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dahua LM22-B201S LED Monitor User Manual

dahua LM22-B201S LED Monitor

Product Information

Specifications

- **Product Name:** LED Monitor
- **Model:** V1.0.0
- **Release Time**: April 2023

Foreword

This manual introduces the installation, functions, and operations of the LED monitor (hereinafter referred to as the monitor). Read it 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
DANGER	Indicates a high potential hazard which, if not avoided, will result in death or serious injury.
WARNING	Indicates a medium or low potential hazard which, if not avoided, could result in slight or moderate injury.
CAUTION TIPS	Indicates a potential risk which, if not avoided, could result in property damage, data loss, reductions in performance, or unpredictable results.
NOTE	Provides additional information as a supplement to the text.

Revision History

Version V1.0.0 – First release (April 2023)

Privacy Protection Notice

As the device user or data controller, you might collect the personal data of others such as their face, fingerprints, and license plate number. You need to be in compliance with your local privacy protection laws and regulations to protect the legitimate rights and interests of other people by implementing measures which include but are not limited to:

- Providing clear and visible identification to inform people of the existence of the surveillance area
- Providing required contact information

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.

Important Safeguards and Warnings

Safety Warning

- Contact the dealer or after-sales service center when in need of adjustment or maintenance.
- Do not place any items on the product. The product may be damaged if foreign objects enter the internal unit.
- Do not tread on or squeeze the power line, especially the plug or connection point of the power line to the product.
- Do not put the product in a flammable or corrosive gaseous environment, which may cause fire or damage.

Notes

- Please put the product in a flat, stable, and dry place. Avoid direct sunlight, high temperature, humidity, dust, and corrosive gas.
- If the product is installed on the wall, please make sure the wall's load-bearing capacity is sufficient. To avoid falling and injuring people, install according to the included instructions with mounting hardware.
- The LCD may experience image distortion or color decay when the temperature variation is too large. Wait for a moment (with power on) and the distortion should disappear.
- Do not block the ventilation opening. Install the product according to this handbook.
- Do not install the product near any heat source such as a radiator, heat register, or stove.
- Do not use uncertified connecting lines, which might cause equipment failure.
- Do not press, stretch, or heat the connecting lines, which might cause damage to them.
- Please firmly grasp the plug of the connecting line when inserting and removing. Pulling the plug directly may cause damage.

Product Usage Instructions

Installation
To install the LED monitor, follow these steps:

1. Choose a flat, stable, and dry place for the monitor.
2. Avoid placing the monitor under direct sunlight or in environments with high temperature, humidity, dust, or corrosive gas.

3. If you plan to mount the monitor on a wall, make sure the wall's load-bearing capacity is sufficient.

4. Refer to the included instructions and use the provided mounting hardware to securely install the monitor on the wall.

Functions and Operations

The LED monitor offers the following functions and operations:

- **Power On/Off:** Press the power button to turn on or off the monitor.
- **Brightness Adjustment:** Use the brightness controls to adjust the display brightness according to your preference.
- **Input Selection:** Use the input selection button to switch between different input sources, such as HDMI, VGA, or DisplayPort.
- **Menu Navigation**: Use the menu buttons to navigate through the on-screen menu and access various settings and options.

Cleaning and Maintenance

To clean and maintain the LED monitor, follow these guidelines:

- Turn off the monitor and unplug it from the power source before cleaning.
- Use a soft, lint-free cloth slightly dampened with water or a mild cleaning solution to gently wipe the screen and the exterior surfaces of the monitor.
- Avoid using abrasive cleaners, strong chemicals, or rough materials that may damage the monitor.
- Do not spray liquid directly onto the screen or any openings of the monitor.

Troubleshooting

If you encounter any issues with the LED monitor, refer to the troubleshooting section of the manual or contact the dealer or after-sales service center for assistance.

FAQ

- **Q: Can I use the LED monitor outdoors?**

  A: No, it is not recommended to use the LED monitor outdoors as it is not designed to withstand outdoor conditions.
- **Q: How do I adjust the display brightness?**

  A: Use the brightness controls on the monitor to increase or decrease the display brightness according to your preference.
- **Q: What should I do if the screen appears distorted or colors are distorted?**

  A: If the screen appears distorted or colors are distorted, wait for a moment (with power on) as it may be due to temperature variation. The distortion should disappear after a short period of time.
- **Q: Can I clean the monitor with strong chemicals?**

  A: No, using strong chemicals may damage the monitor. Use a soft, lint-free cloth slightly dampened with water or a mild cleaning solution to clean the screen and exterior surfaces of the monitor.
- **Q: Where can I find additional help or support?**

  A: If you need additional help or support, refer to the troubleshooting section of the manual or contact the dealer or after-sales service center for assistance.

LED Monitor
User's Manual

Foreword

General
This manual introduces the installation, functions and operations of the LED monitor (hereinafter referred to as "the monitor"). 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
⚠ DANGER	Indicates a high potential hazard which, if not avoided, will result in death or serious injury.
⚠ WARNING	Indicates a medium or low potential hazard which, if not avoided, could result in slight or moderate injury.
⚠ CAUTION	Indicates a potential risk which, if not avoided, could result in property damage, data loss, reductions in performance, or unpredictable results.
🔑 TIPS	Provides methods to help you solve a problem or save time.
📖 NOTE	Provides additional information as a supplement to the text.

