



LCD Monitor

User Manual

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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 B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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 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: <http://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: <http://www.recyclethis.info>.

Industry Canada ICES-003 Compliance

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




Preface

Applicable Models

This manual is applicable to 43-inch 2K monitors.

Symbol Conventions

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

Symbol	Description
 Danger	Indicates a hazardous situation which, if not avoided, will or could result in death or serious injury.
 Caution	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
 Note	Provides additional information to emphasize or supplement important points of the main text.

Safety Instruction

Caution

- Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.
- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region. Please refer to technical specifications for detailed information.
- Input voltage should meet both the SELV (Safety Extra Low Voltage) and the Limited Power Source with 100~240 VAC according to the IEC60950-1 standard. Please refer to technical specifications for detailed information.
- Do not connect several devices to one power adapter as adapter overload may cause overheating or a fire hazard.
- Please make sure that the plug is firmly connected to the power socket.
- If smoke, odor or noise rise from the device, turn off the power at once and unplug the power cable, and then please contact the service center.



Warning

- The equipment must be connected to an earthed mains socket-outlet.
- CAUTION: Risk of explosion if the battery is replaced by an incorrect type.
- Improper replacement of the battery with an incorrect type may defeat a safeguard (for example, in the case of some lithium battery types).
- Do not dispose of the battery into fire or a hot oven, or mechanically crush or cut the battery, which may result in an explosion.
- Do not leave the battery in an extremely high temperature surrounding environment, which may result in an explosion or the leakage of flammable liquid or gas.
- Do not subject the battery to extremely low air pressure, which may result in an explosion or the leakage of flammable liquid or gas.
- Dispose of used batteries according to the instructions.
- Never place the equipment in an unstable location. The equipment may fall, causing serious personal injury or death.
- NEVER place items that might tempt children to climb, such as toys and remote controls, on the top of the equipment or furniture on which the equipment is placed.

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Chapter 1 Introduction

1.1 Overview

The LCD monitor adopts Mstar ACE-5 auto-coloring and image-enhancing engine to improve image contrast, detail, edge, etc. It is an ideal choice for financial institution, metro, train station, airport and exhibition.

1.2 Key Features

- 8-bit 2-ch LVDS (1920 × 1080) HD display.
- 3D digital comb filter.
- True color OSD and user-friendly operating menu.
- Programmable 12-bit RGB gamma correction.
- Complete factory settings.
- 1-ch HDMI 1.4B input interface, supporting HDCP 1.4.
- Software spread-spectrum technology to reduce EMI radiation.
- 3D noise reduction.
- HD JPEG decoding.
- 1-ch SDI input and 1-ch SDI output.
- Multimedia playing of text, image, audio, video, etc.
- Mstar ACE-5 auto color and image enhancement engine, improving the image contrast, details, edges, etc.

1.3 Panel Buttons

Touch buttons are for illustration only. See details in the following figure and table.

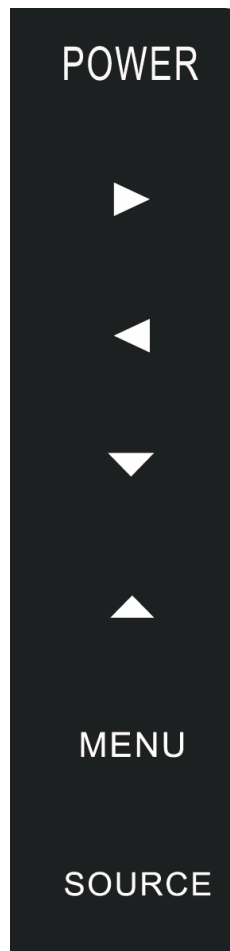


Figure 1-1 Panel Buttons

Table 1-1 Buttons Description

Button	Description
POWER	Confirm Start up Hold down to shut down
MENU	Enter/Exit main menu
SOURCE	Press SOURCE to select signal source
▲/▼/◀/▶	Move the cursor up/down/left/right

1.4 Interfaces

Please view the corresponding rear panel of your monitor.

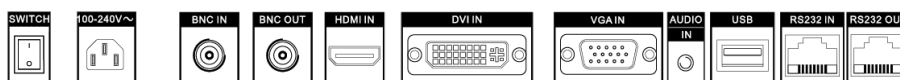


Figure 1-2 Rear Panel of Device

Table 1-2 Description of Rear Panel

Interface	Description
Switch	Power switch
100-240V~	100 to 240 VAC power supply
BNC IN	SDI input
BNC OUT	SDI output
HDMI IN	HDMI digital signal input
DVI IN	DVI digital signal input
VGA IN	Analog VGA input
USB	USB interface
AUDIO IN	Audio input
RS232 IN	RS-232 serial port input
RS232 OUT	RS-232 serial port output

1.5 Power Supply Connections

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

Note

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

1.6 Remote Control

1.6.1 Remote Control Panel

Refer to the following table for the remote control panel description.










