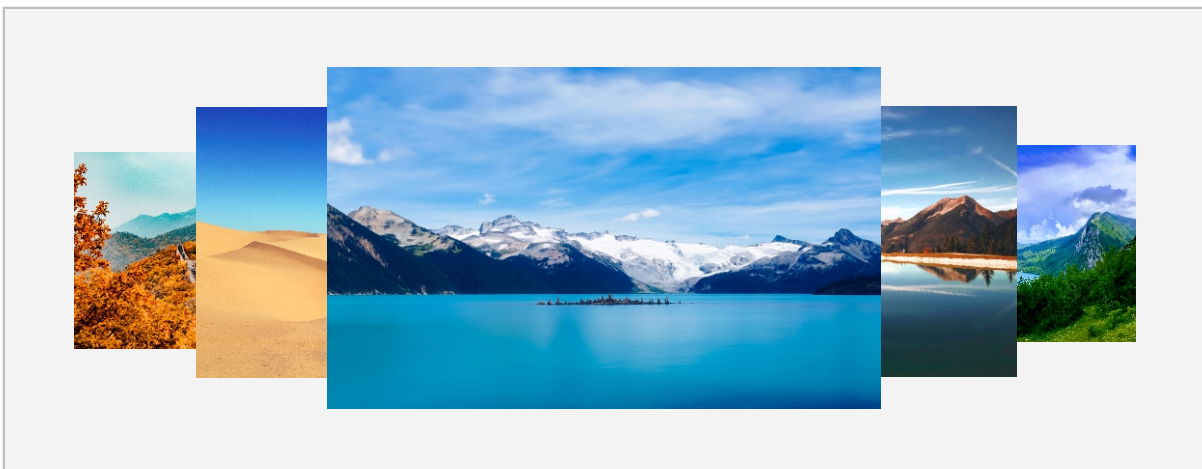
MAGNIMAGE

✒ Main Features and Characteristics

▱ Monitoring the Output

Connecting the external 2K display monitors that monitor the output of the entire machine, this machine help make it easy for the operator to monitor the LED screen display in situations where the LED screen cannot be viewed directly, so that the operator can control the scene without worrying about the content.
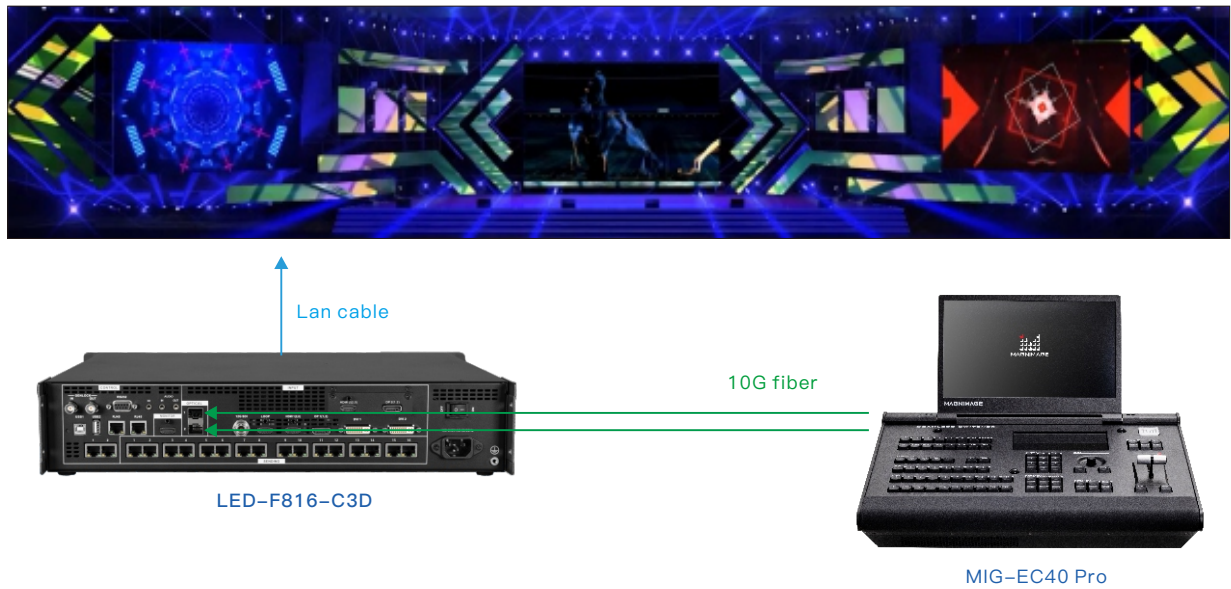

