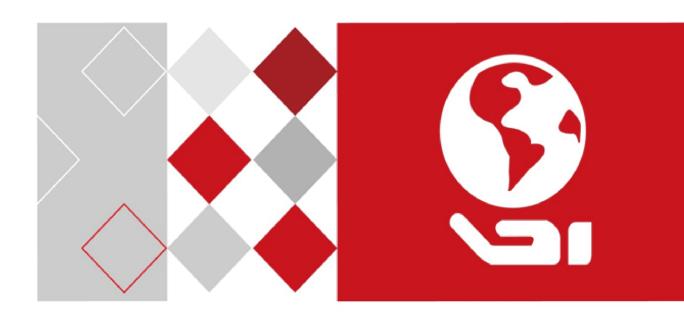
HIKVISION



LCD Monitor

User Manual

LCD Monitor User Manual

User Manual

COPYRIGHT ©2017 Hangzhou Hikvision Digital Technology Co., Ltd.

ALL RIGHTS RESERVED.

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.

LCD Monitor User Manual

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	5
1.1 Overview	5
1.2 Key Features	5
1.3 Dimensions (unit: mm)	6
Chapter 2 Panels and Connections	7
2.1 Interfaces	7
2.2 Panel Buttons	7
2.3 Remote Controller	7
2.4 Power Supply Connections	8
Chapter 3 System Configuration	8
3.1 Input Source Selection	
3.2 Image Parameters	
3.2.1 Configuring Image Mode	8
3.2.2 Configuring Backlight	9
3.2.3 Configuring Zoom Mode	9
3.2.4 Configuring Overscan	10
3.2.5 Configuring VGA Parameters	10
3.3 General System Settings	11
3.4 General System Settings	11
3.5 System Maintenance	12
3.5.1 Upgrading the System	12
3.5.2 Restoring the Defaults	13
Appendix: Specifications	14

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

- 10-bit LVDS ultra HD (3840 × 2160) display;
- High quality LCD screen with flash free and low radiation to relieve eye fatigue;
- True color OSD and user-friendly operation menu;
- Mstar ACE-5 auto color and image enhancement engine, improving the image contrast, details, color of skin and edges, etc.;
- Programmable 12-bit RGB gamma correction;
- 3D noise reduction;
- 2 HDMI input interfaces supported;
- Software spread-spectrum technology to reduce EMI radiation;
- Multimedia playing of text, image, audio, video, etc.

1.3 Dimensions (unit: mm)

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

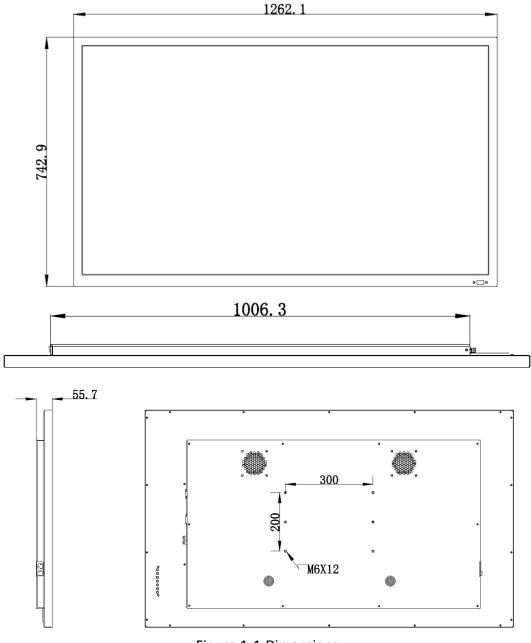


Figure 1-1 Dimensions

Chapter 2 Panels and Connections

2.1 Interfaces

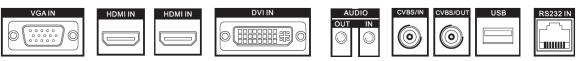


Figure 2-1 Rear Panel of Device

Table 2-1 Description of Rear Panel

Interface	Description
VGA IN	VGA analog input
HDMI IN	2-ch HDMI input (HDMI1: HDMI 1.4; HDMI2: HDMI 2.0)
DVI IN	DVI input
AUDIO IN/OUT	Audio input/output
CVBS IN/OUT	Composite video input
USB Interface	USB interface
RS-232 IN	Serial port input

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.

