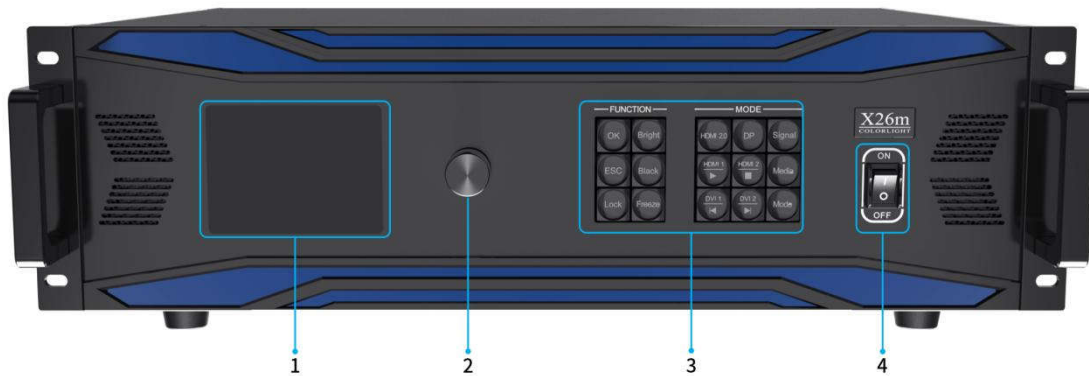# X26m

LED Video Controller

Specification   V1.2

Overview

X26m is an LED video controller with powerful signal receiving and processing abilities, effectively meeting the needs of different scenarios. It supports 4K and 2K video signal inputs, with a capacity of up to 17.03 million pixels, and features 2 types of output ports - Ethernet and optical fiber. In addition, the device boasts abundant practical functions that enable flexible screen control and high-quality image display, making it ideal for various applications.
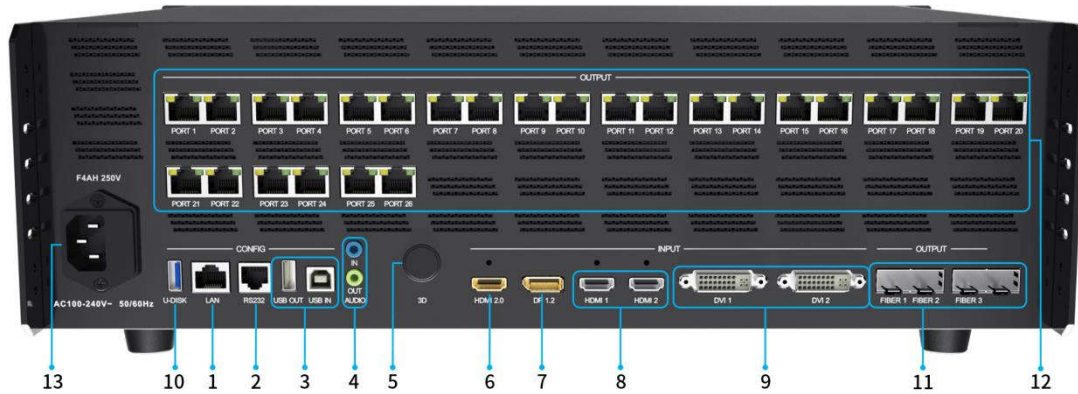
Appearance

Front panel

No.	Item	Function
1	LCD	Display the operation menu and system information.
2	Knob	• Press the knob to enter submenu or confirm selection. • Rotate the knob to select menu item or adjust parameters.

3	Function key	• **OK**: Confirm button.
		• **Bright**: Tune brightness.
		• **ESC**: Exit the current operation or back to previous menu.
		• **Black**: Black screen.
		• **Lock**: Lock all the keys of the front panel.
		• **Freeze**: Freeze screen.
		• **HDMI 2.0 / DP / HDMI 1 / HDMI 2 / DVI 1 / DVI 2**:
		   Switching to a signal source by clicking corresponding button.
		  - Click the button can switch directly the corresponding signal.
		  - In U-disk playback mode, these buttons serve respectively as

		play ▶ , stop ■ , previous ◀ and next ▶ .
		• **Signal**: Input source information.
		• **Media**: Media playback function buttons.
		• **Mode**: Select a preset.
4	Power button	Switch On / Off.

Rear panel

Control

1	LAN	RJ45 port, connect to a switch for accessing local area network.
2	RS232	RJ11 port(6P6C), connect to central control.
3	USB IN	USB2.0 Type B port, connect to a PC for debugging or cascading input.
	USB OUT	USB2.0 Type A port, as cascading output.

