

X2m/X4m

**LED Video Controller** 

Quick Start Guide V1.1

# Contents

Cau	ıtions	. 1
1	Appearance description	. 2
1.1	Front panel	. 2
1.2	Rear panel	. 3
2	Software settings	. 4
2.1	Configure screen	. 4
2.2	Video Source Settings	. 5
2.3	Precise Color Management	, 5
2.4	Audio	, 5
2.5	Other	. 7
2	OSD Menu	. 7
3	Troubleshooting	. 8
Leg	al notice	. 8

#### Cautions

To prevent personal injury and equipment damage, read and follow the safety precautions below.

#### Power safety

- Please do not squeeze the power cord and equipment with heavy objects.
- The device must use a grounded power supply.
- There are live parts in the device, non-professionals are not allowed to disassemble the device without permission to avoid electric shock.
- Please do not disassemble the device when it is powered on or running to avoid the risk of electric shock.
- Please turn off the main power of the device when it is not in use for a long time in a humid environment.
- When the device is not in use, please disconnect the power supply from the device and unplug the power plug from the power outlet.

#### Operational safety

- Please do not place the device on an unstable surface to avoid the device falling and causing damage, which may cause serious personal injury or death.
- Please do not operate with wet hands to prevent electric shock.
- Please do not use the product in an environment containing flammable substances, explosive gases or heat sources.
- Please do not spill any corrosive chemicals or liquids on or near the equipment.
- Please check and test before using it if the equipment is stored for a long time.
- Please power off the device and use a dry rag to clean the device before cleaning the device.
- Please do not block the heat dissipation holes, and keep the working environment well ventilated, so that the heat generated by the equipment during operation can be discharged in time, so as to avoid equipment damage caused by poor heat dissipation.
- This product which is a Class A product may cause radio interference in the living environment, and the user needs to take practical measures for its interference.
- Please use appropriate packaging or original packaging during transportation in order to prevent the equipment from being damaged by strong vibration during transportation.
- Please be careful not to drop the equipment to avoid personal injury or equipment damage when carrying the equipment.

### **Environmental protection**

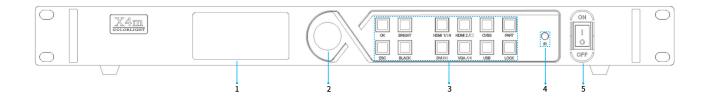
• Please do not dispose of this device and its accessories as ordinary household waste. Discarded equipment should be treated as industrial waste, and incineration is strictly prohibited.

#### A-level statement

• Warning: Operation of this equipment in a residential environment may cause radio interference.

# 1 Appearance description

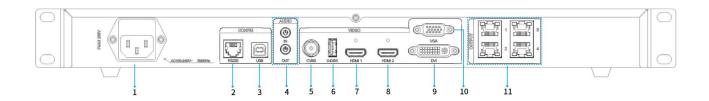
### 1.1 Front panel



No.	Item	Function	
1	LCD display	Display operation menu and system information, resolution 168×128	
2	Knob	Press the knob to access the submenu or confirm.	
		Turn the knob to select menu items or adjust parameters.	
		OK: Enter.	
		Bright: Adjust brightness.	
		ESC: Exit current user interface.	
		Black: Black the screen.	
	Function button	• HDMI 1/ ►II, HDMI 2/ ■, DVI 1/ ►, VGA / ►I:	
3		- Switching to a signal source by clicking corresponding button.	
3		- In U-disk playback mode, these buttons serve respectively as play/pause,	
		stop, previous and next.	
		CVBS: Switch to CVBS.	
		PART: Clip the picture.	
		USB: Click the USB button to enter the USB disk play mode, click again to exit.	
		LOCK: Lock the buttons on the front panel.	
4	Switch	Switch on/off.	

<sup>\*</sup> This picture takes X4m as an example, the product picture is for reference only, please refer to the actual product.

# 1.2 Rear panel



Power supply				
1	AC100-240V~ 50/60Hz	Connect to AC power supply.		
Control				
2	RS232	RJ11(6P6C) interface *, used to connect the central control.		
3	USB	USB2.0 Type B interface, connect to PC for configuration.		
Audio				
	AUDIO IN	Interface type: 3.5mm,		
	AUDIO IN	Receive audio signals from computer and other equipment.		
4		Interface type: 3.5mm,		
	AUDIO OUT	Support HDMI, DP audio decoding and output audio signals to devices such as		
		active speakers.		
Input				
5	CVBS	PAL/NTSC video input		
	U-Disk	USB flash drive interface.		
		• USB flash drive format: NTFS, FAT32, FAT16.		
		Image file formats: jpeg, PNG, webp, BMP.		
6		• Video codec: MPEG1/2, MPEG4, Sorenson H.263, H.263, H.264(AVC1),		
0		H.265(HEVC), RV30/40, Divx, Xvid.		
		• Audio codec: MPEG1/2 Layer I, MPEG1/2 Layer II, MPEG1/2 Layer III, AACLC,		
		VORBIS, PCM, and FLAC.		
		• Video resolution: maximum 1920×1080@60Hz.		
		• 1 x HDMI1.4 input.		
	HDMI 1	• Maximum resolution: 1920×1080@60Hz.		
7		Support EDID1.4.		
		Support HDCP1.4.		
		Supports audio input.		