Revision History

Version	Revision Content	Release Time
V1.0.0	First release.	April 2023

Privacy Protection Notice
As the device user or data controller, you might collect the personal data of others such as their face, fingerprints, and license plate number. You need to be in compliance with your local privacy protection laws and regulations to protect the legitimate rights and interests of other people by implementing measures which include but are not limited: Providing clear and visible identification to inform people of the existence of the surveillance area and provide required contact information.

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

Safety Warning
To use the product safely, correctly, and to keep users from suffering injury or property loss, please observe the following safety precautions when installing, using or maintaining.
Please read this handbook before operating the product and keep the handbook for future reference.

- Notice and observe all the warnings and illustrations.

- Do not adjust, maintain or modify if you do not have appropriate qualifications.

- Do not open or remove the rear cover, box or cover board of the product. Please contact the dealer or after-sales service center when in need of adjustment or maintenance.

- Do not place any items on the product. The product may be damaged if foreign objects enter the internal unit.

- Do not tread on or squeeze the power line, especially the plug or connection point of the power line to the product.

- Do not put the product in flammable or corrosive gaseous environment, which may cause fire or damage the product. Placing the product in proximity to flammable gas can easily result in a dangerous explosion.

- Please turn off power or unplug the power cable immediately if there is smoking, off-odor, or abnormal noise. Contact the after-sales service center for maintenance after confirming there is no more smoke or odor. Further use could result in fire.

- Only qualified service people can maintain. If the product gets any kind of damage, such as damage to the plug, foreign matter or liquid into the unit, exposure to rain or humidity, loss of function, or dropped, please contact dealer or after-sales service center.

- Do not expose the product to rain or chemicals. If the product is moist, allow to fully dry before plugging in or turning on power.

- Turn off the power when cleaning the product.

- Failure to properly secure all screws during installation can result in a fall of the product. Ensure all mounting

hardware and other installation accessories are properly secured during installation.

- Do not touch any fixed components inside the product. Failure to do so can result in damage to the product or person.
- Be careful during maintenance of product even if the power is off. Some components are equipped with UPS, and can continue to supply power which is dangerous to people.

Notes

- Please put the product in a flat, stable and dry place. Avoid direct sunlight, high temperature, humidity, dust, and corrosive gas.
- If the product is installed on the wall, please make sure the wall's load bearing capacity is sufficient. To avoid falling and injuring people, install according to the included instructions with mounting hardware.
- The LCD may experience image distortion or color decay when the temperature variation is too large. Wait for a moment (with power on) and the distortion should disappear.
- Do not block the ventilation opening. Install the product according to this handbook.
- Do not install the product near any heat source such as a radiator, heat register or stove.
- Do not use uncertified connecting lines, which might cause equipment failure.
- Do not press, stretch or heat the connecting lines, which might cause damage to it.
- Please firmly grasp the plug of the connecting line when inserting and removing. Pulling the connecting line might cause damage to it.
- Cut off power and the connecting line immediately and contact the after-sales service center if the product or the connecting line is damaged for some reason. Continued use without maintenance might cause smoking or off-odor.
- Do not hang or lean on the product. Doing so can cause the product to fall or become damaged. It may also cause injury to people. Pay special attention when children are nearby.
- Please turn off power for safety if not using the product for a long time.
- Do not let the connecting line get squeezed, buckled, pulled or twisted.
- Make sure the power is turned off and the connecting lines are removed when moving the product.
- Avoid collisions with the product. This may cause equipment failure.

Introduction

Appearance
The figures in the manual are for reference only, and might differ from the actual product.

