HIKVISION

LCD Monitor

User Manual

User Manual

Any and all information, including, among others, wordings, pictures, graphs are the properties of Hangzhou Hikvision Digital Technology Co., Ltd. or its subsidiaries (hereinafter referred to be "Hikvision"). This user manual (hereinafter referred to be "the Manual") cannot be reproduced, changed, translated, or distributed, partially or wholly, by any means, without the prior written permission of Hikvision. Unless otherwise stipulated, Hikvision does not make any warranties, guarantees or representations, express or implied, regarding to the Manual.

About this Manual

This Manual is applicable to the Monitor.

The Manual includes instructions for using and managing the product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version in the company website (http://overseas.hikvision.com/en/).

Please use this user manual under the guidance of professionals.

Trademarks Acknowledgement

HIKVISION and other Hikvision's trademarks and logos are the properties of Hikvision in various jurisdictions. Other trademarks and logos mentioned below are the properties of their respective owners.

Legal Disclaimer

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THE PRODUCT DESCRIBED, WITH ITS HARDWARE, SOFTWARE AND FIRMWARE, IS PROVIDED "AS IS", WITH ALL FAULTS AND ERRORS, AND HIKVISION MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY, SATISFACTORY QUALITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT OF THIRD PARTY. IN NO EVENT WILL HIKVISION, ITS DIRECTORS, OFFICERS, EMPLOYEES, OR AGENTS BE LIABLE TO YOU FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR INDIRECT DAMAGES, INCLUDING, AMONG OTHERS, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, OR LOSS OF DATA OR DOCUMENTATION, IN CONNECTION WITH THE USE OF THIS PRODUCT, EVEN IF HIKVISION HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

REGARDING TO THE PRODUCT WITH INTERNET ACCESS, THE USE OF PRODUCT SHALL BE WHOLLY AT YOUR OWN RISKS. HIKVISION SHALL NOT TAKE ANY RESPONSIBILITES FOR ABNORMAL OPERATION, PRIVACY LEAKAGE OR OTHER DAMAGES RESULTING FROM CYBER ATTACK, HACKER ATTACK, VIRUS INSPECTION, OR OTHER INTERNET SECURITY RISKS; HOWEVER, HIKVISION WILL PROVIDE TIMELY TECHNICAL SUPPORT IF REQUIRED.

SURVEILLANCE LAWS VARY BY JURISDICTION. PLEASE CHECK ALL RELEVANT LAWS IN YOUR JURISDICTION BEFORE USING THIS PRODUCT IN ORDER TO ENSURE THAT YOUR USE CONFORMS THE APPLICABLE LAW. HIKVISION SHALL NOT BE LIABLE IN THE EVENT THAT THIS PRODUCT IS USED WITH ILLEGITIMATE PURPOSES.

IN THE EVENT OF ANY CONFLICTS BETWEEN THIS MANUAL AND THE APPLICABLE LAW, THE LATER PREVAILS.

Regulatory Information

FCC Information

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC compliance: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Conditions

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

EU Conformity Statement

This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the EMC Directive 2014/30/EU, the LVD Directive 2014/35/EU, the RoHS Directive 2011/65/EU.

2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info

2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: www.recyclethis.info

Industry Canada ICES-003 Compliance

This device meets the CAN ICES-3 (A)/NMB-3(A) standards requirements.

Applicable Models

This manual is applicable to the model: LCD Monitor.

Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
 NOTE	Provides additional information to emphasize or supplement important points of the main text.
 WARNING	Indicates a potentially hazardous situation, which if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
 DANGER	Indicates a hazard with a high level of risk, which if not avoided, will result in death or serious injury.

TABLE OF CONTENTS

Chapter 1 Overview

1.1 Overview

The LCD monitor is a reliable surveillance display with LED backlit technology, excellent color reduction and image processing, and true display of video details. Multiple interfaces are able to meet various surveillance environments, and build-in speaker is convenient to audio play. The monitor is an ideal choice for security and surveillance application.

