HIKVISION

22-inch LCD Display Unit

User Manual

Thank you for purchasing our product. If there is any question or request, please do not hesitate to contact us. This manual may contain several technically incorrect places or printing errors, and the content is subject to change without notice. The updates will be added into the new version of this manual. We will readily improve or update the products or described in the manual.

Regulatory Information

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Hikvision® 22-inch LCD Display Unit User's Manual

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TABLE OF CONTENTS

IMPORTANT SAFEGUARDS

1. Installation cautions

- Do not block any ventilation openings.
- Always ensure that the monitor is located in a well-ventilated area to prevent the unit from overheating.
- Only use accessories specified by the manufacturer or those sold with the product
- Avoid operating or placing the monitor in the following environments: extremes of temperatures, both hot and cold; high humidity; direct sunlight; excessively dusty surroundings; avoid close proximity to other equipment that generates a strong magnetic field

2. Water and moisture

Do not use this appliance near water. To reduce the risk of fire or electric shock, do not expose this unit to rain or moisture.

3. Power cord and power cord protection

Power cords should be routed so that they not likely to be walked on or pinched. Pay particular attention to the location of cords and plugs, convenience receptacles, and the point of exit from the appliance.

4. Product care

Do not touch the screen directly with fingers. The oils from your skin may leave marks on the surface of the screen, which are difficult to be removed and may damage the screen permanently. Do not apply pressure to the screen.

5. Cleaning

Clean only with a dry cloth.

6. Servicing

Do not attempt to service this unit yourself. Opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

7. Lightning

For added protection during a lighting storm or when this unit is left unattended and unused for long periods of time, unplug the unit from the wall outlet and disconnect the cable system. This will prevent damage to the unit due to lightning and power line surges.

IMPORTANT SAFEGUARDS

8. Mains plug (2 pin/3 pin)

- Do not remove the grounding or earth connection from the power supply / mains plug.
- Always remember to unplug the monitor from the power supply under the following circumstances if the monitor will not be used for a long period of time, if the power supply cable or plug/connector is damaged or if the monitor housing is damaged or broken.

> **CAUTION:** Do not attempt to dismantle this product. Any attempt to dismantle or remove the covers from this product will invalidate the warranty and may also result in serious injury.

INTRODUCTION

This manual explains how to correctly install, operate and get the best performance from your monitor. Please read this user manual carefully before installing your monitor then keep it near your monitor for quick reference. First, please check that the contents of the box correspond with the following checklist:

- Display Unit
- Power cord
- VGA cable
- Adaptor
- User manual

If any item is missing or damaged, please contact your dealer. Please keep the box and packing materials so that you may properly store or transport your monitor.

FEATURES

- The monitor is designed for use in a small work area or for those who need more work space on the desk.
- The convenient and user-friendly onscreen display allows for easy and accurate adjustments of screen size, position and screen color.
- The monitor complies with the VESA Display Data Channel (DDC) specification for Plug and Play compatibility. Advanced microcircuitry makes setup and configuration fast and effortless.
- The monitor features Advanced Color Controls for fine-tuning to meet your own personal tastes or application requirements. Use the on-screen controls to adjust the color temperature,
- RGB gain value for the best possible screen color and intensity.
- Press the Menu button and activate the Self-Diagnosis menu to determine whether your monitor is functioning normally, not receiving a signal or is receiving a signal that is out of scanning range.
- Activate the higher refresh rates of the monitor to stabilize the screen and eliminate the annoying flicker that contributes to eye-strain and headaches.
- The monitor supports the optimal display performance with 1920x1080 @ 60 Hz
- The monitor can be connected to various types of video devices with supporting video input signals such as Composite video (CVBS), and Separate video.
- The internal stereo speakers produce a good quality audio sound.

ASSEMBLING THE MONITOR

The monitors are designed for use on a desktop.

The arm of the monitor stand is shipped preinstalled on the monitor.

