

# **LED Monitor**

User's Manual



V1.0.0

### Foreword

### General

This manual introduces the installation, functions and operations of the UHD LED MONITOR device (hereinafter referred to as "the Device"). Read carefully before using the device, and keep the manual safe for future reference.

### Safety Instructions

The following signal words might appear in the manual.

Signal Words	Meaning
	Indicates a high potential hazard which, if not avoided, will result in death or serious injury.
	Indicates a medium or low potential hazard which, if not avoided, could result in slight or moderate injury.
	Indicates a potential risk which, if not avoided, could result in property damage, data loss, reductions in performance, or unpredictable results.
	Provides methods to help you solve a problem or save time.
	Provides additional information as a supplement to the text.

### **Revision History**

Version	Revision Content	Release Time
V1.0.0	First release.	January 2024

### About the Manual

- The manual is for reference only. Slight differences might be found between the manual and the product.
- We are not liable for losses incurred due to operating the product in ways that are not in compliance with the manual.
- The manual will be updated according to the latest laws and regulations of related jurisdictions. For detailed information, see the paper user's manual, use our CD-ROM, scan the QR code or visit our official website. The manual is for reference only. Slight differences might be found between the electronic version and the paper version.



- All designs and software are subject to change without prior written notice. Product updates might result in some differences appearing between the actual product and the manual. Please contact customer service for the latest program and supplementary documentation.
- There might be errors in the print or deviations in the description of the functions, operations and technical data. If there is any doubt or dispute, we reserve the right of final explanation.
- Upgrade the reader software or try other mainstream reader software if the manual (in PDF format) cannot be opened.
- All trademarks, registered trademarks and company names in the manual are properties of their respective owners.
- Please visit our website, contact the supplier or customer service if any problems occur while using the device.
- If there is any uncertainty or controversy, we reserve the right of final explanation.



### **Important Safeguards and Warnings**

This section introduces content covering the proper handling of the device, hazard prevention, and prevention of property damage. Read carefully before using the device, and comply with the guidelines when using it.

### **Operation Requirements**



- Make sure that the power supply of the device works properly before use.
- Do not pull out the power cable of the device while it is powered on.
- Only use the device within the rated power range.
- Use the device under allowed humidity (10%–85% (RH)) and temperature (0 °C to 40 °C, or 32 °F to 104 °F) conditions.
- Prevent liquids from splashing or dripping on the device. Make sure that there are no objects filled with liquid on top of the device to avoid liquids flowing into it.
- Do not disassemble the device.

### Installation Requirements



- Connect the device to the adapter before power on.
- Strictly abide by local electrical safety standards, and make sure that the voltage in the area is steady and conforms to the power requirements of the device.
- Do not connect the device to more than one power supply. Otherwise, the device might become damaged.



- Observe all safety procedures and wear required protective equipment provided for your use while working at heights.
- Do not expose the device to direct sunlight or heat sources.
- Do not install the device in humid, dusty or smoky places.
- Install the device in a well-ventilated place, and do not block the ventilator of the device.
- Use the power adapter or case power supply provided by the device manufacturer.
- Connect class I electrical appliances to a power socket with protective earthing.



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# 1 Packing List

Check whether there is any obvious damage on the packing box.

Unpack the box and check whether the components are complete according to the packing list.

### Table 1-1 Packing list

Name	Quantity
LED monitor	1
HDMI cable	1
Power cable	1
User's manual	1
Wall bracket	1
Remote control	1
Expansion screw	1

### Standby Introduction:

When the current port has no signal and there is no remote control or button operation, after 60 seconds, count down another 60 seconds to enter standby mode. If the remote control and button are operated, the standby time will be recalculated. The standby power is  $\leq$  0.5W.



## **2** Product Information

### 2.1 Product Appearance

Figure 2-1 Appearance

(Figures are for reference only)

### 2.2 Features

- Low energy consumption, long service life.
- High contrast ratio and high luminance.
- Automatically eliminates ghosting
- Rapid response times, no trailing image
- UHD LCD panel with top-ranking video processing chip.