Figure 1-3 Remote Control

Note

The following keys are only used under the USB signal source:  ,  ,  ,  ,  ,  .

Table 1-3 Description of Remote Control Buttons

Key	Function
	Turn on/ off the monitor
	Turn on/ off the sound
MENU	Enter/Exit main menu
FREEZE	Freeze the image

Key	Function
SOURCE	Press SOURCE to select signal source
▲/▼/◀/▶	Up/ down/ left/ right direction keys, select a submenu or set menu parameters
OK	Confirm
	Play/Pause
	Stop
	Previous/Next
	Repeat
	Return

1.6.2 Remote Control Operation

If the monitor has an IR receiver at the corner, you shall aim the remote control at the IR receiver. Otherwise, you shall aim the remote control at screen center.

You should operate the remote control within an angle of $\pm 45^\circ$ when aiming at the IR receiver or screen center. Otherwise, the screen may not respond.

In order to achieve better performance, it is recommended to keep the distance between remote control and monitor within 5 meters.

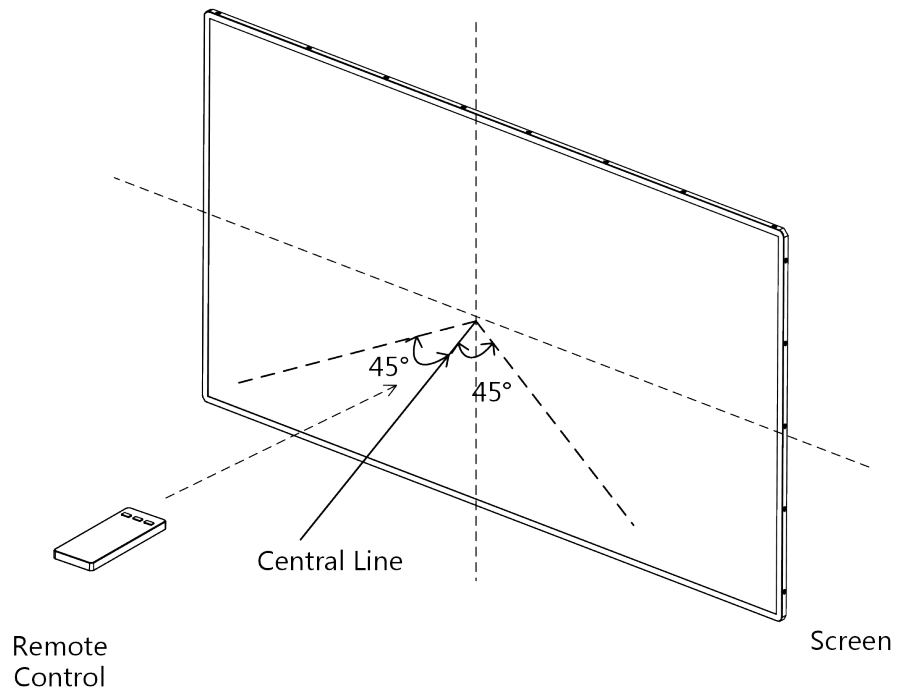


Figure 1-4 Operation of Remote Control

Chapter 2 Terminal Operations

2.1 Switch Input Source

The monitor supports 5 signal sources: HDMI, DVI, VGA, SDI, USB.

