Colorlight

X100 Pro-11U

Video Splicer

Specification

1 Overview

X100 Pro-11U is Colorlight's brand-new professional video splicer, designed especially for large-screen splicing. It integrates multiple video processing functions such as cropping, scaling, splicing, and multi-screen display. This multipurpose device can serve as a video processor for LCD and DLP splicing screens, or as an LED controller for fine-pitch LED video walls with ultra-high resolution.

With a modular design and robust FPGA architecture, X100 Pro-11U delivers outstanding display effects and efficient video processing capability, ensuring long-term, stable, and safe operation. The modular plug-in design also allows users to flexibly configure input and output boards as needed, greatly satisfying the demands of different scenarios.

In terms of inputs, X100 Pro-11U offers industry-standard ports including HDMI, DP, SDI, DVI, VGA, and CVBS, and supports 1080P HD and 4K resolutions up to 4096×2160@60Hz. As for outputs, it supports both Gigabit Ethernet (GbE) and 10 Gigabit optical fiber outputs, facilitating the smooth display of large and over-distance fine-pitch LED screens. Additionally, DVI and HDMI outputs are available, enabling flexible LCD and DLP applications.

Given its powerful features and superior performance, X100 Pro-11U is suitable for a wide range of applications, such as command and dispatch systems, power system operation and maintenance, party and government conferences, visualization data centers, broadcasting and television, as well as high-end stage rentals.

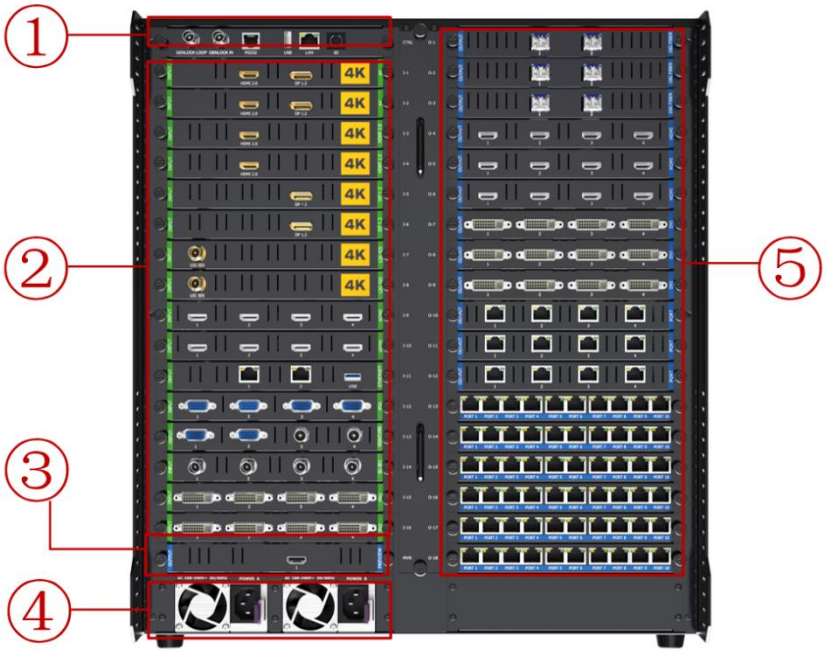
2 Appearance

2.1 Front Panel

No.	Name	Description
1	Touch screen	Displays current device status and allows for parameters configuration and device operation.
2	Power switch	Power on/off the device.

Note: The image shown is for illustration purpose only and may not be an exact representation of the product due to hardware configuration and production process. Please refer to the actual product.

2.2 Rear Panel



No.	Name	Description
1	Main board	• GENLOCK IN: Accept the sync signal; • GENLOCK LOOP: Loop the sync signal; • RS232 serial port; • USB3.0 port; • GbE control port; • 3D port.
2	Input board	Supports 10 types of input boards.
3	Preview and monitoring board	Displays the preview of 1 channel 2K inputs and monitoring of its real-time outputs.
4	Power	AC 100-240V, 50/60Hz, supports dual power supplies redundancy (Backup power supply needs to be purchased separately as an optional accessory.)
5	Output board	Supports 6 types of output boards.

Note: The image shown is for illustration purpose only and may not be an exact representation of the product due to hardware configuration and production process. Please refer to the actual product.

3 Features

Main Board

- GENLOCK IN/LOOP:
  - 1×GENLOCK IN port, for Genlock signal input; supports Bi-Level and Tri-Level sync.
  - 1×GENLOCK LOOP port, for Genlock signal output.
- RS232:
  - 1×RJ11/RS232 serial port (baud rate: 115,200), for connection with a central controller or other devices.
- USB:
  - 1×USB3.0 port, for upgrading the program and image file via a USB drive.
- LAN:
  - 1×RJ45 GbE port, for connection with a control PC for communication.
- 3D:
  - 1×3D VESA port, for 3D sync signal output (Work with active 3D glasses, which needs to be purchased separately as an optional accessory.)