* 1 x HDMI 14 input.					
8 HDMI 2  • Support EDID1.4. • Supports audio input.  • Maximum resolution: 1920×1080@60Hz. • Support HDCP1.4. • Support EDID1.4. • Support HDCP1.4.  10 VGA  • Maximum resolution: 1920×1080@60Hz.  Output   • X4m: 4 Gigabit Ethernet ports One network port load capacity: 655360 pixels Total load capacity is 2.6 million pixels, maximum width is 3840 pixels and maximum height is 2000 pixels.  • X2m: 2 Gigabit Ethernet ports One network port load capacity: 655360 pixels Total load capacity is 1.3 million pixels, maximum width is 3840 pixels and maximum height is 2000 pixels.  • It is highly recommended that the cable (CAT5E) length should not exceed 100m.			• 1 x HDMI1.4 input.		
Support HDCP1.4. Supports audio input.  Maximum resolution: 1920×1080@60Hz. Support EDID1.4. Support HDCP1.4.  Support HDCP1.4.  Maximum resolution: 1920×1080@60Hz.  Maximum resolution: 1920×1080@60Hz.   VGA  Maximum resolution: 1920×1080@60Hz.   V4m: 4 Gigabit Ethernet ports. One network port load capacity: 655360 pixels. Total load capacity is 2.6 million pixels, maximum width is 3840 pixels and maximum height is 2000 pixels.  X2m: 2 Gigabit Ethernet ports. One network port load capacity: 655360 pixels. Total load capacity is 1.3 million pixels, maximum width is 3840 pixels and maximum height is 2000 pixels. It is highly recommended that the cable (CAT5E) length should not exceed 100m.			• Maximum resolution: 1920×1080@60Hz.		
Supports audio input.  Maximum resolution: 1920×1080@60Hz.  Support EDID1.4. Support HDCP1.4.  Maximum resolution: 1920×1080@60Hz.  Output   X4m: 4 Gigabit Ethernet ports. One network port load capacity: 655360 pixels. Total load capacity is 2.6 million pixels, maximum width is 3840 pixels and maximum height is 2000 pixels.  X2m: 2 Gigabit Ethernet ports. One network port load capacity: 655360 pixels. Total load capacity is 1.3 million pixels, maximum width is 3840 pixels and maximum height is 2000 pixels. It is highly recommended that the cable (CAT5E) length should not exceed 100m.	8	HDMI 2	Support EDID1.4.		
Povi			Support HDCP1.4.		
9 DVI Support EDID1.4.  Support HDCP1.4.  10 VGA • Maximum resolution: 1920×1080@60Hz.  Output  • X4m: 4 Gigabit Ethernet ports.  One network port load capacity: 655360 pixels.  Total load capacity is 2.6 million pixels, maximum width is 3840 pixels and maximum height is 2000 pixels.  • X2m: 2 Gigabit Ethernet ports.  One network port load capacity: 655360 pixels.  Total load capacity: 655360 pixels.  It is highly recommended that the cable (CAT5E) length should not exceed 100m.			Supports audio input.		
Support HDCP1.4.  NGA  Maximum resolution: 1920×1080@60Hz.  VGA  X4m: 4 Gigabit Ethernet ports.  One network port load capacity: 655360 pixels.  Total load capacity is 2.6 million pixels, maximum width is 3840 pixels and maximum height is 2000 pixels.  X2m: 2 Gigabit Ethernet ports.  One network port load capacity: 655360 pixels.  Total load capacity is 1.3 million pixels, maximum width is 3840 pixels and maximum height is 2000 pixels.  Total load capacity is 1.3 million pixels, maximum width is 3840 pixels and maximum height is 2000 pixels.  It is highly recommended that the cable (CAT5E) length should not exceed 100m.			• Maximum resolution: 1920×1080@60Hz.		
Output  * Maximum resolution: 1920×1080@60Hz.  Output  * X4m: 4 Gigabit Ethernet ports.  - One network port load capacity: 655360 pixels.  - Total load capacity is 2.6 million pixels, maximum width is 3840 pixels and maximum height is 2000 pixels.  * X2m: 2 Gigabit Ethernet ports.  - One network port load capacity: 655360 pixels.  - Total load capacity is 1.3 million pixels, maximum width is 3840 pixels and maximum height is 2000 pixels.  * It is highly recommended that the cable (CAT5E) length should not exceed 100m.	9	DVI	Support EDID1.4.		
