bematech

SB9011D All-in-one Touch POS Terminal

USER MANUAL
1 Overview

Thank you for purchasing the SB9011D all-in-one touch POS terminal, Bematech is committed to continuously improve product quality and provide better after-sales service. In order to take full advantage of our devices, we strongly recommend that you take the time to read this manual before diving into software solution.

Note: Information in this manual may change without prior notice.

1.1 Safety Information

- Before plug in the product, please make sure the power you provide meets the power requirements (such as voltage, frequency); Make sure the ground terminal of the power outlet is working properly.
- Lightning may damage this product. During lightning storms, unplug the network cable, power cable and any other connections.
- Turn off power before connecting any devices (except USB devices) to the terminal.
- Do not attempt to open the chassis. You may be hurt by electric shock. For service, call your place of purchase.
- Do not spill liquid on the terminal. Do not place any objects into the ventilation holes of this product. It may cause short-circuit of the internal components and cause a fire or electric shock.
- After the computer is stored below temperature of 10 °C, please place the machine in room temperature (10-35 °C) in the original packing for at least two hours to allow the terminal to restore to room temperature before operation. This is to avoid condensation that might bring electrical damage.
- Keep the terminal clean, dry, and away from dust, moisture and direct sunlight.
- Do not use harsh chemicals or strong cleaning solvents to clean the...
monitor screen. Wipe it clean with a soft terry cloth applied with a mild solution

- Do not share the same power outlet with high-power electrical appliances; keep distance from high level magnetic interference.
- Do not use sharp pointed objects to work with the touch screen to avoid damage to the screen.

When the following occurs:
- Liquid gets inside the POS terminal;
- Accidental physical damage;
- POS terminal produces a burning smell;

Immediately disconnect the power supply, unplug the power cord, and contact a qualified service technician.

12 Electromagnetic compatibility statement

FCC NOTICE
This device complies with Part 15 of FCC Rules. Operations are subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

EUROPEAN COMMUNITY (CE) MARK OF CONFORMITY
This product is in conformity with the protection requirements of EU Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility. Logic Controls cannot accept responsibility for any failure to satisfy the protection requirements resulting from a non-recommended modification of the product. This product has been tested and found to comply with the limits for Class A Information Technology Equipment according to CISPR 22 / European Standard EN 55022. The limits for Class A equipment were derived for commercial and industrial environments to provide reasonable protection against interference with licensed communication equipment.
2 Installation Guide

2.1 appearances
2.2 Rear panel I/O connectors

At the rear panel of the SB9011D is a row of external I/O device connectors detailed as follows:

- **POWER key:** Turn power on/off
- **MOUSE:** Connection to PS/2 mouse
- **KB:** Connection to PS/2 keyboard
- **LPT:** DB25 parallel port for connection to POS printer
- **VGA:** VGA signal output for connection to external monitor
- **COM 1.3.4.5.6:** DB9 port for connection to serial devices
- **USB:** Connection to USB devices
- **LAN1:** RJ-45 Ethernet connection to 100M-bit LAN
- **LAN2:** RJ-45 Ethernet connection to Giga-bit LAN
- **LINE OUT:** Stereo phone jack audio output
- **MIC IN:** Microphone input
- **12V DC IN:** Connection to 12V DC Power Supply
3 Setup and Driver Installation

3.1 Motherboard BIOS settings

The POS terminal has a BIOS (Basic Input Output System) chip on the motherboard. Every time you start the terminals, the system will first run the BIOS self-test routine to check the main components of the system to ensure it is working properly.

The terminal is loaded with default BIOS settings in the factory. Please do not change the parameters in the BIOS unless necessary.

In the following situations, you need to run the BIOS setup:

1) Error message appears on the screen during the system self-test and requested to enter BIOS setup.
   a. Press F1 to run setup; or
   b. Press F2 to load default values and continue

2) If you need to change the factory default settings to customized application requirements.
   a. During system boot, hit DEL key to enter BIOS setup.
   b. If the message disappears before you respond to, you can turn off the machine and restart the computer. You can also press <Ctrl>+<Alt>+<Del> to restart.