Input

- 10 types of input boards available for flexible configuration:
  - 1×HDMI2.0, supports up to 4096×2160@60Hz input on a single channel.
  - 1×DP1.2, supports up to 4096×2160@60Hz input on a single channel.
  - 1×12G-SDI, supports up to 4096×2160@60Hz input on a single channel.
  - 1×HDMI2.0 + 1×DP1.2 (either-or), supports up to 4096×2160@60Hz input on a single channel.
  - 4×DVI, supports up to 1920×1200@60Hz input on a single channel.
  - 4×HDMI1.4, supports up to 1920×1200@60Hz input on a single channel.
  - 4×VGA, supports up to 1920×1080@60Hz input on a single channel.
  - 2×VGA + 2×CVBS. VGA supports up to 1920×1080@60Hz input on a single channel; CVBS supports PAL/NTSC standard video input.
  - 4×3G-SDI, supports up to 1920×1080@60Hz input on a single channel.
  - 2×RJ45 GbE ports for V_IPX2, supports H.264 and H.265 decoding.

- Total number of input boards on a single device:
  - Maximum number of boards: 16.

Output

- 6 types of output boards available for flexible configuration:
  - 4×HDMI1.4, supports up to 1920×1200@60Hz output on a single channel.
  - 4×DVI, supports up to 1920×1200@60Hz output on a single channel.
  - 1×HDMI2.0, supports up to 4096×2160@60Hz output on a single channel.
  - 10×GbE ports, with a maximum load capacity of 6.55 million pixels output.
  - 2 Channels of 5G Ethernet ports (A single board has four 5G network ports, with 2 main ports and 2 backup ports), with a maximum load capacity of 5.89 million pixels output.
  - 1 Channel of 10G fiber ports (A single board has two 10G fiber ports, with 1 main port and 1 backup port), with a maximum load capacity of 6.55 million pixels output.
- Preview and monitoring:
  - 1×HDMI1.4 port, for previewing inputs and monitoring real-time outputs, with a fixed output of 1920×1080@60Hz.
  - Supports previewing inputs and monitoring real-time outputs via Web-based software.
- Layers limitations:
  - Maximum number: 92×1080P or 23×4K.
  - For OUT1~OUT3, OUT4~OUT6, OUT7~OUT9, OUT10~OUT12, OUT13~OUT15, each screen group supports a maximum of 16 × 1080P or 4 × 4K. For OUT16~OUT18, the screen group supports a maximum of 12×1080p or 3×4K.
- Total number of output boards on a single device:
  - Maximum number of boards: 18.
  - Maximum number of video outputs: 72.
  - Maximum number of GbE output ports: 180×GbE ports, with a maximum load capacity of 117.96 million pixels.
  - Maximum number of 5G Ethernet output ports: 36 main and 36 backup 5G Ethernet ports, with a maximum load capacity of 106.02 million pixels.
  - Maximum number of fiber output ports: 18 main and 18 backup 10G fiber ports, with a maximum load capacity of 117.96 million pixels.

- Limitations on a single device:
  - Load capacity of a single device: 32,767 pixels (maximum width/height).
  - Load capacity of a single layer: 32,767 pixels (maximum width/height). For a single screen, 2K video output board and 4K video output board cannot be used together.

Video Processing

- Number of input signals:
  - Supports 16×4K or 64×1080P simultaneously.
- Multi-window and multi-layer display:
  - Supports window roaming and free splicing.
- Cropping:
  - Supports cropping of the input source. The cropped input source can be used independently as a new input source.
- Scrolling text:
  - Customize text content, and set the font format and size, scrolling direction and speed, background color, etc.
  - Flexible displaying of messages, notifications, slogans, and banners.
- UHD background:
  - Supports uploading high-resolution images for background display, with a maximum width/height of 32,767 pixels.
- Logo management for input:
  - Available for text or image.
- 3D display:
  - Work with a 3D emitter and active 3D glasses (optional accessories) to deliver a 3D visual experience.
- Custom frame rate:
  - Available frame rates: 29.97/30/50/59.94/60/120Hz.
  - Customize any frame rate within 23.98~240Hz.

Color Management

- Independent color adjustment of each input source, enabling adjustments to brightness, color temperature, and RGB gain.
- Independent color adjustment of each Ethernet output, enabling adjustments to brightness, color temperature, RGB gain, contrast, saturation, and brightness

compensation.

- Independent color adjustment of each video output, enabling adjustments to brightness, color temperature, RGB gain, contrast, saturation, and brightness compensation.
- Brightness adjustment on the level of port group: Manage the display brightness independently by group.

Multi-screen Management

- Supports screens grouping management, with up to 6 groups.
- Multiple types of screens, including LED, LCD, DLP, etc.
- Independent setting of scenes, background images, subtitles, color brightness, output frame rate, and other parameters for each group of screens.

Device Control

- Connectable to a PC and central controller via LAN, RS232, etc.
- Supports device access and control from Web using different operating systems (Windows, iOS, Android, Linux); multi-user operation supported.
- App control: Works with Colorlight's Kylin Visualization Intelligent Control Platform.
- Views device information and performs operations on the front panel.
- Manages up to 2000 presets and schedules the tour of presets.

