Colorlight

S20
Controller

Specification V2.1

Colorlight Cloud Tech Ltd

Overview

S20 is a controller possessing powerful video signal receiving capacity. It supports the input of DP1.2 and HDMI2.0, and seamless switching between signal sources. A single unit features a loading capacity of up to 8.85 million pixels, with a maximum width or height of 8192 pixels, while a single Ethernet port supports a loading width or height of up to 4096 pixels, and the controller supports signal inputs of up to 4096×2160@60Hz resolution. Thus, S20 allows users to configure ultra-long, ultra-high and ultra-large screens. S20 supports 20 Gigabit Ethernet outputs, as well as Ethernet port redundancy and controller redundancy. It can not only effectively ensure the display stability of screens, but also provide high-quality image display and flexible screen control.

Features

- Inputs: 1×DP 1.2, 1×HDMI 2.0
- Supports seamless switching between signal sources
- Loading capacity: up to 8.85 million pixels, maximum width or height: 8192 pixels
- Loading capacity of a single Ethernet port: up to 650 thousand pixels, maximum width or height: 4096 pixels. The loading capacity will reduce when the height exceeds 1280 pixels.
- Input resolution: up to 4096×2160@60Hz, supporting customized setting of resolution within control range.
- Outputs: 20 Gigabit Ethernet ports, supporting Ethernet port redundancy or controller redundancy
- Supports USB cascading control and RS232 protocol control
- Separate audio input and output
- Supports 3D display（optional）
- Better gray at low brightness
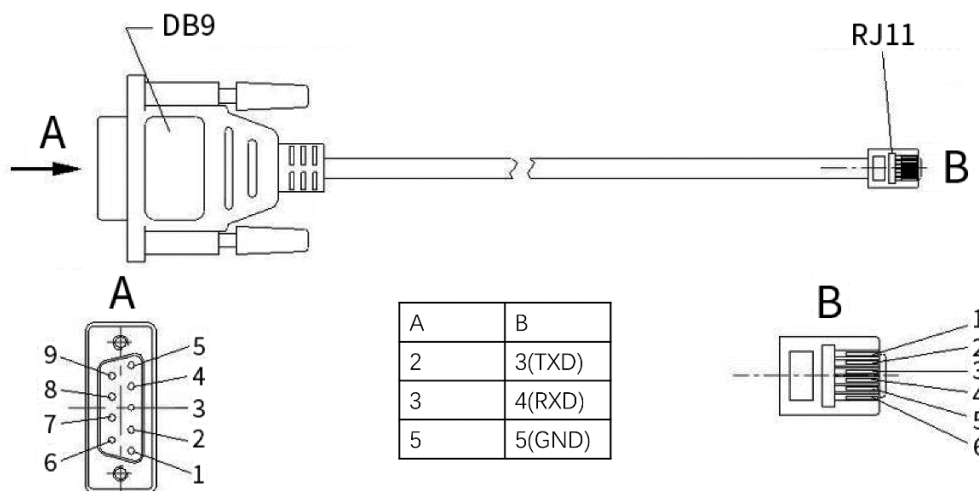- Compatible with all receiver cards and multifunction cards of Colorlight

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: Escape key Bright: Brightness adjustment Black: Blackout
4	Selection Key	HDMI: Select HDMI2.0 as the signal source DP: Select DP1.2 as the signal source
5	Power Switch	Power switching for the device