Steps

1. Press **SOURCE** to enter Input Source page.

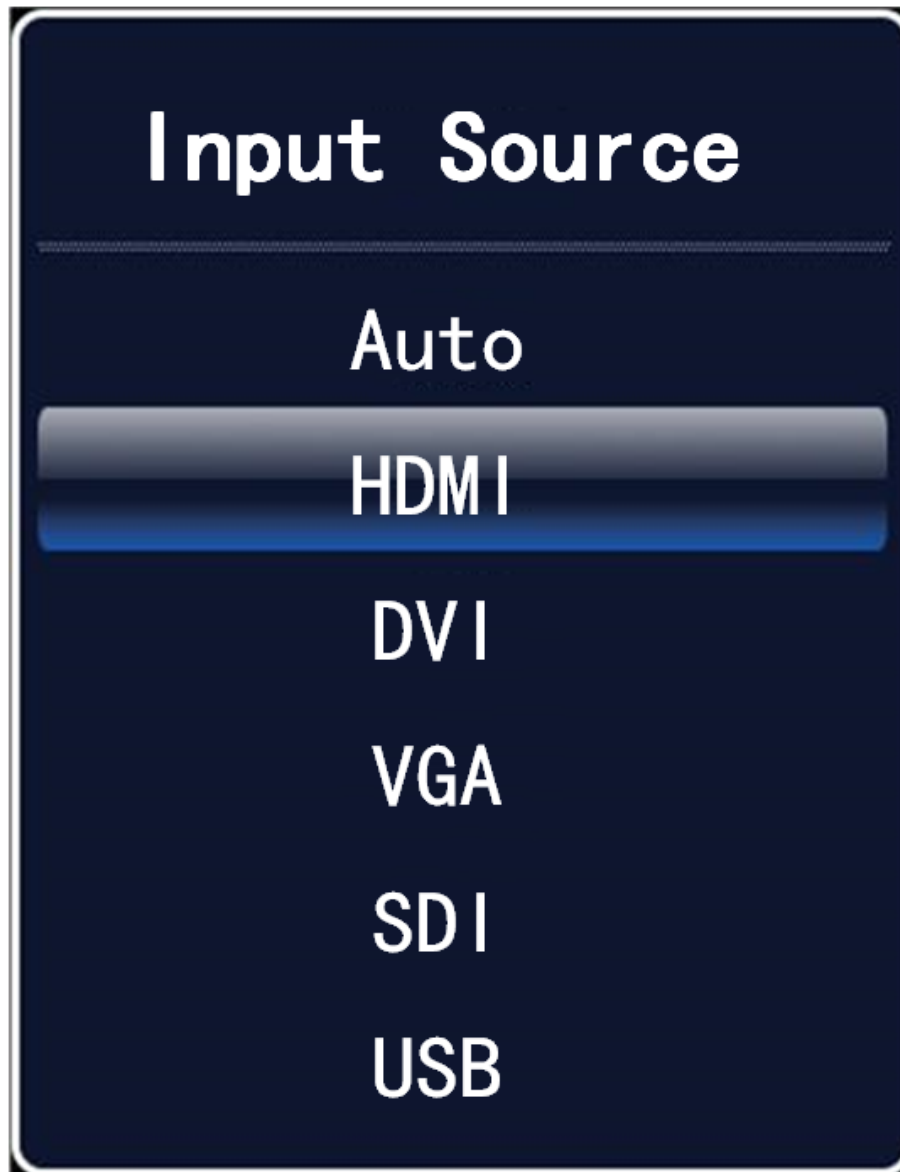


Figure 2-1 Input Source

2. Press ▼ or ▲ to select the input source.
3. Press **OK** to accomplish the input source selection.

2.2 Menu Descriptions

Menu Operations



Note

Configuration steps vary depending on the menu you choose.

Table 2-1 Description of Menu Operations

1	Press MENU and the main menu appears on the screen, such as image mode, audio settings, VGA parameters, etc.
2	Press ▲/▼/◀/▶ to select a submenu.
3	Press OK to confirm the submenu.
4	Press ▲/▼ to select parameters.
5	Press ◀/▶ to set the parameters.
6	Press MENU to complete the settings and back to the main menu interface.

OSD Settings

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

Enter Menu Settings page: **Menu → Menu Settings** , and then set language, OSD duration, and OSD blending.

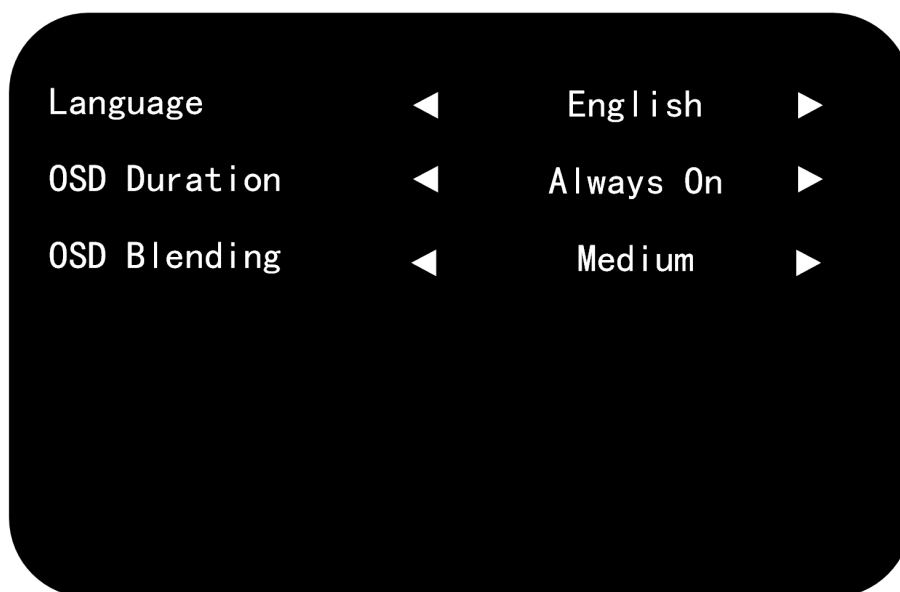


Figure 2-2 OSD Settings

Language

Supports Chinese & English menu switch.

