X100 Pro-7U

Video Splicer

Specification V1.3

1 Overview

X100 Pro-7U is Colorlight's brand-new professional video splicer, designed especially for large splicing screens. It integrates multiple video processing functions, such as cropping, scaling, splicing, and multi-screen display. This multipurpose device can serve as a processor for LCD and DLP splicing screens or as a controller for fine-pitch LED video walls with ultra-high resolution.

With a modular design and robust FPGA architecture, X100 Pro-7U 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-7U offers industry-standard ports including HDMI, DP, SDI, DVI, VGA, CVBS, and IP, and supports 1080P HD and 4K resolution of 4096×2160@60Hz. As for outputs, it supports both Gigabit Ethernet (GbE) and 10 Gigabit optical fiber outputs, facilitating the smooth display of fine-pitch LED screens at large scales and over long distances. Additionally, DVI and HDMI outputs are available, enabling flexible LCD and DLP applications.

Given its powerful features and superior performance, X100 Pro-7U 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	Power	AC 100-240V, 50/60Hz, supports dual power supplies redundancy (Backup power supply needs to be purchased separately as an optional accessory.)
2	Main board	• GENLOCK IN: Accepts the sync signal; • GENLOCK LOOP: Loops the sync signal; • RS232 serial port; • USB 3.0 port; • GbE control port; • 3D port.
3	Input board	Supports 10 types of input boards.
4	Output board	Supports 7 types of output boards.
5	Preview and monitoring board	Displays the preview of 1 channel of 2K input and monitoring of its real-time output.

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×USB 3.0 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 a 3D emitter and 3D glasses, both of which need to be purchased separately as optional accessories.)

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 video 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 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: 8.
  - Maximum number of input windows: 64.

Output

- 7 types of output boards available for flexible configuration:
  - 1×HDMI2.0, supports up to 4096×2160@60Hz output on a single channel.
  - 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.
  - 8×GbE ports, with a maximum load capacity of 5.24 million pixels output.
  - 10×GbE ports, with a maximum load capacity of 6.55 million pixels output.
  - 4×5G Ethernet ports (2 main and 2 backup), with a maximum load capacity of 5.89 million pixels output.
  - 2×10G fiber ports (1 main and 1 backup), 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.
- Total number of output boards on a single device:
  - Maximum number of boards: 8.
  - Maximum number of video outputs: 32.
  - Maximum number of GbE output ports: 80×GbE ports, with a maximum load capacity of 52.42 million pixels.
  - Maximum number of 5G Ethernet output ports: 16 main and 16 backup 5G Ethernet ports, with a maximum load capacity of 47.18 million pixels.
  - Maximum number of fiber output ports: 8 main and 8 backup 10G fiber ports, with a maximum load capacity of 52.42 million pixels.
- Limitations on a single device:
  - Maximum load capacity of a single device: 73,728,000 pixels .
  - Maximum width/height load capacity of a single device or a single layer: 32,767 pixels (maximum width/height).
  - Limitations on Using Different Types of Boards: 4K and 2K output boards can be used together (special firmware required).

Video Processing

- Number of input signals:
  - Supports 8×4K or 32×1080P simultaneously.
- Multi-window and multi-layer display:
  - Supports window roaming and free splicing.
- Cropping:
  - Supports cropping of the input source. The cropped source can be used independently as a new input source.
- Scrolling text:
  - Supports customizing text content, and setting 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.
- HDR:
  - Supports HDR10, compliant with SMPTE ST 2086/2084 standards.
  - Supports HLG.
- 3D display:
  - Works 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.
  - Supports customizing any frame rate within 23.98~240Hz.

Color Management

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

- Brightness adjustment on the level of port group, enabling independent management of display brightness for each group.

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.
- Accesses device information and performs operations on the front panel.
- Manages up to 2,000 presets and schedules the preset tours.

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, EAC, and IC.

Certifications of CB, cTUVus, and KC are underway.

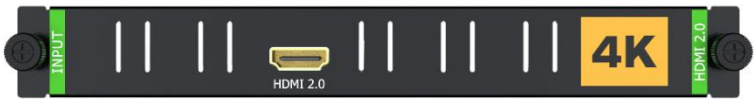
🕮 Note: If the product does not have the relevant certifications required by the countries or regions where it is to be sold, please contact Colorlight to confirm or address the problem. Otherwise, the customer shall be responsible for the legal risks, or Colorlight has the right to claim compensation.