Easy Maintenance

- Upgrades the program and image file via a USB drive or Web-based software.

Stable and Reliable

- Redundancy backup:
  - Supports redundancy backup of Ethernet output ports and fiber output ports on a single device.
  - Supports inter-device redundancy backup.
  - Dual power supplies redundancy (Backup power supply needs to be purchased separately as an optional accessory.)
- Device monitoring:
  - Abnormal temperature alarm, disconnection alert, etc.

4 Certifications

CCC, CE, UKCA, FCC, and IC.

Certifications of CB, cTUVus, EAC, and KC are underway.

Note: If the product does not have the relevant certifications required by the countries or regions where it is to be sold, please contact Colorlight to confirm or address the problem. Otherwise, the customer shall be responsible for the legal risks, or Colorlight has the right to claim compensation.

5 Board Specifications

5.1 Input Board

V4KH1INV5101: 1×HDMI2.0 port

Details

- 1×HDMI Type A port.
- HDMI2.0 standard, compatible with HDMI1.4/1.3.
- A single supports a maximum resolution of 4096×2160@60Hz and a minimum of 800×600@60Hz; the maximum pixel clock is 594MHz.
- 8/10-bit input source.
- Custom resolutions:
  - Maximum width: 8,192 pixels (8192×1080@60Hz, forced by external signal, EDID unavailable).
  - Maximum height: 8,192 pixels (1024 × 8192@60Hz, forced by external signal, EDID unavailable).
- HDR supported.
- Independent EDID settings, using EDID V1.3 standard.
- HDCP2.2 compliant, backward compatible.
- Interlaced signal input not supported.

Technical Specifications

Input	Maximum resolution	Color space	Sampling	Color depth	Frame rate (Hz)
4K	4096×2160	YCbCr	4:2:2	8bit	23.97,24,30, 50,59.94,60
		YCbCr/RGB	4:4:4	8bit	
	3840×2160	YCbCr	4:2:2	8/10bit	
		YCbCr/RGB	4:4:4	8bit	
		YCbCr/RGB	4:4:4	10bit	23.97,24,30,50
2K	1920×1200	YCbCr	4:2:2	8/10bit	23.97,24,30, 50,59.94,60, 100,120,144
		YCbCr/RGB	4:4:4	8/10bit	
	1920×1080	YCbCr	4:2:2	8/10bit	
		YCbCr/RGB	4:4:4	8/10bit	
HD	1280×720	YCbCr	4:2:2	8/10bit	23.97,24,30,50, 59.94,60,100, 120,144,240

Note: Only a part of supported resolutions are listed above.

V4KD1INV5101: 1×DP1.2 port

Details

- 1×DP port.
- DP1.2 standard.
- A single port supports a maximum resolution of 4096×2160@60Hz and a minimum of 800×600@60Hz.
- 8/10-bit input source.
- Custom resolutions:
  - Maximum width: 8,192 pixels (8192×1080@60Hz, forced by external signal, EDID unavailable).
  - Maximum height: 8,192 pixels (1024 × 8192@60Hz, forced by external signal, EDID unavailable).
- HDR supported.
- Independent EDID settings, using EDID V1.3 standard.
- HDCP2.2 compliant, backward compatible.
- Interlaced signal input not supported.

Technical Specifications

Input	Maximum resolution	Color space	Sampling	Color depth	Frame rate (Hz)
4K	4096×2160	YCbCr	4:2:2	8bit	23.98,30,50, 59.94,60
		YCbCr/RGB	4:4:4	8bit	
	3840×2160	YCbCr	4:2:2	8/10bit	
		YCbCr/RGB	4:4:4	8/10bit	
2K	1920×1200	YCbCr	4:2:2	8/10bit	23.97,24,30, 50,59.94,60, 100,120,144
		YCbCr/RGB	4:4:4	8/10bit	
	1920×1080	YCbCr	4:2:2	8/10bit	
		YCbCr/RGB	4:4:4	8/10bit	
HD	1280×720	YCbCr	4:2:2	8/10bit	23.97,24,30, 50,59.94,60, 100,120,144, 240
		YCbCr/RGB	4:4:4	8/10bit	

Note: Only a part of supported resolutions are listed above.

X100IN022: 1×12G-SDI port

Details

- 1×12G-SDI port.
- SMPTE424M/292M standard, supports SD/HD/3G/6G/12G-SDI (Level A/B).
- A single port supports a maximum resolution of 4096 × 2160@60Hz and a minimum of 720×480i@59.94Hz.
- 8/10-bit input source.
- HDR supported.
- EDID settings not supported; different inputs resolution supported.
- Interlaced display supported: 1080i/480i/576i.

