X12
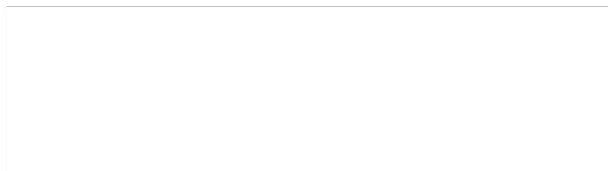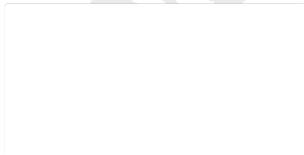## Controller

Specification V1.1

Overview

The X12 controller is a professional control system and video processing device designed for LED display engineering applications. It has DVI and HDMI connectors, and supports seamless switching between multiple signals, broadcast quality scaling and multi-window display. The X12 boasts 12 Gigabit Ethernet ports. A single unit features a loading capacity of 7.2 million pixels, with 8192 pixels in maximum width or 4096 pixels in maximum height. Meanwhile, the X12 is equipped with abundant practical functions that enable flexible screen control and high-quality image display, which gives it an edge in the LED display engineering application field.

Features

- Input: 1×DVI, 3×HDMI1.4

- Loading capacity: 7.2 million pixels, maximum width: 8192 pixels, or maximum height: 4096 pixels

- Input resolution: up to 1920×1200@60Hz, supporting customized setting

- Output: 12 Gigabit Ethernet ports, supporting Ethernet port backup or sender backup

- Support switching, cropping, splicing and scaling of video sources

- Support display of up to 3 windows, of which the location and size can be freely adjusted

- HDCP1.4 compliant

- Dual USB2.0 for high-speed configuration, used for debugging or cascading with the X12 controller

- Support RS232 protocol

- Brightness, color temperature, contrast, hue and saturation adjustment
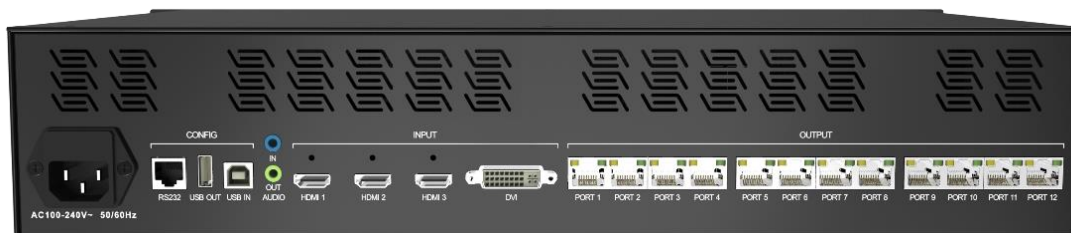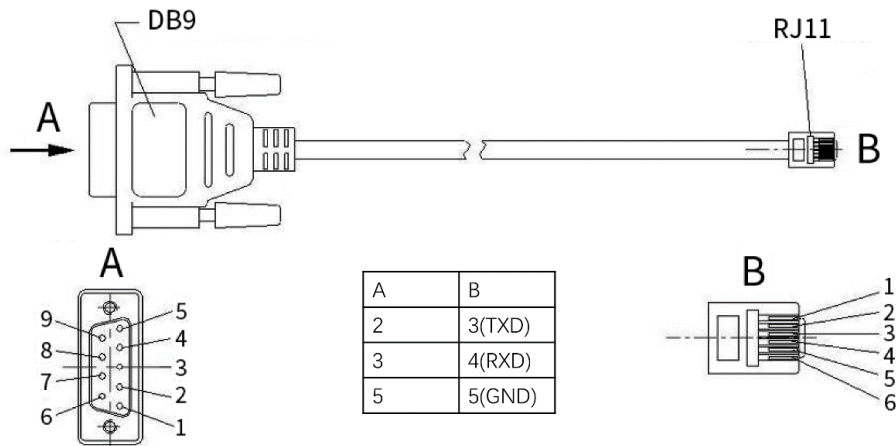
- Better gray at low brightness

Hardware

Front

No.	Item	Function
1	LCD	Display the operation menu and system information
2	Knob	Turn the knob to select an item or adjust the parameter; press the knob to confirm your selection or adjustment
3	Function Key	OK: Enter key ESC: Exit the current menu or operation Bright: Brightness adjustment Lock: Lock all the keys of the front panel Part: Cropping Mode: Mode selection
4	Video Source Selection Key	HDMI1/HDMI2/HDMI3/DVI: Video source selection keys, which function as number selection keys in mode selection
5	Power Switch	Switch on or off the power supply

Version: 1.1

Rear

Input		
1	HDMI1/2/3	3×HDMI inputs, supporting audio input HDMI1.4 specification (Support 1920 × 1200@60Hz, 1920 × 1080@60Hz)
2	DVI	1×DVI input DVI1.0 specification (Support 1920 × 1200@60Hz, 1920 × 1080@60Hz)
Output		
1	Port1-12	RJ45, 12×Gigabit Ethernet outputs
Control		
1	RS232	RJ11(6P6C)*, connect to the third party device
2	USB OUT	USB output, as cascading output
3	USB IN	USB input, connect to the PC for debugging
Audio		
1	AUDIO IN	Audio input, for inputting audio signals from the computer or other devices.
2	AUDIO OUT	Audio output, for outputting audio signals to the speaker (Support processing and outputting the audio signals of HDMI)
Power Supply		
1	AC 100~240V	AC power connector, containing a built-in fuse