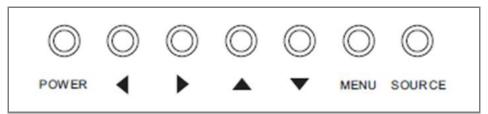


Figure 2-2 Buttons on the Display Unit

Table 2-2 Description of Buttons

Button	Description
SOURCE	Enter source menu; back to the previous menu
MENU	Enter main menu; confirm the item selection
UP/DOWN	Move the cursor up/down
LEFT/RIGHT	Move the cursor left/right
POWER	Standby/Start up

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

Name	Function
POWER	Turn on/off the device
TEST	Reserved
MUTE	Turn off/on the sound
Number 0-9	Numerical button
FREEZE	Freeze the screen
PIC	Reserved
INFO	System information
LIGHT	Exit TV
Direction Key	Up/Down, Left/Right
ОК	Confirm/Enter
+VOL-	Volume adjustment
MENU	Enter menu or return
SOURCE	Input source menu
СН	Reserved
PLAY	Play/Pause
STOP	Stop
PREV/NEXT	Previews/Next
LIST	Playing list
REPEAT	Replay
L/R	Left/Right
	channel/stereo
RETURN	Back to the previous
	menu

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



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

Before you start:

Turn on the display unit when the power supply and the input signal are available.

Step 1 Press **SOURCE** on the remote controller to enter the menu. Five input sources are selectable: VGA, CVBS, HDMI, DVI and USB signal.

Step 2 Press direction keys to select the input source.

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

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 ◀ or ▶ on the remote control to enter the Image Settings page.

Step 2 Press ▲ or ▼ to select the Image Mode item.

Step 3 Press OK.

Image Settings	
Image Mode	User
Contrast	53
Brightness	51
Hue	50
Sharpness	50
Saturation	50

Figure 3-1 Image Mode

Step 4 Press ◀ or ▶ to switch it to Standard/Soft/Natural/Vivid/Sports/Lightness/User mode.

Step 5 Configure the image parameters.

- Constant parameters of contrast, brightness, color, hue and sharpness are provided for Standard/Soft/Natural/Vivid/Sports/Lightness image modes.
- When you select the User mode, press ◀ or ▶ to set the brightness, contrast, hue, sharpness and saturation values from 0 to 100.

Step 6 Press **MENU** again to complete the settings.

3.2.2 Configuring Backlight

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

Step 1 On the main menu, press ◀ or ▶ on the remote control to enter the Image Settings page.

Step 2 Press ▲ or ▼ to select the **Backlight** item.

Step 3 Press OK.

Step 4 Press ◀ or ▶ to set the backlight value from 0 to 100.



Figure 3-2 Backlight Settings

Step 5 Press **MENU** again to complete the settings.

3.2.3 Configuring Zoom Mode

The zoom mode refers to the proportions of the height and width of an image.

Step 1 On the main menu, press ◀ or ▶ on the remote control to enter the Image Settings page.

Step 2 Press ▲ or ▼ to select the **Zoom Mode** item.

Step 3 Press OK.

Step 4 Press ◀ or ▶ to set the zoom mode to 16:9, 4:3, or P2P.

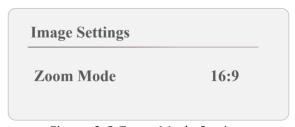


Figure 3-3 Zoom Mode Settings

Step 5 Press **MENU** again to complete the settings.

3.2.4 Configuring Overscan

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 by adjusting the overscan value of up/down/left/right.

Step 1 On the main menu, press ◀ or ▶ on the remote control to enter the Image Settings page.

Step 2 Press ▲ or ▼ to select the **Overscan** item.

Step 3 Press OK.

Step 4 Press ◀ or ▶ to set the 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.

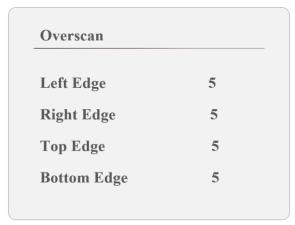


Figure 3-4 Overscan Settings

Step 5 Press **MENU** again to complete the settings.

3.2.5 Configuring VGA Parameters

For VGA input source, you can adjust the VGA parameters, including adjusting row, column, clock and phase values of the VGA signal.

