



LCD Monitor

User Manual

Legal Information

User Manual

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Perface

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.

Applicable Models

This manual is applicable to monitors of the following sizes: 22 inch, 32 inch, 43 inch, and 55 inch.

Contents

Chapter 1 Introduction	1
1.1 Overview	1
1.2 Key Features	1
1.3 Panel Buttons	1
1.4 Interfaces	2
1.5 Power Supply Connections	3
1.6 Remote Control	3
Chapter 2 Terminal Operations	5
2.1 Switch Input Source	5
2.2 Menu Descriptions	5
2.3 Configure Image Parameters	7
2.4 Configure Audio Settings	10
2.5 Enable/Disable keypad lock	11
2.6 System Maintenance	12
2.6.1 Upgrade the Device	12
2.6.2 Restore the Defaults	12
2.6.3 Configure Temperature Monitoring	13
2.6.4 View System Information	14
2.6.5 Enable/Disable Auto Sleep	15
2.6.6 Enable/Disable Power Saving Mode	15
2.6.7 Configure Screen Saver	15
2.6.8 Check Energy Diagram	15
Chapter 3 Client Operation	17
3.1 Log in to Client	17
3.2 Configure Serial Port	17
3.3 Startup/Shutdown	17

3.4 Switch Input Source 18

Chapter 1 Introduction

1.1 Overview

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

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.
- 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.
- 1-ch HDMI 1.3 input interface, supporting HDCP 1.2.
- Software spread-spectrum technology to reduce EMI radiation.
- 3D noise reduction.
- HD JPEG decoding.
- Multimedia playing of text, image, audio, video, etc.

1.3 Panel Buttons

Touch buttons place on the left side of the monitor. See details in the following figure and table.

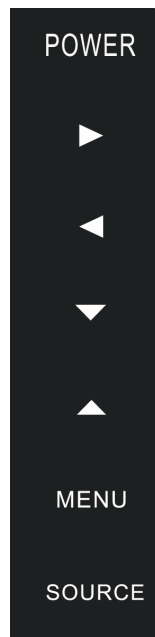


Figure 1-1 Panel Buttons

Table 1-1 Buttons Description

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

1.4 Interfaces

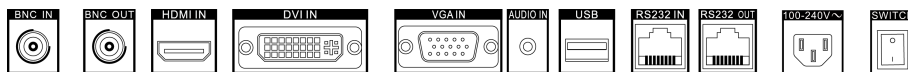


Figure 1-2 Rear Panel of Device

Table 1-2 Description of Rear Panel

Interface	Description
BNC IN	CVBS input
BNC OUT	CVBS output

Interface	Description
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, 2A) 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

Refer to the following table for the remote controller descriptions.











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

Chapter 2 Terminal Operations

2.1 Switch Input Source

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

Steps

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

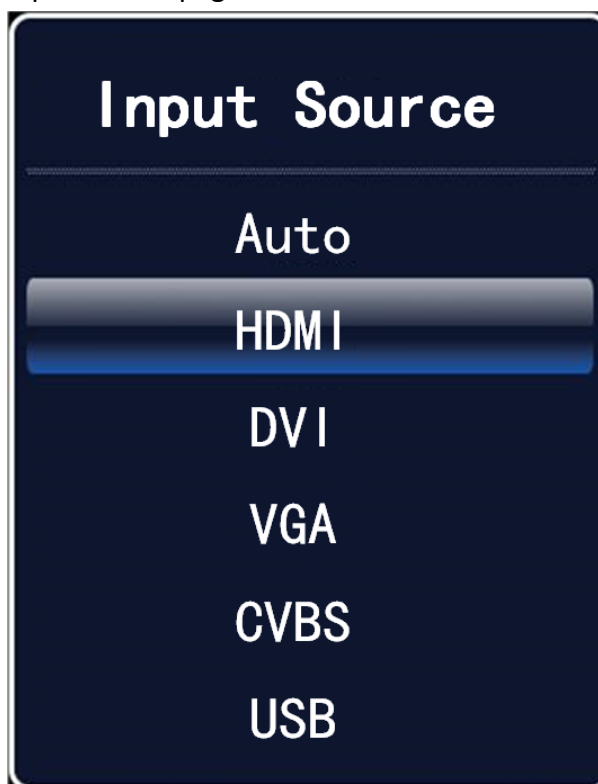


Figure 2-1 Input Source

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

2.2 Menu Descriptions

Menu Operations



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.