Control keys
<↑>Move up
<↓>Move down
<←>Move left
<→>Move right
<Enter> To select this option
<Esc> To exit the menu or to return to the main menu from the submenu
<+/PU> Increase the value or change selection
</PD> Reduce the value or change selection
<F1> Help, only available in the status menu and select templates menu
<F9> To load default! settings
<F10> To store settings and exit the CMOS SETUP program
### Main CMOS Setup Menu

<table>
<thead>
<tr>
<th>System Overview</th>
<th>Item Help</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP25X2 BIOS VER:100 2011-06-20</td>
<td>While entering setup BIOS auto detects the presence of SATA Device. This displays the status of auto detection of SATA devices.</td>
</tr>
<tr>
<td>AMIBIOS Version :08.00.15</td>
<td></td>
</tr>
<tr>
<td>Built Date:06/20/11</td>
<td></td>
</tr>
<tr>
<td>ID:LIPVB8106</td>
<td></td>
</tr>
<tr>
<td>System summary</td>
<td></td>
</tr>
<tr>
<td>IDE Device</td>
<td>Not detected</td>
</tr>
<tr>
<td>CF Disk Device</td>
<td>Not detected</td>
</tr>
<tr>
<td>SATA1 Device</td>
<td>Hard Disk</td>
</tr>
<tr>
<td>SATA2 Device</td>
<td>Not Detected</td>
</tr>
<tr>
<td>System time (hh:mm:ss)</td>
<td>Fri 10/26/2012</td>
</tr>
<tr>
<td>System date (mm:dd:yy)</td>
<td>English</td>
</tr>
<tr>
<td>Language</td>
<td></td>
</tr>
<tr>
<td>System Overview</td>
<td></td>
</tr>
<tr>
<td>IP25X2 BIOS VER:100 2011-01-05</td>
<td></td>
</tr>
<tr>
<td>AMIBIOS Version :08.00.15</td>
<td></td>
</tr>
</tbody>
</table>

F1 Help ↑↓ Select Item +/- Change Values F9 Setup Defaults
Esc Exit ←→ Select Menu Enter Select Sub Menu F10 Save and Exit

### Advanced Settings Menu

<table>
<thead>
<tr>
<th>Advanced Settings</th>
<th>Item Help</th>
</tr>
</thead>
<tbody>
<tr>
<td>WARNING: setting wrong values in the below sections may cause system to malfunction</td>
<td>Configure CPU</td>
</tr>
<tr>
<td>CPU Configuration</td>
<td></td>
</tr>
<tr>
<td>Supper IO Configuration</td>
<td></td>
</tr>
<tr>
<td>Hardware Health Configure</td>
<td></td>
</tr>
<tr>
<td>ACPI Configure</td>
<td></td>
</tr>
<tr>
<td>USB Configuration</td>
<td></td>
</tr>
<tr>
<td>APM Configuration</td>
<td></td>
</tr>
</tbody>
</table>

F1 Help ↑↓ Select Item +/- Change Values F9 Setup Defaults
Esc Exit ←→ Select Menu Enter Select Sub Menu F10 Save and Exit
Exit Menu

<table>
<thead>
<tr>
<th>Exit options</th>
<th>Item Help</th>
</tr>
</thead>
<tbody>
<tr>
<td>Save Change and Exit</td>
<td>Exit system setup after saving the changes.</td>
</tr>
<tr>
<td>Discard Change and Exit</td>
<td></td>
</tr>
<tr>
<td>Discard Change</td>
<td></td>
</tr>
<tr>
<td>Load Optimal Default</td>
<td></td>
</tr>
</tbody>
</table>

F1   Help   ↑↓ Select Item   +/- Change Values   F9 Setup Defaults
Esc   Exit   ←→ Select Menu   Enter   Select Sub Menu   F10 Save and Exit

3.2 Touch screen driver installation:

Step 1: Navigate to the installer directory to find the setup.exe file. Double-click on “setup.exe” to start installation.
**Step 2:** When installation starts, click [Next] to proceed to the next step.

**Step 3:** Installation in progress
Step 4: Uncheck “Install PS/2 interface driver” and click [Next] to continue installation.

Step 5: Uncheck “install RS232 interface driver” and click [Next] to continue installation.
Step 6: Select option “NONE”, click [Next] to continue installation.

Step 7: When installing USB touch, please connect the USB controller and USB cable
Step 8: If there are additional touch monitors connected, please check “Support multi-monitor system”.

Step 9: Select the destination location to install the touch driver. The default path is “C:\ Program Files\ eGalaxtouch”. Click [Next] to continue installation.
Step 10: Select the Program Folder to install the utility. The default is “eGalaxtouch”. Click [Next] to continue installation.

Step 11: Check the option to create a desktop shortcut icon.
After install the driver successfully, identify the USB controller is installed as shown below.

