



# WinLCD User Manual

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## ***Revision History***

Revision	Date	By	Remark
V1.0	2003.12.26	Dongmei Li	First edition
V1.1	2004.02.18	Dongmei Li	Second edition

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## **1 Introduction**

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Welcome **WinLCD**, a powerful tool authored from Sunplus, It features receiving LCD image data from USB port of LCD Emulator (refer to LCD Emulator user guide for details) and displaying LCD image. With this easy-to-use tool, you can view LCD image conveniently in your PC. The tool provides user-friendly interface, pull-down menus, short-cut keys, etc. This documentation will guide you through the **WinLCD** installation, quick start, command, and function usage. For individual product specification, please contact your **SUNPLUS** sales representatives for further request.

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## 2 Installation

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This chapter provides the information about **WinLCD** installation.

### 2.1 System Requirement

The tool of current version can be run on Windows98®, Windows2000® or WindowsXP®. The prepositional minimum requirement in system is here:

**CPU clock:** 500 MHz

**Capacity of memory:** 64 MB

**Capacity of Hard disk:** 20 MB

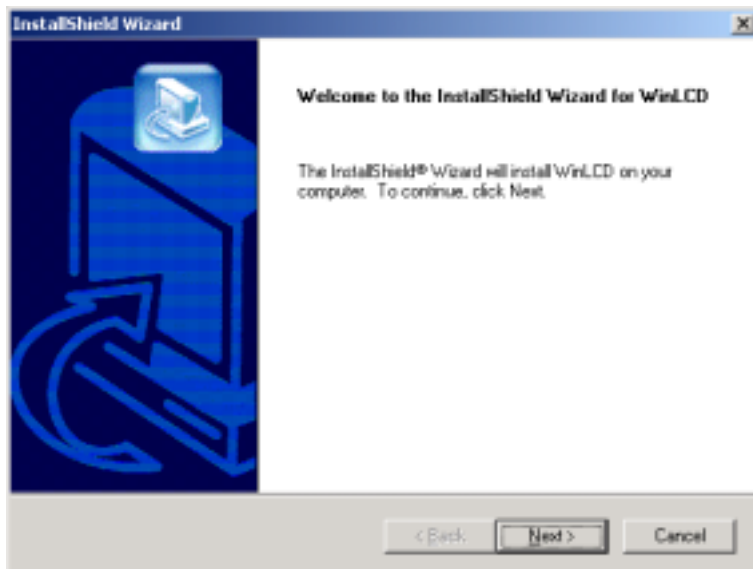
**USB 1.0 or later**

**DirectX 7.0 or later**

### 2.2 Installation

Take the following steps, and you will install this tool on your computer:

1. Execute the installation file.



2. Follow the on-screen prompts, and the tool will be installed on your computer.

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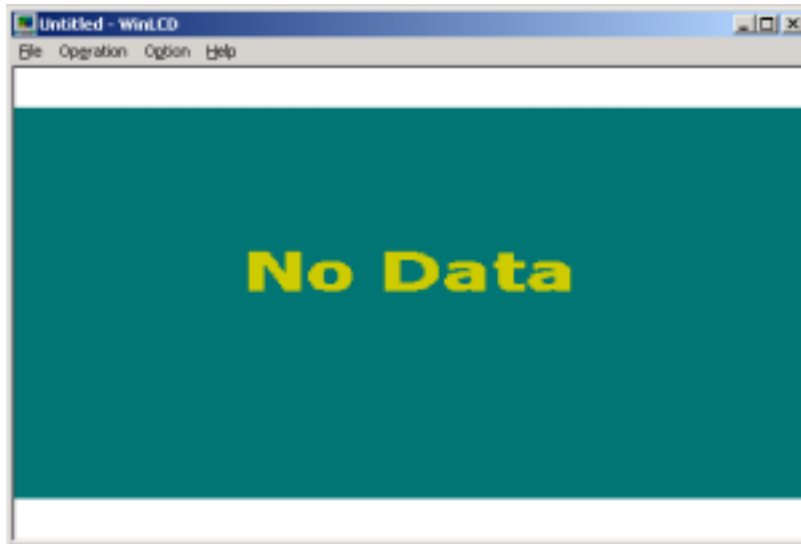
### 3 Quick Start

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1. Please select **[Start]** → **[Program]** → **[SUNPLUS]** → **[WinLCD]** and click "WinLCD" to start up the application.