To assemble the monitor:

1. Put a smooth pad or cloth on a level surface. Place the monitor on it facing downwards.
2. Insert the arm of the monitor stand of the monitor into the pedestal foot provided. See figures below.
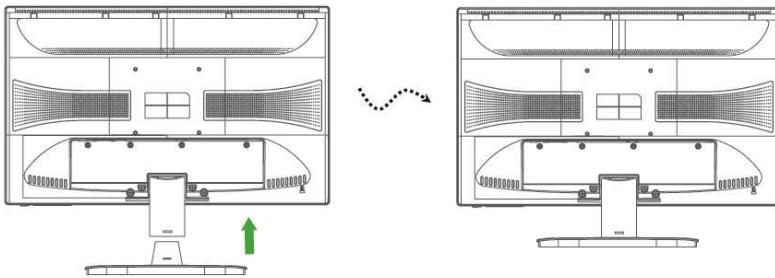

To disassemble the monitor:

1. Put a smooth pad or cloth on a level surface. Place the monitor on it facing downwards.
2. Shrapnel with fingers or similar objects hold the base below, carefully detach the supporting arm from the foot by pressing the groove on the back of the supporting arm. (Note that the fixation point can be broken if too much force is applied). See figures below.
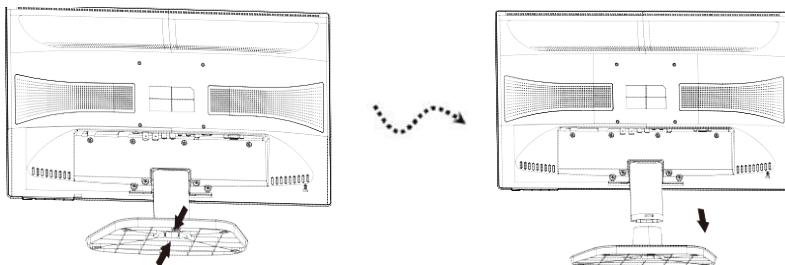
WALL HANGING STANDARD
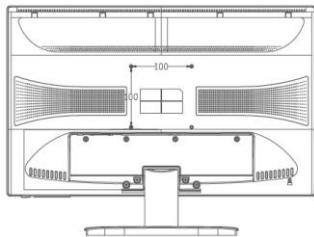
The monitor's installation surface is compatible with other types of VESA standard stands.

Hole spacing: 100 x 100 mm

Screw length: 8 to12 mm

THE FUNCTION OF THE INTERFACE
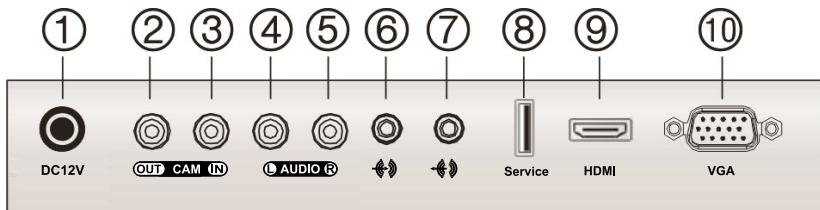
1. DC 12V Input.

2. CAM OUT: VIDEO signal output.

3. CAM IN: VIDEO signal Input.

4. RCA AUDIO L : AUDIO signal input left.

5. RCA AUDIO R: AUDIO signal out Right.

6. Stereo Input: AUDIO signal input.

7. Stereo Out : AUDIO signal out.

8. Service: USB and service input.

9. HDMI: HDMI signal input.

10. VGA: RGB signal input.

FRONT PANEL CONTROLS

Control panel
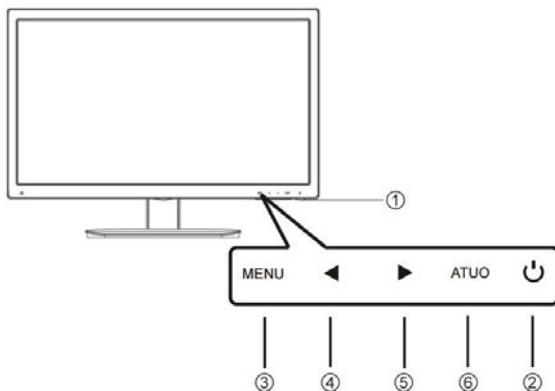
1. POWER indicator

Show both normal operation and power management status with power LED

2. POWER

Switch the monitor on and off.

3. MENU

Turn the OSD window on.