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 port supports a maximum resolution of 4096×2160@60Hz and a minimum of 800×600@60Hz; the maximum pixel clock is 594MHz.
- 8/10/12-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, adopting EDID V1.3 standard.
- HDCP2.2 compliant, backward compatible.
- Interlaced input not supported.

Technical Specifications

Input	Maximum resolution	Color space	Sampling	Color depth	Frame rate (Hz)
4K	4096×2160	YCbCr/RGB	4:4:4	12bit	23.98, 24, 30
		YCbCr	4:2:2	8bit	23.98, 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	23.98, 24, 30, 50
2K	2560×1440	YCbCr/RGB	4:4:4	12bit	23.98, 24, 30, 50, 59.94, 60
	1920×1200	YCbCr	4:2:2	8/10bit	23.98, 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	
	1920×1080	YCbCr/RGB	4:4:4	12bit	23.98, 24, 30, 50, 59.94, 60, 100, 120
HD	1280×720	YCbCr	4:2:2	8/10bit	23.98, 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.

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 800x600@60Hz.
- 8/10/12-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, adopting EDID V1.3 standard.
- HDCP2.2 compliant, backward compatible.
- Interlaced input not supported.

Technical Specifications

Input	Maximum resolution	Color space	Sampling	Color depth	Frame rate (Hz)
4K	4096×2160	YCbCr/RGB	4:4:4	12bit	23.98, 24, 30
		YCbCr	4:2:2	8/12bit	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	2560×1440	YCbCr/RGB	4:4:4	12bit	23.98, 24, 30, 50, 59.94, 60
	1920×1200	YCbCr	4:2:2	8/10bit	23.98, 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	

		1920×1080	YCbCr/RGB	4:4:4	12bit	23.98, 24, 30, 50, 59.94, 60, 100, 120
	HD	1280×720	YCbCr	4:2:2	8/10bit	23.98, 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.
- Interlaced input supported: 1080i/ 576i/ 480i.

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	1920×1080p	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 for HDMI2.0 port is 594MHz. • 8/10/12-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, adopting EDID V1.3 standard. • HDCP2.2 compliant, backward compatible. • Interlaced 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.
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). • Independent EDID settings, adopting EDID V1.3 standard. • HDCP1.4 compliant, backward compatible. • Interlaced input not supported.

	Input	Maximum resolution	Color space	Sampling	Color depth	Frame rate (Hz)
Technical Specifications	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).
  - Maximum height: 4,096 pixels (512×4096@60Hz, forced by external signal, EDID unavailable).
- Independent EDID settings, adopting EDID V1.3 standard.
- HDCP1.4 compliant, backward compatible.
- Interlaced input not supported.

	Input	Maximum resolution	Color space	Sampling	Color depth	Frame rate (Hz)
Technical Specifications	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.					

X100IN018: 4×VGA ports

Details

- 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).

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

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.

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.					

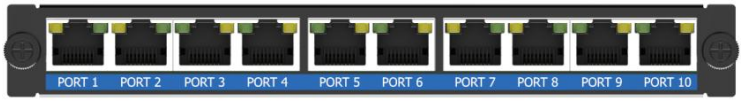
X100IN004: 4×SDI ports

Details

- 4×3G-SDI ports, 4×2K@60Hz inputs.
- A single port supports a maximum resolution of 1920x1080@60Hz.
- SMPTE424M/292M standard, supports SD-SDI/HD-SDI/3G-SDI (Level A/B).
- 8/10-bit input source.
- EDID settings not supported; different input resolutions supported.
- Interlaced input supported: 1080i/480i/576i.

Technical Specifications	Input	Resolution	Color space	Sampling	Color depth	Frame rate (Hz)
	3G	1920×1080	YCbCr	4:2:2	10bit	50, 59.94, 60
	HD	1920×1080p	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 port supports Level A/B. Only a part of supported resolutions are listed above.					
VIPX2V2001: V_IPX2 ports						
Details	 • 2×RJ45 GbE ports; 1×USB 3.0 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.					