Audio

4	AUDIO IN	• Interface type: 3.5mm. • Receive audio signals from computers and other equipment.
	AUDIO OUT	• Interface type: 3.5mm. • Support HDMI, DP audio decoding and output audio signals to devices such as active speakers.

3D

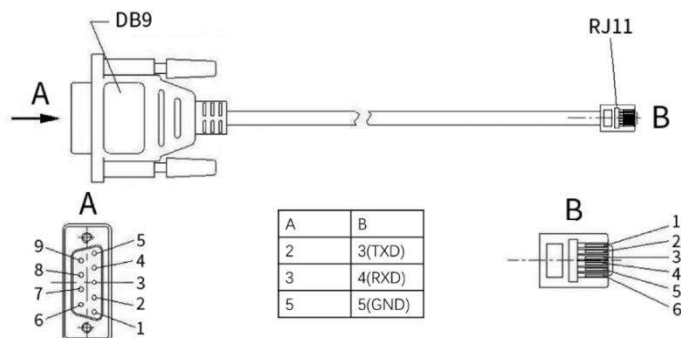| 5	3D*(Optional)	Output 3D sync signal (Use with active 3D glasses.)

Input

6	HDMI 2.0	• 1× HDMI2.0 input, supports HDMI1.4/HDMI1.3.
		• Maximum 4096×2160@60Hz, Minimum 800×600@60Hz, Maximum pixel clock 600MHz.
		• Custom resolution:
		  - Maximum 8192 (8192×1080@60Hz) in width.
		  - Maximum 8192 (1080×8192@60Hz) in height.
		• Support independent EDID settings, using EDID V1.3 standard.
		• Support audio input.
		• HDR not supported.
		• De-interlaced signal input not supported.

7	DP 1.2	• 1× DP1.2 input.
		• Maximum 4096×2160@60Hz, Minimum 800×600@60Hz, Maximum pixel clock 600MHz.
		• Custom resolution:
		  - Maximum 8192 (8192×1080@60Hz) in width.
		  - Maximum 8192 (1080×8192@60Hz) in height.
		• Support independent EDID settings, using EDID V1.3 standard.
		• Support audio input.
		• HDR not supported.
		• De-interlaced signal input not supported.

8	HDMI 1, HDMI 2	• 2× HDMI1.4 inputs.
		• Maximum 1920×1200@60Hz, Minimum 800×600@60Hz, Maximum pixel clock 165MHz.
		• Custom resolution:
		  - Maximum 4096 (4096×512@60Hz) in width.
		  - Maximum 4096 (512×4096@60Hz) in height.
		• Support independent EDID settings, using EDID V1.3 standard.
		• HDCP1.4 compliant, backwards compatible.
		• Support audio input.
		• De-interlaced signal input not supported.

9	DVI 1, DVI 2	• 2× DVI inputs.
		• Maximum 1920×1200@60Hz, Minimum 800×600@60Hz, Maximum pixel clock 165MHz.
		• Custom resolution:
		  - Maximum 4096 (4096×512@60Hz) in width.
		  - Maximum 4096 (512×4096@60Hz) in height.

		• Support independent EDID settings, using EDID V1.3 standard. • HDCP1.4 compliant, backwards compatible. • De-interlaced signal input not supported.

10	U-DISK	• U-disk interface, supporting video / image playback from U-disk.
		• USB flash drive formats: NTFS, FAT32, exFAT.
		• Image format: JPEG, PNG, WEBP, GIF, BMP.
		• Image resolution:
		  - Maximum 4096×2160@60Hz.
		• Video file: 3GP, AVI, FLV, M4V, MKV, MP4, TP, TS, VOB, WMV, MPEG.
		  - Video encoding: MPEG-1 / 2, MPEG-4, H.264 / AVC, H.265 / HEVC, GOOGLE VP8, MOTION JPEG.
		  - Audio encoding: MPEG Audio, Windows Media Audio, AAC Audio, AMR Audio.
		• Video resolution:
		  - Maximum 4096×2160@60Hz (Formats: H.264/AVC, MVC, H.265/HEVC).
		  - Maximum 1920×1080@60Hz (Formats: MPEG-1/2, MPEG-4, GOOGLE VP8, VC-1).

Output		

11	FIBER 1
	
	FIBER 2
	
	FIBER 3
		• 3× 10G Optical fiber ports.
		  - FIBER 1 corresponds to PORT 1-10 Gigabit Ethernet ports output.
		  - FIBER 2 corresponds to PORT 11-20 Gigabit Ethernet ports output.
		  - FIBER 3 corresponds to PORT 21-26 Gigabit Ethernet ports output.
		• It needs to be used with 10G single-mode optical module (purchase separately); supports dual LC fiber interfaces; wavelength 1310nm; transmission distance 2 km.
		* The rightmost fiber port is reserved and does not serve any functional purpose.