Touch function settings
Touch calibration

Touch device line test
4 Troubleshooting

1) Terminal does not boot
If the terminal cannot boot after repeated pressing of the power switch when connect to the power, the terminal power light remains off, the fan does not operate, and the BIOS beeping is not heard, it might be power supply problems.
(a) Check the power adapter is plugged in correctly to the power outlet.
(b) Check the connection between the terminal and the power adapter, and then re-boot the machine.
(c) If the terminal is working in high temperature environment that causes the terminal automatically shut down in protection mode, please disconnect the power of the machine. Wait until environment temperature has dropped and restart.
(d) If the terminal does not boot after a sudden power failure or illegal shutdown, unplug the adapter from the terminal, and press the power button several times. Then plug in the adapter and boot again.
(e) If the adapter light blinks or go off, unplug the adapter immediately and do not plugged in again. Contact with our products service center.

2) The terminal automatically restart (or shutdown)
If terminal is frequently automatic shutdown or auto-boot during operation (or boot up),
(a) Check the power supply is connected properly; make sure the plug is not loose and contacts are in good condition;
(b) Check if the AC line voltage is stable;
(c) A sudden power failure or improper shutdown may cause this problem. Press F8 to boot system into safe mode and debug.
(d) If any new hardware is added or replaced that caused this problem, remove
the hardware and reboot;
(e) If the above steps do not resolve this problem, reinstall the operating system.

3) **The touch screen does not respond**
(a) Remove the touch driver and then install it again.
(b) Execute the “eGalaxTouch utility and check if the interface port is working.

4) **When touching the screen, cursor always returns to a fixed position.**
(a) Check if there is anything pressing on the touch screen.
(b) Other high power or high frequency equipment may affect the screen or controller. Make sure that the touch screen is away from the high-voltage equipment.
(c) The touch screen driver is not installed correctly, install the driver (please refer to the “Touch Screen Setup”) and run a 25-point calibration.

5) **Touch screen is not accurate**
Please run the touch screen calibration program with a 25-point recalibration, we also recommend you to do this after change the monitor resolution or refresh rate. When running the calibration, touch the center of calibration point to assure accuracy.

6) **The cursor moves opposite to the touch movement**
(a) Run the 4/9/25 point calibration.
(b) The touch screen driver is not installed properly, reinstall the driver.

7) **The cursor fixed at the edge of LCD**
(a) Check if the edge of the screen is being pressed by something.
(b) Check the edges of the LCD if there is anything jammed in the front bezel.
(c) Make sure the touch screen is clean.
8) **The cursor in the touch screen can only move in a small area or touch positions are inaccurate.**

(a) This situation usually occurs first time after installing the driver. Please run the touch screen calibration program. We also recommend you to do this after changing monitor resolution.

(b) Run the touch screen calibration program to do a 25-point recalibration.
## 5 Specifications

<table>
<thead>
<tr>
<th>MODEL</th>
<th>SB9011D 15” All-in-one Touch POS Terminal</th>
</tr>
</thead>
</table>

### Main Board
- **CPU**: Intel Atom Processor, D525 dual core 1.8GHz
- **Chipset**: D525 + CH8M chipset
- **Memory**: DDR3 1066/1333, up to 4GB
- **Storage**: SATA 2.5 inch Hard Disk Drive, 160GB or higher

### Display
- **LCD panel**: 15” TFT LCD
- **Resolution**: 1024x768
- **Brightness**: 250cd/m²
- **Touch Screen**: 5-wire resistive touch
- **View Angle**: Horizontal: 140°  Vertical: 130°
- **Tilting Angle**: 0 to 90°

### I/O Ports
- **External DC Input**: 1x DC jack
- **PS/2 Ports**: 1x PS/2 mouse, 1x PS/2 keyboard
- **Serial Ports**: 5x DB9 serial ports (COM1, COM3-COM6)
- **Parallel Port**: 1x DB25 parallel port
- **VGA**: 1x DB15 2nd video VGA connector
- **LAN**: 2x RJ45, (1x 100Mbit, 1x 1Gbit)
- **USB**: 4x USB 2.0
- **Audio**: 1x audio out, 1x mic in

### Environment
- **Operating Temperature**: 0°C to 40°C
- **Storage Temperature**: -20°C to 60°C
- **Relative Humidity**: 8% to 80% non-condensing

### Electrical (External Power Adapter)
- **Input**: 100 to 250VAC, 50 to 60Hz AC 2.5A
- **Output**: DC 12V 7A
- **Power Consumption**: 35W max

### Mechanical
- **Packing Dimensions**: 460x420x240mm
- **Weight**: NW 6.5Kg, GW 8.5Kg
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