5.2 Output Board

X1000UT03: 8×Ethernet ports	
Details	 • 8×RJ45 GbE ports; a single board supports up to 5.24 million pixels. • Load capacity of a single board: – 8bit@60Hz: 5.24 million pixels; 10bit@60Hz: 3.93 million pixels – 8bit@120Hz: 2.62 million pixels; 10bit@120Hz: 1.96 million pixels – 8bit@240Hz: 1.31 million pixels; 10bit@240Hz: 0.98 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): – Steady on (power indicator): Normal power supply. – Blinking (data indicator): Normal signal output.
X1000UT04: 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): – Steady on (power indicator): Normal power supply. – Blinking (data indicator): Normal signal output.

X100PROV1001: 4×5G Ethernet ports

Details

- 4 Channels of 5G Ethernet ports (2 main and 2 backup), 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 data from port 1, and port 4 automatically backs up data from port 2.
- Load capacity of a single board:
  - 8bit@60Hz: 5.89 million pixels; 10bit@60Hz: 4.42 million pixels
  - 8bit@120Hz: 2.94 million pixels; 10bit@120Hz: 2.21 million pixels
  - 8bit@240Hz: 1.47 million pixels; 10bit@240Hz: 1.10 million pixels
- Load capacity of a single Ethernet port:
  - 8bit@60Hz: 2.94 million pixels; 10bit@60Hz: 2.21 million pixels
  - 8bit@120Hz: 1.47 million pixels; 10bit@120Hz: 1.10 million pixels
  - 8bit@240Hz: 0.73 million pixels; 10bit@240Hz: 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):
  - Steady on (power indicator): Normal power supply.
  - Blinking (data indicator): Normal signal output.

X1000UT05: 2×fiber ports

Details

- 2×10G fiber ports (1 main and 1 backup).
- Works 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, with a transmission distance of 2km, and a wavelength of 1,310nm. 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 backs up data from 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.

X1000UT18: HDMI2.0 port

Details

- 1×HDMI2.0 port, 1×4K@60Hz output.
- A single board supports a maximum resolution of 4096×2160@60Hz and a minimum of 800×600@60Hz.
- Custom output 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.
- RGB 4:4:4/YCbCr 4:2:2 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	
2K	1920×1200	RGB	4:4:4	8bit	30, 59.94, 60, 100, 119, 120, 144
	1920×1080	RGB	4:4:4	10bit	
Others		YCbCr	4:2:2	10bit	30, 59.94, 60, 100, 119, 120, 144

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

X1000UT01: 4×DVI ports

Details

- 4×DVI ports, 4×2K@60Hz outputs.
- A single port supports a maximum resolution of 1920×1200@60Hz and a minimum of 800×600@60Hz.
- Custom output 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.
- 8-bit, RGB 4:4:4 output by default.

Technical

Output	Maximum resolution	Color space	Sampling	Color depth	Frame rate (Hz)

Specifications	2K	1920x1200	RGB	4:4:4	8bit	29.97, 59.94, 30, 50, 60
		1920x1080	RGB	4:4:4	8bit	29.97, 59.94, 30, 50, 60
	🕮 Note: Only a part of supported resolutions are listed above.					

X1000UT02: 4×HDMI ports

Details

- 4×HDMI1.4 ports, 4×2K@60Hz outputs.
- A single port supports a maximum resolution of 1920×1200@60Hz and a minimum of 800×600@60Hz.
- Custom output 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.
- 8-bit, RGB 4:4:4 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.					

5.3 Preview and Monitoring Board

X100PROV2001: Preview and monitoring board

Details

- 1×HDMI1.4 port, for previewing inputs and monitoring outputs, with a fixed output of 1920×1080@60Hz.
- Supports previewing inputs and monitoring outputs via web-based software.

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×USB 3.0 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).