*DB9 female to RJ11(6P6C) cable:

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

Device Specifications

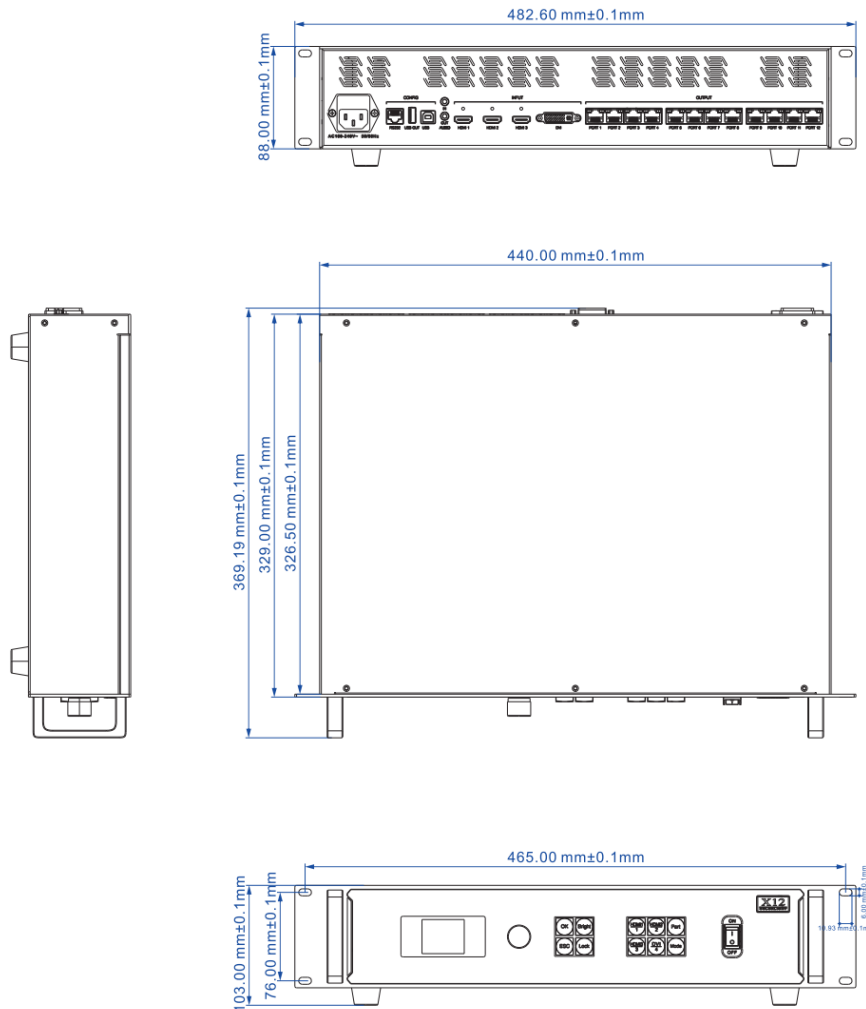| Model		X12
Size		2U
Electrical Specifications	Input Voltage	AC100~240V, 50~60Hz
	Power	30W
Operating Environment	Temperature	-30°C~60°C/-22°F~140°F
	Humidity	0%RH~80%RH, non-condensing
Storage Environment	Temperature	-40°C~80°C/-40°F~176°F
	Humidity	0%RH~90%RH, non-condensing
Device Specifications	Dimensions	W×H×L/482.6×88.0×369.2mm^3/19"×3.5"×14.5"
	Net Weight	4.6kg/10.1lbs
Packing Specifications	Dimensions	W×H×L/525.0×150.0×455.0mm^3/20.7"×5.9"×17.9"
	Net Weight	1.6kg/3.53lbs

Technical Specifications

HDMI 1.4			
Standard	HDMI 1.4 specification, support HDCP		
Input	Format		Maximum Input Resolution
	8bit	RGB444	1920×1200@60Hz
		YCbCr444	
		YCbCr422	
	Frame Rate	23.98/24/25/29.97/30/50/59.97/60Hz	
	Support audio input		

DVI			
Standard	Support HDCP		
Input	Format		Maximum Input Resolution
	8bit	RGB444	1920×1200@60Hz
		YCbCr444	
		YCbCr422	
	Frame Rate	23.98/24/25/29.97/30/50/59.97/60Hz	

Dimensions

Unit: mm

Statement

Thank you for purchasing the product of Colorlight Cloud Tech Ltd. If you encounter any problems during use or have any suggestions, please contact us through official channels. We will do our best to provide support and listen to your valuable suggestions. We will constantly make improvements on technical specifications but