12	PORT 1-26	• 26× 1G Gigabit Ethernet ports.
		• Load capacity:
		  - Per port: 655,360 pixels; Total load capacity: 17.03 million pixels.
		  - Output 8bit@60Hz: 650,000 pixels.

		- Output 8bit@120Hz: 320,000 pixels.
		- Output 8bit@240Hz: 160,000 pixels.
		- Maximum width 16,384 pixels, maximum height 8,192 pixels.
		• The recommended maximum cable (CAT5e) run length is 100 meters.
		• Supports redundant backup.
Power		
13	MAINS INPUT	AC100-240V, 50 / 60Hz, connect to AC power supply, built-in fuse.

* The illustration is for reference only. Actual hardware configuration and production processes may cause differences. Please refer to the actual product.

* RJ11 (6P6C) to DB9 cable:

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

Features

Input

- Maximum 4096x2160@60Hz.
- 4K input interface: 1×DP1.2, 1×HDMI2.0.
- 2K input interface: 2×HDMI1.4, 2×DVI.
- 1× U-disk interface.

Output

- Up to 17.03 million pixels load capacity.
- 26× Gigabit Ethernet ports and 3× 10 Gigabit optical fiber ports (Choose either Ethernet port or optical port)

Audio

- 1×3.5mm independent input.
- 1×3.5mm independent output.
- Supports HDMI & DP audio decoding and output.

Functions

- Up to 6 windows, supports window overlapping.
- Window roaming and free scaling, with a minimum window size of 64×64.
- Free cropping and seamless switching of video signals, crop box adjustable, with a minimum window size of 64×64.
- Adjusting color gamut with Precise Color Management (Requires receiving card support.)
- Genlock synchronization, supporting locking internal vsync, input source, and automatic Genlock (according to layers).
- Supports brightness and precise color temperature adjustment.
- Supports 3D display (Accessories need to be purchased separately.)
- Improving grayscale performance with Better Grayscale at Low Brightness.
- Easy saving and loading of 128 preset scenes.
- Supports playback and upgrade via USB drive.
- Supports bluetooth remote controller (Optional).
- Virtual pixel, support 3x virtual and 4x virtual
- Support subtitles

Control

- USB interfaces for control and cascading.
- RS232 protocol control.
- Supports LAN port control.
- Supports control via App.

Signal Formats

HDMI2.0

Input	Max. resolution	Color space	Sampling	Color depth	Frame rate（Hz）
4K	4096x2160	YCbCr	4:2:2	8bit	23.98,24,25,29.97,30,50,59.94,60
		YCbCr/RGB	4:4:4	8bit	
	3840x2160	YCbCr	4:2:2	8bit	23.98,24,25,29.97,30,50,59.94,60
		YCbCr/RGB	4:4:4	8bit	
2K	2048x1080	YCbCr	4:2:2	8bit	23.98,24,25,29.97,30,50,59.94,60, 100,120
		YCbCr/RGB	4:4:4	8bit	
	1920x1080	YCbCr	4:2:2	8bit	23.98,24,25,29.97,30,50,59.94,60, 100,120,240
		YCbCr/RGB	4:4:4	8bit	

📖　Note: Only a part of supported resolutions are listed above.

DP1.2

Input	Max. resolution	Color space	Sampling	Color depth	Frame rate（Hz）
4K	4096×2160	YCbCr/RGB	4:4:4	8bit	23.98,24,30
		YCbCr	4:2:2	8bit	23.98,30,50,59.94,60
		YCbCr/RGB	4:4:4	8bit	
	3840×2160	YCbCr	4:2:2	8bit	
		YCbCr/RGB	4:4:4	8bit	
2K	2560×1440	YCbCr/RGB	4:4:4	8bit	23.98,24,30,50,59.94,60
	1920×1200	YCbCr	4:2:2	8bit	23.98,24,30,50,59.94,60,100,120,144
		YCbCr/RGB	4:4:4	8bit	
HD	1280×720	YCbCr	4:2:2	8bit	23.98,24,30,50,59.94,60,100,120,144, 240
		YCbCr/RGB	4:4:4	8bit	

📖　Note: Only a part of supported resolutions are listed above.

DVI

Input	Max. resolution	Color space	Sampling	Color depth	Frame rate（Hz）
2K	1920×1200	YCbCr	4:2:2	8bit	29.97,59.94,30,50,60
		YCbCr/RGB	4:4:4	8bit	

📖　Note: Only a part of supported resolutions are listed above.