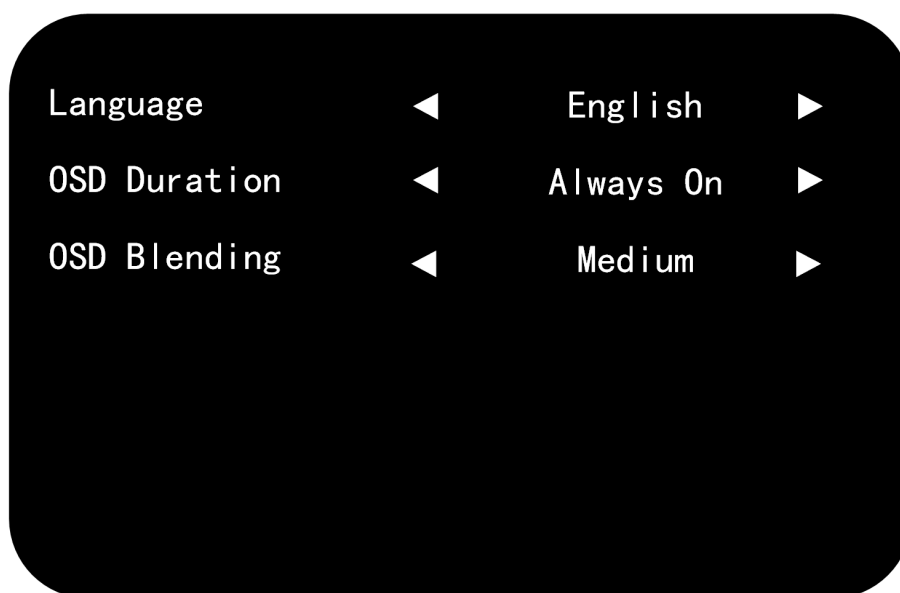


Figure 2-2 OSD Settings

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**.

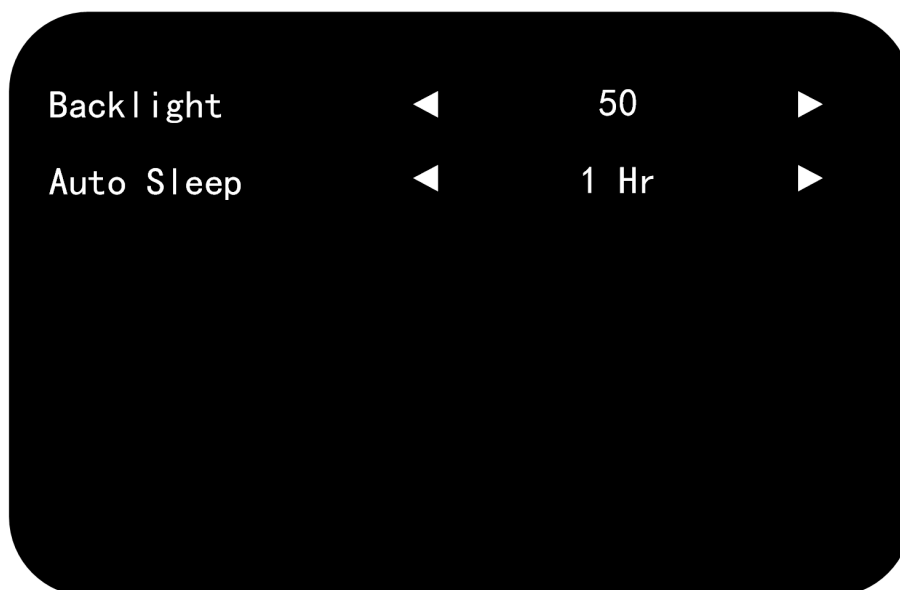


Figure 2-4 Backlight Settings

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.