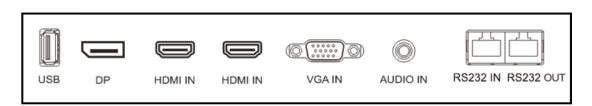




## **3 External Connections**

Please connect the monitor to external devices according to the following I/O interface list. Choose the corresponding incoming signal channel.

Figure 3-1Ports



VGA INPUT: D-SUB 15 pins Connector HDMI INPUT: HDMI Connector AUDIO IN: Phone Jack, Stereo USB IN: Support USB update RS232 IN: RJ-45 Connector RS232 OUT : RJ-45 Connector DP INPUT: Display Port

I/O boards may differ depending on model

### Attention

Please turn off the power of the external device and the product when connecting.



### **Remote Control**

Remote control is a must-have device. For functions of its buttons, see Table 3-2.

### Ŵ

Make sure to keep the remote control safe if the Device is installed in public areas.

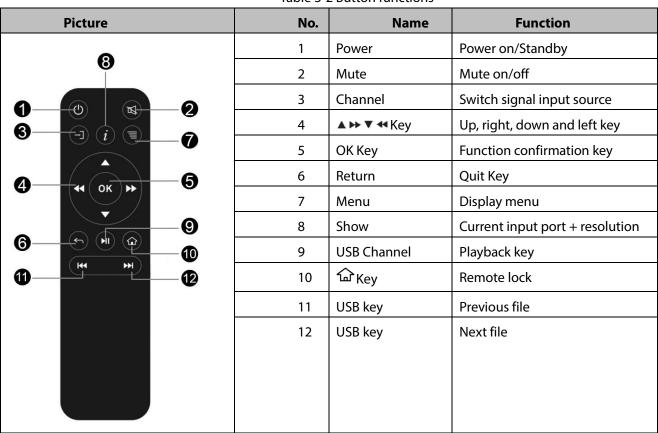


Table 3-2 Button functions

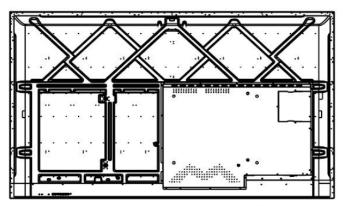


# 4 Main Menu

#### 4.1 Main Menu

To activate, press the menu button on the bottom left of the bezel. The sub-menus of the main menu are: Picture menu, Sound menu, Option menu, Scree menu.

Press the menu button to select the sub-menu item. The selected menu item will show a bordered wire frame. Press the  $\blacktriangle \nabla$  button to move among the secondary menu items of the sub-menu.



(Figures are for reference only)



### A. "Source" button

Press the button to display all the signal channel menus.

### B. "Upward" button

Press the button to move the cursor to the needed function.

Press the button to change the selected function in OSD menu item.

### C. "Downward" button

Press the button to move the cursor to the needed function.

Press the button to change the selected function in OSD menu item.

### D. "Rightward" button

Press the button to move the cursor to the needed function. Press the button to change the selected function in OSD menu item.

### E. "Leftward" button

Press the button to move the cursor to the needed function.

Press the button to change the selected function in OSD menu item.

### F. "Menu" button

Press the button to display the OSD main menu. Press the button to Exit the OSD menu or menu item.

#### G. "Power" button

Press the button to turn on or turn off the display.



### 4.2 Picture Menu

Picture menu can set Picture Mode, Color Temperature, Aspect Ratio, Noise Reduction, MPEG Noise Reduction, HDR and Color Range. Press ◀ ▶ button to adjust, press ▲ ▼ button to move, press ▶ button to enter, press menu button to exit.

	PICTURE					
2	Picture Mode	Standard				
	Color Temperature	Medium				
	Aspect Ratio	Auto				
	Noise Reduction	Middle				
	MPEG Noise Reduction	Low				
× .	HDR	Middle				
1994 - C	Color Range	Auto				
		1 101/5				
	Z ADJUST	T↓ MOVE	OK ENTER			

### 4.3 Sound Menu

Sound menu can set Sound Mode, Balance, Auto Volume, Surround Sound and TV Speaker. Press ◀► button to adjust, press ▲ ▼ button to move, press ► button to enter, press menu button to exit.