Secondary Function: Turns the OSD window off and moved from sub menu to top menu in the OSD window.

4. ◄ (Left Arrow (*))

*Primary Functio*n: Used to adjust the volume.

Secondary Function: Moves cursor to the down in the OSD window and decreases the value of any selected menu.

5. ► (Right Arrow (*))

*Primary Functio*n: Used to select from different input source.

Secondary Function: Moves cursor to the up in the OSD (On-Screen Display) window and increases the value of any selected menu.

6. AUTO (*)

Primary Function: Automatically adjusts the display to the most optimal setting possible. (VGA mode only)

Secondary Function: Selects sub menu.

FRONT PANEL CONTROLS

Changing a monitor parameter

Press the **MENU** button on the front panel to obtain the OSD menu screen.

1. Use Left - Right buttons to select the menu.
2. Use AUTO button to select the submenus.
3. Use Left-Right buttons to select a submenu function.
4. Press AUTO button, then using left-right buttons you can make adjustments as necessary.
5. To exit, press **MENU**.

Hot keys

► Right Arrow	When there is no OSD, to select input signal source. CAM-VGA-HDMI
◄ Left Arrow	When there is no OSD, you can adjust the volume directly.
AUTO	Automatically choose the correct horizontal and vertical position and the size of the screen image (VGA only).

ADJUSTMENT PROCEDURE
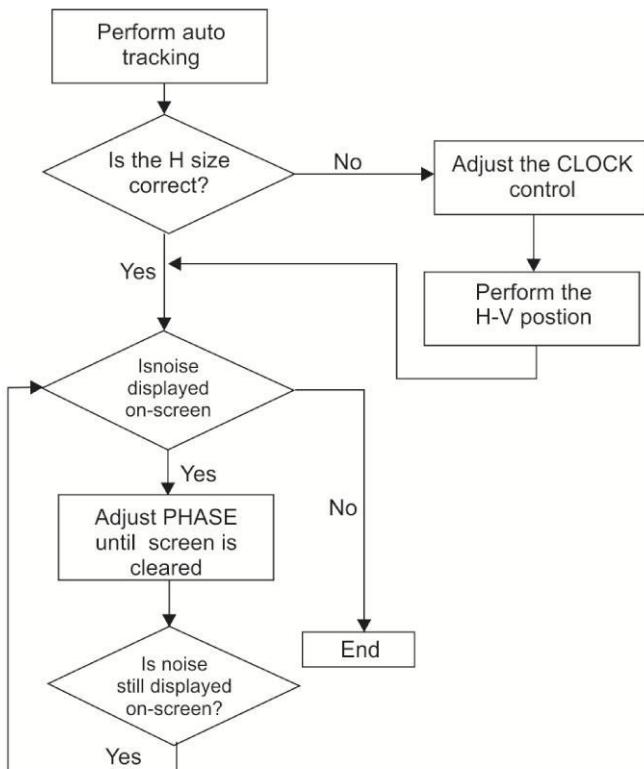
OSD FUNCTION

Configure the monitor using the on-screen display (OSD) menus and submenus.
Changes are immediately saved and implemented.

VGA menu

- **Video**

(Advanced Control)
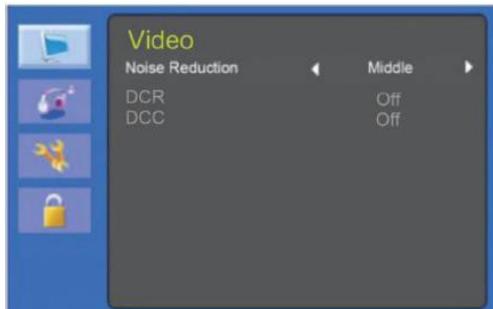
(Auto Config)
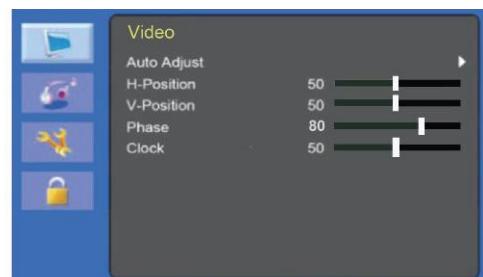
OSD FUNCTION

1. Brightness

Adjust the brightness of the image.