Rear

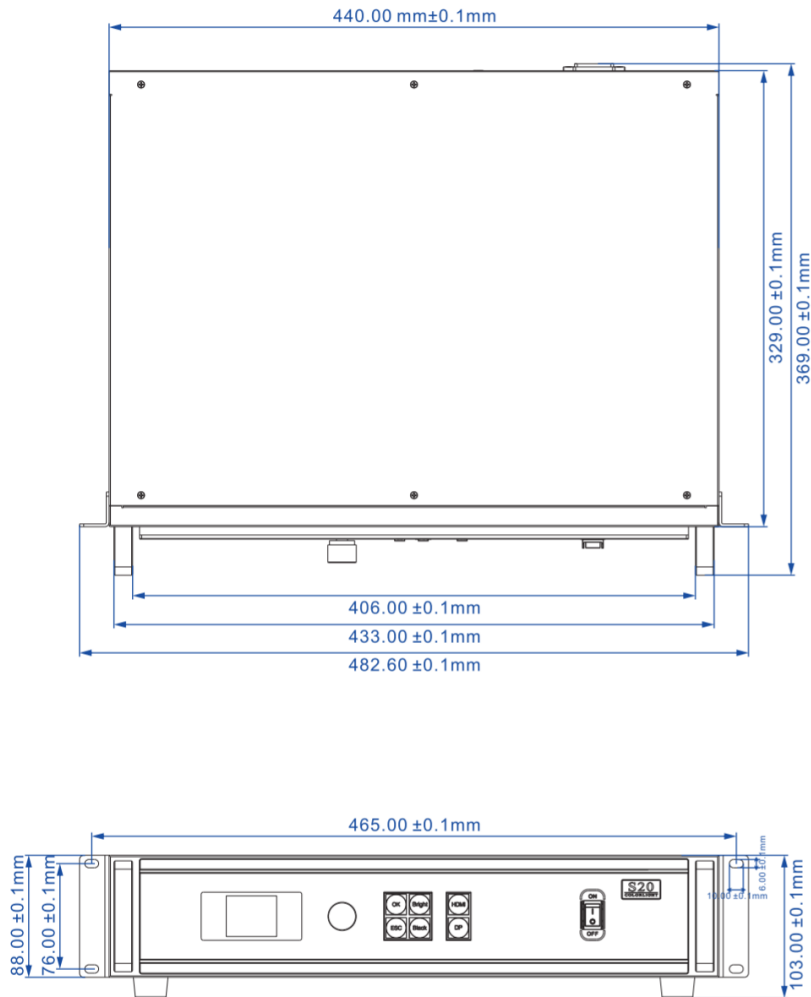| Input		
1	HDMI2.0	1×HDMI 2.0
2	DP1.2	1×DP 1.2
Output		
1	Port 1-20	RJ45, 20 Gigabit Ethernet outputs
2	3D (Optional)	Output the 3D control signal
Control		
1	USB IN	USB input, connecting to PC for debugging
2	USB OUT	USB output, as cascading output
3	RS232	RJ11 (6P6C)*, connect to the third party device
Audio		
1	AUDIO IN	Audio input, input audio signals from the computer or other devices
2	AUDIO OUT	Audio output, output audio signals to the speaker (Support processing and outputting the audio signal of HDMI and DP)
Power Supply		
1	AC 100~240V	AC power interface, containing a built-in fuse

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

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

Device Specifications

Model		S20
Chassis Size		2U
Electrical Specifications	Input Voltage	AC100~240V, 50/60Hz
	Power Consumption	40W
Operating Environment	Temperature	-20℃~70℃/-4℉~158℉
	Humidity	0%RH~80%RH, non-condensing
Storage Environment	Temperature	-40℃~80℃/-40℉~176℉
	Humidity	0%RH~90%RH, non-condensing
Device Specifications	Dimensions	W×H×L/482.6×88.0×369.0 mm³/19"×3.5"×14.5"
	Net Weight	5.1kg/11.24lbs
Packing Specifications	Dimensions	W×H×L/525.0×150.0×455.0mm³/20.7"×5.9"×17.9"
	Net Weight	6.7kg/14.77lbs

Technical Specifications

HDMI2.0（A）			
Standard	HDMI2.0 specification, EIA/CEA-861 standard, supports EDID Backward compatible with HDMI1.4 and HDMI1.3		
Input	Format		Maximum Input Resolution
	8bit	RGB444	4096×2160@60Hz
		YCbCr444	
		YCbCr422	
	Frame Rate	23.98/24/25/29.97/30/47.95/48/50/59.94/60/120/144Hz	
Support audio input			
DP1.2			
Standard	DP1.2 specification, supports EDID		
Input	Format		Maximum Input Resolution
	8bit	RGB444	4096×2160@60Hz
		YCbCr444	
		YCbCr422	
	Frame Rate	23.98/24/25/29.97/30/47.95/48/50/59.94/60/120/144Hz	
Support audio input			

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 to get more updated information.