Technical Specifications

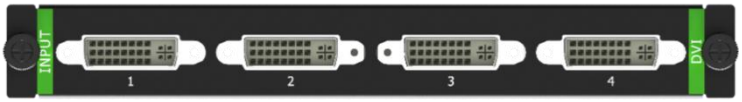
Input	Maximum resolution	Color space	Sampling	Color depth	Frame rate (Hz)
12G	4096×2160	YCbCr	4:2:2	10bit	50,59.94,60
	3840×2160	YCbCr	4:2:2	10bit	
6G	4096×2160	YCbCr	4:2:2	10bit	23.98,24,25, 29.97,30
	3840×2160	YCbCr	4:2:2	10bit	
3G	1920×1080	YCbCr	4:2:2	10bit	50,59.94,60
HD	1920×1080	YCbCr	4:2:2	10bit	23.98,24,25, 29.97,30
	1920×1080i	YCbCr	4:2:2	10bit	50,59.94,60
	1280×720	YCbCr	4:2:2	10bit	23.98,24,25, 29.97,30,50, 59.94,60
SD	720×576i	YCbCr	4:2:2	8bit	50
	720×480i	YCbCr	4:2:2	8bit	59.94

Note: 12G-SDI supports Level A/B. Only a part of supported resolutions are listed above.

V4K2IN1V5101: 1×HDMI2.0 port+1×DP1.2 port	
Details	 • Use either 1×HDMI Type A or 1×DP port, 1×4K@60Hz input. • HDMI2.0 standard, compatible with HDMI1.4/1.3 • DP1.2 standard, compatible with DP1.1. • A single port supports a maximum resolution of 4096 × 2160@60Hz and a minimum of 800×600@60Hz, the maximum pixel clock of the HDMI2.0 port is 594MHz. • 8/10-bit input source. • Custom resolutions: - Maximum width: 8,192 pixels (8192×1080@60Hz, forced by external signal, EDID unavailable). - Maximum height: 8,192 pixels (1024 × 8192@60Hz, forced by external signal, EDID unavailable). • HDR supported. • Independent EDID settings, using EDID V1.3 standard. • HDCP2.2 compliant, backward compatible. • Interlaced signal input not supported.
Technical Specifications	• For HDMI2.0 port, please refer to the XV4KH1INV5101-1×HDMI2.0 port. • For DP1.2 port, please refer to the V4KD1INV5101-1×DP1.2 port.
VIPX2V2001: V_IPX2 port	
Details	 • 2×RJ45 GbE ports; 1×USB3.0 port. • H.264/H.265 decoding supported. • ONVIF, GB28181, RTSP and other protocols supported. • DHCP supported. • Supports firmware upgrades for V_IPX2 decoder cards via a USB drive.
Technical Specifications	8 Channels, 3840×2160@30fps
	18 Channels, 2560×1440@30fps
	32 Channels, 1920×1080@30fps
	64 Channels, 720×576@30fps
	🕮 Note: Only a part of supported resolutions are listed above.

X100IN0011: 4×DVI ports

Details



- 4×SL-DVI-I ports, 4×2K@60Hz inputs.
- A single port supports a maximum resolution of 1920 × 1200@60Hz and a minimum of 800×600@60Hz; the maximum pixel clock is 165MHz.
- 8-bit input source.
- Custom resolutions:
  - Maximum width: 4,096 pixels (4096×512@60Hz, forced by external signal, EDID unavailable).
  - Maximum height: 4,096 pixels (512×4096@60Hz, forced by external signal, EDID unavailable).
- HDR not supported.
- Independent EDID settings, using EDID V1.3 standard.
- HDCP1.4 compliant, backward compatible.
- Interlaced signal input not supported.

Technical Specifications

Input	Maximum resolution	Color space	Sampling	Color depth	Frame rate (Hz)
2K	1920×1200	YCbCr	4:2:2	8bit	23.98,24,30, 50,59.94,60
		YCbCr/RGB	4:4:4	8bit	
	1920×1080	YCbCr	4:2:2	8bit	
		YCbCr/RGB	4:4:4	8bit	

Note: Only a part of supported resolutions are listed above.

X100IN0021: 4×HDMI ports

Details

- 4×HDMI Type A ports, 4×2K@60Hz inputs.
- HDMI1.4 standard, compatible with HDMI1.3.
- A single port supports a maximum resolution of 1920 × 1200@60Hz and a minimum of 800×600@60Hz; the maximum pixel clock is 165MHz.
- 8-bit input source.
- Custom resolutions:
  - Maximum width: 4,096 pixels (4096×512@60Hz, forced by external signal, EDID unavailable).