2. Contrast

Adjust the contrast of the image, the difference between light and dark areas on the screen.

3. Color Temperature

Choose a different preset color temperature or set your own customized color parameters.(Normal/ Warm/ Cool/ User).

4. Advanced Setting

4-1 Noise Reduction

4-2 DCR (not support)

4-3 DCC (not support)

5. Auto Config

5-1 Auto adjust

Automatically choose the correct horizontal position and vertical position and size of the screen image.

5-2 H-Position

Adjust the position of the display horizontally (left or right).

5-3 V-Position

Adjust the position of the display vertically (up or down).

5-4 Phase

Remove any horizontal noise and clear or sharpen the image of the characters.

5-5 Clock

Adjust the width (horizontal size) of the screen image.

6. Auto Color

Operate the white balance and automatically adjust the color settings.(Available only during VGA input source signal)

OSD FUNCTION

- **Sound**

1. Sound Mode

Choose a different preset sound mode or your own customized sound. (Standard/ Speech/ Music/ Personal)

2. Balance

Adjust the sound balance of the left and right speakers.

3. Bass

When you select **User** mode, adjust the bass sound.

4. Treble

When you select the user mode, adjust the treble sound.

5. Virtual Surround

Provide an enhanced listening experience.

6. Auto Volume

Automatically remains at the same volume level if you change the program.

OSD FUNCTION

● **Setting**
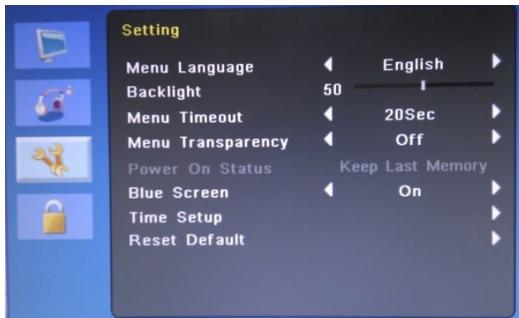
1. Menu Language

Select language for the OSD.

2. Backlight

Adjust the brightness of the image.

3. Menu Time out

Adjust the display of the OSD menu (20 to 60 seconds).

4. Menu Transparency

Adjust the OSD transparency.

5. Power On Status (Not used)

6. Blue Screen

When there is no signal input, select the blue background color.

7. Reset Default

Reset the screen to the factory preset display settings.

OSD FUNCTION

● **Child Lock**

1. Keypad Lock

Turn the keypad lock on or off.

Keyboard lock unlock method:Long press "MENU" key for about 8 seconds, can be unlocked.

OSD FUNCTION

Cam menu

● **Video**
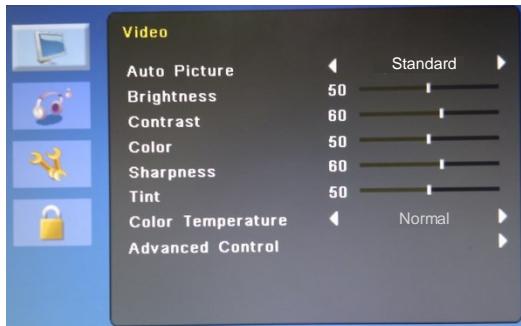
(Advanced Control)

1. Auto Picture

Select the picture mode (Standard/Movie/ECO/Personal/ Vivid).

2. Brightness

Adjust the brightness of the image.

3. Contrast

Adjust the contrast of the image, the difference between light and dark areas on the screen.

4. Color

Adjust the color of the image.

5. Sharpness

Adjust the display image quality (if the screen proceeds to scaling up).

6. Tint

Adjust tint of the image.
Only for NTSC signal.

7. Color Temperature

Choose a different preset color temperature or set your own customizedcolor

parameters (Normal/ Warm/ Cool/ User).

8. Advanced Control

8-1 Noise Reduction

Reduce the noise in the picture due to poor reception or poor picture quality.

(Middle/ High/ Off/ Low)

8-2 DCR

Turn DCR on or off.

8-3 DCC

Turn DCC on or off.