Output  • X4m: 4 Gigabit Ethernet ports.  - One network port load capacity: 655360 pixels.  - Total load capacity is 2.6 million pixels, maximum width is 3840 pixels and maximum height is 2000 pixels.  • X2m: 2 Gigabit Ethernet ports.  - One network port load capacity: 655360 pixels.  - Total load capacity is 1.3 million pixels, maximum width is 3840 pixels and maximum height is 2000 pixels.  • It is highly recommended that the cable (CAT5E) length should not exceed 100m.			Support HDCP1.4.		
<ul> <li>X4m: 4 Gigabit Ethernet ports.         <ul> <li>One network port load capacity: 655360 pixels.</li> <li>Total load capacity is 2.6 million pixels, maximum width is 3840 pixels and maximum height is 2000 pixels.</li> </ul> </li> <li>X2m: 2 Gigabit Ethernet ports.         <ul> <li>One network port load capacity: 655360 pixels.</li> <li>Total load capacity is 1.3 million pixels, maximum width is 3840 pixels and maximum height is 2000 pixels.</li> <li>It is highly recommended that the cable (CAT5E) length should not exceed 100m.</li> </ul> </li> </ul>	10	VGA	Maximum resolution: 1920×1080@60Hz.		
- One network port load capacity: 655360 pixels Total load capacity is 2.6 million pixels, maximum width is 3840 pixels and maximum height is 2000 pixels.  • X2m: 2 Gigabit Ethernet ports One network port load capacity: 655360 pixels Total load capacity is 1.3 million pixels, maximum width is 3840 pixels and maximum height is 2000 pixels.  • It is highly recommended that the cable (CAT5E) length should not exceed 100m.	Output				
<ul> <li>Total load capacity is 2.6 million pixels, maximum width is 3840 pixels and maximum height is 2000 pixels.</li> <li>X2m: 2 Gigabit Ethernet ports.</li> <li>One network port load capacity: 655360 pixels.</li> <li>Total load capacity is 1.3 million pixels, maximum width is 3840 pixels and maximum height is 2000 pixels.</li> <li>It is highly recommended that the cable (CAT5E) length should not exceed 100m.</li> </ul>			X4m: 4 Gigabit Ethernet ports.		
and maximum height is 2000 pixels.  • X2m: 2 Gigabit Ethernet ports.  - One network port load capacity: 655360 pixels.  - Total load capacity is 1.3 million pixels, maximum width is 3840 pixels and maximum height is 2000 pixels.  • It is highly recommended that the cable (CAT5E) length should not exceed 100m.			- One network port load capacity: 655360 pixels.		
<ul> <li>X2m: 2 Gigabit Ethernet ports.</li> <li>One network port load capacity: 655360 pixels.</li> <li>Total load capacity is 1.3 million pixels, maximum width is 3840 pixels and maximum height is 2000 pixels.</li> <li>It is highly recommended that the cable (CAT5E) length should not exceed 100m.</li> </ul>			- Total load capacity is 2.6 million pixels, maximum width is 3840 pixels		
<ul> <li>PORT 1-4         <ul> <li>One network port load capacity: 655360 pixels.</li> <li>Total load capacity is 1.3 million pixels, maximum width is 3840 pixels and maximum height is 2000 pixels.</li> <li>It is highly recommended that the cable (CAT5E) length should not exceed 100m.</li> </ul> </li> </ul>			and maximum height is 2000 pixels.		
<ul> <li>Total load capacity is 1.3 million pixels, maximum width is 3840 pixels and maximum height is 2000 pixels.</li> <li>It is highly recommended that the cable (CAT5E) length should not exceed 100m.</li> </ul>			X2m: 2 Gigabit Ethernet ports.		
<ul> <li>and maximum height is 2000 pixels.</li> <li>It is highly recommended that the cable (CAT5E) length should not exceed 100m.</li> </ul>	11	PORT 1-4	- One network port load capacity: 655360 pixels.		
• It is highly recommended that the cable (CAT5E) length should not exceed 100m.			- Total load capacity is 1.3 million pixels, maximum width is 3840 pixels		
100m.			and maximum height is 2000 pixels.		
			It is highly recommended that the cable (CAT5E) length should not exceed		
Support redundant backup.			100m.		
			Support redundant backup.		