1.2 Key Features

- LED backlit technology with full HD 1920 × 1080
- Wide view angle: 178 ^{o} (H) / 178 ^{o} (V)
- Image processing: 3D comb filter, 3D De-interlace, 3D noise reduction
- Multiply inputs: HDMI, VGA, BNC input, USB, audio in
- Outputs: BNC output, audio out
- Support HD TVI and CVBS signal input
- Build-in speaker
- Image freeze
- Auto input signal source switch
- IR remote control
- Standby during no signal input
- Eco power saving mode
- Dual power supply: 24 VDC or 100 to 240 VAC
- High reliable components for 7 × 24 working hours
- VESA stand bracket

1.3 Dimensions (unit: mm)

Refer to the following figure for the dimensions of the monitor:

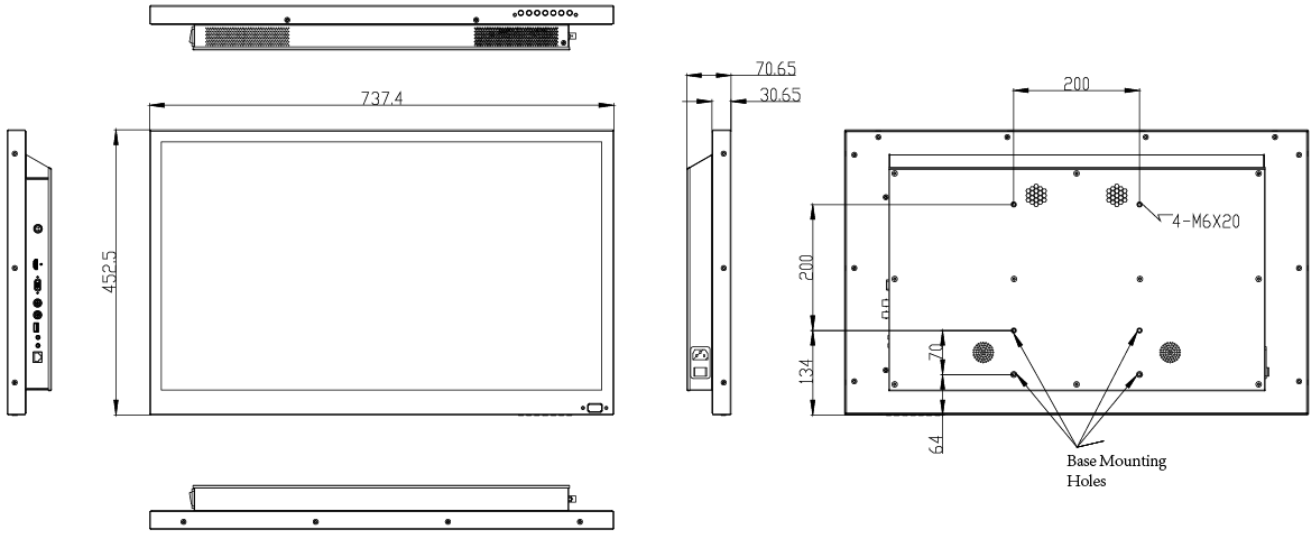

Figure 1-1 Dimensions

Chapter 2 Panels and Connections

2.1 Interfaces

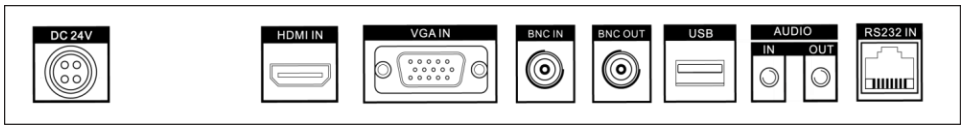

Figure 2-1 Rear Panel of Device

Table 2-1 Description of Rear Panel

Interface	Description
DC 24V	24 VDC power input
HDMI IN	HDMI digital signal input
VGA IN	Analog VGA input
BNC IN	BNC input
BNC OUT	BNC output
USB	USB interface
AUDIO IN	Audio input
AUDIO OUT	Audio output
RS232 IN	RS-232 communication interface

2.2 Panel Buttons

Refer to the following figure and table for the description of the touch buttons on the lower right corner of the monitor.

