# Table of Contents

1 Introduction .......................................................................................................................... 2  
   1.1 Safety Information ......................................................................................................... 2  
   1.2 Electromagnetic compatibility statement ........................................................................ 3  

2 Overview ............................................................................................................................... 4  
   2.1 Features .......................................................................................................................... 4  
   2.2 Appearances ..................................................................................................................... 4  
   2.3 Outline Dimensions .......................................................................................................... 4  
   2.4 Rear panel I/O connectors ............................................................................................... 5  

3 Setup and Driver Installation ............................................................................................... 6  
   3.1 Motherboard Connectors ................................................................................................ 6  
   3.2 Motherboard Headers ...................................................................................................... 7  
   3.3 Header pin assignment ...................................................................................................... 7  
   3.5 Motherboard BIOS settings ............................................................................................ 14  
   3.6 Touch screen driver installation ....................................................................................... 19  

4 Hardware Installation ........................................................................................................... 24  
   4.1 Magnetic Script Reader (MSR) Installation * .................................................................... 24  
   4.2 LCD Rear Display installation * ...................................................................................... 25  
   4.3 SATA Hard Disk Installation ............................................................................................ 26  

5 Troubleshooting .................................................................................................................... 27  

6 Specifications ......................................................................................................................... 29
1 Introduction

Thank you for purchasing the SB1015 all-in-one touch POS terminal. The SB1015 offers highly enhanced features, with easy connection to various optional devices for optimal performance. This easy-to-use POS terminal is designed to help you enhance your business flexibility and offer superior customer experience.

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 setting up 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.

- To avoid electric shocks, disconnect the power cord from the electrical outlet before relocating the system.

- 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 terminal is stored below temperature of 10 °C, please place it 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 cause 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;
- The power cord or plug is damaged;
- POS terminal produces a burning smell;

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

1.2 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. Bematech / 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 Overview

2.1 Features

- True-flat no-bezel 15" touch monitor with LED backlight display
- Fanless design
- High performance Intel quad core celeron processor J1900
- Support DDR3L SO-DIMM 1066/1333 MHz up to 8GB
- Stable and robust mechanical design
- Easy to change or replace hard disk drive
- Optional integrated 8" customer LCD, 2x20 VFD and 3-track MSR.

2.2 Appearances

2.3 Outline Dimensions
2.4 Rear panel I/O connectors

At the rear panel of the SB1015 is a row of external I/O device connectors detailed as follows:

<table>
<thead>
<tr>
<th>Port</th>
<th>Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC-in 12V</td>
<td>DC-in 12V Power Connector</td>
<td>Connect compatible power adapter to provide power supply for the system.</td>
</tr>
<tr>
<td></td>
<td>USB 2.0 Port</td>
<td>Connect USB keyboard, mouse or other devices compatible with USB specification.</td>
</tr>
<tr>
<td></td>
<td>USB 3.0 Port</td>
<td>Connect USB keyboard, mouse or other devices compatible with USB specification. USB 3.0 ports supports up to 5Gbps data transfer rate.</td>
</tr>
<tr>
<td></td>
<td>VGA Port</td>
<td>Connect second display device that support VGA specification.</td>
</tr>
<tr>
<td></td>
<td>Serial Port</td>
<td>Connect external devices that supports serial communications interface.</td>
</tr>
<tr>
<td></td>
<td>RJ-45 LAN Port</td>
<td>This connector is standard RJ-45 LAN jack for Network connection.</td>
</tr>
<tr>
<td></td>
<td>Line-Out Connector</td>
<td>Connect external speaker, earphones, etc for system audio output.</td>
</tr>
<tr>
<td></td>
<td>Power Switch</td>
<td>For user to boot/shutdown system.</td>
</tr>
</tbody>
</table>
3 Setup and Driver Installation

