X20

Controller

Specification V1.1

Overview

X20 is a controller possessing 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. A single unit features a loading capacity of 13 million pixels, with 16384 pixels in maximum width or 8192 pixels in maximum height. Equipped with 20 Gigabit Ethernet ports and 2 10G optical fiber ports, X20 is able to meet the need of different clients. Additionally, X20 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: 13 million pixels, maximum width: 16384 pixels, or maximum height: 8192 pixels
- Input resolution: up to 4096×2160@60Hz, supporting customized setting
- Output connectors: 20×Gigabit Ethernet port, 2×10G optical fiber port
- Supports video source switching, cropping, splicing and scaling
- Supports up to 6 windows, of which the location and size can be freely adjusted
- Supports precise color management and display gamut adjustment
- Supports video sync
- Separate audio input and output
- Support RS232 protocol control
- Support HDCP
- Brightness and color temperature adjustment
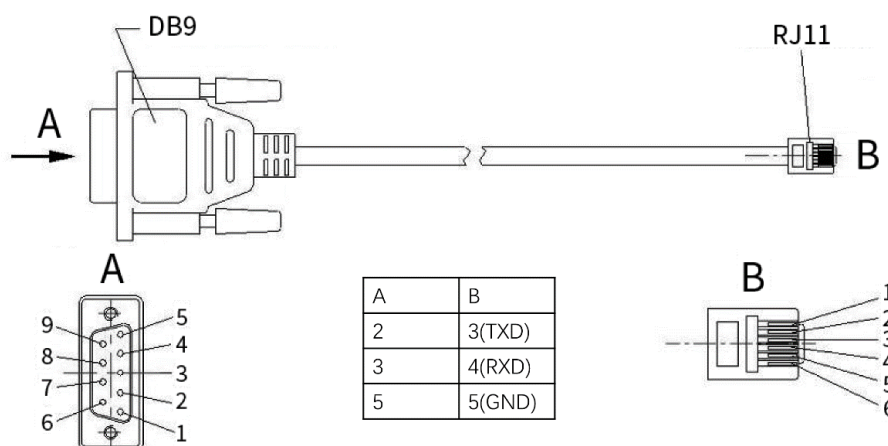- Better gray at low brightness

Hardware

Front Panel

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 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
4	Mode Key	HDMI 2.0/DP 1.4/3/HDMI1/HDMI2/DVI1/DVI2: Video source selection keys, which function as number selection keys in mode selection Signal: View the signals Mode: Output mode selection
5	Power Switch	Switch the device on or off

Version: 1.1

Back Panel

Input		
1	HDMI 2.0	1×HDMI 2.0
2	DP 1.4	1×DP 1.4
3	HDMI1, HDMI2	2×HDMI 1.4
4	DVI1, DVI2	2×DVI
Output		
1	Port 1-20	RJ45, 20×Gigabit Ethernet port
2	Fiber1 Fiber2	Dual LC, 2×10G optical fiber port
Control		
1	RS232	RJ11(6P6C)*, used to communicate via 3rd party interfaces
2	USB OUT	USB output, for cascading with the X20 controller
3	USB IN	USB input, connecting to 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 outputting the audio signals of HDMI and DP)
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

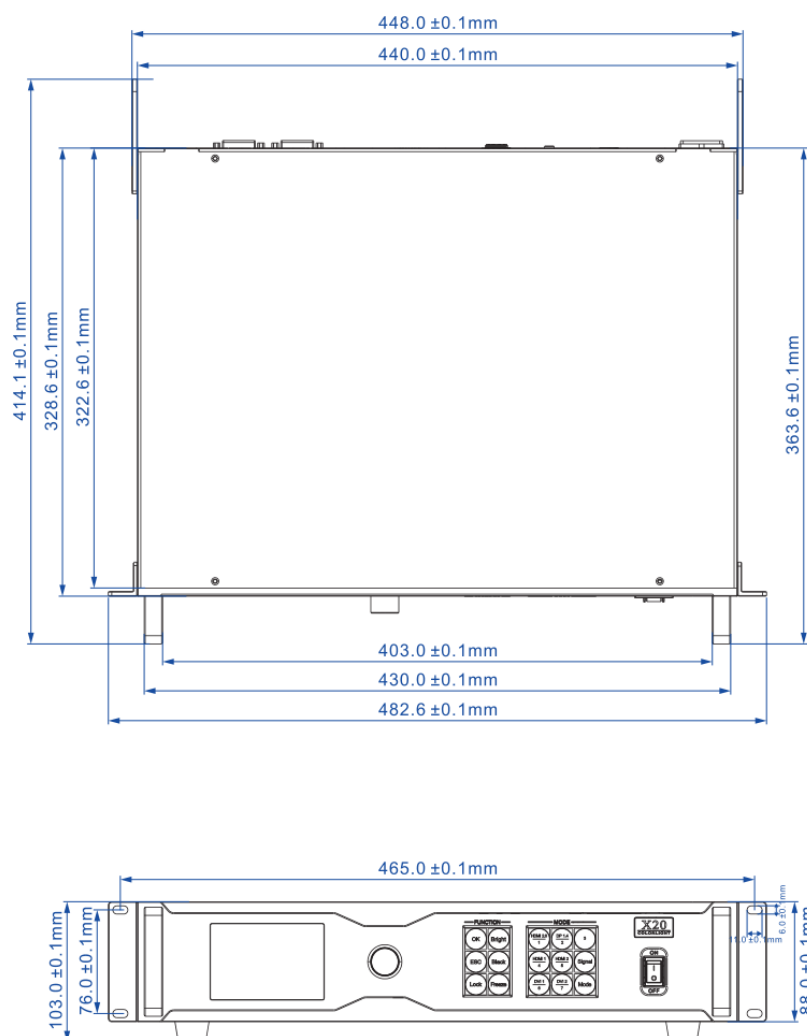| Model		X20
Size		2U
Electrical Specifications	Input Voltage	AC100~240V, 50/60Hz
	Power Consumption	50W
Communication Distance	Ethernet Cable	Recommended: CAT5e≤100m
	Optical Fiber	Single-mode optical transceiver (optional): 2km, 20km
Operating Environment	Temperature	-20℃~70℃/-4°F~158°F
	Humidity	0%RH~80%RH, 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

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