Figure 1-1 Appearance
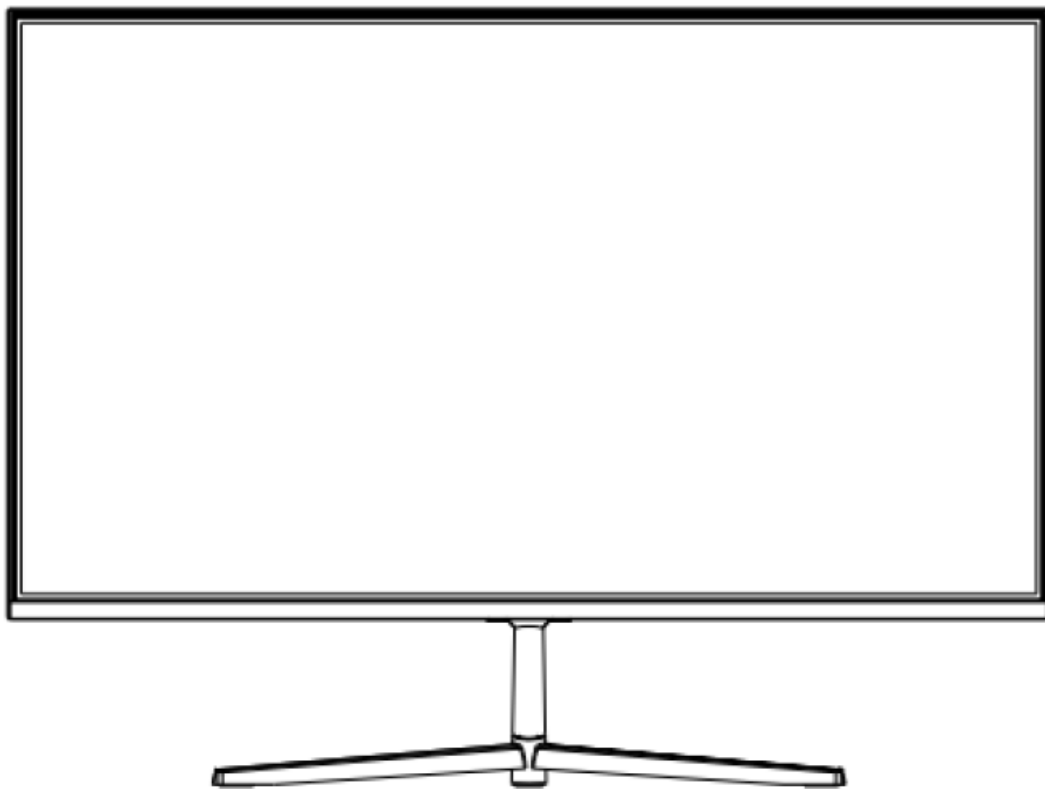
Features

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

Ports

- Please connect the monitor to external devices according to the following I/O interface list. Choose the corresponding incoming signal channel.
- Please turn off the power of the external device and the product when connecting.

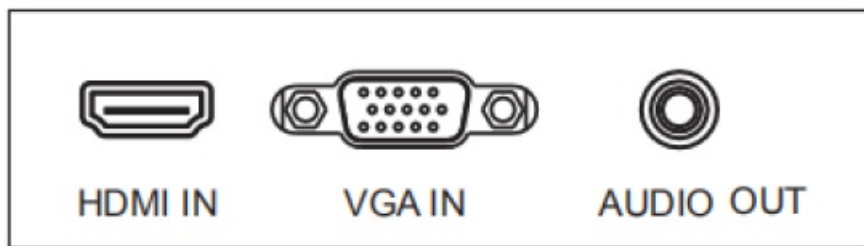Figure 2-1 Port A
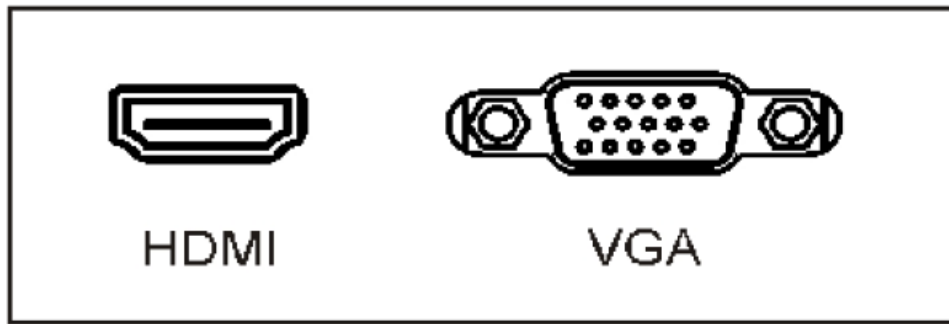
Figure 2-2 Port B
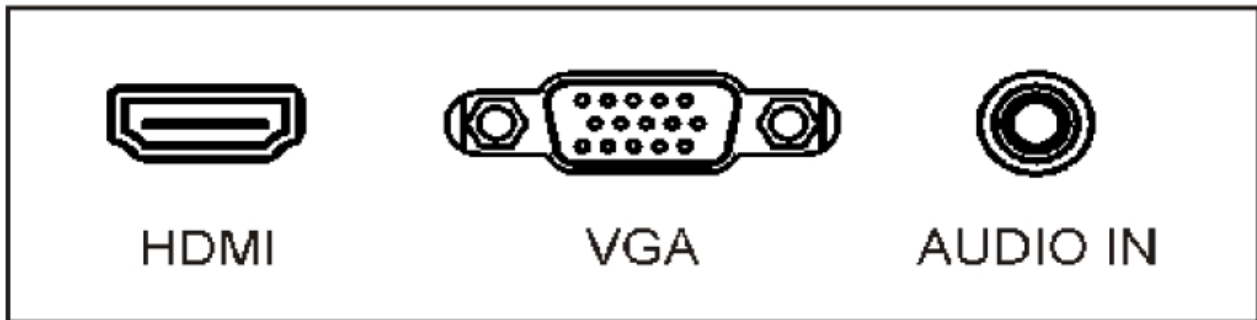
Figure 2-3 Port C

Table 2-1 Ports Description

Name	Description
VGA INPUT	D-SUB 15 pins Connector
HDMI INPUT	HDMI Connector
AUDIO IN	3.5mm audio port
AUDIO OUT	3.5mm audio port