Manual Adjustment



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

Step 1 On the main menu, press ◀ or ▶ on the remote control to enter the Image Settings page.

Step 2 Press ▲ or ▼ to select the **VGA Parameters** item.

Step 3 Press OK.

Step 4 Press ◀ or ▶ to set the values of the Row, Column, Clock and Phase from 0 to 100.

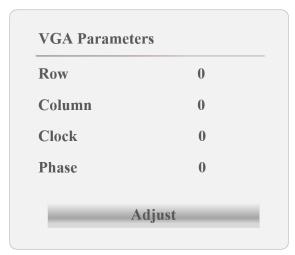


Figure 3-5 VGA Parameters

Step 5 Press MENU again to complete the settings

Auto Adjustment

Step 1 On the main menu, press ◀ or ▶ on the remote control to enter the Image Settings page.

Step 2 Press ▲ or ▼ to select the VGA Parameters item.

Step 3 Press OK.

Step 4 Press Adjust to automatically adjust the parameters according to signal source.



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

3.3 General System Settings

You can set the general system settings, including the language, screen saver and menu logout time.

3.4 General System Settings

Step 1 On the main menu, press ◀ or ▶ on the remote control to enter the **Other Settings** page.

Step 2 Press ▲ or ▼ to select items to set parameters.

Menu Time: set the dwell time of menu when it is in inactivity. You can set the time to 5/10/15/20/30 seconds or Always.

Example: when the time is set to 5 seconds, the system will exit from the current operation menu after 5 minutes of menu inactivity.

Language: select the system language.

 Screen Saver: set the screen saver mode to black or blue when the monitor has no signal input.

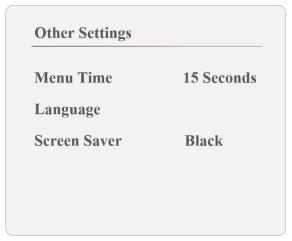


Figure 3-6 General System Settings

Step 3 Press MENU again to complete the settings

3.5 System Maintenance

You can restore the defaults, upgrade the system software or check the software version.

3.5.1 Upgrading the System

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 ◀ or ▶ on the remote control to enter the **Other Settings** page.

Step 2 Press ▲ or ▼ to select **Software Upgrade**.



Figure 3-7 System Maintenance

Step 3 Select **Upgrade (USB)** and press ▶ to enter the pop-up dialog box.

Step 4 Press ◀ to continue the system upgrade.

3.5.2 Restoring the Defaults

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

Step 1 On the main menu, press ◀ or ▶ on the remote control to enter the **Other Settings** page.

Step 2 Press ▲ or ▼ to select **Restore Defaults**.

Step 3 Press ◀ to continue to restore the defaults.

Appendix: Specifications

Model		DS-D5055UL-B
	Diagonal screen size	55"
	Backlight	LCD Backlight
	Max. resolution	3840 × 2160
	Brightness	500 cd/m²
LCD Carroon	Contrast	1100:1
LCD Screen	Response time	8 ms
	Pixel pitch	0.315 mm × 0.315 mm
	Color	10 bit, 1.07B
	Viewing angle	Horizantal 178°, vertical 178°
	Active area	1233.4 × 706.8 mm
		2, HDMI interface
	Video input	1, VGA interface
		1, DVI interface
		1, CVBS interface
	Video output	1, CVBS interface
Interfaces	Audio input	1,
meriaecs	Audio output	1
	USB interface	1
	RS-232 interface	1
	Speaker	2, 8Ω, 5W
	Network	1, RJ-45 10/100 Mbps self-adaptive Ethernet interface
	Color of casing	Black
	Power supply	100 to 240 VAC, 50/60Hz
	Power consumption	≤ 100 W
	Standby power consumption	≤ 1 W
General	Working temperature	0 to 40 ° C (0 to 104 ° F)
	Storage temperature	-20 to 60 ° C (-4 to 140 ° F)
	Working humidity	10 to 90 % (non-condensing)
	Storage humidity	5 to 90 % (non-condensing)
	Gross weight (with packing)	≤ 41 kg (90.4 lb)
	Net weight	≤ 35 kg (77.2 lb)



UD07490B www.hikvision.com