OSD Duration

Refers to the display time of the menu after it is not used. Press ◀ or ▶ to adjust the OSD duration to: Always On/5 Sec/15 Sec/30 Sec.

OSD Blending

Refers to the OSD transparency. You can adjust the blending value to: High/Middle/Low/Off.

2.3 Configure Image Parameters

Image Mode

You can switch image modes and adjust image parameters including contrast, brightness, color, sharpness, and hue.

Enter Image Mode page: **MENU** → **Image Mode** , and then press ▲ or ▼ to select **Image Mode**.



Figure 2-3 Image Mode

Standard

Suitable for a normal environment.

Gentle

Suitable for a dark room.

Dynamic

Suitable for a bright room.

User

When you select the **User** mode, press ◀ or ▶ to set the brightness, contrast, color, or sharpness to adjust display effect.

 **Note**

Adjustable parameters vary depending on the input source you choose. If the parameter bar is gray, it indicates that the parameter is unadjustable under the current input source.

Backlight Settings

You can adjust the screen brightness. The higher the backlight value, the brighter the screen. Enter Backlight Settings page: **MENU** → **Backlight Settings** , and then press ▲ or ▼ to select **Backlight**.

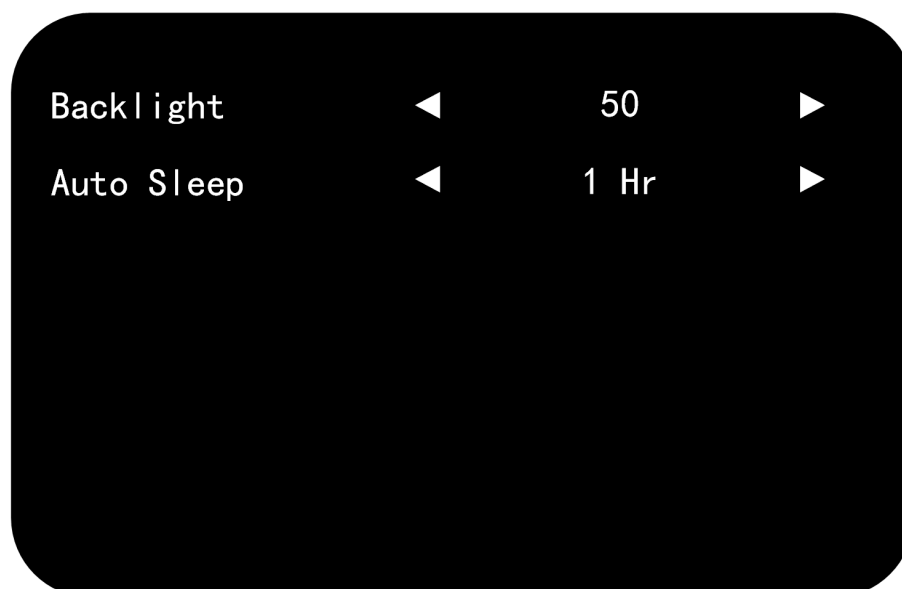


Figure 2-4 Backlight Settings

VGA Parameter

When you select VGA as the input source, you can adjust VGA parameters to make the picture show in the correct position.

Enter VGA Parameter page: **MENU** → **VGA Parameter** , and then press ▲ or ▼ to adjust VGA parameters according to your needs.