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, Image Menu, Color Temp menu, OSD Setting menu, Reset menu and Misc menu. Press the menu button to select the sub-menu item. The selected menu item will show a bordered wireframe. Press the ▲ ▼ button to move among the secondary menu items of the sub-menu.
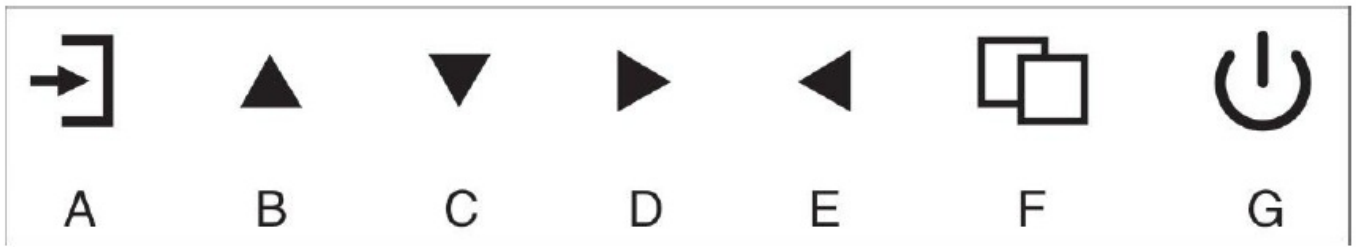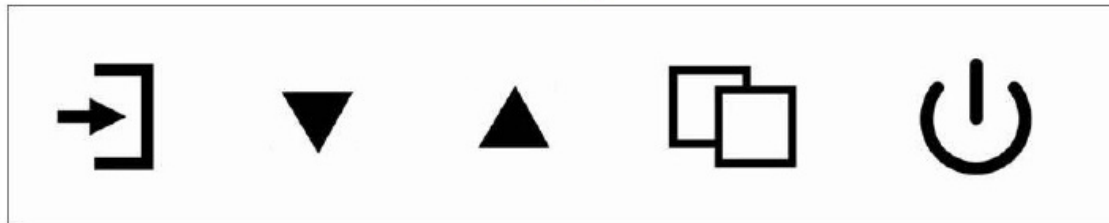
Figure 3-1 7 key

| A | B | C | D | E | F | G |

Figure 3-2 5 key

Table 3-1 Icon description

Icon	Description
⇥	• Source button. • Press the button to display all the signal channel menus.
▲	• 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.
▼	• 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.
◀	• 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.
▶	• 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.
⬓	• Menu button. • Press the button to display the OSD main menu. Press the button to Exit the OSD menu o r menu item.
⏻	• Power button. • Press the button to turn on or turn off the display.

PC PICTURE Menu

PICTURE menu can set the brightness, contrast, black equalizer, low blue, ECO and DCR function. Press ▲ ▼ button to adjust value when item is selected, press menu button to exit.
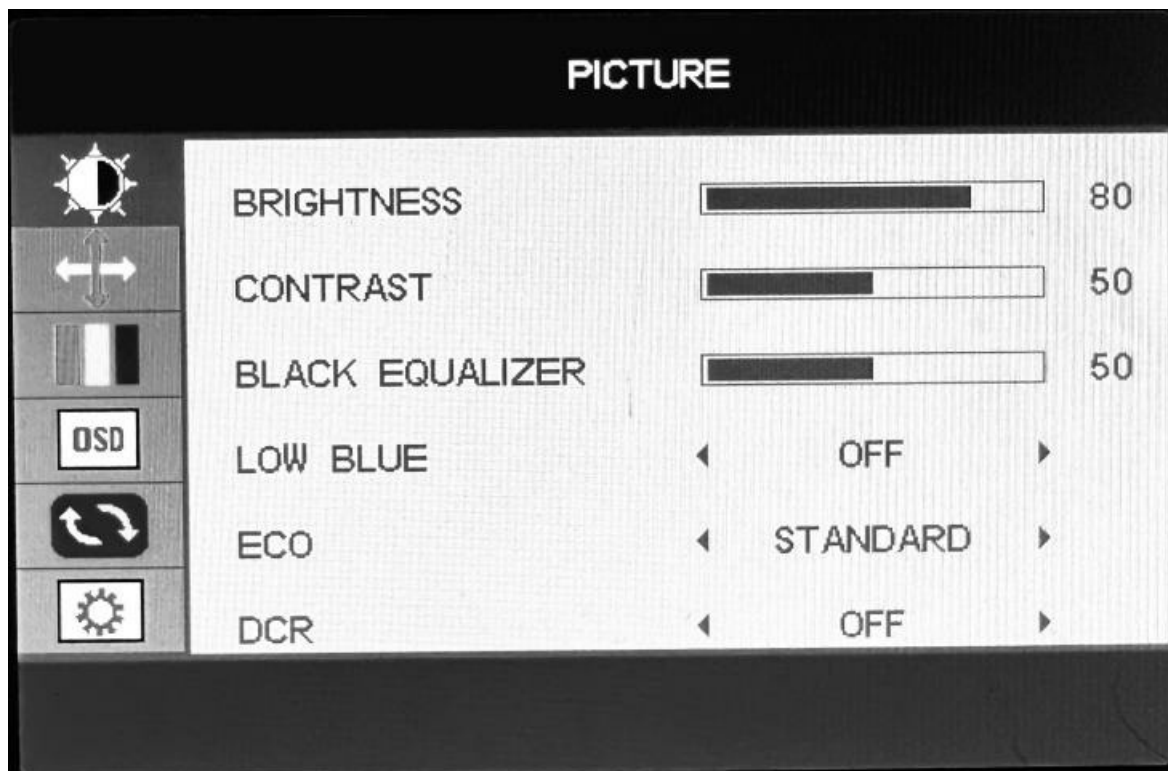
- **IMAGE Menu**