8-4 Picture Format

Select the aspect ratio

OSD FUNCTION

● **Audio**
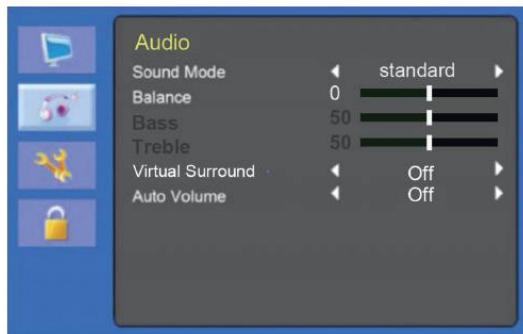
1. Sound Mode

Choose a different preset sound mode or your own customized sound.

(Standard/ Music/ Speech/ Personal)

2. Balance

Adjust the sound balance of the left and right speakers.

3. Bass

When you select Personal mode, adjust the bass sound.

4. Treble

When you select the Personal mode, adjust the treble sound.

5. Virtual Surround

Provide an enhanced listening experience.

6. Auto Volume

Automatically remains at the same volume level if you change the program.

OSD FUNCTION

● **Setting**
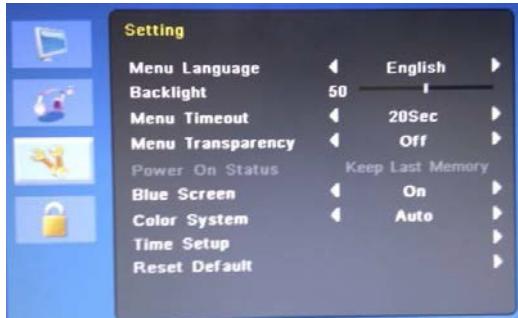
1. Menu Language

 Select the OSD language.

2. Backlight

 Adjust the brightness of the image.

3. Menu Time Out

 Adjust the display time of the OSD menu (20 to 60 seconds).

4. Menu Transparency

 Adjust the OSD transparency.

5. Power On Status (Not Used)

6. Blue Screen

 When there is no signal input, select the blue background color.

7. Color System

 Select the input signal system Auto or PAL, PAL-60, NTSC, NTSN_44, SECAM.

8. Reset Default

 Reset the screen to the factory preset display settings.

OSD FUNCTION

● **Child Lock**

1. Keypad Lock

Turn the keypad lock on or off.

Keyboard lock unlock method:Long press "MENU" key for about 8 seconds, can be unlocked.

OSD FUNCTION

HDMI menu

● **Video**

(Advanced Control)
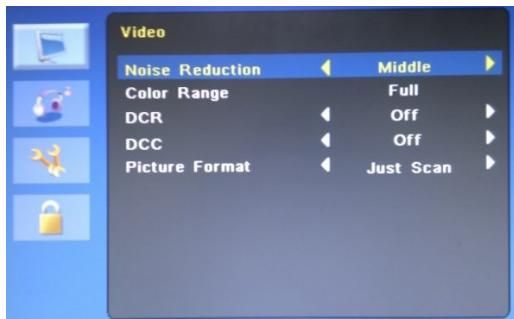
1. Auto Picture

Select the picture mode (Standard/Movie/ECO/Personal/ Vivid).

2. Brightness

Adjust the brightness of the image.

3. Contrast

Adjust the contrast of the image, the difference between light and dark areas on the screen.

4. Color

Adjust the color of the image.

5. Sharpness

Adjust the display image quality (if the screen proceeds to scaling up).

6. Color Temperature

Choose a different preset color temperature or set your own customizedcolor parameters (Normal/ Warm/ Cool/ User).

7. Advanced Control

7-1 Noise Reduction

Reduce the noise in the picture due to poor reception or poor picturequality.(Off/ Low/ Middle/ High).

7-2 Color Range

Select the color format(Full/Limit).

7-3 DCR

Turn DCR on or off.

7-4 DCC

Turn DCC on or off.

7-5 Picture Format

Select the aspect ratio (Just Scan/ OverScan)

OSD FUNCTION

● Audio

1. Sound Mode

Choose a different preset sound mode or your own customized sound.

(Music/ Speech/ Personal/ Standard)

2. Balance

Adjust the sound balance of the left and right speakers.