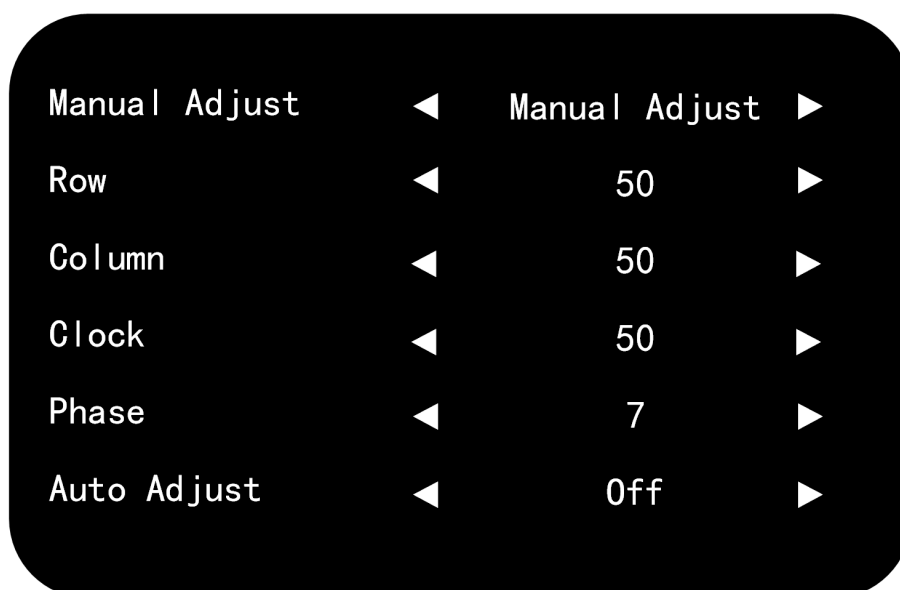


Figure 2-5 VGA Parameter

Overscan Settings

When there is black border, you can shield the borders for better image quality. Enter Overscan Settings page: **MENU** → **Overscan Settings**, and then press **◀** or **▶** to disable Overscan. You can set **Left Edge**, **Right Edge**, **Top Edge** and **Bottom Edge** from 0 to 100.

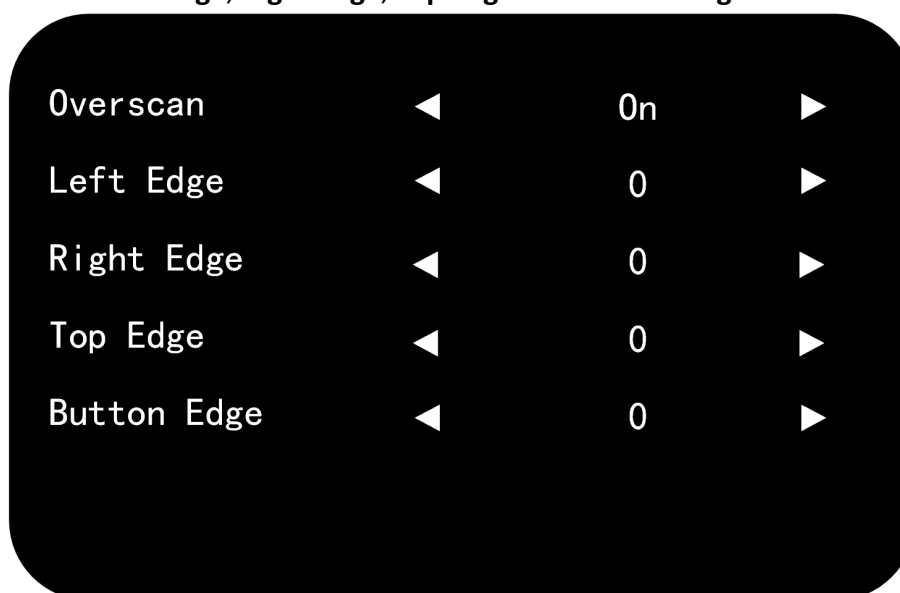


Figure 2-6 Overscan Settings

 **Note**

The value of overscan is the pixel value of certain edge.

Aspect

You can set the aspect ratio as 16:9, 4:3, and P-to-P to zoom pictures.

Enter Aspect page: **MENU** → **Aspect** , and then press ◀ or ▶ to set the aspect ratio.