3.1 Motherboard Connectors
### 3.2 Motherboard Headers

<table>
<thead>
<tr>
<th>Header</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FP_AUDIO1</td>
<td>Front Panel Audio Header</td>
<td>9-pin Block</td>
</tr>
<tr>
<td>SPEAK_CON1</td>
<td>Left Speaker Header</td>
<td>2-pin Block</td>
</tr>
<tr>
<td>SPEAK_CON2</td>
<td>Right Speaker Header</td>
<td>2-pin Block</td>
</tr>
<tr>
<td>SPDIF</td>
<td>HDMI_SPDIF Header</td>
<td>2-pin Block</td>
</tr>
<tr>
<td>COM2/3/4/5/6</td>
<td>Serial Port Header X 5</td>
<td>9-pin Block</td>
</tr>
<tr>
<td>TX-RXCOM2</td>
<td>RS422/RS485 Header</td>
<td>4-pin Block</td>
</tr>
<tr>
<td>JW_FP</td>
<td>Front Panel Header(PWR LED/ HD LED/Power Button /Reset)</td>
<td>9-pin Block</td>
</tr>
<tr>
<td>GPIO</td>
<td>GPIO Header</td>
<td>10-pin block</td>
</tr>
<tr>
<td>F_USB1</td>
<td>USB 2.0 Port Header</td>
<td>9-pin Block</td>
</tr>
<tr>
<td>PS2KBMS</td>
<td>PS2 Keyboard &amp; Mouse Header</td>
<td>6-pin Block</td>
</tr>
<tr>
<td>LPT1</td>
<td>Parallel Port Header</td>
<td>25-pin Block</td>
</tr>
<tr>
<td>HDMI</td>
<td>HDMI Port Header</td>
<td>20-pin Block</td>
</tr>
<tr>
<td>CPUFAN1</td>
<td>CPUFAN Header</td>
<td>4-pin Block</td>
</tr>
<tr>
<td>SYSFAN1</td>
<td>SYSFAN Header</td>
<td>3-pin Block</td>
</tr>
<tr>
<td>VGA1</td>
<td>VGA Port Header</td>
<td>12-pin Block</td>
</tr>
<tr>
<td>JP2</td>
<td>LVDS Panel Brightness Adjustment Header</td>
<td>2-pin Block</td>
</tr>
<tr>
<td>INVERTER</td>
<td>LVDS Inverter</td>
<td>6-pin Block</td>
</tr>
<tr>
<td>LVDS</td>
<td>LVDS Header</td>
<td>30-pin Block</td>
</tr>
</tbody>
</table>

### 3.3 Header pin assignment

(1) **FP_AUDIO1** (9-pin): Line-Out, MIC-In Header

![Diagram of FP_AUDIO1 header pin assignment](image)
(2) SPEAK_CON1 (2-pin)/ SPEAK_CON 2 (2-pin): Speaker Headers

(3) SPDIF (2-pin): HDMI_SPDIF Out Header

(4) COM2/3/4/5/6 (9-Pin): Serial Port Headers

(5) TX-RXCOM2 (4-Pin): RS422/485 Header

*Notice: User needs to go to BIOS to set ‘Transmission Mode Select’ as [RS422/RS485] for COM2 as well (refer to Page 34).

(6) JW-FP (9-pin): Front Panel Header
(7) GPIO (10-pin): GPIO Header

(8) F_USB1 (9-pin): USB 2.0 Port Header

(9) PS2KBMS (6-pin): PS/2 Keyboard & Mouse Header

(11) HDMI (20-pin): HDMI Header

<table>
<thead>
<tr>
<th>Pin NO.</th>
<th>Pin Definition</th>
<th>Pin NO.</th>
<th>Pin Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pin 1</td>
<td>GND</td>
<td>Pin 2</td>
<td>HDMI_TXP2</td>
</tr>
<tr>
<td>Pin 3</td>
<td>HDMI_TXP1</td>
<td>Pin 4</td>
<td>HDMI_TXN2</td>
</tr>
<tr>
<td>Pin 5</td>
<td>HDMI_TXN1</td>
<td>Pin 6</td>
<td>GND</td>
</tr>
<tr>
<td>Pin 7</td>
<td>GND</td>
<td>Pin 8</td>
<td>HDMI_TXP0</td>
</tr>
<tr>
<td>Pin 9</td>
<td>HDMI_TXCP</td>
<td>Pin 10</td>
<td>HDMI_TXN0</td>
</tr>
<tr>
<td>Pin 11</td>
<td>HDMI_TXCN</td>
<td>Pin 12</td>
<td>GND</td>
</tr>
<tr>
<td>Pin 13</td>
<td>NC</td>
<td>Pin 14</td>
<td>NC</td>
</tr>
<tr>
<td>Pin 15</td>
<td>HDMI_SDA</td>
<td>Pin 16</td>
<td>HDMI_SCL</td>
</tr>
<tr>
<td>Pin 17</td>
<td>HDMI_+5V</td>
<td>Pin 18</td>
<td>GND</td>
</tr>
<tr>
<td>Pin 19</td>
<td>GND</td>
<td>Pin 20</td>
<td>HDMI_HPD</td>
</tr>
</tbody>
</table>
(12) CPUFAN1 (4-pin)/SYSFAN1 (3-pin): FAN Headers