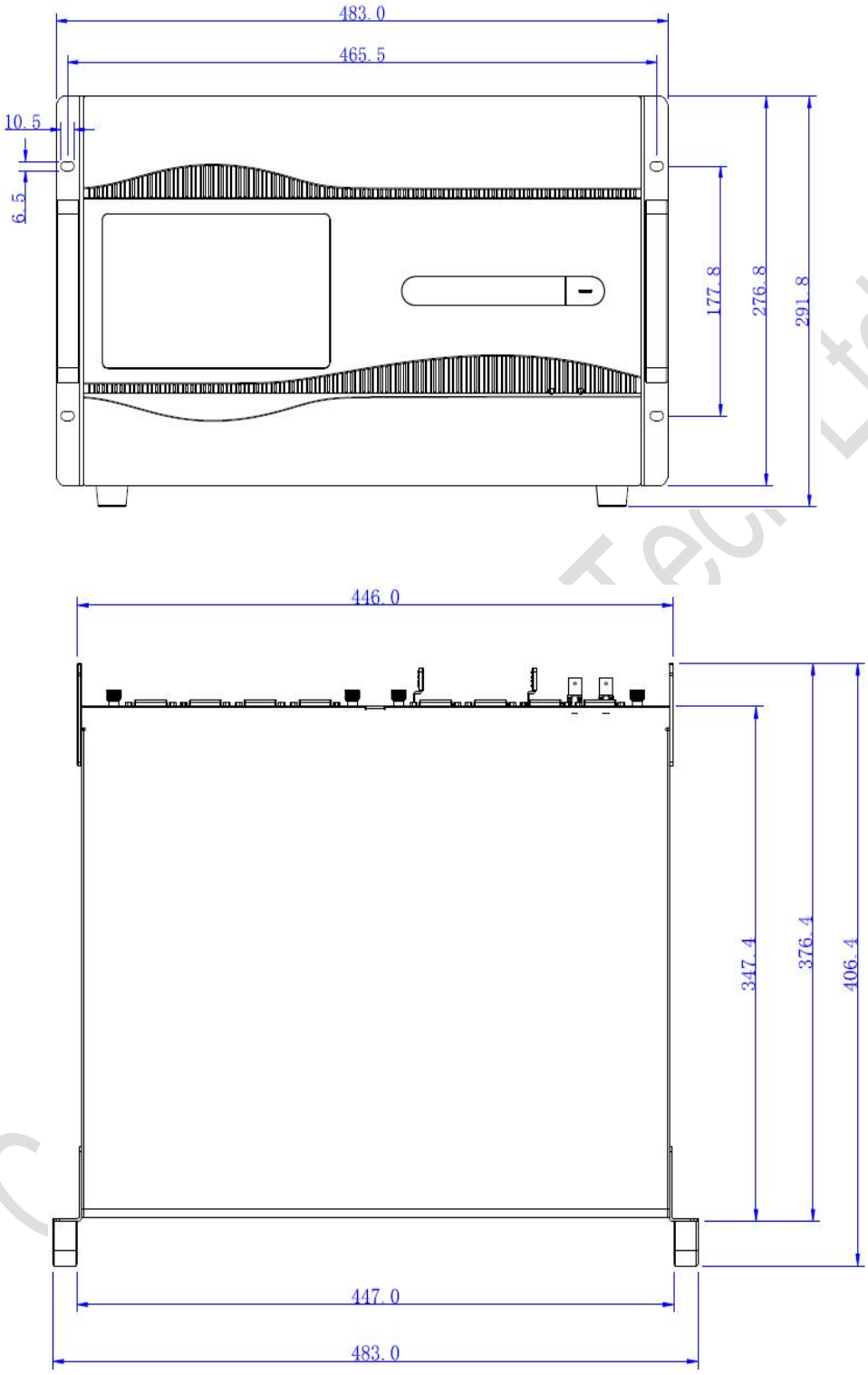
6 Applications

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

7 Device Specifications

Model		X100 Pro-7U
Chassis		7U
Dimensions	Device (W×H×D)	483.0mm (19.0") ×276.8mm (10.9") ×406.4mm (16.0")
	Packing (W×H×D)	605.0mm (23.8") ×395.0mm (15.5") ×505.0mm (19.8")
Weight	Net	19.3kg (42.55lbs)
	Gross	24.2kg (53.35lbs)
Electrical parameters	Power supply	AC 100~240V, 50/60Hz, supports dual power supplies redundancy (Backup power supply needs to be purchased separately as an optional accessory.)
	Average board power	10W
	Maximum power	230W
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 invert the device or place it vertically.

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.

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