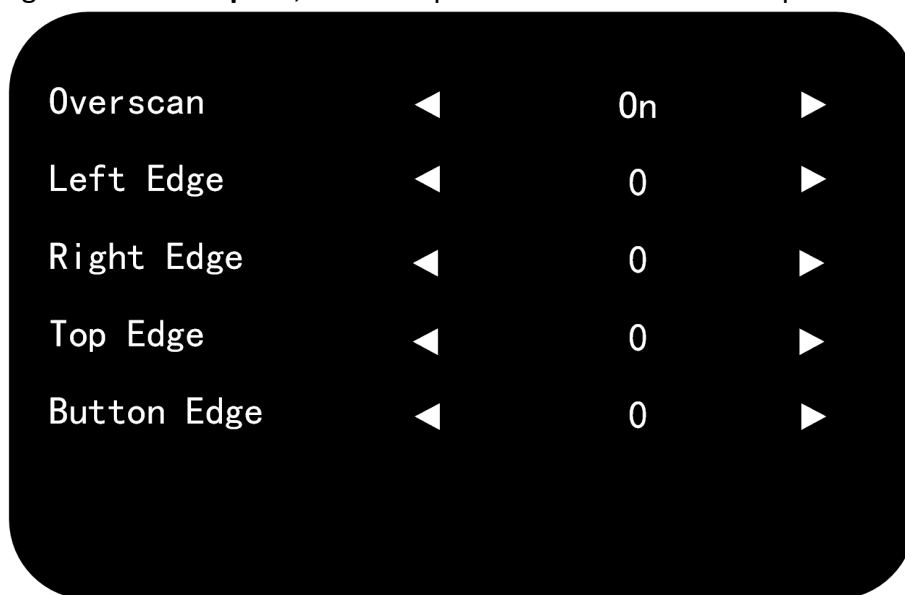


Figure 2-7 Aspect

Image Freeze

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

Enter Image Freeze page: **MENU** → **Other Settings** → **Image Freeze** , and then press ◀ or ▶ to set Image Freeze as Yes or No to enable or disable the image freeze.

Note

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

Lighting

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

Enter Lighting page: **MENU** → **Other Settings** → **Lighting** , and then press ◀ or ▶ to switch lighting modes.

Normal Mode

Suitable for normal light conditions.

Daylight Mode

Suitable for daylight conditions.

Night Mode

Suitable for night light conditions.

2.4 Configure Audio Settings

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

Enter **Menu** → **Audio Setting** , and then press ◀ or ▶ to set the mute, volume, and balance.

Mute	Off
Volume Setting	30
Balance Setting	0

Figure 2-8 Audio Settings

2.5 Enable/Disable Lock Keypad

You can disable lock keypad to avoid the misoperation of control panel buttons.

Enter Lock Keypad page: **MENU** → **Lock Keypad** , and then press ◀ or ▶ to turn on/off Lock Keypad.

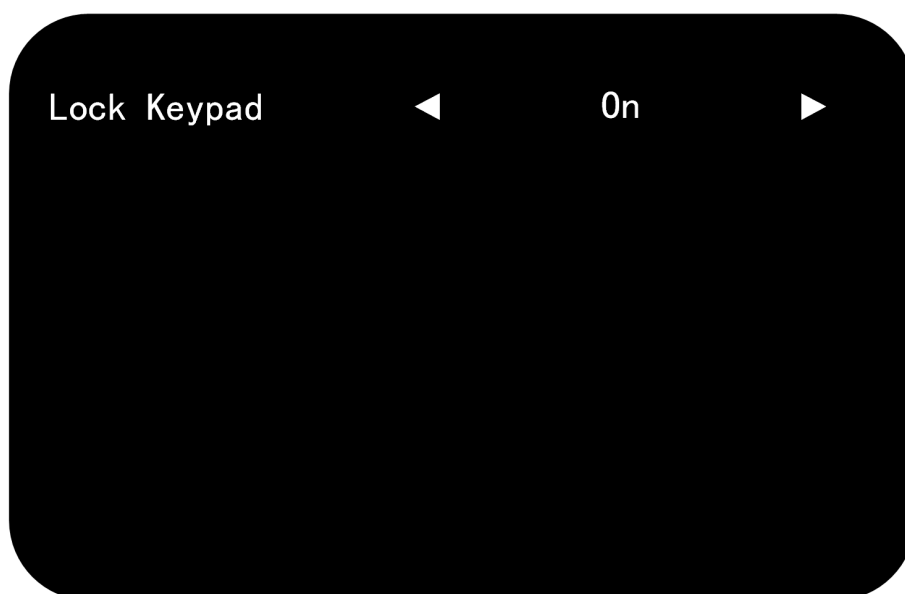


Figure 2-9 Lock Keypad

 **Note**

When the lock keypad is enabled, the control panel buttons are invalid.

2.6 System Maintenance

The device supports functions such as viewing system information, upgrading software, high temperature protection, no signal screensaver.

2.6.1 Upgrade the Device

Please use the latest update package to get all the possible updates.

Before You Start

Insert the USB flash drive with the update package to the device.

Steps

1. Enter Upgrade(USB) page: **MENU → Maintenance → Upgrade(USB)** .
2. Press ◀ or ▶ to confirm the operation.
3. Press ◀ to continue the upgrading process or ▶ to cancel the operation and back to the menu.

2.6.2 Restore the Defaults

All parameters of the device can be restored to default settings.

Steps

1. Enter Restore Defaults page: **MENU → Restore Defaults** .



Figure 2-10 Restore Defaults

2. Press ◀ or ▶ to confirm the operation.
A dialog box pops up.
3. Press ◀ to continue restoring the defaults or ▶ to cancel the operation and back to the menu.

2.6.3 Configure Temperature Monitoring

You can enable Overheat Alarm and once the board temperature is too high, an alarm prompt appears on the screen.