(13) VGA1 (12-pin): VGA Header

(14) JP2 (2-pin): LVDS Panel Brightness Adjustment Header
(15) INVERTER (6-Pin): LVDS1 Inverter Header

<table>
<thead>
<tr>
<th>Pin No.</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BKLT_PWR1</td>
</tr>
<tr>
<td>2</td>
<td>BKLT_PWR2</td>
</tr>
<tr>
<td>3</td>
<td>BKLT_EN</td>
</tr>
<tr>
<td>4</td>
<td>BKLT_PWM</td>
</tr>
<tr>
<td>5</td>
<td>GND1</td>
</tr>
<tr>
<td>6</td>
<td>GND2</td>
</tr>
</tbody>
</table>

(16) LVDS (30-Pin): 24-bit dual channel LVDS Header

<table>
<thead>
<tr>
<th>Pin NO.</th>
<th>Pin Define</th>
<th>Pin NO.</th>
<th>Pin Define</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pin 1</td>
<td>LVDS_VCC</td>
<td>Pin 2</td>
<td>LVDS_VCC</td>
</tr>
<tr>
<td>Pin 3</td>
<td>LVDS_VCC</td>
<td>Pin 4</td>
<td>GND</td>
</tr>
<tr>
<td>Pin 5</td>
<td>GND</td>
<td>Pin 6</td>
<td>GND</td>
</tr>
<tr>
<td>Pin 7</td>
<td>LVDSA_DATAN0</td>
<td>Pin 8</td>
<td>LVDSA_DATAP0</td>
</tr>
<tr>
<td>Pin 9</td>
<td>LVDSA_DATAN1</td>
<td>Pin 10</td>
<td>LVDSA_DATAP1</td>
</tr>
<tr>
<td>Pin 11</td>
<td>LVDSA_DATAN2</td>
<td>Pin 12</td>
<td>LVDSA_DATAP2</td>
</tr>
<tr>
<td>Pin 13</td>
<td>GND</td>
<td>Pin 14</td>
<td>GND</td>
</tr>
<tr>
<td>Pin 15</td>
<td>LVDSA_CLKN</td>
<td>Pin 16</td>
<td>LVDSA_CLKP</td>
</tr>
<tr>
<td>Pin 17</td>
<td>LVDSA_DATAN3</td>
<td>Pin 18</td>
<td>LVDSA_DATAP3</td>
</tr>
<tr>
<td>Pin 19</td>
<td>LVDSB_DATAN0</td>
<td>Pin 20</td>
<td>LVDSB_DATAP0</td>
</tr>
<tr>
<td>Pin 21</td>
<td>LVDSB_DATAN1</td>
<td>Pin 22</td>
<td>LVDSB_DATAP1</td>
</tr>
<tr>
<td>Pin 23</td>
<td>LVDSB_DATAN2</td>
<td>Pin 24</td>
<td>LVDSB_DATAP2</td>
</tr>
<tr>
<td>Pin 25</td>
<td>GND</td>
<td>Pin 26</td>
<td>GND</td>
</tr>
<tr>
<td>Pin 27</td>
<td>LVDSB_CLKN</td>
<td>Pin 28</td>
<td>LVDSB_CLKP</td>
</tr>
<tr>
<td>Pin 29</td>
<td>LVDSB_DATAN3</td>
<td>Pin 30</td>
<td>LVDSB_DATAP3</td>
</tr>
</tbody>
</table>
## 3.4 Motherboard Jumpers