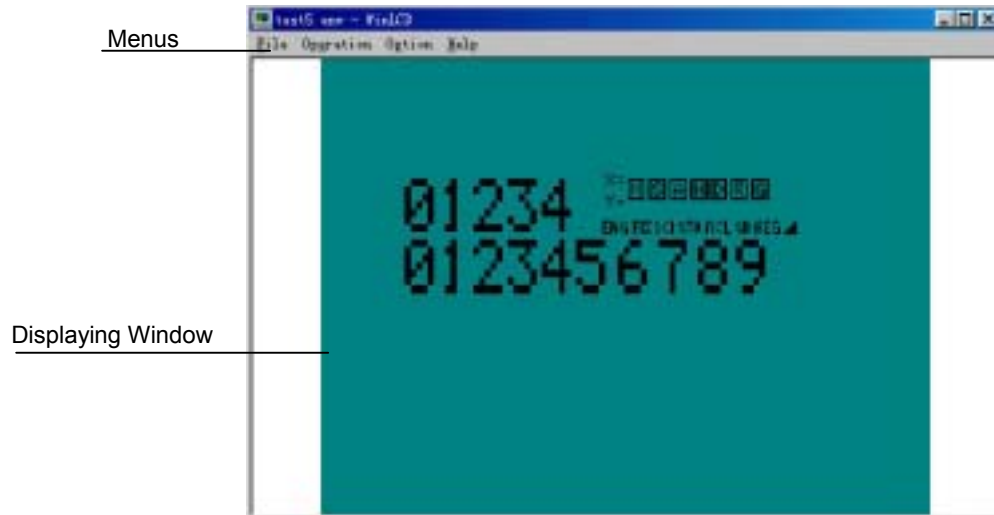
A main interface will be shown as follows:



2. Click **[File]** → **[New]** or **[Open]** to open a file, which includes some settings for LCD image displaying.
3. Click **[Option]** → **[Setting]** to set certain information for LCD image displaying.
4. Click **[Operation]** → **[Start]** to display LCD image.
5. Click **[Operation]** → **[End]** to stop LCD image displaying.

## 4 Looking Through WinLCD Components

The tool consists of two parts: Displaying window and Menus.



### 4.1 Displaying Window

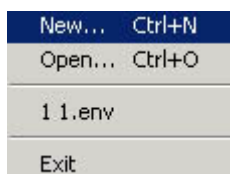
This window will display LCD image received from USB port of LCD Emulator.

### 4.2 Menus

Four pull-down menus are included: File, Operation, Option, and Help.

#### File

In this menu, you can create or open a file, which includes some settings for LCD image displaying, and exit from WinLCD for windows by pressing [Exit] command.



#### Operation



In this menu, select [Start] command to receive LCD image and display it, and select [End] to stop receiving and displaying.



**Option**

Full Screen	F4
Setting	F5
Always on top	F7


**Full Screen**

The tool will be displayed in full screen mode.

**Setting:**

Using this command, the settings for LCD image displaying will be finished.

**Always on top:**

If this command is selected, the symbol  will appear on the left of this command, this application will always on the top of the **Window** of your PC.