Steps

1. Enter Alarm Settings page: **MENU** → **Alarm Settings** .
2. Press ◀ or ▶ to enable/disable Overheat Alarm.

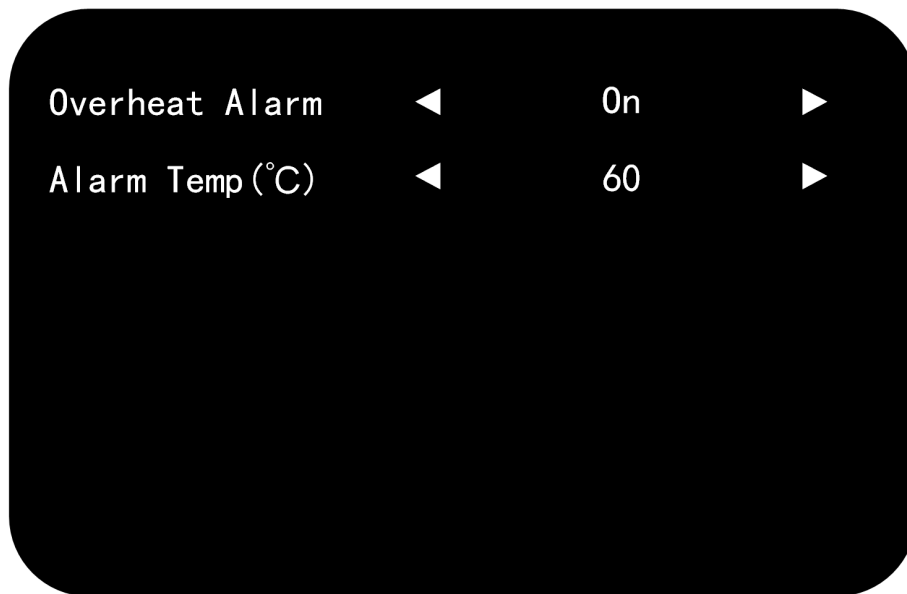


Figure 2-11 Alarm Settings

3. Select **Alarm Temp (°C)** and press ◀ or ▶ to adjust the alarm temperature.
4. Press **MENU** again to complete the settings and back to the main menu interface.

2.6.4 View System Information

View the system information for maintenance.

Enter System Info page: **MENU** → **System Info** , and check current software version, working hours, current temperature, device ID.

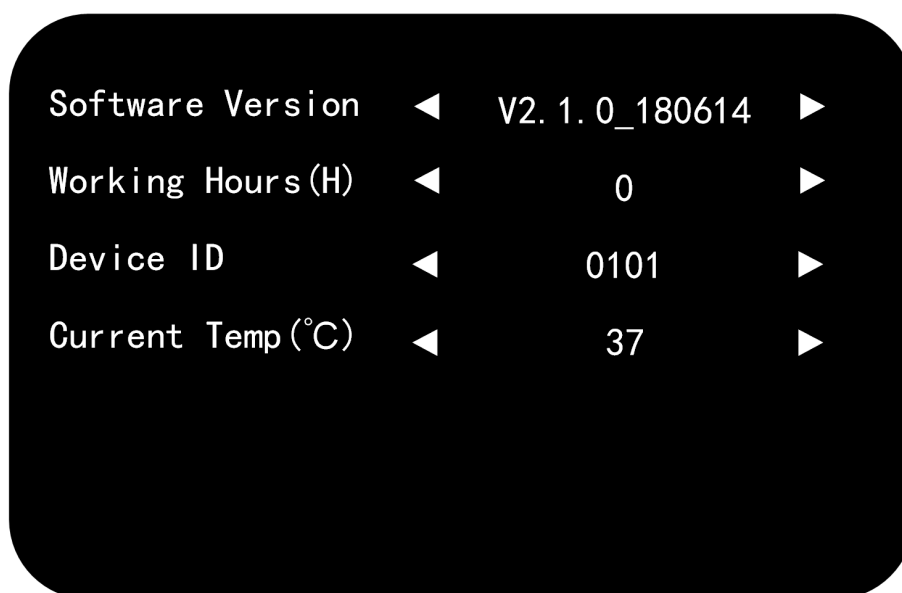


Figure 2-12 System Information



Note

The software version is only for reference.

2.6.5 Enable/Disable Auto Sleep

When the monitor does not have signal input in a preset interval, it goes to sleep automatically.

Steps

1. Enter Auto Sleep page: **MENU** → **Backlight Settings** → **Auto Sleep** .
2. Press ◀ or ▶ to set Auto Sleep value or turn off Auto Sleep.
3. Press **MENU** again to complete the settings and back to the main menu interface.