<table>
<thead>
<tr>
<th>Jumper</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>JBAT</td>
<td>CMOS RAM Clear Function Setting</td>
<td>2-pin Block</td>
</tr>
<tr>
<td>ME_RTC</td>
<td>Clear ME RTC Function Setting</td>
<td>2-pin Block</td>
</tr>
<tr>
<td>JP3</td>
<td>INVERTER VCC 3.3V/5V/12V Select</td>
<td>4-pin Block</td>
</tr>
<tr>
<td>JP4</td>
<td>LVDS VCC 3.3V/5V/12V Select</td>
<td>4-pin Block</td>
</tr>
<tr>
<td>JCOMP1</td>
<td>COM1 Header Pin9 Function Select</td>
<td>6-Pin Block</td>
</tr>
<tr>
<td>JCOMP2</td>
<td>COM2 Header Pin9 Function Select</td>
<td>6-Pin Block</td>
</tr>
<tr>
<td>JCOM2</td>
<td>COM2 Header RS485/RS422 Select</td>
<td>6-Pin Block</td>
</tr>
</tbody>
</table>
(1) JBAT (2-pin): Clear CMOS Setting

1-2 Open: Normal; 1-2 Closed: Clear CMOS

(2) ME_RTC (2-pin): Clear ME_RTC Function Setting

1-2 Open: Normal; 1-2 Closed: Clear ME_RTC.

(3) JP3 (4-pin): INVERTER Back Light VCC 3.3V/5V/12V Select

2-4 Closed: Inverter Backlight VCC = 3.3V
3-4 Closed: Inverter Backlight VCC = 5V
6-4 Closed: Inverter Backlight VCC = 12V

(4) JP4 (4-pin): LVDS VCC 3.3V/5V/12V Select

2-4 Closed: VCC = 3.3V
3-4 Closed: VCC = 5V
4-6 Closed: VCC = 12V

(5) JCOMP1 (6-pin): COM1 Port Pin9 Function Select

1-2 Closed: RS232; 3-4 Closed: +12V; 5-6 Closed: +5V.

(6) JCOMP2 (6-pin): COM2 Header Pin9 Function Select

1-2 Closed: RS232; 3-4 Closed: +12V; 5-6 Closed: +5V

(7) JCOM2 (6-pin): COM2 Header RS232/RS485/RS422 Function Select

1-2 Closed: RS232; 3-4 Closed: RS485; 5-6 Closed: RS422.
3.5 Motherboard BIOS settings

The POS terminal has a BIOS (Basic Input Output System) program located on a Flash Memory on the motherboard. This program is a bridge between motherboard and operating system. When you start the computer, the BIOS program will gain control. The BIOS first operates an auto-diagnostic test called POST (power on self test) for all the necessary hardware, it detects the entire hardware device and configures the parameters of the hardware synchronization. Only when these tasks are completed done it gives up control of the computer to operating system (OS).

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

3.5.1 Entering Setup
Power on the terminal and pressing <Del> immediately allows you to enter Setup. If you do not press the key at the correct time and the system does not enter Setup, turn off the terminal and try again.

3.5.2 BIOS Menu Screen
The following diagram show a general BIOS menu screen:

[BIOS Menu Screen Diagram]
3.5.3 Function Keys

- Press ←→ (left, right) to select screen;
- Press ↑↓ (up, down) to choose, in the main menu, the option you want to confirm or to modify.
- Press <Enter> to select.
- Press ↔/←→ keys when you want to modify the BIOS parameters for the active option.
- [F1]: General help.
- [F2]: Previous value.
- [F3]: Optimized defaults.
- [F4]: Save & Reset.
- Press <Esc> to quit the BIOS Setup.

3.5.4 Getting Help

Main Menu
The on-line description of the highlighted setup function is displayed at the top right corner the screen.

Status Page Setup Menu/Option Page Setup Menu
Press [F1] to pop up a small help window that describes the appropriate keys to use and the possible selections for the highlighted item. To exit the Help Window, press <Esc>.

