LED Video Controller

Specification V1.0

Overview

The controller possesses powerful video signal input and processing capacity. It supports 4K inputs with DP 1.4 and HDMI 2.0 connectors, and 2K inputs with HDMI 1.4 and DVI connectors, and the multiple signals can be seamlessly switched. Equipped with 8 Gigabit Ethernet ports, the controller can greatly meet your different demands. Additionally, the device boasts abundant practical functions that enable flexible screen control and high-quality image display.

Features

- Input connectors: 1×DP 1.4, 1×HDMI 2.0, 2×HDMI 1.4, 2×DVI
- Loading capacity: 5.24 million pixels, maximum width: 16384 pixels, or maximum height: 8192 pixels
- Input resolution: up to 4096×2160@60Hz, supporting customized setting
- Output connectors: 8×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
- HDCP
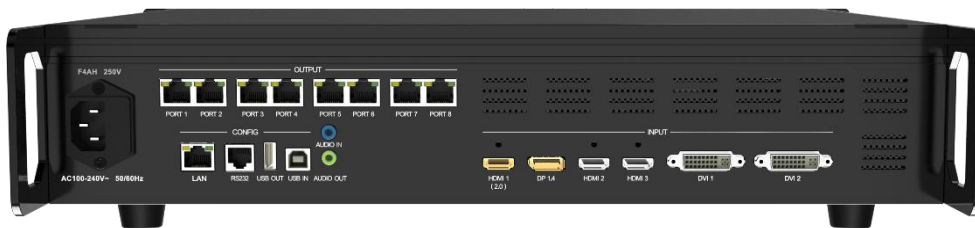- Brightness and color temperature adjustment
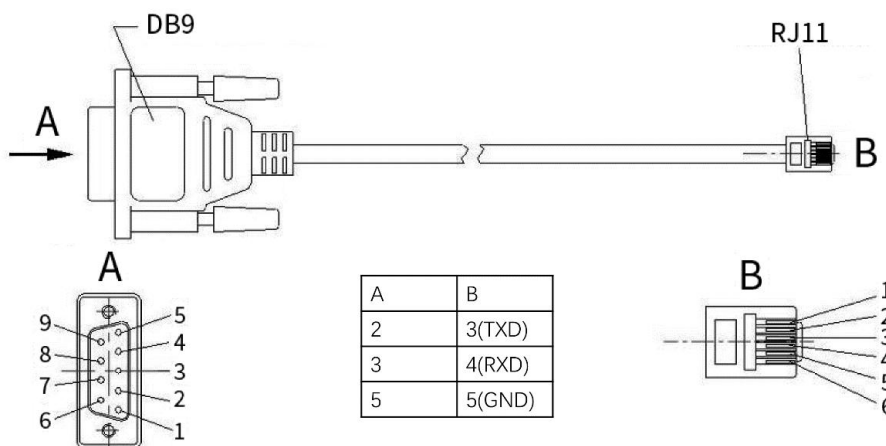
Hardware

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 Key	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 Key	HDMI1/DP/3/HDMI2/HDMI3/DVI1/DVI2: Video source selection keys, which function as number selection keys in mode selection Signal: View the signals Mode: Output mode selection
Power Switch	Switch the device on or off

Back Panel

Input Connector	
HDMI 2.0	1×HDMI 2.0
DP 1.4	1×DP 1.4
HDMI1, HDMI2	2×HDMI 1.4
DVI1, DVI2	2×DVI
Output Connector	
Port 1-8	RJ45, 8×Gigabit Ethernet port
Control Connector	
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
Audio Connector	
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 Connector	
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		Controller
Size		2U
Electrical Specifications	Input Voltage	AC100~240V, 50/60Hz
	Power Consumption	50W
Operating Environment	Temperature	-20℃~70℃/-4°F~158°F
	Humidity	0%RH~80%RH, non-condensing
Storage Environment	Temperature	-30℃~80℃/-22°F~176°F
	Humidity	0%RH~90%RH, non-condensing
Device Specifications	Dimensions	W×H×L/482.6mm×88.0mm×414.1mm/19"×3.5"×16.3"
	Net Weight	4.8kg/10.58lbs
Packing Specifications	Dimensions	W×H×L/525.0×150.0×495.0mm^3/20.7"×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 1.4			
Standard	DP 1.4 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	
	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