Monitoring screen

▱ Time Task

Supports automatic switching of presets at the set point in time.
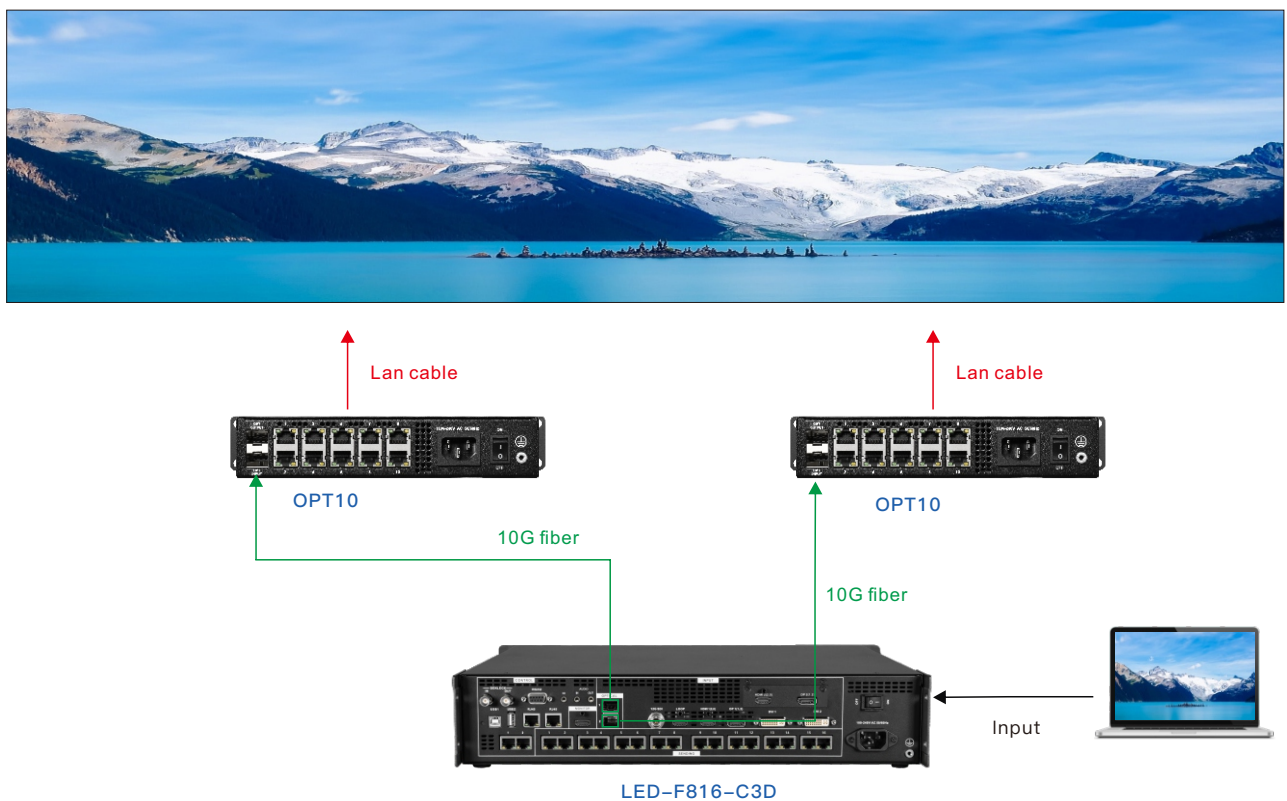
✎ Main Features and Characteristics

⬚ Optical input

MIG-EC40 Pro event console connect with LED-F816-C3D video control server from 10G fiber to solve long distance
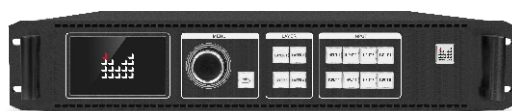

