Colorlight

X16E

LED Video Controller

Specification V1.1

Overview

X16E is a controller possessing powerful video signal input and processing capacity. It supports 4K inputs with DP 1.2 and HDMI 2.0 ports, and 2K inputs with HDMI 1.4 and DVI ports, and the multiple signals can be seamlessly switched. Equipped with 16 Gigabit Ethernet ports, the controller can greatly meet your different demands. Additionally, X16E boasts abundant practical functions that enable flexible screen control and high-quality image display.

Features

- Input ports: 1×DP 1.2, 1×HDMI 2.0, 2×HDMI 1.4, 2×DVI.
- Loading capacity: 10.48 million pixels, maximum 16384 pixels in width or maximum 8192 pixels in height.
- Input resolution: up to 4096×2160@60Hz, supporting customized setting.
- Output ports: 16×Gigabit Ethernet port.
- Video source switching, cropping, splicing and scaling.
- Up to 6 windows, of which the location and size can be freely adjusted.
- Precise color management and display gamut adjustment.
- Video sync.
- Separate audio input and output.
- Analyzing and outputting the audio signals of HDMI and DP inputs.
- LAN control.
- Control via hand-held terminal (app).
- RS232 protocol control.
- 3D (optional).
- HDCP (Only HD interface support).
- Brightness and color temperature adjustment.

Hardware

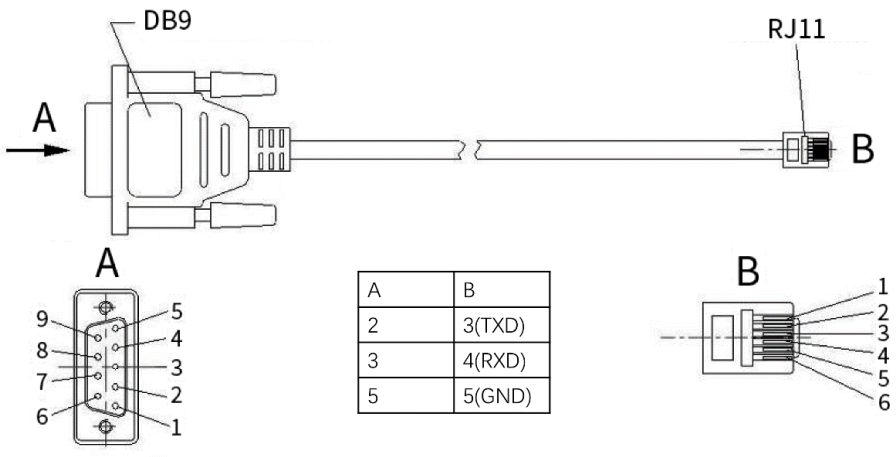
Front panel

Item	Function
LCD	Display the operation menu and system information.
Knob	• Turn the knob to select an item or adjust the parameter. • press the knob to confirm your selection or adjustment.
Function Keys	• **OK**: Enter key. • **Bright**: Brightness adjustment. • **ESC**: Exit the current menu or operation. • **Black**: Blackout. • **Lock**: Lock all the keys of the front panel. • **Freeze**: Freeze the image.
Mode Keys	• **HDMI1 / DP / HDMI2 / HDMI3 / DVI1 / DVI2**: Video source selection keys. • **Signal**: View the signals. • **Mode**: Presets scene switches, which can be switched by knob or button row. • **1~7**: Presets scene quick selection button.
Power Switch	Switch the device on or off

Rear panel

Input	
HDMI 1 (2.0)	1× HDMI 2.0
DP 1.2	1× DP 1.2
HDMI 2, HDMI 3	2× HDMI 1.4
DVI1, DVI2	2× DVI
Output	
Port 1-16	RJ45, 16× 1 Gigabit Ethernet port
Control	
LAN	Network control (communication with PC, or access network)
RS232	RJ11(6P6C)*, connect to the third party device
USB OUT	USB output, for cascading with the controller
USB IN	USB input, connecting to PC for debugging
3D	
3D (optional)	Connect to the 3D emitter
Audio	
AUDIO IN	Audio input, for inputting audio signals from the computer or other devices
AUDIO OUT	Audio output, for outputting audio signals to the speaker (Support outputting the audio signals of HDMI and DP)
Power	
MAINS INPUT	AC power connector, AC 100~240V,containing a built-in fuse

* DB9 female to RJ11(6P6C) cable:



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

Device Specifications

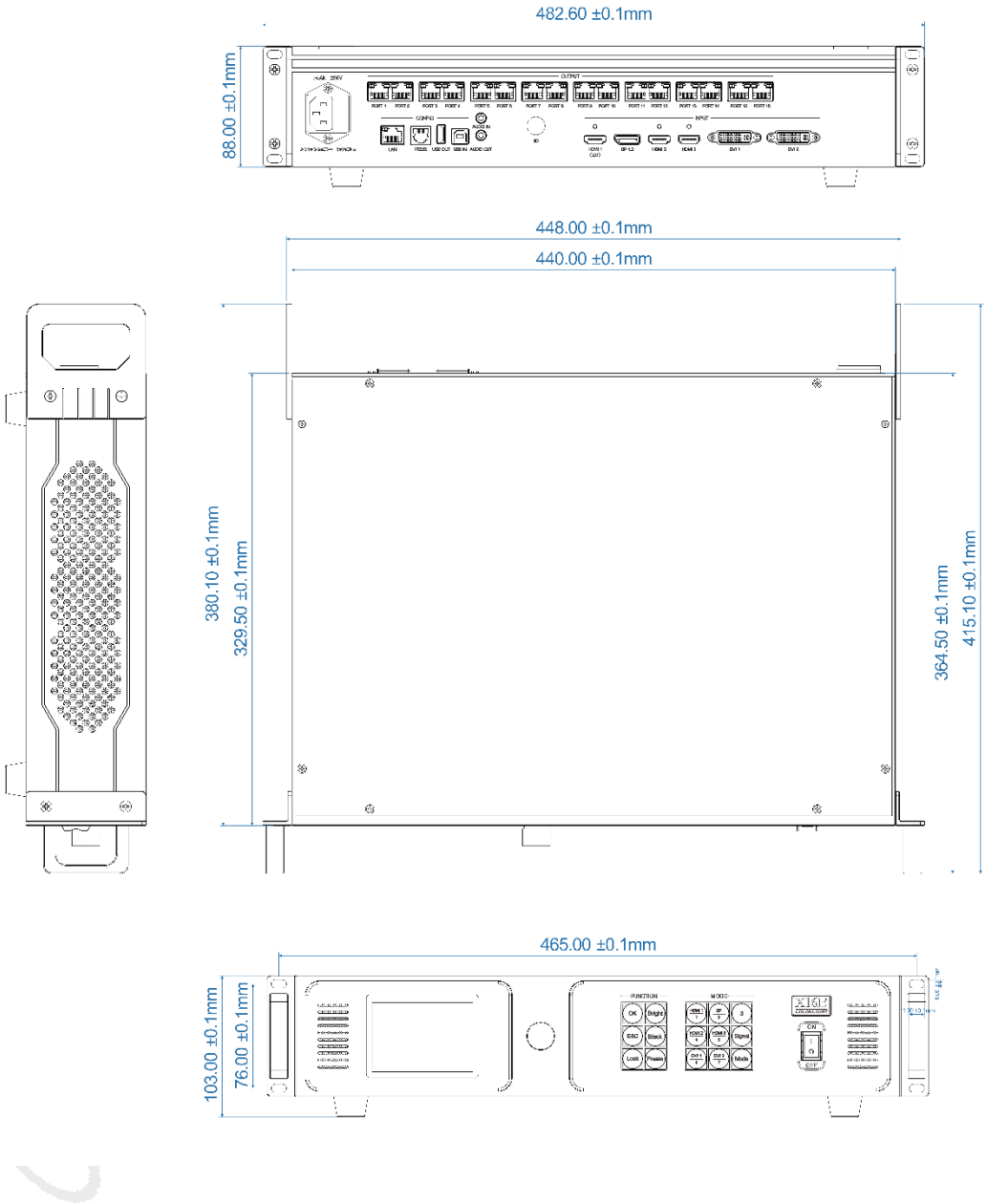
Model		X16E
Size		2U
Electrical Specifications	Input Voltage	AC100~240V, 50/60Hz
	Power Consumption	50W
Operating Environment	Temperature	-20°C~70°C/-4°F~158°F
	Humidity	0%RH~80%RH, non-condensing
Storage Environment	Temperature	-30°C~80°C/-22°F~176°F
	Humidity	0%RH~90%RH, non-condensing
Device Specifications	Dimensions	W×H×L/482.6mm×103.0mm×415.1mm/19"×4.1"×16.3"
	Net Weight	4.8kg/10.58lbs
Packing Specifications	Dimensions	W×H×L/525.0mm×150.0 mm×495.0mm/20.7"×5.9"×19.5"
	Net Weight	1.8kg/3.97lbs

Technical Specifications

HDMI 2.0(A)			
Standard	HDMI 2.0 specification, EIA/CEA-861 standard		
	Backward compatible with HDMI 1.4 and HDMI 1.3		
Input	Format		Maximum Input Resolution
	8bit	RGB444	4096×2160@60Hz
		YCbCr444	
		YCbCr422	
	Frame Rate	23.98/24/25/29.97/30/50/59.97/60/120/144Hz	
	Support audio input		
DP 1.2			
Standard	DP 1.2 specification, support EDID		
Input	Format		Maximum Input Resolution
	8bit	RGB444	4096×2160@60Hz
		YCbCr444	
		YCbCr422	
	Frame Rate	23.98/24/25/29.97/30/50/59.97/60/120/144Hz	
	Support audio input		
HDMI 1.4			
Standard	HDMI 1.4 specification, HDCP1.4 compliant		
Input	Format		Maximum Input Resolution
	8bit	RGB444	1920×1200@60Hz
		YCbCr444	
		YCbCr422	
	Frame Rate	23.98/24/25/29.97/30/50/59.97/60Hz/120/144Hz	
	Support audio input		
DVI			
Standard	HDCP1.4 compliant		
Input	Format		Maximum Input Resolution
	8bit	RGB444	1920×1200@60Hz
		YCbCr444	
		YCbCr422	
	Frame Rate	23.98/24/25/29.97/30/50/59.97/60Hz/120/144Hz	

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.

Welcome to choose to use the products of Colorlight Cloud Technology Co., Ltd. If you have any questions or suggestions in use, please contact us through official channels, we will try our best to support and listen to your valuable suggestions. For more information and updates, please visit the official website www.colorlightinside.com or scan the QR code.

Service Phone

4008 770 775

Colorlight Cloud Tech Ltd.

Official Website: www.colorlightinside.com
Head Office Address:Room 37F-39F,Building 8, Zone A,
Shenzhen International Innovation Valley, Vanke Cloud City, Dashi Yilu,
Nanshan District, Shenzhen, China