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## 5 Applying WinLCD

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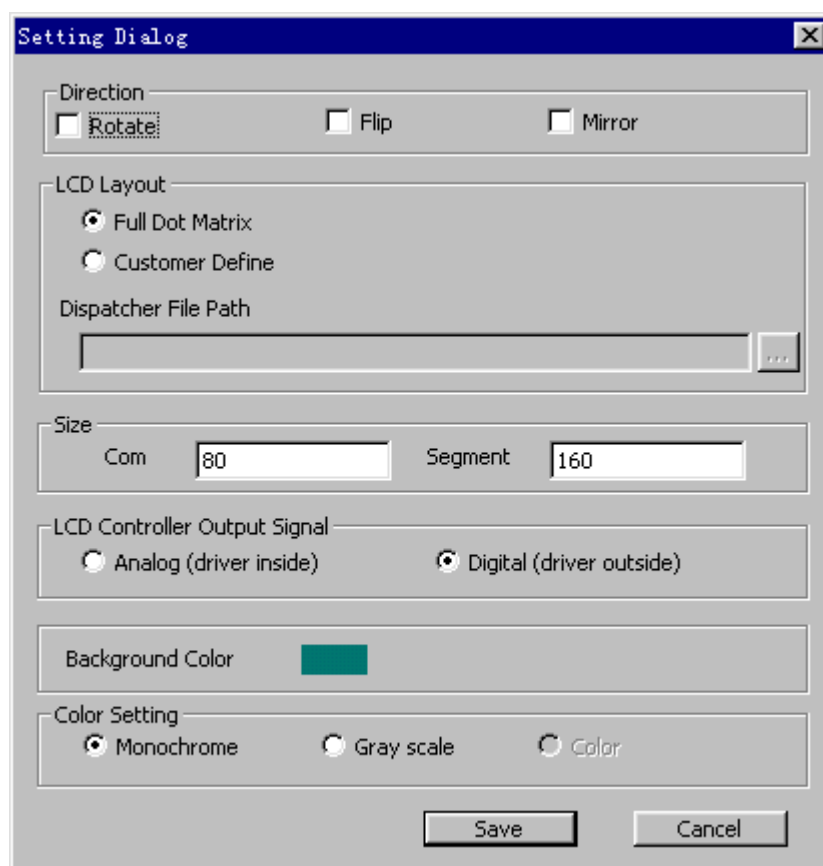
Here is the best place for you to get some hands-on experience about using this tool.

### 5.1 Creating a New File/ Opening an Existing File

Before beginning to receive and display LCD image, you must create a new file (\*.env) by clicking **[File]** → **[New]** or open an exist file (\*.env) by clicking **[File]** → **[Open]**. In the file (\*.env), the settings for LCD image displaying are included. These settings will be finished by pressing **[Option]** → **[Setting]**.

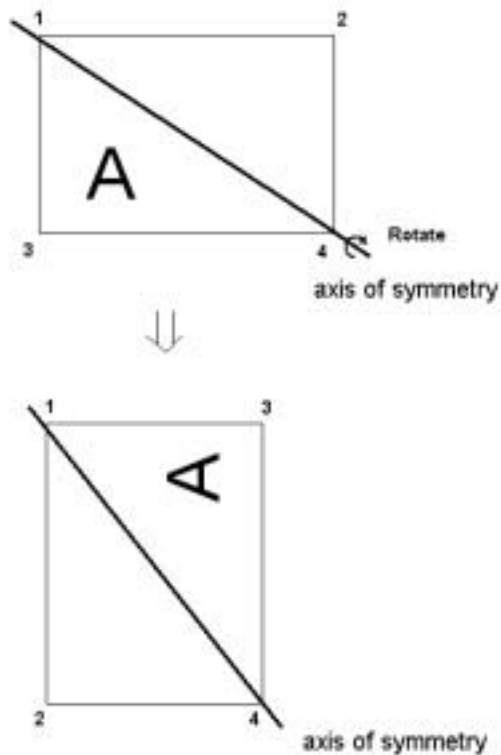
### 5.2 Setting for LCD Image Displaying

After creating or opening an env file, you can select **[Option]** → **[Setting]** to display a new dialog box.



**Direction:**

**Rotate:** The displayed picture will be rotated as follows:



**Flip:** The displayed picture will be flipped vertically.


**Mirror:** The displayed picture will be flipped horizontally.

Notes:

1. The precedence of **Rotate** operation is higher than the other ones.
2. The combined selection among these three items is legal, and the initial setting is none of them is chosen.

#### **LCD Layout:**

**Full Dot Matrix:** The LCD image data received from USB port will be displayed in **Full Dot Matrix** mode.

**Customer Define:** The LCD image data received from USB port will be displayed based on the information in dispatcher file. You can select the dispatcher file by pressing  button on the **Dispatcher File Path** area.

Note that the initial setting is **Full Dot Matrix**.