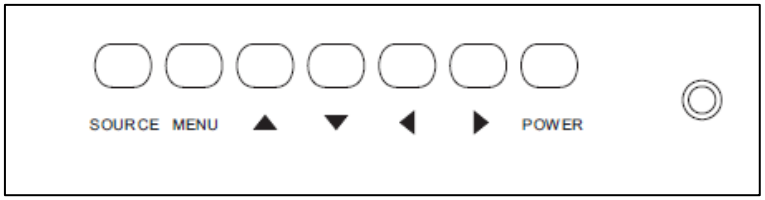

Figure 2-2 Buttons on the Display Unit

Table 2-2 Description of Buttons

Button	Description
SOURCE	Enter source menu
MENU	Enter main menu
UP/DOWN	Move the cursor up/down
LEFT/RIGHT	Move the cursor left/right
POWER	Confirm/start up; hold down to shut down

2.3 Remote Controller

Refer to the following figure and table for the remote controller descriptions.

Figure 2-3 Remote Control

Table 2-3 Button Description

Key	Function
	On/Off switch, turn on/off the monitor
	Mute key, for turning off the sound of the monitor
MENU	Enter main menu
FREEZE	Freeze the image
SOURCE	Input source selection menu
Direction Keys	Up/down/left/right direction keys
OK	Confirm
	Play/Pause
	Stop
	Previous
	Next
	Repeat
	Return

2.4 Power Supply Connections

Insert the 3-pin power plug (100 to 240 VAC, 2A) into well-grounded power socket.

Figure 2-4 Power Supply

NOTE

Disconnect the power of the monitor if it will not be used for a long time.

Chapter 3 System Configuration

3.1 Input Source Selection

Turn on the display unit when the power supply is on and input source is confirmed.

Step 1 Press **SOURCE** on the remote controller to enter the menu as shown below. 22 inch LCD display unit includes 4 input sources as AV, HDMI, DVI, VGA and USB signal.

Step 2 Press direction keys to select the input source.

Step 3 Press **OK** to accomplish the input source selection.

Figure 3-1 Input Source

3.2 Image Parameters

3.2.1 Configuring Image Mode

You can adjust the image parameters by switching image modes and adjust the values of contrast, brightness, color, sharpness and hue.

Step 1 On the main menu, press the ▲ and ▼ buttons on the remote control to select the Image Mode.

Step 2 Press **OK** to enter the image mode settings interface.

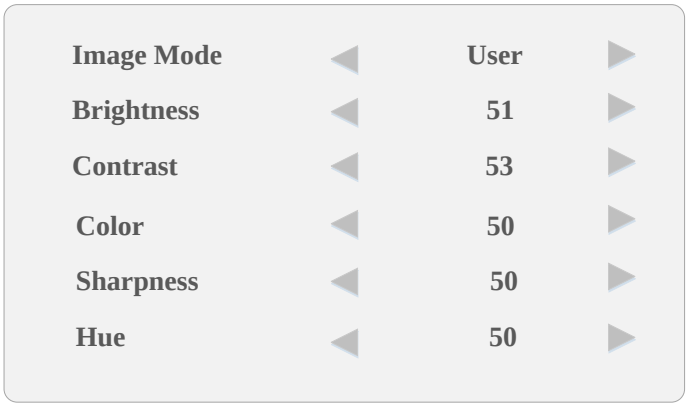

Figure 3-2 Image Mode

Step 3 Press ◄ or ► to switch it to **Standard**/**Gentle**/**Dynamic**/**User** mode. Different parameters of contrast, brightness, color, hue and sharpness are provided for different image modes.

Step 4 (Optional) When you select the **User** mode, press ◄ or ► to set the brightness and contrast values from 0 to 100.

Step 5 Press **MENU** again to complete the settings and back to the main menu interface.

3.2.2 Configuring Lighting Mode

You can set the lighting parameters to adopt different surrounding lighting conditions.

Step 1 On the main menu, press the ▲ and ▼ buttons on the remote control to select the **Lighting**.