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<tr><td></td><td>
- Maximum height: 4,096 pixels (512×4096@60Hz, forced by external signal, EDID unavailable).
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<tr><td></td><td>
• HDR not supported.
• Independent EDID settings, using EDID V1.3 standard.
• HDCP1.4 compliant, backward compatible.
• Interlaced signal input not supported.
</td></tr>
<tr><td rowspan="2">Technical Specifications</td><td>
<table>
<tr><th>Input</th><th>Maximum resolution</th><th>Color space</th><th>Sampling</th><th>Color depth</th><th>Frame rate (Hz)</th></tr>
<tr><td rowspan="4">2K</td><td rowspan="2">1920×1200</td><td>YCbCr</td><td>4:2:2</td><td>8bit</td><td rowspan="4">23.98,24,30, 50,59.94,60</td></tr>
<tr><td>YCbCr/RGB</td><td>4:4:4</td><td>8bit</td></tr>
<tr><td rowspan="2">1920×1080</td><td>YCbCr</td><td>4:2:2</td><td>8bit</td></tr>
<tr><td>YCbCr/RGB</td><td>4:4:4</td><td>8bit</td></tr>
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<tr><td>📖 Note: Only a part of supported resolutions are listed above.</td></tr>
<tr><td colspan="2">X100IN018: 4×VGA ports</td></tr>
<tr><td>Details</td><td>


• 4×VGA ports, 4×2K@60Hz inputs.
• A single port supports a maximum resolution of 1920 × 1080@60Hz and a minimum of 640×480@60Hz.
• 8-bit input source.
• Custom resolutions:
- Maximum width: 1,920 pixels (1920×1080@60Hz).
- Maximum height: 1,080 pixels (1080×1920@60Hz).
• HDR not supported.
• Independent EDID settings not supported.
• Interlaced signal input not supported.
</td></tr>
<tr><td rowspan="2">Technical Specifications</td><td>
<table>
<tr><th>Input</th><th>Maximum resolution</th><th>Color space</th><th>Sampling</th><th>Color depth</th><th>Frame rate (Hz)</th></tr>
<tr><td>2K</td><td>1920×1080</td><td>RGB</td><td>4:4:4</td><td>8bit</td><td>59.94,60</td></tr>
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<tr><td>📖 Note: Only a part of supported resolutions are listed above.</td></tr>
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X100IN020: 2×VGA ports+ 2×CVBS ports

Details

- 2×VGA ports, 2×CVBS ports.
- A single VGA port supports a maximum resolution of 1920×1080@60Hz and a minimum of 640×480@60Hz.
  - Maximum width: 1,920 pixels (1920×1080@60Hz).
  - Maximum height: 1,080 pixels (1080×1920@60Hz).
- A single CVBS port supports PAL/NTSC video standard .
- 8-bit input source.
- HDR not supported.
- Independent EDID settings not supported.
- Interlaced signal input not supported.

Technical Specifications

Input	Maximum resolution	Color space	Sampling	Color depth	Frame rate (Hz)
SD	720×576i	YCbCr	4:2:2	8bit	50
	720×480i	YCbCr	4:2:2	8bit	59.94

Note: Only a part of resolutions supported by CVBS ports are listed above. For VGA ports, please refer to the X100IN018: 4×VGA ports.

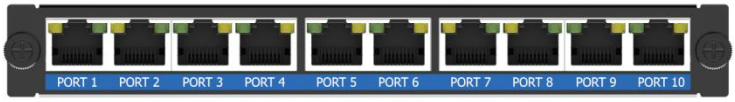
X100IN004: 4×SDI ports

Details

- 4×3G-SDI ports, 4×2K@60Hz inputs.
- A single port supports up to 1920×1080@60Hz.
- SMPTE424M/292M standard, supports SD-SDI/HD-SDI/3G-SDI (Level A/B).
- 8/10-bit input source.
- HDR supported.
- Interlaced display supported: 1080i/480i/576i.
- EDID settings not supported; different input resolutions supported.

Technical Specifications	Input	Maximum resolution	Color space	Sampling	Color depth	Frame rate (Hz)
	3G	1920×1080	YCbCr	4:2:2	10bit	50,59.94,60
	HD	1920×1080	YCbCr	4:2:2	10bit	23.98,24,25, 29.97,30
		1920×1080i	YCbCr	4:2:2	10bit	50,59.94,60
		1280×720	YCbCr	4:2:2	10bit	23.98,24,25, 29.97,30,50, 59.94,60
	SD	720×576i	YCbCr	4:2:2	8bit	50
		720×480i	YCbCr	4:2:2	8bit	59.94
	🕮 Note: 3G-SDI supports Level A/B. Only a part of supported resolutions are listed above.					

5.2 Output Board

X100OUT04: 10×Ethernet ports	
Details	 • 10×RJ45 GbE ports; a single board supports up to 6.55 million pixels. • Load capacity of a single board: - 8bit@60Hz: 6.55 million pixels; 10bit@60Hz: 4.91 million pixels - 8bit@120Hz: 3.27 million pixels; 10bit@120Hz: 2.45 million pixels - 8bit@240Hz: 1.63 million pixels; 10bit@240Hz: 1.22 million pixels • Load capacity of a single Ethernet port: - 8bit@60Hz: 0.65 million pixels; 10bit@60Hz: 0.49 million pixels - 8bit@120Hz: 0.32 million pixels; 10bit@120Hz: 0.24 million pixels - 8bit@240Hz: 0.16 million pixels; 10bit@240Hz: 0.12 million pixels • The output image of each port can be set freely within the device control range. • Indicator status (2 indicators per port): - Power indicator steady on: normal power supply. - Data indicator blinking: normal signal output.