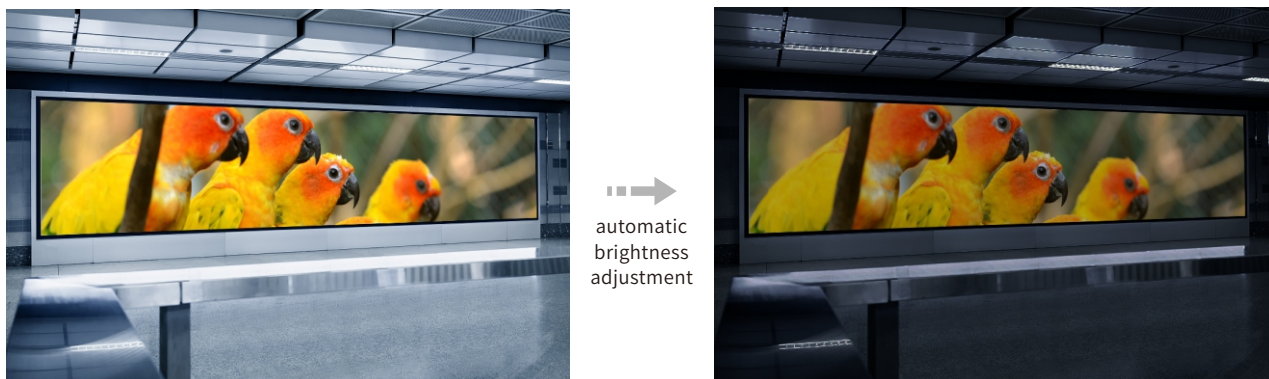Lan cable

10G fiber

LED—F816—C3D

MIG—EC40 Pro

⬚ Optical output

LED-F816-C3D video control server connect with OPT10 fiber converter from 10G fiber to solve long distance transmission。
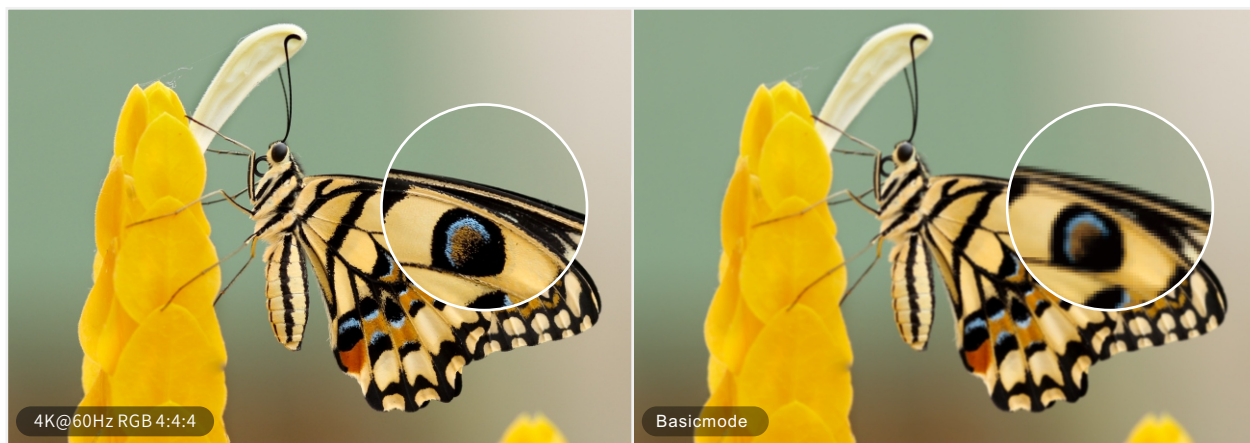

Lan cable

Lan cable

OPT10

OPT10

10G fiber

10G fiber

LED—F816—C3D

Input

◢ **Main Features and Characteristics**

▢ **automatic brightness adjustment**

Support automatic brightness adjustment at the set point in time.

automatic
brightness
adjustment

▢ 4K@60Hz RGB 4:4:4

Input, output and internal processing are all RGB 4:4:4 sampling, which can accurately restore the signal source image details. The image display is clear and delicate. At the same time, there is no frame reducing or losing for the whole channel processing of the controller , so the video is played more smoothly, and the image details are fully displayed。

4K@60Hz RGB 4:4:4

Basicmode

◿ Technical Parameters

Input specification

Port	Quantity	Resolution specification
HDMI2.0	2	3840X2160/60Hz and customized
DVI	2	3840X1080/60Hz and customized
12G SDI	1	2160P/60Hz,Backward compatible (not supported by SD)
DP1.2	2	7680X1080/60Hz、3840X2160/60Hz and customized
OPT	2	For optical port input (Can not be backup or output at the same time)
Genlock (In)	1	

Output specification

Port	Quantity	Resolution specification
Ethernet port (connect receiving card)	16	15.68 million pixels loading for the whole machine, and 0.98 million pixels loading on a single network port，max horizontal 16380px, max vertical 7680 px
HDMI LOOP	1	HDMI Loop, the same with HDMI2.0
HDMI Monitor	1	The output of the whole machine can be monitored,1920×1080/60Hz
OPT	2	Used for optical backup or signal copy output (Can not be optical input at the same time)
Genlock (Out)	1	
3D	1	Connect the 3D signal transmitter

Control port

Port	Quantity	
Square opening USB	1	Connect computer software to control
RJ45	2	For computer software control or multi-cascade control or central control
RS232	1	Use RS232 to central control

Machine Specification

Input Power Voltage	100-240V AC 50/60HZ
Power Consumption	80W
Dimension (L×W×H)	482.6X451.3X88mm
Weight	7.6KG