Step 2 Press **OK** to enter the lighting mode settings interface.

Step 3 Press ◄ or ► to Normal, Daylight 1 to 3 and Night 1 to 3. You can switch to different modes according to the surrounding lighting conditions.

Normal: for normal light conditions.

Daylight1/Daylight2/Daylight3: for daylight conditions. **Night1/Night2/Night3**: for night light conditions.

The level 3 is more suitable for a surrounding lighting condition with higher backlight compensation requirement.

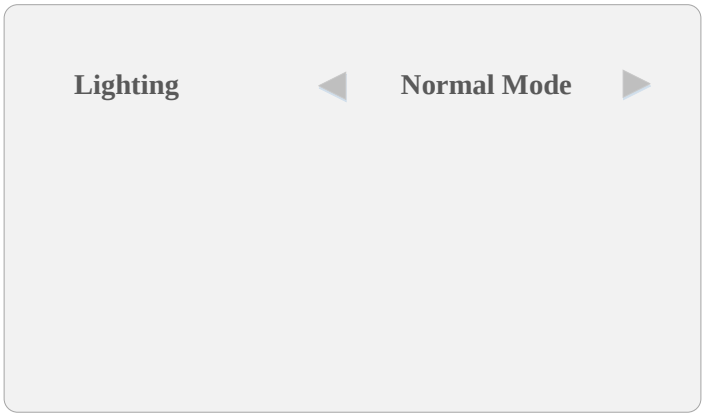

Figure 3-3 Lighting Mode

Step 4 Press **MENU** again to complete the settings and back to the main menu interface.

3.2.3 Configuring Audio Settings

You can switch the mute on/off and adjust the volume.

Step 1 On the main menu, press the ▲ and ▼ buttons on the remote control to select the **Audio Mode**.

Step 2 Press **OK** to enter the audio settings interface.

Step 3 Press ◄ or ► to set the mute to **On**/**Off**.

Step 4 When the mute is set to **Off**, you can press ◄ or ► to set the volume from 0 to 100.

Step 5 Select **Balance** and press ◄ or ► to adjust the sound balance.

Step 6 Press **MENU** again to complete the settings and back to the main menu interface.

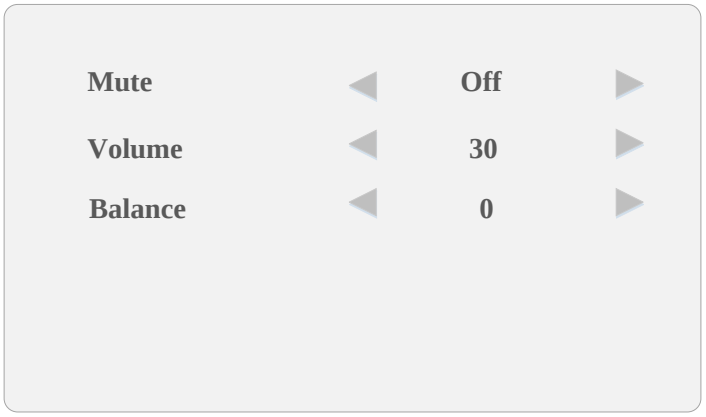

Figure 3-4 Audio Settings

3.2.4 Configuring VGA Parameters

For VGA input source, you can adjust the VGA parameters, including adjusting VGA H position, V Position, clock and phase.

NOTE

The VGA parameter settings are valid only for the VGA input source.

Auto Adjust

Step 1 On the main menu, press the ▲ and ▼ buttons on the remote control to select the **VGA Parameter**.

Step 2 Press **OK** to enter the VGA parameters settings interface.

Step 3 Select the **Adjust Lock** to **Off,** and the device can automatically adjust the parameters according to signal source.

Manual Adjust

Step 1 On the main menu, press the ▲ and ▼ buttons on the remote control to select the **VGA Parameter**.

Step 2 Press **OK** to enter the VGA parameters settings interface.

Step 3 Press ◄ or ► to adjust the values of the **Row**, **Column**, **Clock** and **Phase** from 0 to 100.