X100PROV1001: 2×5G Ethernet ports+ 2×5G backup Ethernet ports

Details

- 2 Channels of 5G Ethernet ports (A single board has four 5G network ports, with 2 main ports and 2 backup ports), with a maximum load capacity of 5.89 million pixels per port.
- Work with CAT6A shielded cables, with a transmission distance of 100m.
- Automatic backup, no configuration required. Ports 1&2 serve as the main output ports, while Port 3 automatically backs up the data from Port 1, and Port 4 automatically backs up the data from Port 2.
- Load capacity of a single board:
  - 60Hz output, 8-bit: 5.89 million pixels, 10-bit: 4.42 million pixels.
  - 120Hz output, 8-bit: 2.94 million pixels, 10-bit: 2.21 million pixels.
  - 240Hz output, 8-bit: 1.47 million pixels, 10-bit: 1.10 million pixels.
- Load capacity of a single Ethernet port:
  - 60Hz output, 8-bit:: 2.94 million pixels, 10-bit: 2.21 million pixels.
  - 120Hz output, 8-bit: 1.47 million pixels, 10-bit: 1.10 million pixels.
  - 240Hz output, 8-bit: 0.73 million pixels, 10-bit: 0.55 million pixels.
- The output image of each port can be set freely within the device control range
- Indicator status (2 indicators per port):
  - Power indicator steady on: normal power supply.
  - Data indicator blinking: normal signal output.

X100OUT05: 1×fiber port + 1×backup fiber port

Details

- 1×10G fiber port (A single board has two 10G fiber ports, with 1 main port and 1 backup port).
- Work with a dedicated optical fiber transceiver. Each fiber port can be converted to 10×GbE ports.
- By default, this board provides dual-core LC interface, a transmission distance of 2km, and a wavelength of 1310nm. It can also work with other optical modules (optional accessories).
- Automatic backup, no configuration required. Port 1 serves as the main output port and port 2 as the backup port which copies and backs up the data

of port 1 automatically.

- Load capacity of port 1:
  - 8bit@60Hz: 6.55 million pixels; 10bit@60Hz: 4.91 million pixels
  - 8bit@120Hz: 3.27 million pixels; 10bit@120Hz: 2.45 million pixels
  - 8bit@240Hz: 1.63 million pixels; 10bit@240Hz: 1.22 million pixels
- The output image of port 1 can be set freely within the device control range.

X100OUT18: 1×HDMI2.0 port

Details

- 1×HDMI2.0 port, 1×4K@60Hz input.
- A single board supports a maximum resolution of 4096×2160@60Hz and a minimum of 800×600@60Hz.
- Custom resolutions:
  - Maximum width: 8,192 pixels (8192×1080@60Hz).
  - Maximum height: 8,188 pixels (1024×8188@60Hz).
- 8/10-bit output supported.
- The output image of each port can be set freely within the device control range.
- RGB4:4:4/YCbCr4:2:2 output supported.

Technical Specifications

Output	Resolution	Color space	Sampling	Color depth	Frame rate (Hz)
4K	4096×2160	RGB	4:4:4	8bit	30,59.94,60
	3840×2160	RGB	4:4:4	8bit	30,59.94,60
2K	1920×1200	RGB	4:4:4	8bit	30,59.94,60,100,119,120,144
	1920×1080	RGB	4:4:4	10bit	30,59.94,60,100,119,120,144
Other		YCbCr	4:2:2	10bit	30,59.94,60,100,119,120,144

Note: Only a part of supported resolutions are listed above.

X100OUT01: 4×DVI ports

Details

- 4×DVI ports, 4×2K@60Hz inputs.
- A single port supports a maximum resolution of 1920 × 1200@60Hz and a minimum of 800×600@60Hz.
- Custom resolutions:
  - Maximum width: 4,096 pixels (4096×512@60Hz).
  - Maximum height: 4,096 pixels (512×4096@60Hz).
- The output image of each port can be set freely within the device control range.
- 8bit, RGB4:4:4 output by default.

Technical Specifications

Output	Maximum resolution	Color space	Sampling	Color depth	Frame rate (Hz)
2K	1920×1200	RGB	4:4:4	8bit	29.97,59.94,30, 50,60
	1920×1080	RGB	4:4:4	8bit	29.97,59.94,30, 50,60

Note: Only a part of supported resolutions are listed above.

X100OUT02: 4×HDMI ports

Details

- 4×HDMI1.4 ports, 4×2K@60Hz inputs.
- A single port supports a maximum resolution of 1920 × 1200@60Hz and a minimum of 800×600@60Hz.
- Custom resolutions:
  - Maximum width: 4,096 pixels (4096×512@60Hz).
  - Maximum height: 4,096 pixels (512×4096@60Hz).
- The output image of each port can be set freely within the device control range.
- 8bit, RGB4:4:4 output by default.