3.5.5 Menu Bars
There are six menu bars on top of BIOS screen:
- Main: To change system basic configuration
- Advanced: To change system advanced configuration
- Chipset: To change chipset configuration
- Security: Password settings
- Boot: To change boot settings
- Save & Exit: Save setting, loading and exit options.
User can press the right or left arrow key on the keyboard to switch from menu bar. The selected one is highlighted.

3.5.6 Main Menu
Main menu screen includes some basic system information. Highlight the item and then use the ↔ or ←→ and numerical keyboard keys to select the value you want in each item.

- System Date
  Set the date. Please use [Tab] to switch between date elements.
- System Time
  Set the time. Please use [Tab] to switch between time elements.

3.5.7 Advanced Menu
OS Selection
The optional settings: [Windows 8.X]; [Android]; [Windows 7].
* Note: User need to go to this item to select the OS mode before installing corresponding OS driver, otherwise problems will occur when installing the driver.

› ACPI Settings
Press [Enter] to make settings for the following sub-item:
  - Enable Hibernation
  - ACPI Sleep State
  - EUP Function
  - Wake-Up by PCIE/LAN from SS
  - Wake-Up by PS/2 Keyboard
  - Wake-Up by PS/2 Mouse
  - PWRON After PWR-Fail
  - RTC WakeUp

› Super I/O Configuration
Press [Enter] to make settings for the following sub-items:
  - Serial Port 1 Configuration
  - Serial Port 2 Configuration
  - Serial Port 3 Configuration
  - Serial Port 4 Configuration
  - Serial Port 5 Configuration
  - Serial Port 6 Configuration
  - Parallel Port Configuration
  - WatchDog Timer
  - WatchDog Timer Value
  - WatchDog Timer Unit

› H/W Monitor
Press [Enter] to view current PC health status & system working status and make settings for the following sub-items:
  - CPUFAN Smart Mode
  - CPUFAN Full-Speed Temperature
  - CPUFAN Idle-Speed Temperature
  - CPUFAN Full-Speed Duty
  - CPUFAN Idle-Speed Duty

› CPU Configuration
Press [Enter] to view current CPU configuration and make settings for the following sub-items:
  - Active Processor Cores
  - Limit CPUID Maximum
  - Execute Disable Bit
  - Hardware Prefetcher
Adjacent Cache Line Prefetch
Intel Virtualization Technology
Power Technology
EIST
Turbo Mode
P-STATE Coordination
CPU C6 report
CPU C7 report
Package C State Limit

- **PPM Configuration**
  Press [Enter] to make settings for PPM Configuration:
  - EIST
  - CPU C Status Report
  - Max CPU C-state

- **SATA Configuration**
  Press [Enter] to make settings for the following sub-items:
  - SATA Port
  - SATA Speed Support
  - SATA ODD Port
  - SATA Mode
  - SATA1 or HDD HotPlug

- **CSM Configuration**
  Press [Enter] to make settings for the following sub-items:
  - Option ROM Message
  - INT19 Trap Response
  - Option ROM execution order

- **USB Configuration**
  Press [Enter] to make settings for the following sub-items:
  - **Legacy USB Support**
    - XHCI Hand-off
    - EHCI Hand-off
    - USB Mass Storage Driver Support

3.5.8 Chipset Menu

- **North Bridge**
  - IGD Turbo Enable
  - DVMT Pre-Allocated
  - DVMT Total Gfx Mem
  - Spread Spectrum Clock
  - RC6(Render Standby)
Primary IGFX Boot Display
LVDS Support
LVDS Panel Type

 South Bridge
  Mini PCIE
  Onboard PCIE Lan Device
  Onboard Lan BootROM
  XHCI Mode
  USB 2.0 (EHCI) Support
  Audio Controller
  High Precision Timer

3.5.9 Security Menu
  Security menu allow users to change administrator password and user password settings.

3.5.10 Boot Menu
  Setup Prompt Timeout
  Bootup Numlock State
  Fast Boot
  VGA Support
  USB Support
  PS2 Device Support
  Network Stack Driver Support
  Boot Option # 1/#2...