NOTE

When the device is restarted or the signal input is changed, the VGA parameters cannot be automatically adjusted.

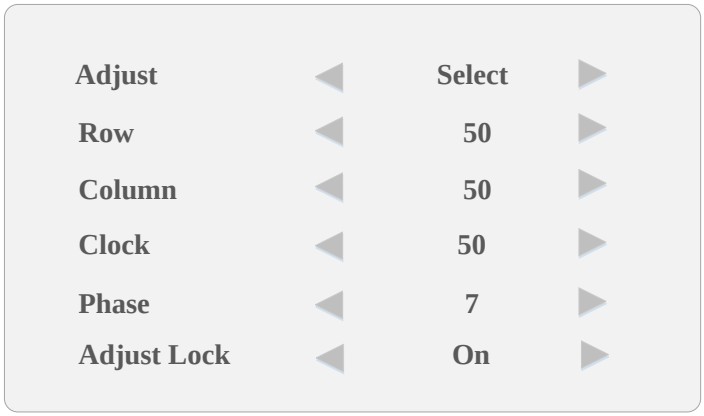

Figure 3-5 VGA Parameters

Step 4 Press **MENU** again to complete the settings and back to the main menu interface.

3.3 Overscan Settings

Overscan is the situation in which not all of an image is present on a viewing screen. You can shield the borders for better image quality adjust the overscan value of up/down/left/right.

Step 1 On the main menu, press the ▲ and ▼ buttons on the remote control to select **Overscan**.

Step 2 Press **OK** to enter the overscan settings interface.

Step 3 Press ◄ or ► to switch the overscan to **On/Off**.

Step 4 When the overscan is selected to On, you can set values of the left edge, right edge, top edge and bottom edge from 0 to 100. The value of overscan is the pixel value of certain edge.

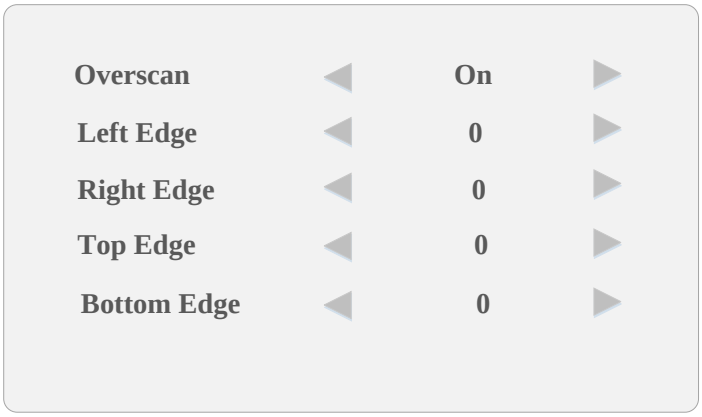

Figure 3-6 Overscan Settings

Step 5 Press **MENU** again to complete the settings and back to the main menu interface.

3.4 Aspect Settings

The aspect ratio refers to the proportions of the height and width of an image.

Step 1 On the main menu, press the ▲ and ▼ buttons on the remote control to select the **Aspect**.

Step 2 Press **OK** to enter the Aspect settings interface.

Step 3 Press ◄ or ► to set the aspect ratio to 16:9, 4:3, P-to-P.

Figure 3-7 Aspect Settings

Step 4 Press **MENU** again to complete the settings and back to the main menu interface.

3.5 System Information and Maintenance

3.5.1 Upgrading the Device

Before you start

Insert the USB flash drive with the update file to the device before you upgrade the device.

Step 1 On the main menu, press the ► on the remote control to enter the Maintenance interface.

Step 2 Press **OK** to enter the maintenance settings interface.

Step 3 Press **Maintenance** key to enter the Maintenance interface.

Figure 3-8 System Maintenance

Step 4 Select **Upgrade (USB)** and press ►to enter the pop-up dialog box.

Step 5 Press the ◄ to continue the upgrading or ► to cancel the operation and back to the menu.

3.5.2 Restoring the Defaults

All parameters of the device can be restored to the user defaults settings.