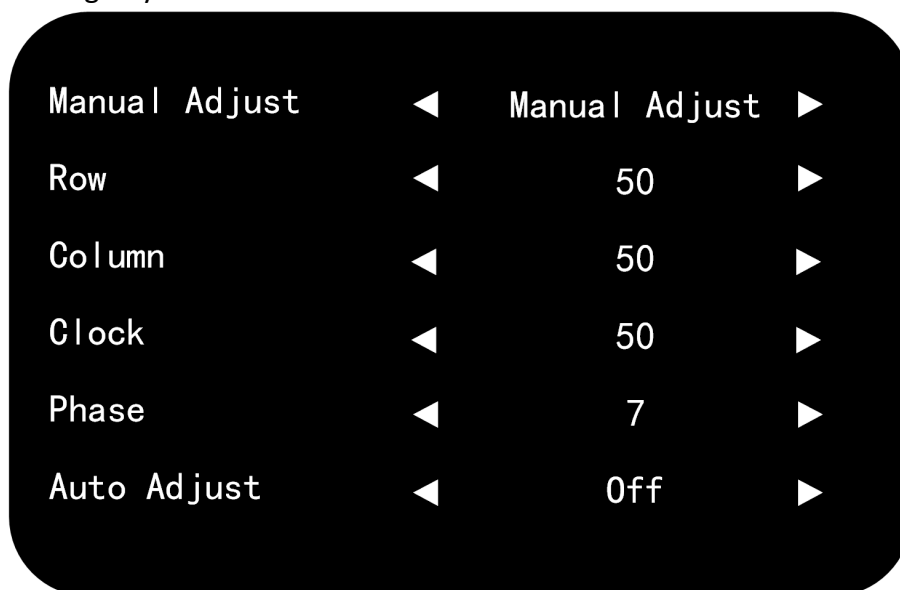


Figure 2-5 VGA Parameter

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.

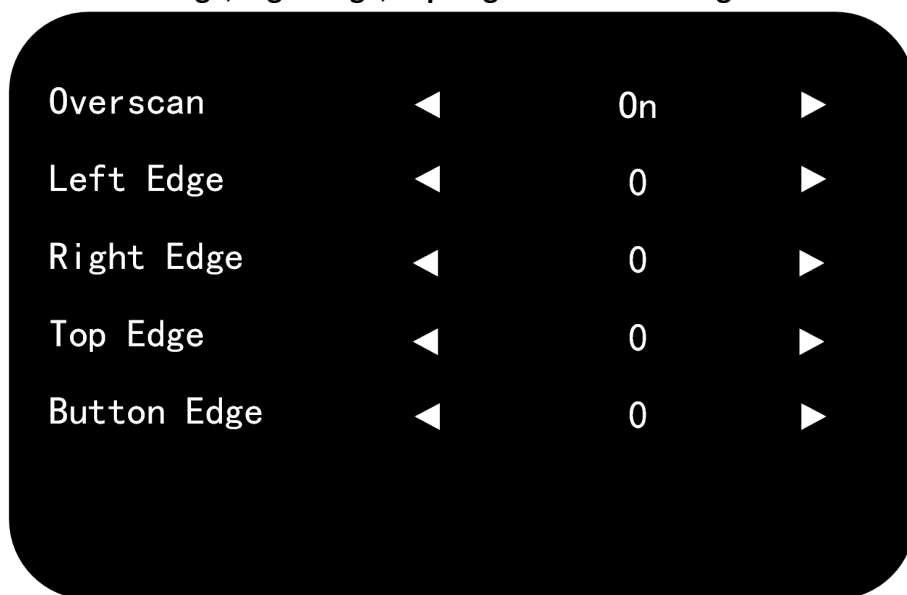


Figure 2-6 Overscan Settings

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 Audio Mode page: **Menu** → **Audio Mode** , and then press ◀ or ▶ to set the mute, volume, and balance.



Figure 2-8 Audio Settings

2.5 Enable/Disable keypad lock

You can disable keypad lock 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.

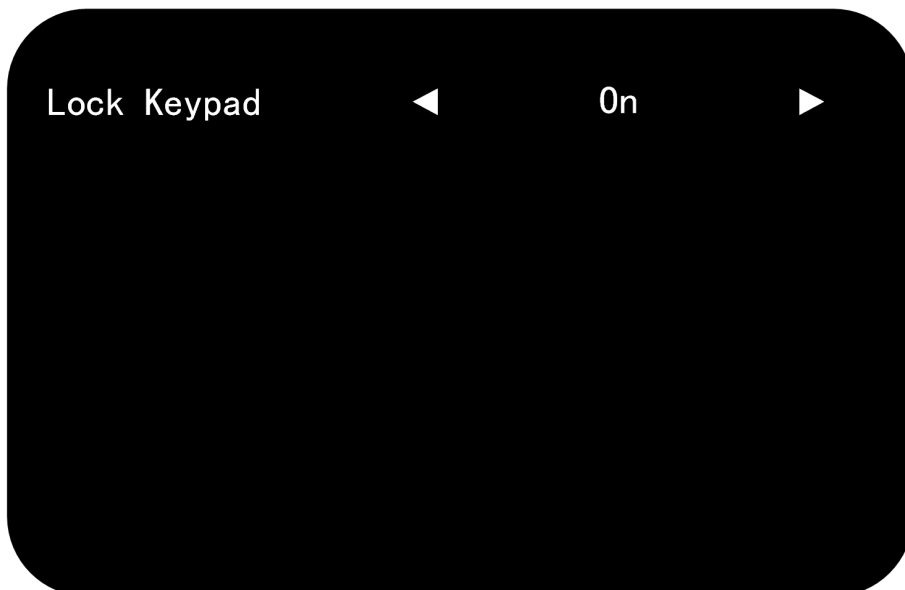


Figure 2-9 Lock Keypad

 **Note**

When the lock keypad keypad lock 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 ► to to start upgrading.
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 ► to start restoration.
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.