3.5.11 Save & Exit Menu
  Save Changes and Reset
  Discard Changes and Reset
  Save Changes
  Discard Changes
  Restore Defaults
  Save as User Defaults
  Restore User Defaults
  UEFI: Built-in EFI Shell
  Lauch EFI Shell from filesystem device
  Reset System with ME disable Mode MEUD000
3.6 Touch screen driver installation

For resistive touch version of SB1015, follow the driver installation and calibration steps below. For PCAP touch version, no driver installation and calibration is required.

3.6.1 Navigate to the installer directory to find the setup.exe file. Double-click on “setup.exe” to start installation.

3.6.2 When installation starts, click [Next] to proceed to the next step.

3.6.3 Installation in progress
3.6.4 Uncheck “Install PS/2 interface driver” and click [Next] to continue installation.

3.6.5 Uncheck “install RS232 interface driver” and click [Next] to continue installation.

3.6.6 Select option “NONE”, click [Next] to continue installation.
3.6.7 If there are additional touch monitors connected, please check “Support multi-monitor system”.

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

3.6.9 Select the Program Folder to install the utility. The default is “eGalaxtouch”. Click [Next] to continue installation.
3.6.10 Check the option to create a desktop shortcut icon. Click [Next] to continue.

After install the driver successfully, identify the USB controller is installed as shown below.

3.6.11 Click on "Settings" tab to change the touch function settings as needed.
3.6.12 Perform touch calibration if necessary and use Draw Test to check touch accuracy after calibration.
4 Hardware Installation

4.1 Magnetic Script Reader (MSR) Installation *

1. Remove the MSR mount cover from the monitor.

2. Insert MSR module. Make sure reader has been properly connect to the monitor USB port then use the 2 screws to fix the MSR.

* Optional peripheral
4.2 LCD Rear Display installation *

1. Use USB cable to connect the second display and install VESA bracket set to the LCD display with M4 screws (x4).

2. Remove the display mount cover from monitor.

3. Mount the LCD display assembly to the touch monitor and secure with screws. Plug USB cable into monitor USB port.

* Optional peripheral
4.3 SATA Hard Disk Installation

1. Remove the HDD mount cover from the back of monitor.

2. Install HDD rubber to both side of SATA HDD. Plug SATA cable and power cable into SATA HDD connector.

3. Insert SATA HDD assembly to the monitor and install HDD mount cover. Secure cover with the coin slot screw.
5 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
   Run the touch screen calibration program with a 25-point recalibration. We also recommend doing this after changing 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 is 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 that 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.
### 6 Specifications

**MAIN BOARD**

- **CPU**: Intel Celeron J1900 quad-core 2.0GHz
- **IO Chipset**: Fintek F71869
- **Memory**: DDR3L 1333 SODIMM slot, up to 8GB
- **Ethernet LAN**: Realtek RTL8111G PCI Express Gigabit LAN
- **Audio**: ALC887 Audio CODEC, HD Audio CODEC
- **Storage**: SATA 2.5 inch Hard Disk Drive/SSD, mSATA SSD

**DISPLAY**

- **LCD panel**: 15" LED-backlit TFT display, XGA 1024 x 768, 250 nits
- **Touch screen**: 5-wire resistive touch, optional projected capacitive touch
- **Touch Controller**: USB interface

**I/O PORTS**

- **USB ports**: USB2.0 x5, USB3.0 x1
- **Serial ports**: RS232 DB9 x3
- **Ethernet**: Gigabit, RJ45 x1
- **Video port**: VGA DB15 x1
- **Audio port**: Line out x1

**ELECTRICAL**

- **Power supply**: DC 12V 90W external power adapter
- **Input to power adapter**: 100 to 240VAC, 50/60Hz

**ENVIRONMENTAL**

- **Operating temperature**: 0°C to 40°C
- **Relative humidity**: 8% to 80%, non-condensing

**MECHANICAL**

- **Dimensions (W x H x D)**: 14.33" x 12.83" x 9.06" (364 x 326 x 230mm)
- **Weight**: 13.0lb (5.91Kg)

**OPTIONAL PERIPHERALS**

- **Customer Display**: VFD 20 columns x 2 lines or 8" True-flat LCD (VESA holes 75x75)
- **MSR**: JIS-I or II, ISO Track 1/2/3
SB1015 All-in-one Touch POS terminal