Step 1 On the Maintenance interface, select **Restore Defaults** and press ►to enter the pop-up dialog box.

Step 2 Press the ◄ to continue to restore the defaults or ► to cancel the operation and back to the menu.

3.5.3 Enabling/Disabling Lock Keypad

You can enable the lock for the control panel buttons of the monitor to avoid misoperation.

Step 1 On the Maintenance interface, select **Lock Keypad**.

Step 2 Press ◄ or ► to set the Lock Keypad to **On** or **Off**. When the Lock Keypad is turned on, the control panel buttons operation is invalid.

3.5.4 Enabing/Disabling Auto Input Source

The input signal source can be automatically detected by the device and switched to the connected signal source on the screen.

Step 1 On the Maintenance interface, select **Auto Input Source**.

Step 2 Press ◄ or ► to set the Auto Input Source to **On** or **Off**. When it is turned on, the device can automatically detect and switch to the currently connected input signal source.

3.5.5 Checking System Information

Step 1 Press **System Info** to enter the system information interface.

Step 2 Check the current software version information, working hours, current temperature, device ID and fan status.

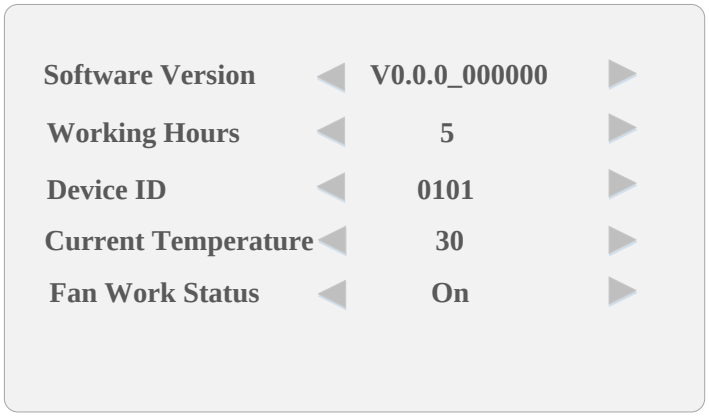

Figure 3-9 System Information

3.5.6 Configuring Fan Monitoring

You can enable the fan temperature control and the overheat alarm prompt on the screen and once the board temperature is too high.

Step 1 Select **Fan Setting** and press **OK**.

Step 2 Press ◄or ► to set the fan mode to **On** or **Auto**.

On: always turns on the fan.

Auto: automatically turns on the fan when the device reaches the defined temperature (refer to step 3).

Step 3 In the auto fan mode, set the temperature for automatically starting the fan.

Step 4 Press ◄or ► to switch the overheat alarm to **On**/**Off**.

Step 5 When the overheat alarm is turned on, set the alarm temperature.

Step 6 Press **MENU** again to complete the settings and back to the main menu interface.

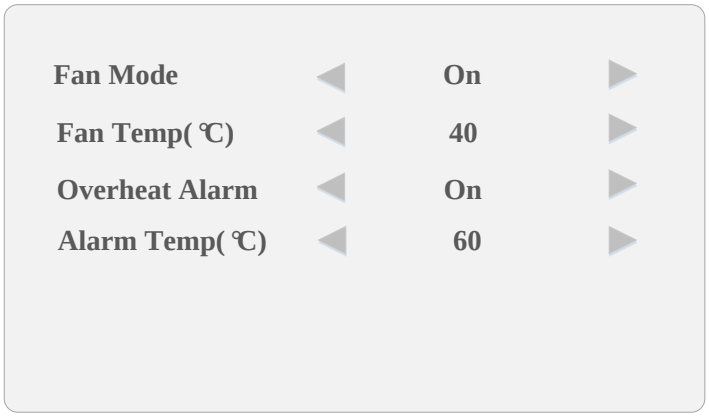

Figure 3-10 Temperature Monitor

3.6 General Settings

3.6.1 Configuring OSD Settings

You can set the language and OSD duration on the menu.

Step 1 On the main menu, press the ► on the remote control to enter the general settings interface.

