



# X16

Controller

Specification V2.1

## Overview

X16 is a professional LED display controller. It possesses powerful video signal receiving, splicing and processing capacities, and supports multiple signal inputs up to 4096×2160 pixels. It supports HDMI, DVI and SDI, and seamless switching between signals. It supports splicing, broadcast quality scaling, and 7 PIPs.

X16 adopts 16 Gigabit Ethernet outputs, and it supports large LED displays of 8192 pixels in maximum width and 4096 pixels in maximum height. Meanwhile, X16 is equipped with a series of versatile functions which can provide flexible screen control and high-quality image displays. It can be perfectly applied to high-end rental displays and high-resolution LED displays.

## Features

- Supports various digital signal ports, including 2×SDI, 1×HDMI2.0 and 4×DVI
- DVI card supports a loading capacity of 10.4 million pixels, maximum width: 8192 pixels, or maximum height: 4096 pixels
- Up to 4096×2160@60Hz input resolution
- 16 Gigabit Ethernet outputs, supporting Ethernet port redundancy or controller redundancy
- Support switching, cropping, splicing and scaling of video sources
- Support the display of up to 7 windows, which are freely assignable and can be scaled up and down
- Support Genlock technology
- Support RS232 protocol
- Support HDCP
- Support brightness and color temperature adjustment
- Support better gray at low brightness
- Support control via hand-held terminal (app)

## Hardware

### Front



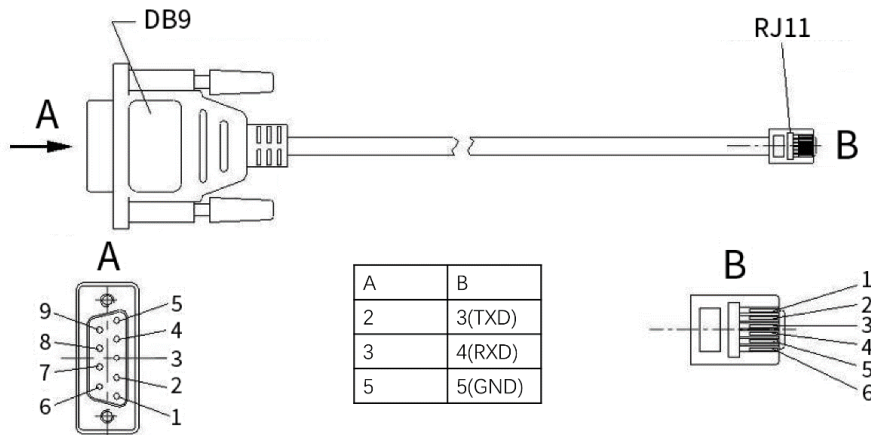
No.	Name	Function
1	LCD	Displays the operation menu and system information
2	Knob	<ul style="list-style-type: none"> <li>Press the knob to enter the submenu or confirm the selection</li> <li>Rotate the knob to select a menu item or adjust parameters</li> </ul>
3	Function Keys	OK: Enter key ESC: Exit the current menu Bright: Adjust brightness Black: Blackout Lock: Lock keys
4	Selection Keys	DVI1/DVI2/DVI3/DVI4/SDI1/SDI2/HDMI: Video source selection Mode: Switch to the preset mode selection interface Freeze: Freeze the image
5	Power Switch	Turn on or off the power

Rear



Input		
1	HDMI	1×HDMI 2.0 input
2	DVI	4×DVI inputs
3	SDI	2×3G-SDI inputs
Output		
1	Port1-16	RJ45, 16×Gigabit Ethernet outputs
Control		
1	LAN	Fast Ethernet port, connect to the PC or router, for access to the local area network
2	RS232	RJ11 (6P6C) *, connect to the third-party device
3	USB OUT	USB output, as cascading output
4	USB IN	USB input, connect to the PC for debugging
5	Genlock	Input synchronized signal
6	Genlock Loop	Output synchronized signal
Power		
1	AC 100~240V	AC power connector, containing a built-in fuse

\*DB9 female to RJ11(6P6C) cable:



### Device specification

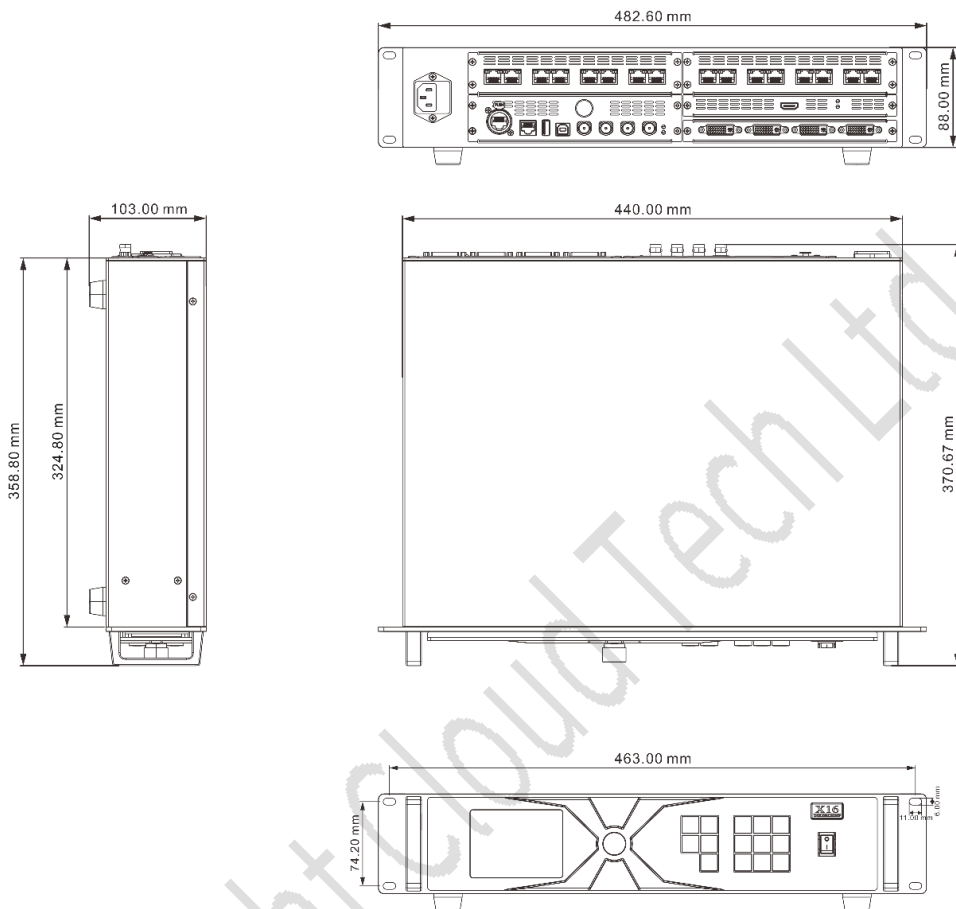
Model		X16
Chassis		2U
Electrical specification	Input Voltage	AC100~240V, 50~60Hz
	Power consumption	70W
Operating environment	Temperature	-20°C~60°C/-4°F~140°F
	Humidity	0%RH~80%RH, non-condensing
Storage environment	Temperature	-30°C~80°C/-22°F~176°F
	Humidity	0%RH~90%RH, non-condensing
Device specification	Dimensions	W×H×L/482.6mm×88.0mm×370.7mm/19"×3.5"×14.6"
	Net weight	9kg/19.84lbs
Packing specification	Dimensions	W×H×L/550.0×175.0×490.0mm <sup>3</sup> /21.7"×6.9"×19.3"
	Net weight	1.8kg/3.97lbs

## Signal format

<b>HDMI input card</b>			
<b>HDMI 2.0</b>			
Standard	HDMI 2.0 specification, EIA/CEA-861 standard, HDCP 2.3 compliant Backward compatible with HDMI 1.4 and HDMI 1.3		
Input	Format		Maximum input resolution
	8bit	RGB444	4096×2160@60Hz
		YCbCr444	
		YCbCr422	
Frame rate	23.98/24/25/29.97/30/50/59.97/60/120Hz		
<b>DVI input card</b>			
<b>DVI</b>			
Standard	VESA standard, HDCP 1.4 compliant		
Input	Format		Maximum input resolution
	8bit	RGB444	1920×1200@60Hz
		YCbCr444	
		YCbCr422	
Frame rate	23.98/24/25/29.97/30/50/59.97/60/120Hz		
<b>SDI</b>			
Standard	Support 1080p, 1080i, 720p		

## 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 without notice. You can visit [www.colorlightinside.com](http://www.colorlightinside.com) to get more updated information.