	SOUND						
21	Sound Mode	Standard					
	Balance	0					
	Auto Volume	Off					
	Surround Sound	Off					
	TV Speaker						
38 - I							
100							
		MOVE	OK	ENTER			
	🔁 ADJUST	MOVE	OK	ENTER			

### 4.4 Option Menu

Option menu can set OSD Language, Restore Factory Default, Software Update(USB), HDMI CEC, Transparent, OSD Duration and Auto Sleep. Press ◀ ▶ button to adjust, press ▲ ♥ button to move, press ▶ button to enter, press menu button to exit.



-		OPTION	
	OSD Language	English	
	Restore Factory Default		
()))	Software Update(USB) HDMI CEC		
-4	Transparent	Off	
-	OSD Duration	15Sec	
1994 - C	Auto Sleep	On	
	☐ ADJUST	1↓ MOVE	OK ENTER

#### 4.5 Screen Menu

Screen menu can set Auto Adjust, Horizontal Pos, Vertical Pos, Clock and Phase. Press ◀► button to adjust, press ▲ ▼ button to move, press ► button to enter, press menu button to exit.

	Screen
21	Auto Adjust
	Horizontal Pos. 50
	Vertical Pos. 50
	Clock 50
	Phase 7
÷.	
	ADJUST NOVE OK ENTER

### 4.6 Channel Selection

"Source" menu can select channel, the options include Input Source, VGA, HDMI, DP and so on. Press ▲ ▼ button to move to the desired channel.



# **5 How to Clean Product**

- 1. Please wipe dust and other particles off with a clean soft towel.
- 2. If it is still not clean, please use a neutral cleaner along with the clean soft towel. Wipe dry after cleaning it.
- 3. Rubbing or scrapping the housing with fingernails or other hard objects might scratch the housing.



# **6** Troubleshooting

Before consulting s	ervice staff, please use	the following chart to	attempt to diagnose the issue.

Problem	Sol	Solution								
	1	2	3	4	5	6	7	8	9	10
No image or sound	•	•	•		•				•	•
Inferior sound, normal image	•	•		•	•				•	
Inferior image, normal sound	•		•	•	•	•			•	
Poor signal	•	•	•		•				•	
Vague image	•		•		•				•	
Double image	•	•	•		•					
Interfering lines in image	•		•	•	•					
Twisty image	•		•		•				•	
Poor signal	•	•	•	•	•				•	
Rung stripe in image			•	•						
Image vertically scrolls	•		•	•					•	
Inferior color	•		•	•	•	•	•	•	•	
No color	•		•		•			•	•	

Solution		
1	Switch to another channel or input.	
2	Check whether the audio signal line is connected.	
3	Check whether the video signal line is connected.	
4	Interference from by other electric appliance may be present.	
5	Adjust fine tuning setting.	
6	Adjust luminance setting.	
7	Adjust contrast ratio setting.	
8	Adjust color setting.	
9	Check whether the system is set-up properly.	
10	Check whether the power is on.	

### Certificate of approval

Inspector

Inspector date

The product accords with the technical criteria and is allowed to sell.



# Appendix 1 Security Commitment and Recommendation

Dahua Vision Technology Co., Ltd. (hereinafter referred to as "Dahua") attaches great importance to cybersecurity and privacy protection, and continues to invest special funds to comprehensively improve the security awareness and capabilities of Dahua employees and provide adequate security for products. Dahua has established a professional security team to provide full life cycle security empowerment and control for product design, development, testing, production, delivery and maintenance. While adhering to the principle of minimizing data collection, minimizing services, prohibiting backdoor implantation, and removing unnecessary and insecure services (such as Telnet), Dahua products continue to introduce innovative security technologies, and strive to improve the product security assurance capabilities, providing global users with security alarm and 24/7 security incident response services to better protect users' security rights and interests. At the same time, Dahua encourages users, partners, suppliers, government agencies, industry organizations and independent researchers to report any potential risks or vulnerabilities discovered on Dahua devices to Dahua PSIRT, for specific reporting methods, please refer to the cyber security section of Dahua's official website.