Step 2 Press the ▲ and ▼ buttons to select the **OSD Settings**.

Step 3 Press **OK** to enter the OSD settings interface.

Step 4 Configure the language, OSD duration and OSD blending parameters.

Language: press ◄ or ► to switch the language between Chinese and English.

OSD Blending: refers to the OSD transparency. Press ◄ or ► to adjust the blending value to: High/Middle/Low/Off.

OSD Duration: sets the OSD duration on the screen. Press ◄ or ► to adjust the OSD duration to: Always On/5Sec/15Sec/30Sec.

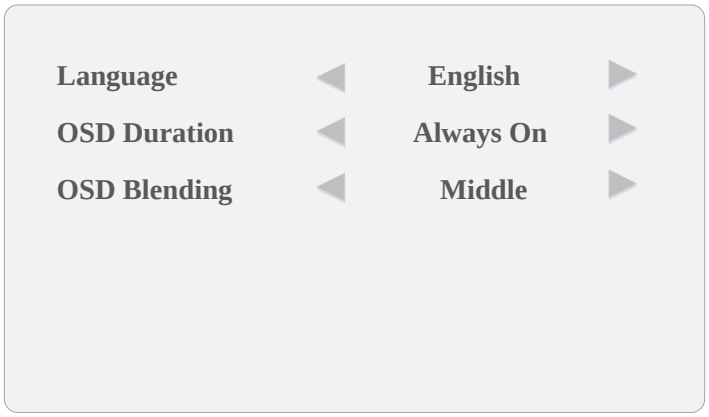

Figure 3-11 OSD Settings

Step 5 Press **MENU** again to complete the settings and back to the main menu interface.

3.6.2 Selecting Screen Saver Mode

The screen saver allows you to set the screen mode and the auto sleep mode when the monitor has no signal input.

Step 1 On the main menu, press the ► on the remote control to enter the general settings interface.

Step 2 Press the ▲ and ▼ buttons to select the **Screen Saver**.

Step 3 Press **OK** to enter the image screen saver settings interface.

Step 4 Select **No Signal** and press ◄ or ► to set the **Blue Screen** or **Black Screen** when there is no signal input.

Step 5 Select **Auto Sleep** and press ◄ or ► to set it to **On** or **Off** when the monitor has no signal input.

Figure 3-12 Screensaver Mode

Step 6 Press **Menu** again to complete the settings and back to the main menu interface.

3.6.3 Configuring Backlight Settings

You can set backlight, low energy, and energy diagram.

Step 1 Press◄ or ► to set the backlight, and adjust the value ranging from 0 to 100.

Step 2 Press◄ or ►to turn on/off the low energy.

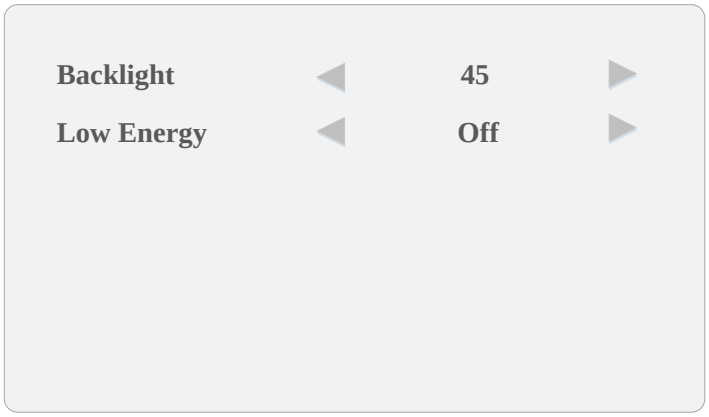

Figure 3-13 Backlight Settings

Step 3 Press **MENU** again to complete the settings and back to the main menu interface.

3.6.4 Configuring Image Freezing

Image freeze feature refers to freezing the current image on the monitor.

Step 1 On the main menu, press the ► on the remote control to enter the general settings interface.

Step 2 Press the ▲ and ▼ buttons to select the **Image Freeze**.

Step 3 Press **OK** to enter the image freeze settings interface.