  IMAGE menu can set H. position, V. position, clock, phase, aspect and free sync function. Press ▲ ▼ button to adjust value when item is selected, press menu button to exit.
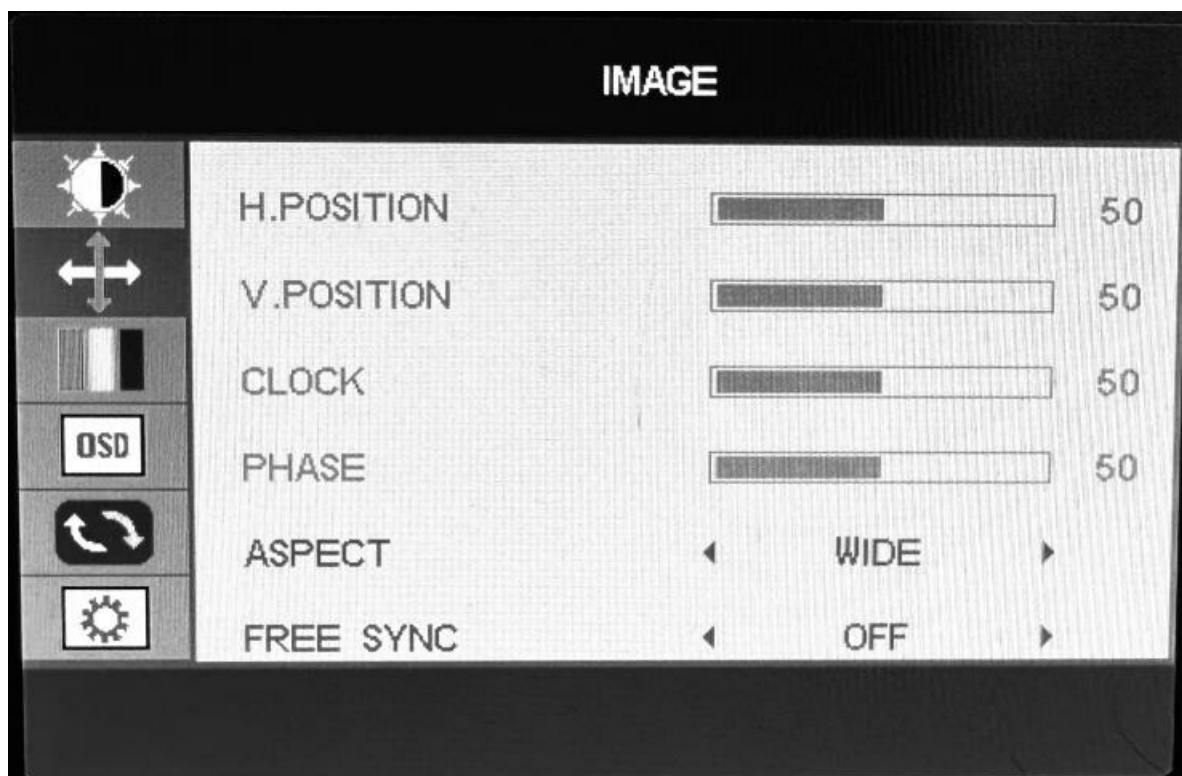
COLOR TEMP Menu

- COLOR TEMP menu can set color temp and HDR function.
- Press ▲ ▼ button to adjust value when item is selected, press menu button to exit.
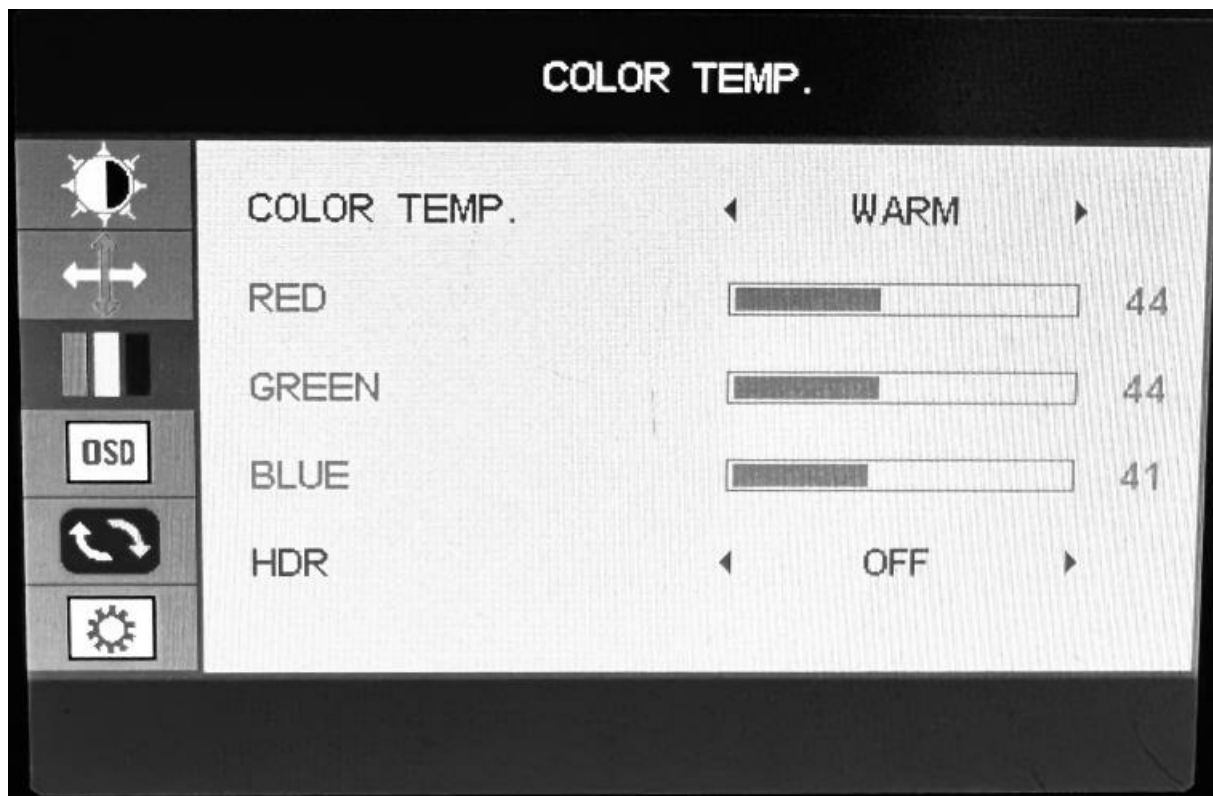
OSD SETTING Menu