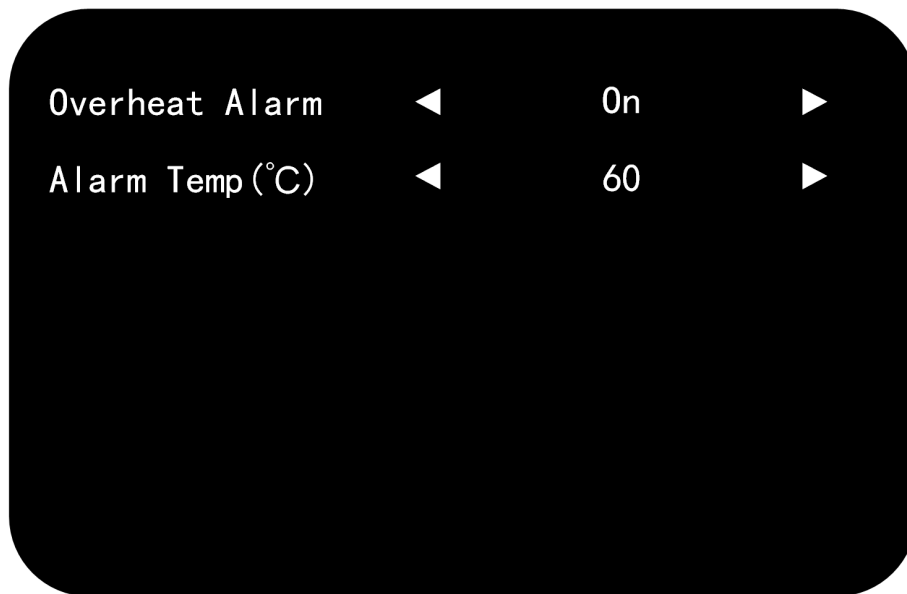


Figure 2-11 Alarm Settings

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.

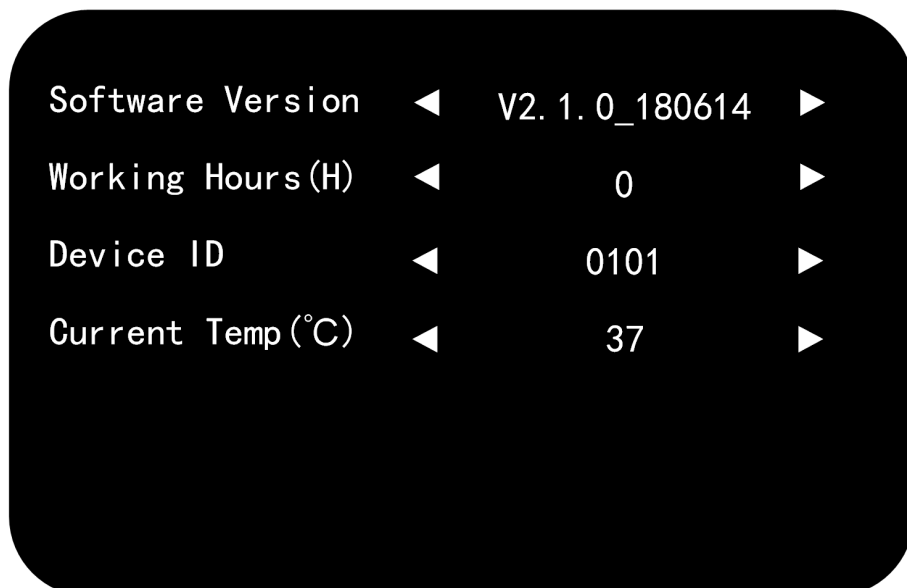


Figure 2-12 System Information

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 Operation

You can turn on/off the monitor, switch the 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**.
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

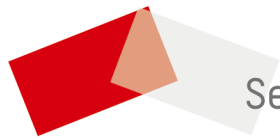
You can switch the input source via the client.

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