	Output	Maximum resolution	Color space	Sampling	Color depth	Frame rate (Hz)
Technical Specifications	2K	1920×1200	RGB	4:4:4	8bit	29.97,59.94,30, 50,60
		1920×1080	RGB	4:4:4	8bit	29.97,59.94,30, 50,60
	Note: Only a part of supported resolutions are listed above.					

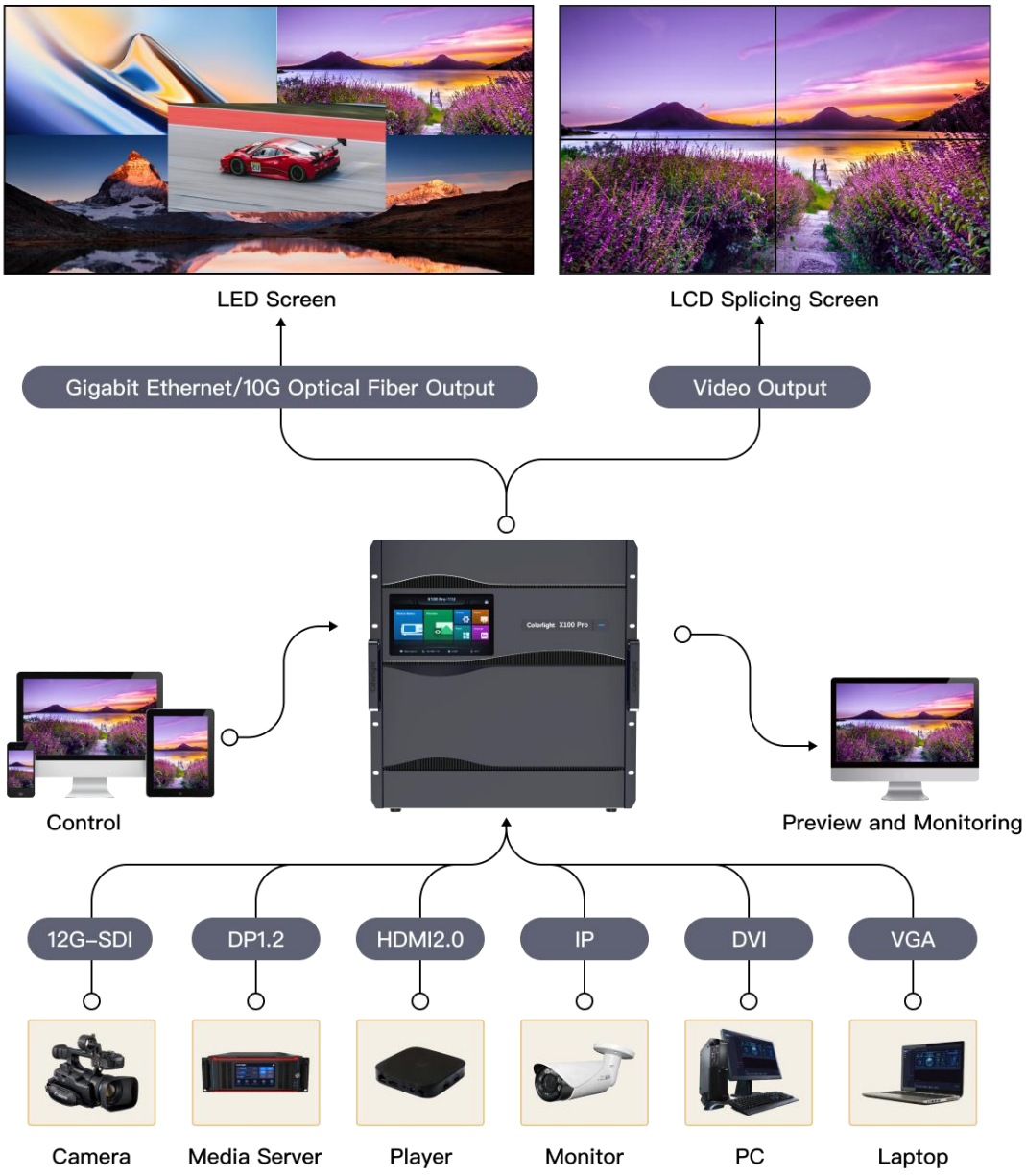
5.3 Preview and Monitoring Board

X100PROV2001: Preview and monitoring board	
Details	 • 1 × HDMI1.4 port, for previewing inputs and monitoring real-time outputs, with a fixed output of 1920×1080@60Hz. • Supports using web-based software to preview and monitor all inputs.

5.4 Main Board

VMBRK39V2001: Main board	
Details	 • 1×GENLOCK IN port, for Genlock signal input; supports Bi-Level and Tri-Level sync. • 1×GENLOCK LOOP port, for Genlock signal output. • 1×RJ11/RS232 serial port (baud rate: 115,200), for connection with a central controller or other devices. • 1×USB3.0 port, for upgrading the program and image file via a USB drive. • 1×RJ45 GbE port, for connection with a control PC for communication; for connection with a router, switch, or PC; for Web control. • 1 × 3D VESA port, work with a 3D emitter and active 3D glasses (optional accessories).