OSD SETTING menu can set language, OSD H/V. POS, OSD timer, transparency and OSD LOGO function.
Press ▲ ▼ button to adjust value when item is selected, press menu button to exit.
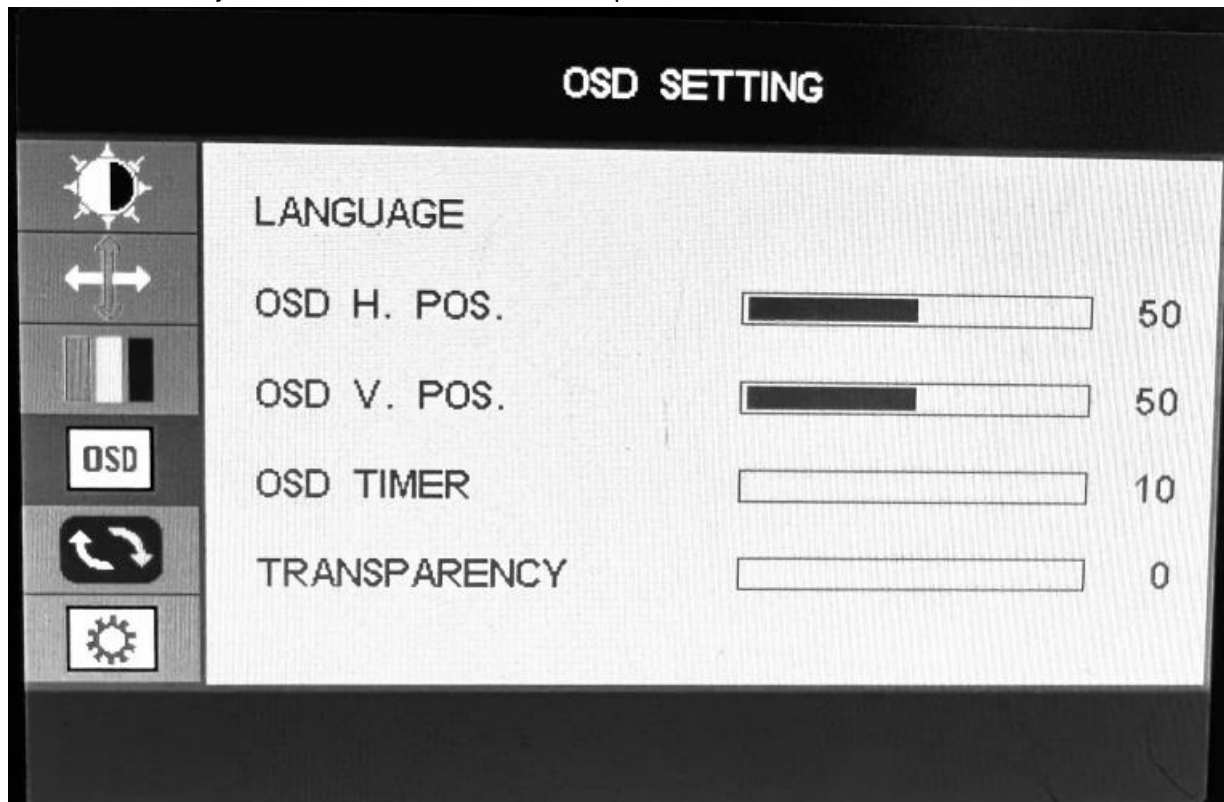
RESET Menu

