X7
LED Video Controller

Specification V1.6

Overview

X7 is a professional control system and video processing equipment specially designed for LED engineering applications. It is shipped with various video signal interfaces, supports high-definition digital ports (DVI, HDMI, SDI) and their seamless switching, allowing broadcast quality scaling and multi-pictures display.
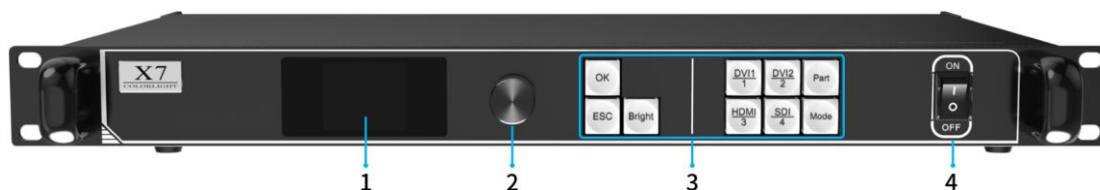
With 8 Gigabit Ethernet outputs, X7 supports LED display with maximum 8192 pixels in width or 4096 pixels in height. Also, used with a series of versatile functions for a flexible screen control and high-quality image display, X7 enjoys strong advantages in LED engineering applications.

Features

- Various digital signal ports, including $2\times$ DVI, $1\times$ HDMI, $1\times$ SDI.
- Loading capacity of up to 5.2 million pixels, with maximum 8192 pixels in width or maximum 4096 pixels in height.
- Input resolution up to $1920\times1200@60Hz$.
- 8 Gigabit Ethernet output ports, supports Ethernet port redundancy or controller redundancy.
- User-definable video source switching and scaling.
- Up to 3 layers, easily customize position and size.
- Independent audio input and HDMI audio decoding.
- RS232 protocol.
- HDCP.
- Brightness and color temperature adjustment.
- Supports Better Gray Level at Low Brightness, can effectively maintain the complete display of grey scale under low brightness.
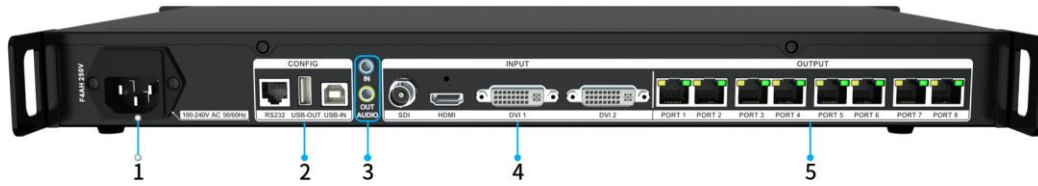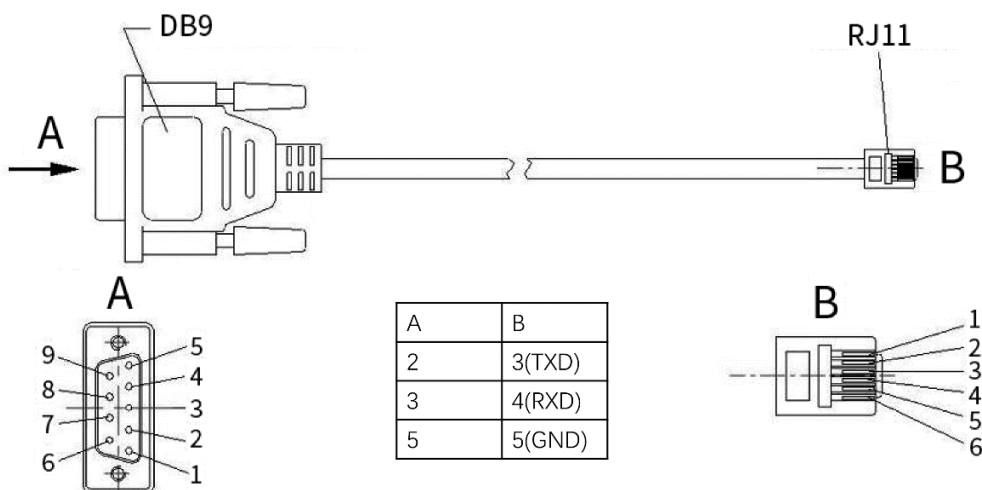
Hardware