HDMI1.4

Input	Max. resolution	Color space	Sam pling	Color depth	Frame rate（Hz）
2K	1920×1200	YCbCr	4:2:2	8bit	29.97,59.94,30,50,60
		YCbCr/RGB	4:4:4	8bit	

📖　　Note: Only a part of supported resolutions are listed above.
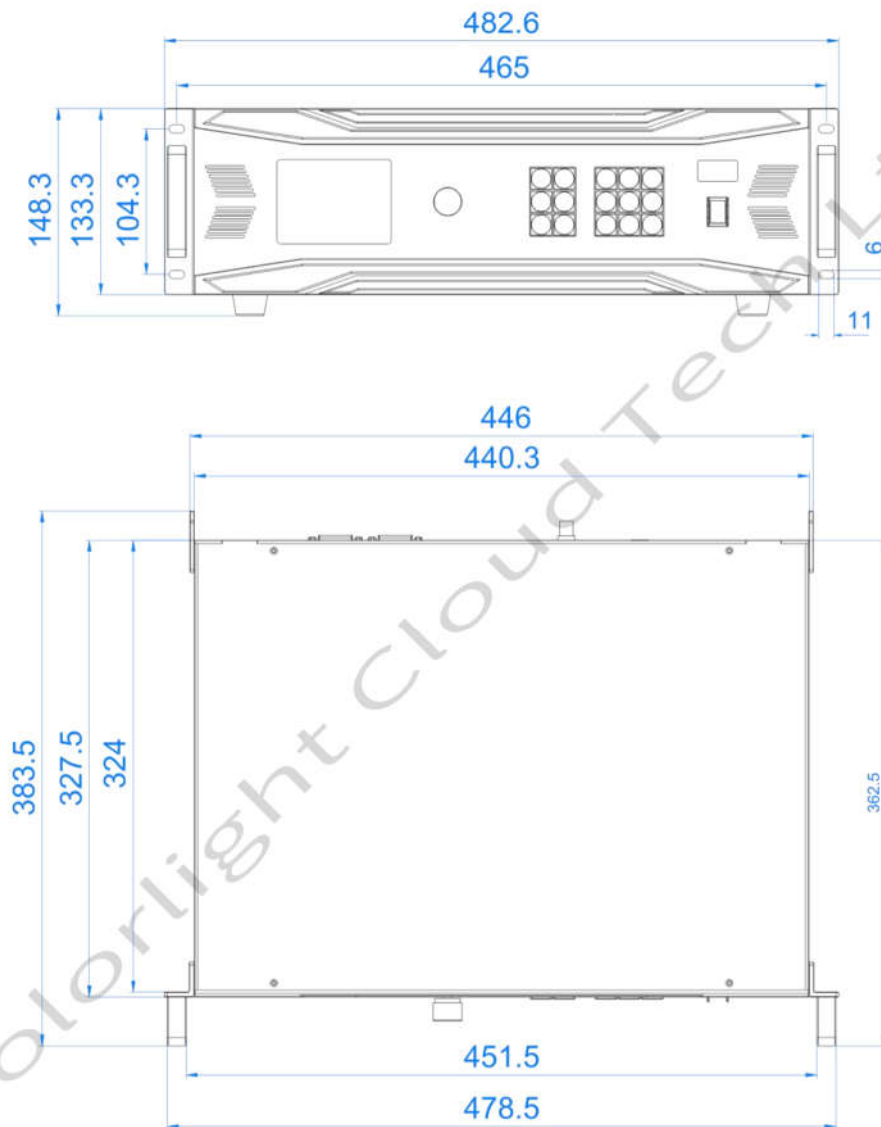
Specifications

Dimensions (W×H×D)	
Device	482.6mm (19") × 133.3mm (5.3") × 385.0mm (15.2") (No foot pads.)
Packing	560.0mm (22.1") × 240.0mm (9.5") × 480.0mm (18.9")
Weight	
Net	6.25kg (13.78lbs)
Gross	8.95kg (19.73lbs)
Electrical parameters	
Power supply	AC100-240V~, 2.1A, 50/60Hz
Rated power	80W
Operating environment	
Temperature	-20°C~50°C (-4°F~122°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
Certifications	
CE, FCC, IC, UKCA. * If the product does not have the relevant certifications required by the countries or regions where it is to be sold, please contact Colorlight to confirm or address the problem. Otherwise, the customer shall be responsible for the legal risks or Colorlight has the right to claim compensation.	

Applications

Reference Dimensions

Unit: mm

Statement

Due to possible changes in product batches and production processes, the text and pictures in the document may be adjusted and revised to match accurate product information, specifications, and features. Colorlight may make improvements and changes to this document without prior notice. Please refer to the actual product.

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