- RESET menu can set image auto adjust, color auto adjust, reset, auto powerdown, timecount and OD function.
- Press ▲ ▼ button to adjust value when item is selected, press menu button to exit.
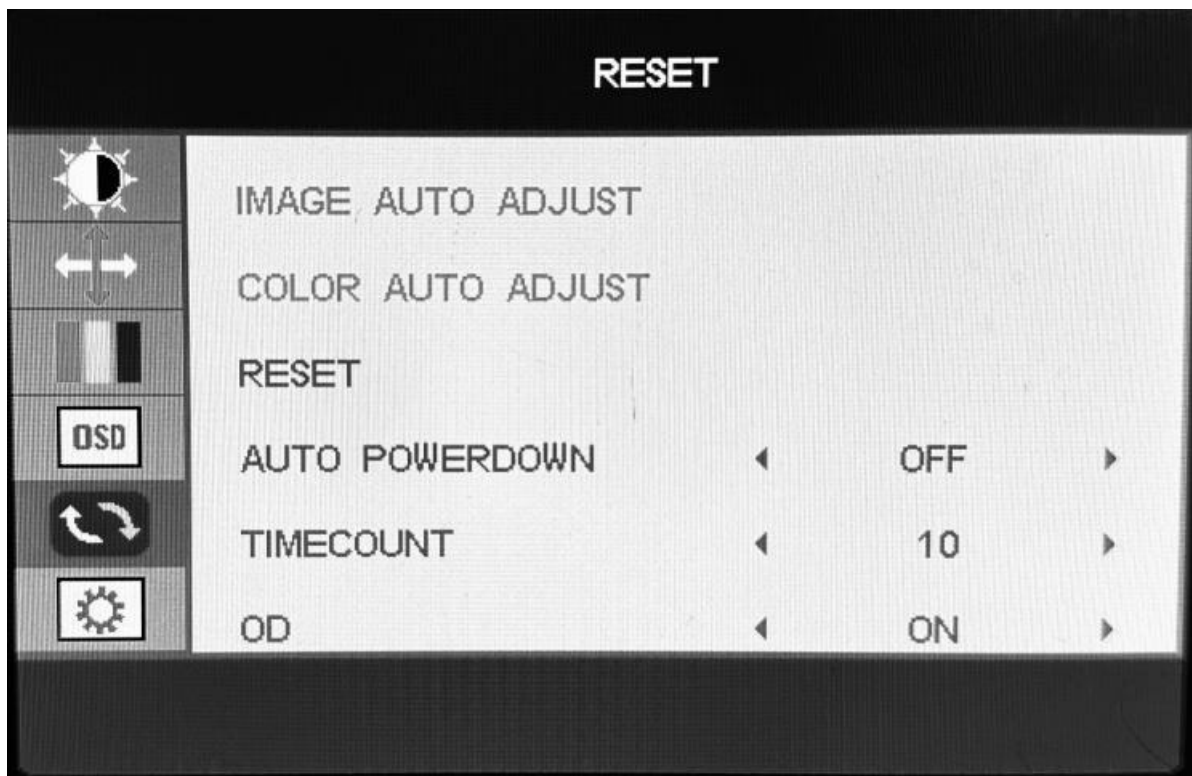
MISC. Menu

- MISC menu can set signal source, mute and volume function.
- Press ▲ ▼ button to adjust value when item is selected, press menu button to exit.
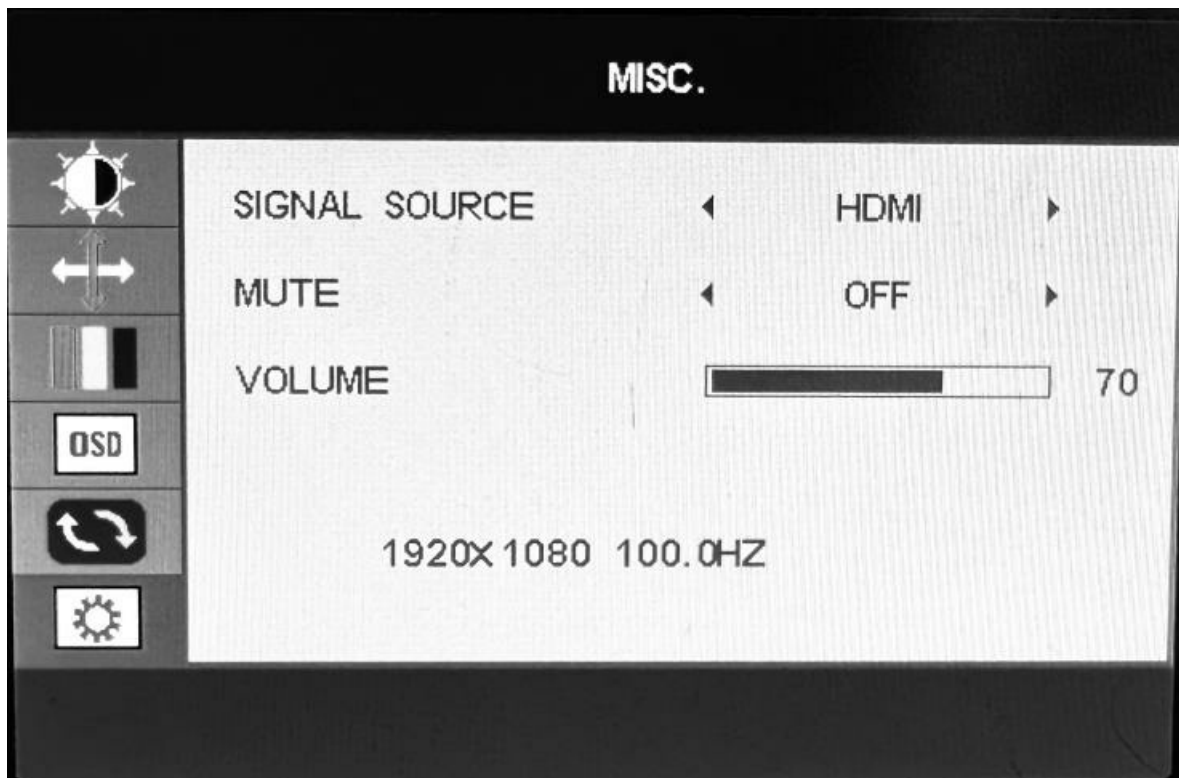
Channel Selection

- "Source" menu can select channel (input). The options include VGA, HDMI.
- Press ▲ ▼ button to adjust value when item is selected, press menu button to confirm.