Product security requires not only the continuous attention and efforts of manufacturers in R&D, production, and delivery, but also the active participation of users that can help improve the environment and methods of product usage, so as to better ensure the security of products after they are put into use. For this reason, we recommend that users safely use the device, including but not limited to:

### 1. Account Management

### 1.1 Use complex passwords

Please refer to the following suggestions to set passwords:

- The length should not be less than 8 characters;
- Include at least two types of characters: upper and lower case letters, numbers and symbols;
- Do not contain the account name or the account name in reverse order;
- Do not use continuous characters, such as 123, abc, etc.;
- Do not use repeating characters, such as 111, aaa, etc.

### 1.2 Change passwords periodically

It is recommended to periodically change the device password to reduce the risk of being guessed or cracked.

### 1.3 Allocate accounts and permissions appropriately

Appropriately add users based on service and management requirements and assign minimum permission sets to users.

### 1.4 Enable account lockout function

The account lockout function is enabled by default. You are advised to keep it enabled to protect account security. After multiple failed password attempts, the corresponding account and source IP address will be locked.

### 1.5 Set and update password reset information in a timely manner



Dahua device supports password reset function. To reduce the risk of this function being used by threat actors, if there is any change in the information, please modify it in time. When setting security questions, it is recommended not to use easily guessed answers.

### 2. Service Configuration

### 2.1 Enable HTTPS

It is recommended that you enable HTTPS to access Web services through secure channels.

### 2.2 Encrypted transmission of audio and video

If your audio and video data contents are very important or sensitive, we recommend you to use encrypted transmission function in order to reduce the risk of your audio and video data being eavesdropped during transmission.

### 2.3 Turn off non-essential services and use safe mode

If not needed, it is recommended to turn off some services such as SSH, SNMP, SMTP, UPnP, AP hotspot etc., to reduce the attack surfaces.

If necessary, it is highly recommended to choose safe modes, including but not limited to the following services:

- SNMP: Choose SNMP v3, and set up strong encryption and authentication passwords.
- SMTP: Choose TLS to access mailbox server.
- FTP: Choose SFTP, and set up complex passwords.
- AP hotspot: Choose WPA2-PSK encryption mode, and set up complex passwords.

### 2.4 Change HTTP and other default service ports

It is recommended that you change the default port of HTTP and other services to any port between 1024 and 65535 to reduce the risk of being guessed by threat actors.

### 3. Network Configuration

### 3.1 Enable Allow list

It is recommended that you turn on the allow list function, and only allow IP in the allow list to access the device. Therefore, please be sure to add your computer IP address and supporting device IP address to the allow list.

### 3.2 MAC address binding

It is recommended that you bind the IP address of the gateway to the MAC address on the device to reduce the risk of ARP spoofing.

### 3.3 Build a secure network environment

In order to better ensure the security of devices and reduce potential cyber risks, the following are recommended:

Disable the port mapping function of the router to avoid direct access to the intranet devices from external network;

According to the actual network needs, partition the network: if there is no communication demand between the two subnets, it is recommended to use VLAN, gateway and other methods to partition the network to achieve network isolation;

Stablish 802.1x access authentication system to reduce the risk of illegal terminal access to the private network.

### 4. Security auditing



### 4.1 Check online users

It is recommended to check online users regularly to identify illegal users.

### 4.2 Check device log

By viewing logs, you can learn about the IP addresses that attempt to log in to the device and key operations of the logged users.

### 4.3 Configure network log

Due to the limited storage capacity of devices, the stored log is limited. If you need to save the log for a long time, it is recommended to enable the network log function to ensure that the critical logs are synchronized to the network log server for tracing.

### 5. Software Security

### 5.1 Update firmware in time

According to the industry standard operating specifications, the firmware of devices needs to be updated to the latest version in time in order to ensure that the device has the latest functions and security. If the device is connected to the public network, it is recommended to enable the online upgrade automatic detection function, so as to obtain the firmware update information released by the manufacturer in a timely manner.

### 5.2 Update client software in time

We recommend you to download and use the latest client software.

### 6. Physical protection

It is recommended that you carry out physical protection for devices (especially storage devices), such as placing the device in a dedicated machine room and cabinet, and having access control and key management in place to prevent unauthorized personnel from damaging hardware and other peripheral equipment (e.g. USB flash disk, serial port).

### ENABLING A SMARTER SOCIETY AND BETTER LIVING