3. Bass

When you select Personal mode, adjust the bass sound.

4. Treble

When you select the Personal mode, adjust the treble sound.

5. Virtual Surround

Provide an enhanced listening experience.

6. Auto Volume

Automatically remains at the same volume level if you change the program.

OSD FUNCTION

● **Setting**

1. Menu Language

Select the OSD language.

2. Backlight

Adjust the brightness of the image.

3. Menu Time Out

Adjust the display time of the OSD menu (20 to 60 seconds).

4. Menu Transparency

Adjust the OSD transparency.

5. Power On Status (Not Used)

6. Blue Screen

When there is no signal input, select the blue background color.

7. Reset Default

Reset the screen to the factory preset display settings.

OSD FUNCTION

● **Child Lock**

1. Keypad Lock

Turn the keypad lock on or off.

Keyboard lock unlock method:Long press "MENU" key for about 8 seconds, can be unlocked.

SELF-DIAGNOSIS

If there is no image, the Self-Diagnosis screen will be displayed. The self-diagnosis function checks if the status of the monitor screen is No Signal, Out of Range or None Supported.

No Signal

The **No Signal screen** is displayed when the D-Sub signal connector is connected but the status of the monitor is on DPMS mode.

Out of Range

The **Out of Range** screen is displayed when the applied frequency is under or over normal range.

Normal range (Non-interlaced mode only):
H: 30 to 80 kHz
V: 50 to 76 Hz

TROUBLESHOOTING

Symptom	Check
Picture is jittery	Adjust Clock to set the screen position and adjust the Clock value carefully until there is no noise displayed.
No picture	Check if the power switch and computer power switch are in the On position. Check if the signal cable is correctly connected to the video card. Check if the pins of D-sub connector are not bent. Check if the computer is in the power- saving mode.
POWER LED is not lit	Check if the power switch is in the On position. Check if the power cord is correctly connected.
Image is unstable	Check if the signal cable is suitable to the video card.
Picture bounces or a wave pattern is present in the picture	Keep the devices that may cause electrical interference away from the monitor. See the FCC information at the front cover of the manual.
Picture is blurred	Adjust Contrast and Brightness.
No sound	Check the audio cables are correctly connected to the computer. Adjust the volume after checking the sound is muted. Check the audio system in the computer.
Low sound	Adjust the volume on the OSD menu. Adjust the volume of the sound card in the computer.
VIDEO screen cannot be seen	Check if PICTURE mode has been set. Check if the video terminal is properly connected.
No video	Check if the video cable is correctly connected to the computer and set to Functions on the OSD picture menu.
Poor color in the video	Adjust the Color or Tint values on the OSD Picture menu.
Grainy picture in the video	Adjust the Sharpness on the OSD Picture menu.

SPECIFICATIONS

Device Model	DS-D5022 Series	
Display Type	TFT-LED Backlight	
Screen Size	21.5"	
Dot Pitch	0.248×0.248 mm	
Max Resolution	1920×1080	
Best Operation Resolution	1920×1080@60Hz	
Brightness	250cd/m²	
Contrast	1000:1	
Response Time	5ms	
Color	16.7M	
Viewable Area	477×268mm	
Viewing Angle	Horizontal 170°, Vertical 160º	
Interfaces	VGA Input Port	1
	HDMI Input Port	1
	Audio(L/R)	1/1
	BNC(in/out)	1/1
	PC Audio in	1
	Head phone out	1
	USB	1
Power Supply	12 VDC,3A	
Consumption	≤30W	
Audio	2W x 2	
Operation Temperature	0°C~40°C (32°F~104°F)	
Operation Humidity	10%~85%	
Storage Temperature:	-20°C~55°C (-4°F~131°F)	
Storage Humidity:	5%~95%	
Bezel Material	Plastic	
Bezel Color	Black	
Wall-mounting Dot Site	100×100mm	
Wall-mounting Thread	M4	
Device Dimensions	511×377×170mm	
Package Dimensions	561×426×103mm	
G.W.	4.6Kg	
N.W.	3.2Kg	
Standard Package	Display Unit	1
	Power Cord	1
	VGA Cord	1
	Adapter	1
	User Manual	1

SPECIFICATIONS