Step 4 Press ◄ or ► to set Image Freeze to **Yes** or **No** to enable or disable the image freeze feature.

Figure 3-14 Image Freeze Settings

Step 5 Press **MENU** key to return to the main menu after accomplishing the settings.

NOTE

After having switched the input source, the image freeze is automatically disabled by default.

3.7 Playing External Files

You can play the external files on the monitor, including the photo, movies, music or txt files, etc.

Before you start

Insert the USB flash driver with the external files to the device before operating the following steps.

Step 1 Press the **SOURCE** of the remote controller.

Step 2 Select USB of Input Source menu to enter the interface.

Step 3 Press◄ or ► to play the photo, movies, music or txt files.

Step 4 Enter the menu to select identified USB flash drive and press **OK** to accomplish it.

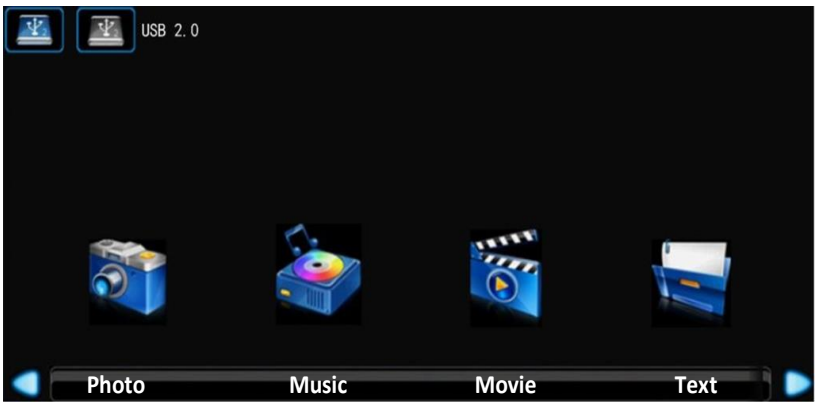

Figure 3-15 USB Menu

Step 5 You can use the toolbar at the bottom of the playing window to realize different functions. Refer to the following table.

Table 3-1 Toolbar Buttons

Icons	Description	Icons	Description
	Pause	/	Speed/Reverse
/	Previous/Next		Stop
	Repeat All		Playlist
	Information	/	Slow/Frame by frame
	Resume	/	Zoom In/Out
	Aspect		Move
	Stereo		

Appendix A: Specifications

Model		DS-D5032FL-B
LCD Screen	**Backlight**	LED Backlight
	Dimension	32 inch
	Dot pitch	0.3637 mm × 0.3637 mm
	Max. resolution	1920 × 1080p
	Optimal working resolution	1920 × 1080@60Hz
	Brightness	400 cd/m²
	Contrast	3000: 1
	Response time	10 ms
	Color	16.7M
	Active Area	698.4 × 392.85 mm
	Viewing Angle	Horizantal 178°, vertical 178º
Interfaces	**VGA Input**	1
	BNC Input	1
	BNC Output	1
	USB 2.0 Interface	1
	HDMI input	1
	RS-232 interface	1
	IR Receiver	1 (for remot control)
	Audio input	1
	Audio output	1
General	**Casing Material**	Metal
	Color of Casing	Black
	Wall-mounting Hole	200 × 200 mm
	Wall-mounting Screw	M4
	Power Supply	24 VDC; 100 to 240 VAC, 50/60Hz
	Power Consumption	≤ 60 W
	Standby Power Consumption	≤ 0.5 W
	Working Temperature	0 to 40 º C (0 to 104 º F)
	Working Humidity	10 to 90 %
	Storage Temperature	-20 to 55 º C (-68 to 140 º F)
	Storage Humidity	5 to 95%
	Dimensions (without base)	737.4 × 452.5 × 70.7 mm (29.0" × 17.8" × 2.8")
	Packing Dimensions	881 × 205 × 630 mm (34.7" × 8.1" × 24.8")
	Gross Weight	19 kg (41.9 lb)
	Net Weight	12 kg (26.5 lb)

First Choice for Security Professionals