# Static LCD Module Demo Kit

# Last update on 2002-11-08

# 1.1 Introduction

Our Minilogic's Static LCD Module Demo Kit can demonstrate the special functionality of our Static COG LCD Module. It demonstrates,

- Our LCD Module can operate over a wide range of voltage, fom 2.0V to 5.0V
- The cascade function of our ICs to form a single piece of 80 to 120 segments LCD driver.
- Methods to display the data pattern onto the LCD module
- The widest viewing angle and best contrast of TN LCD module

Other functions like,

• Connect the Static LCD Module Demo Kit to the computer by the USB cable, and use the ML1001 USB Demo Program to display pattern using the computer.



# 1.2 Detail description of Static LCD Module Demo Kit

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Label	Function
Power Socket	Connect a 9V battery
Mode button	Display pattern format 1
Trigger button	Display pattern format 2
Voltage button	Change voltage from 5.0, 4.0, 3.0 to 2.0V
Reset button	Reset the Demo kit
LCD Module	The Static LCD Module
USB Socket	Connects the Demo kit to a computer using
	an USB cable
Socket 1	Connect the COG LCD module to display
	either using the ML1001 USB Demo
	Program or pressing the buttons.
Socket 2	For development use

Tables1.0 Description of Static LCD Module Demo Kit

# 2.1 How to use the Static LCD Module Demo Kit

There are two different modes of operations in this Demo kit.

One mode is the **standalone** mode. Without connecting an USB cable to a computer. As shown from the above, user can press the **Mode** button or **Trigger** button to display the two different pattern formats in this mode.

The other mode is the **USB** mode. With connecting an USB cable to a computer. Users can display the ir pattern through using the computer.

### First pattern format in standalone Mode

The sequence of actions of the first pattern format:

- 1. After the power has just switched **ON** or pressing the **Reset** button, all segments will not display.
- 2. When users press the **Mode** button, the LCD module will display the segment one to the last segments one by one.
- 3. After the last segments has displayed, users can press the **Mode** button, the segment will not display from segment one to the last segment one by one.

Note: Pressing other buttons except the Reset button during step 2 will not have effect on the display.

## Second pattern format in standalone Mode

The sequence of actions of the second pattern format:

- 1. After the power has just switched **ON** or pressing the **Reset** button, all segments will not display.
- 2. When users press the **Trigger** button, the LCD module will display the data pattern 1 input by the users.

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- 3. When users press the **Trigger** button, the LCD module will display the data pattern 2 input by the users
- 4. When users press the **Trigger** button, the LCD module will display the data pattern 3 input by users
- 5. When users press the **Trigger** button, the LCD module will display all segments.

Note: Users can press the **Voltage** button, to change the voltage from 5.0V, 4.0V, 3.0V to 2.0V, to demonstrate the effect of changing voltage on the LCD module.

### **USB Mode**

In the USB mode, users can input their data pattern through using our ML1001 USB Demo Program. Details on how to use our ML1001 USB Demo Program can be found from our ML1001 USB Demo User Guide on our web site <a href="http://www.minilogic.com.hk">http://www.minilogic.com.hk</a>

Note: Pressing any buttons except the Reset button, will not have any effect on the system.

## 3.1 Trouble shooting

#### Nothing displayed on the LCD module

- Check the power connection
- Check the LCD Module Connection
- Pressing the Reset button.

#### Nothing happens after pressing the keys

- Press the key one more time
- Wait a few minutes and then press the key

### Changing voltage doesn't have any effect on the display

• Our LCD module can operates on a wide range of voltages; changing voltages only have a minor effect on the LCD module.

### Can't input pattern using the ML1001 USB Demo Program

• Check our ML1001 USB Demo Program User Guide.



### This user manual can't solved my problem

• E-mail your questions to <u>tech@minilogic.comhk</u>. We will answer your questions and solve your problem ASAP.