Front panel

No.	Name	Function
1	LCD	Display the operation menu and system information.
2	Knob	Select an item or adjust the parameter, press the knob to confirm your selection or adjustment.
3	Function keys	• **OK**: Confirm button. • **ESC**: Exit the current operation or back to previous menu. • **Bright**: Tune brightness. • **Part**: Crop Screen. • **Mode**: Select a preset. • **1~4**: Quick selection of preset.
	Selection keys	**DVI 1** / **DVI 2** / **HDMI** / **SDI**: Video source selection.
4	Power button	Switch On / Off.

Rear panel

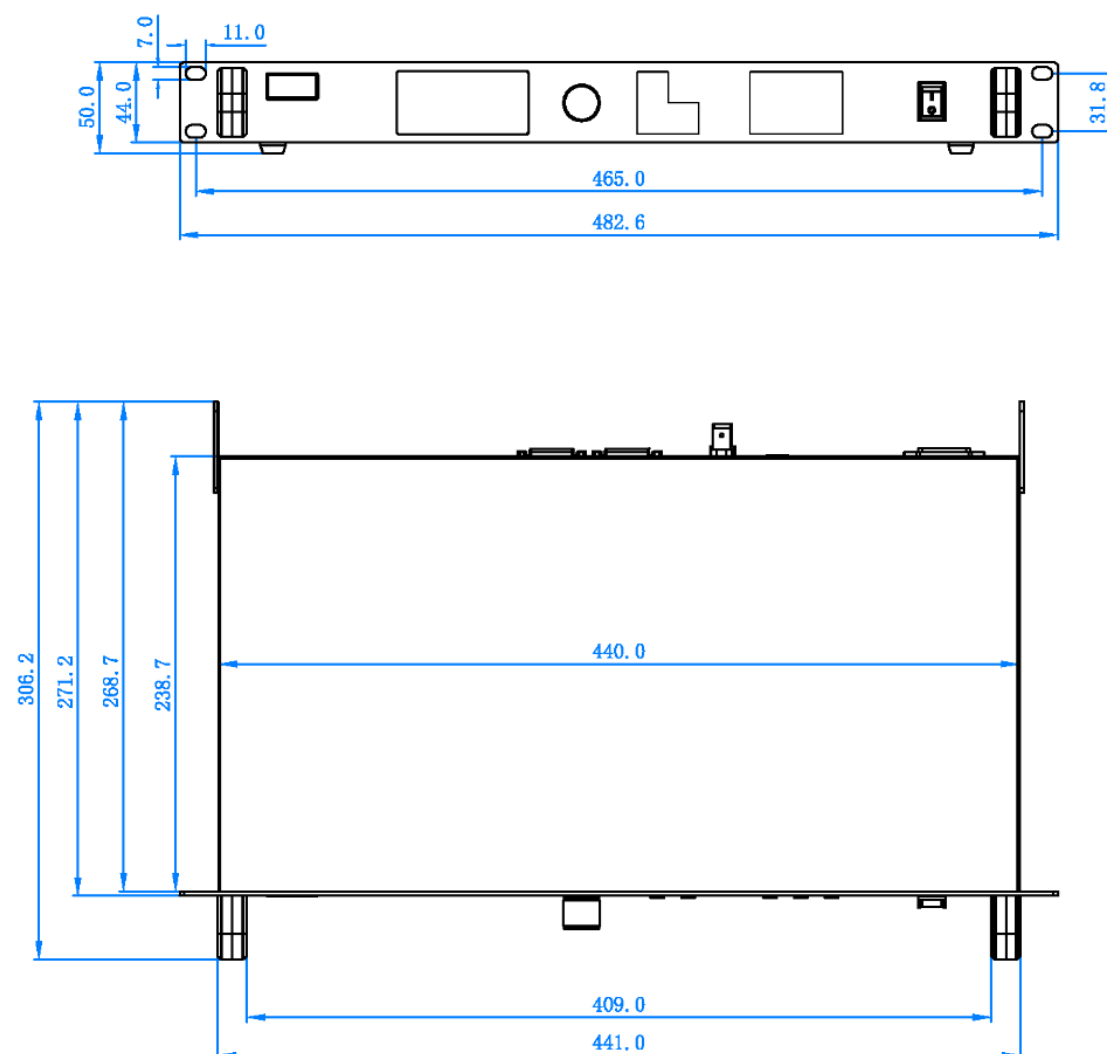| Power		
1	MAINS INPUT	AC100-240V, 50 / 60Hz, connect to AC power supply, built-in fuse.
Control		
2	RS232	*RJ11 port(6p6c), connect to third-party device.
	USB IN	USB port input, connect to a PC for debugging or cascading input.
	USB OUT	USB port output, as cascading output.
Audio		
3	AUDIO IN	• Interface type: 3.5mm. • Receive audio signals from computers or other audio sources.
	AUDIO OUT	• Interface type: 3.5mm. • Support HDMI audio decoding and output audio signals to devices such as active speakers.
Input		
4	DVI 1, DVI 2	2× DVI input.
	HDMI	1× HDMI1.4 input.
	SDI	1× SDI input, support 3G-SDI standard and de-interlacing.
Output		
5	PORT 1-8	RJ45, 8× 1G Ethernet ports output.