6 Applications

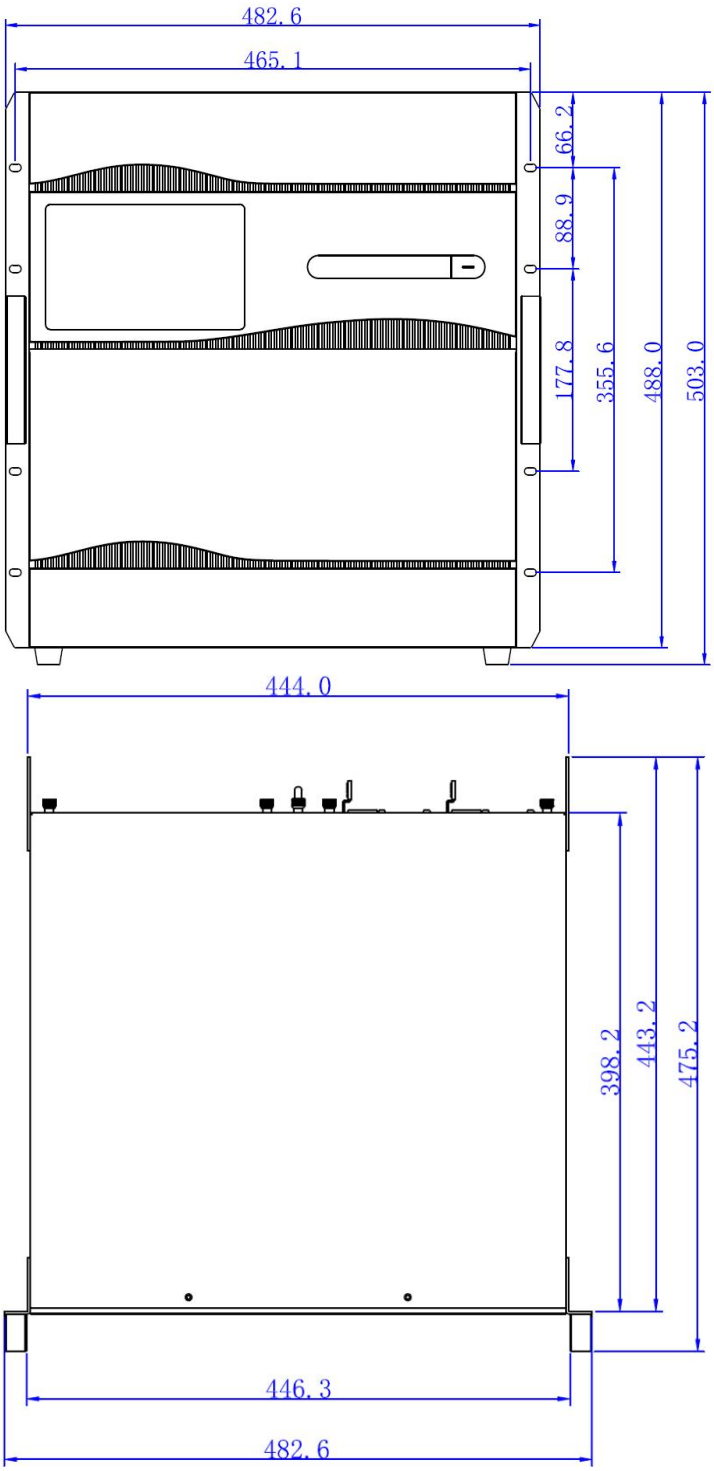


Note: The image shown is for illustration purpose only. Please refer to the actual product.

7 Device Specifications

Dimensions（W×H×D）	
Device	482.6mm (19.0")×488.0mm (19.2")×475.2.mm (18.7") (not including rubber feet)
Packing	655.0mm (25.8")×660.0mm (26.0")×620.0mm (24.4")
Weight	
Net	38.0kg (83.78lbs)
Gross	54.0kg (119.05lbs)
Electrical parameters	
Power supply	AC100-240V~, 50 / 60Hz, supports dual power supplies redundancy (Backup power supply needs to be purchased separately as an optional accessory.)
Rated power	400W, with an average power of 10W per board
Operating environment	
Temperature	10°C~45°C(50°F~113°F)
Humidity	0%RH-85%RH, non-condensing
Storage environment	
Temperature	-10°C~60°C(14°F~140°F)
Humidity	0%RH-95%RH, non-condensing
Placement conditions	
This device can only be placed horizontally. Do not place vertically or upside-down.	

8 Reference Dimensions



Unit: mm

Statement

Due to possible changes in product batches and production processes, the text and pictures in the document may be adjusted and revised to match accurate product information, specifications, and features. Colorlight may make improvements and changes to this document without prior notice. Please refer to the actual product.

Thank you for choosing Colorlight Cloud Tech Ltd product. If you have any questions or suggestions during use, please contact us through official channels. We will do our utmost to provide support and listen to your valuable suggestions. For more information and updates, please visit www.colorlightinside.com or scan the QR code.

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