FAQ

How to Clean Product

1. **Step1** Please wipe dust and other particles off with a clean soft towel.
2. **Step** 2 If it is still not clean, please use a neutral cleaner along with the clean soft towel. Wipe dry after cleaning it.
3. **Step** 3 Rubbing or scrapping the housing with fingernails or other hard objects might scratch the housing.

Troubleshooting

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

Problem	Fix									
	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	⊕		⊕		⊕			⊕	⊕	

Table 4-1 Solutions

No.	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 Cybersecurity Recommendations

Mandatory actions to be taken for basic device network security:

1. Use Strong Passwords

    Please refer to the following suggestions to set passwords:

    1. The length should not be less than 8 characters.
    2. Include at least two types of characters; character types include upper and lower case letters, numbers and symbols.
    3. Do not contain the account name or the account name in reverse order.
    4. Do not use continuous characters, such as 123, abc, etc.
    5. Do not use overlapped characters, such as 111, aaa, etc.
2. Update Firmware and Client Software in Time

    1. According to the standard procedure in Tech-industry, we recommend to keep your device (such as NVR, DVR, IP camera, etc.) firmware up-to-date to ensure the system is equipped with the latest security patches and fixes. When the device is connected to the public network, it is recommended to enable the "auto-check for updates" function to obtain timely information of firmware updates released by the manufacturer.
    2. We suggest that you download and use the latest version of client software.

"Nice to have" recommendations to improve your device network security:

1. **Physical Protection**

   We suggest that you perform physical protection to device, especially storage devices. For example, place the device in a special computer room and cabinet, and implement well-done access control permission and key management to prevent unauthorized personnel from carrying out physical contacts such as damaging hardware, unauthorized connection of removable device (such as USB flash disk, serial port), etc.

2. **Change Passwords Regularly**

   We suggest that you change passwords regularly to reduce the risk of being guessed or cracked.

3. **Set and Update Passwords Reset Information Timely**

   The device supports password reset function. Please set up related information for password reset in time, including the end user's mailbox and password protection questions. If the information changes, please modify it in time. When setting password protection questions, it is suggested not to use those that can be easily guessed.

4. **Enable Account Lock**

   The account lock feature is enabled by default, and we recommend you to keep it on to guarantee the account security. If an attacker attempts to log in with the wrong password several times, the corresponding account and the source IP address will be locked.

5. **Change Default HTTP and Other Service Ports**

   We suggest you to change default HTTP and other service ports into any set of numbers between 1024–65535, reducing the risk of outsiders being able to guess which ports you are using.

6. **Enable HTTPS**

   We suggest you to enable HTTPS, so that you visit Web service through a secure communication channel.

7. **MAC Address Binding**

   We recommend you to bind the IP and MAC address of the gateway to the device, thus reducing the risk of ARP spoofing.

8. **Assign Accounts and Privileges Reasonably**

   According to business and management requirements, reasonably add users and assign a minimum set of permissions to them.

9. **Disable Unnecessary Services and Choose Secure Modes**

   If not needed, it is recommended to turn off some services such as SNMP, SMTP, UPnP, etc., to reduce risks. If necessary, it is highly recommended that you use safe modes, including but not limited to the following services:

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

10. **Audio and Video Encrypted Transmission**

    If your audio and video data contents are very important or sensitive, we recommend that you use encrypted transmission function, to reduce the risk of audio and video data being stolen during transmission. Reminder: encrypted transmission will cause some loss in transmission efficiency.

11. **Secure Auditing**

    1. Check online users: we suggest that you check online users regularly to see if the device is logged in without authorization.
    2. Check device log: By viewing the logs, you can know the IP addresses that were used to log in to your

devices and their key operations.

12. **Network Log**

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

13. **Construct a Safe Network Environment**

In order to better ensure the safety of device and reduce potential cyber risks, we recommend:

1. Disable the port mapping function of the router to avoid direct access to the intranet devices from external network.
2. The network should be partitioned and isolated according to the actual network needs. If there are no communication requirements between two sub networks, it is suggested to use VLAN, network GAP and other technologies to partition the network, so as to achieve the network isolation effect.
3. Establish the 802.1x access authentication system to reduce the risk of unauthorized access to private networks.
4. Enable IP/MAC address filtering function to limit the range of hosts allowed to access the device.

Documents / Resources

LED Monitor
User's Manual

dahua LM22-B201S LED Monitor [pdf] User Manual
LM22-B201S LED Monitor, LM22-B201S, LED Monitor, Monitor

References

- **User Manual**