#### **Option:**

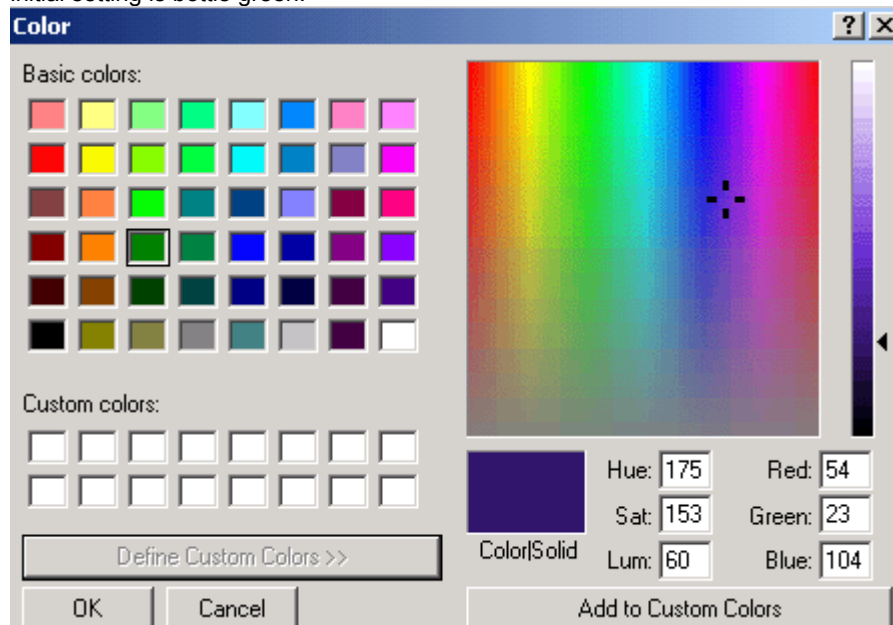
**Size:** The size of screen to display LCD image will be set here. The initial setting for **Full Dot Matrix** mode is:

Com: 80, Seg: 160; the maximum is: Com: 320, Seg: 240. The initial setting for **Customer Define** mode is:

Com: 64, Seg: 128; the maximum is: Com: 64, Seg: 128.

**LCD Controller Output Signal:** The format of each frame data for displaying will be selected: Analog (driver inside), and Digital (driver outside).

**Background Color:** Click on color area to display a color palette. Here you can choose color for screen. The initial setting is bottle green.



#### **Color Setting:**

The color of the displayed picture will be selected: monochrome and gray scale. The initial setting is monochrome.

After you have finished settings, you can press **[Save]** on the dialog box to save settings in a file (\*.env).

### **5.3 Displaying LCD Image**

Select **[Operation]** → **[Start]** command to receive LCD image and display it, and select **[Operation]** → **[End]** to stop receiving and displaying. When you start to display the image, the setting function in **Option** menu will be disabled.

When displaying LCD image, some prompt information will be shown:

1. Can't open the LCD Emulator device

Reason:

- LCD Emulator cannot be connected.
- The driver of LCD Emulator cannot be installed right.
- The driver of LCD Emulator cannot run normally.

2. Set Com and segment fail!

Reason:

- LCD Emulator cannot run normally.
- The values of Com and Seg are error.

3. Received Data is error

Reason:

- The received data of LCD Emulator is error.
- The values of Com and Seg are error.

4. The buffer of receiving data overflows

Reason:

- The received data of LCD Emulator is error.
- The values of Com and Seg are error.

5. Operation Timeout

Reason:

- Some operation cannot be finished in time during communication. Maybe LCD Emulator has no response.
- LCD Emulator cannot receive data accurately.

6. Waiting

Reason: LCD Emulator is waiting for receiving data.

7. Can't create DirectDraw7 object

8. Please insure that DirectX7.0 or above version installed

9. Can't create DirectDrawInterface

10. Can't change the Cooperative Level

11. Can't change the fullscreen/window mode

When the prompt information 7 ~11 is occur, please check whether DirectX's installation is right.

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## **6 Accelerator**

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Ctrl+N	New project
Ctrl +O	Open
F2	Start
F3	End
F4	Full Screen
F5	Setting
F7	Always on top
ESC	Cancel full-screen mode

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## **7 Technical Support**

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WinLCD is designed to use easily. However, on some occasion you may need some explanations or help with an issue. In most cases, you can find the answer to your questions through on-line help inserted this tool. In addition, you can get available support material around-the-clock at our website. .

For the furthermore technical support, you can contact with your Sunplus sales representatives.

Web Site Support:

[http://www.sunplus.com.tw/service/fae/fae\\_form.asp](http://www.sunplus.com.tw/service/fae/fae_form.asp)