<sup>\*</sup> This picture takes X4m as an example, the product picture is for reference only, please refer to the actual product.

### 2 Software settings

Please use **LEDVISION** software to configure and set up the screen.

- Please make sure that the LED panels were set up with correct receiving card parameters.
- Before setting the parameters below, ensure that the hardware is connected correctly, and the software can successfully detect the device and all the receiving cards.
- Please go to <u>www.colorlightinside.com.</u> to download and install LEDVISION software.

### 2.1 Configure screen

Open LEDVISION software, select Control > LED Screen Settings (enter password 168 or 777).

- Open the **Sending Device** page, select the sending device as the sender and click **Detect Senders**.
- Open the **Detect Receives** page and click **Detect All Receives**.

- Enter the Receiver Mapping (Look from Front) and add the corresponding number and size of receiving cards to the port.
- Click the index of the network port, add the corresponding connection relationship according to the actual panel connection.
- Send the connection relationship to the screen for testing.
  - \* If the screen is displayed normally, save the connection relationship of the box to senders and the receiving cards.

### 2.2 Video Source Settings

Go to **Sending Device** > **Video Source Settings** page, select the video source.

- **Video Switch**: Click one of the input sources to switch to corresponding signal.



- Limit Range to Full Range: Select to set the signal source format limited to full, that is 16~235 to 0~255.
- **Cropping**: Click the 📘 to crop the screen.
- **EDID**: Click the • to select the normal resolution, or customize the resolution.
- **Picture Adjustment**: Select ✓ to adjust Hue, Saturation, Brightness Compensation, Contrast and Sharpness.
- Window Size: Set the position and size of the window.
- **Preset**: Customize presets. The device supports up to 16 presets.

### 2.3 Precise Color Management

Enter the Precise Color Management page, select Enable Sender

Precise Color Management, you can adjust the screen color, brightness and color space.

- Select Quick Choose for color space and brightness.
- Select Measurements to enter measurements for screen color and brightness.
- After setting the screen color and brightness, you can choose the color gamut standard.

#### 2.4 Audio

Enter the audio interface for audio settings.

- **Volume**: Adjust the master volume (0~15).

<sup>\*</sup> Requires i9 or above receiving card that supports HDR function.

- Treble: Adjust the treble volume (0~100).
- Bass: Adjust the bass volume (0~100).
- **Balance**: Adjust the volume of left and right channels (-50~50).
- **Surround Mode**: Select the surround mode (SRS TruSurround XT, Surround).

#### 2.5 Other

Enter Other Page, you can have the following settings.

- **Better Gray Level on Low Brightness**: Optimizes low gray display on low brightness.
- **Mapping from Sender**: Enables connection mapping saved in the device instead of that in the receiving cards.
- **Device Name:** Set up user defined device name.
- **Temperature**: Monitor the operating temperature of the device.
- **Test mode**: Select the built-in test modes of the device to test the screen display.
- **Set to Internet Time**: Synchronize the device time with that of the controlling computer.
- **Export Parameters to file**: Export the current device configuration to a file.
- **Import Parameters from file**: Import a previously saved device configuration file.
- Factory Restore: Resets the device.

#### 2 OSD Menu

Enter the OSD menu with the main menu key on the remote control (optional) and you can setup the image, sound and other advanced settings.

- **Image**: Set the image mode, color temperature and grayscale range.
- **Sound**: Set sound mode, balance and surround sound.
- **Settings**: Set language, timing mode and factory reset.

### 3 Troubleshooting

Phenomenon	Potential Cause	Method
LCD screen does not light up,	Poor power input contacts.	Check the power connection.
no response.	Device power is off.	Make sure the POWER is switched on.
Poor image display such as	HDMI wire quality is not up to standard.	Replace with good quality wire.
ghosting.	HDMI wire is too long.	Reduce signal resolution or shorten HDMI wire length.
No image output after	The target input source is not connected to a source.	Make sure the target signal source is connected properly.
switching signal.	Poor wire contacts.	Check input and output wires and ensure they are in good contact.
Unable to use this device.	Internal damage to the device.	Contact sales or FAE.

## Legal notice

Copyright © 2022 Colorlight Cloud Tech Ltd. . All rights reserved.

Without the express written permission of Colorlight Cloud Tech Ltd., no unit or individual may copy, copy, transcribe or translate part or all of the contents of this book. Not to be used for any commercial or profit-making purposes in any form or by any means.

This guide is for reference only and does not constitute any form of commitment. Please refer to the actual product (including but not limited to color, size, screen display, etc.)



### 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