2.6.6 Enable/Disable Power Saving Mode

The Power Saving Mode can reduce screen brightness and power consumption.

Steps

1. Enter Power Saving Mode page: **MENU** → **Other Settings** → **Power Saving Mode** .
2. Press ◀ or ▶ to enable/disable Power Saving Mode.
3. Press **MENU** again to complete the settings and back to the main menu interface.

2.6.7 Configure Screen Saver

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

Steps

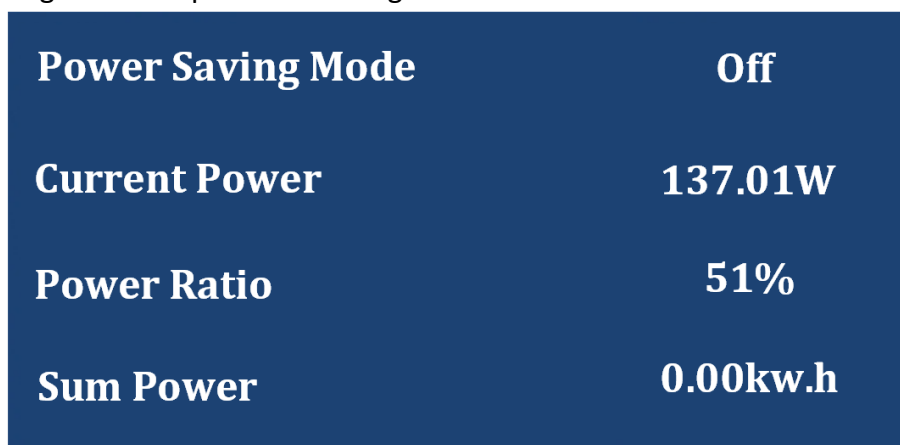
1. Enter No Signal Screensaver page: **MENU** → **Other Settings** → **No Signal Screensaver** .
2. Press ◀ or ▶ to set **Blue** or **Black** or **LOGO** when there is no signal input.
3. Press **MENU** again to complete the settings and back to the main menu interface.

2.6.8 Check Energy Diagram

You can confirm the working condition of power saving mode and check current power, the power ratio, the sum power of the monitor.

Steps

1. Enter Energy Diagram page: **MENU** → **Other Settings** → **Energy Diagram** .
2. Press ▶ to enable Energy Diagram.
3. Press **MENU** again to complete the settings and back to the main menu interface.



Power Saving Mode	Off
Current Power	137.01W
Power Ratio	51%
Sum Power	0.00kw.h

Figure 2-13 Energy Diagram

The Energy Diagram appears on the top left of the screen.

Current Power

The current power of the device.

Power Ratio

The ratio of the current power to the maximum power.

Sum Power

The total power accumulated from the factory to the present.

4. **Optional:** Turn off Energy Diagram.
 - 1) Repeat step 1, and press ▶ to disable Energy Diagram.
 - 2) Press **MENU** again to complete the settings and back to the main menu interface.

Chapter 3 Client Operations

You can turn on/off the monitor, switch input signal through the ScreenControl client.

3.1 Log in to Client

If you use the client software for the first time, set Control Mode and Screen Type.

Before You Start

Obtain the ScreenControl software from the CD-ROM and install it.

Steps

1. Double-click the client software shortcut to open the client.
2. Select **Control Mode** to **serial port**.
3. Select **Screen Type** to **LCD-D50/SDI**.
4. Select **User Name** to **guest**.
5. Click **Login** to log in to the client software.

3.2 Configure Serial Port

The client controls the screen by connecting the serial port.

Steps

1. Click **System Configuration** → **Serial Port Configuration** .
2. Select **Serial Port**.
3. Set **Buad Rate** to 9600.
4. Click **Open** to connect the serial port.
5. **Optional:** Click **Close** to disconnect the serial port.



3.3 Startup/Shutdown

You can turn on/off the monitors via the client.

Before You Start

Configure the serial port, and see **Configure Serial Port** for details.

Steps

1. Open the Screen Control page.
2. Hold the mouse to draw a rectangle to select one or multiple virtual screens.
3. Turn on/off the monitors.
 - Right click to select Startup/Shutdown.
 - Click  to turn off the monitors. Or click  to turn on the monitors.

3.4 Switch Input Source

You can switch the input source via the client.

Before You Start

Configure the serial port, and see *Configure Serial Port* for details.

Steps

1. Open the Screen Control page.
2. Hold the mouse to draw a rectangle to select one or multiple virtual screens.
3. Right click and select Switch Signal.
4. Select the source according to your needs.



See Far, Go Further