* DB9 female to RJ11(6P6C) cable:

A	B
2	3(TXD)
3	4(RXD)
5	5(GND)

Signal format

Input	Color space	Sampling	Color depth	Resolution	Frame rate
DVI	YCbCr	4:2:2	8bit	1920×1200@60hz	23.98, 24, 25, 29.97, 30, 50, 59.94, 60
	YCbCr	4:4:4	8bit		
	RGB	4:4:4	8bit		
HDMI1.4	YCbCr	4:2:2	8bit	1920×1200@60hz	23.98, 24, 25, 29.97, 30, 50, 59.94, 60
	YCbCr	4:4:4	8bit		
	RGB	4:4:4	8bit		
SDI	YCbCr	4:2:2	8bit	1920×1080i	50,59.94,60
	YCbCr	4:2:2	8bit	1920×1080p	50,59.94,60
	YCbCr	4:2:2	8bit	1280×720p	23.98,24,25,29.97,30, 50,59.94,60

Parameters

Dimensions （W×H×D)	
Unboxed	482.6mm(19.0")×44.0mm(1.7")×306.2mm (12.1"),1U chassis (w / o foot pads)
Boxed	525.0mm (20.7")×95.0mm (3.7")×355.0mm (14.0")
Weight	
Net weight	3.10kg (6.83lbs)
Total weight	4.26kg (9.39lbs)
Electrical specification	
Power input	AC100-240V, 1.0A, 50 / 60Hz
Rated power	30W (With all cards installed)
Operating environment	
Temperature	-20°C~60°C / -4°F~140°F
Humidity	0%RH~80%RH, non-condensing
Storage environment	
Temperature	-30°C~80°C / -22°F~176°F
Humidity	0%RH~90%RH, non-condensing
Certification	
CCC, CE, FCC, IC, EAC, UKCA.	
* 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 caused or Colorlight has the right to claim compensation.	

Reference dimensions

Unit: mm

Statement

As factors such as product batches and production processes may change, in order to provide accurate product information, specification parameters, and product characteristics in order to match the actual product, the text description and picture effects in the document will be adjusted and revised appropriately. If it is necessary to carry out the above modification and adjustment without prior notice, please refer to the actual product.

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