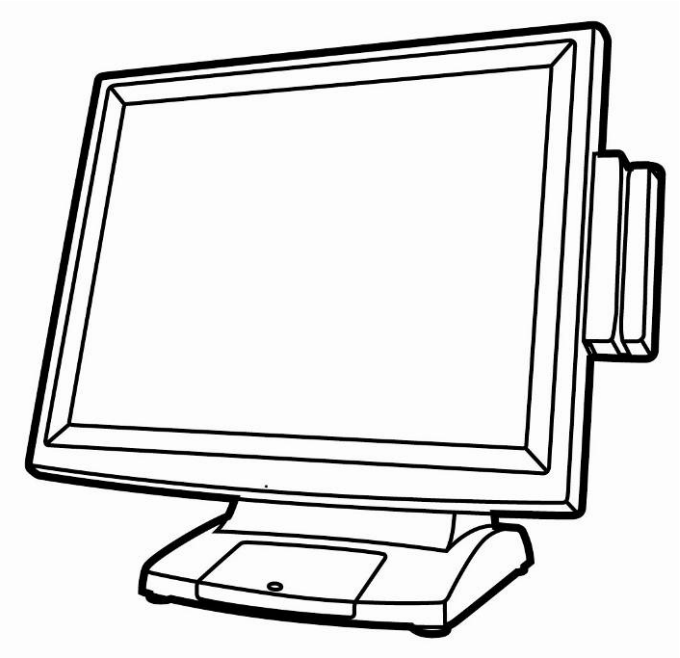
User Manual

Revision v1.0 Sep. 2009

Point-of-Sale Hardware System



Manual Version 1.0
Part Number:

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Safety

IMPORTANT SAFETY INSTRUCTIONS

1. To disconnect the machine from the electrical Power Supply, turn off the power switch and remove the power cord plug from the wall socket. The wall socket must be easily accessible and in close proximity to the machine.
2. Read these instructions carefully. Save these instructions for future reference.
3. Follow all warnings and instructions marked on the product.
4. Do not use this product near water.
5. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
6. Slots and openings in the cabinet and the back or bottom are provided for ventilation; to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register, or in a built-in installation unless proper ventilation is provided.
7. This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
8. Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.
9. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

CE MARK

This device complies with the requirements of the EEC directive 2004/108/EC with regard to “Electromagnetic compatibility” and 2006/95/EC “Low Voltage Directive”

FCC

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

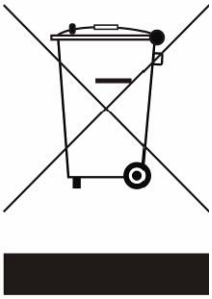
(2) This device must accept any interference received, including interference that may cause undesired operation

CAUTION ON LITHIUM BATTERIES

There is a danger of explosion if the battery is replaced incorrectly. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

LEGISLATION AND WEEE SYMBOL

2002/96/EC Waste Electrical and Electronic Equipment Directive on the treatment, collection, recycling and disposal of electric and electronic devices and their components.



The crossed dustbin symbol on the device means that it should not be disposed of with other household wastes at the end of its working life. Instead, the device should be taken to the waste collection centers for activation of the treatment, collection, recycling and disposal procedure.
To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract.

This product should not be mixed with other commercial wastes for disposal.

Revision History

Changes to the original user manual are listed below:

Revision	Date	Description
V1.0	Sep, 2009	● Release

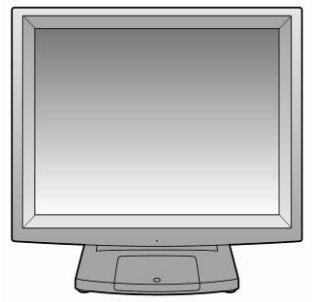
Table Contents

1 Item Checklist

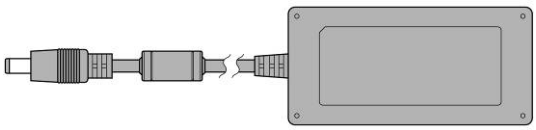
Take the system unit out of the carton. Remove the unit from the carton by holding it by the foam inserts. The following contents should be found in the carton:

1-1 Standard Items

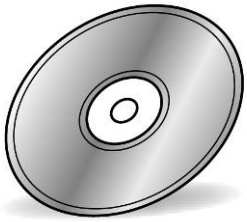
a.



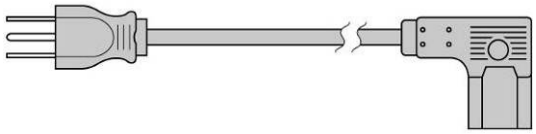
c.



b.



d.

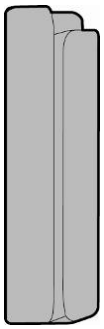


e.

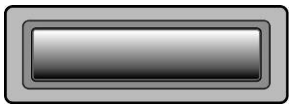
a. System
b. Driver CD
c. Power Adapter (65W)
d. Power Cable
e. COM-RJ45 Cable (x2)

1-2 Optional Items

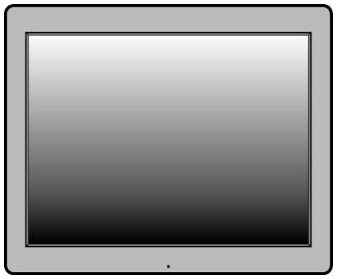
a.



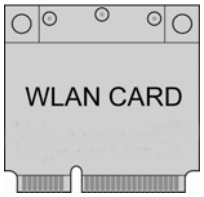
b.



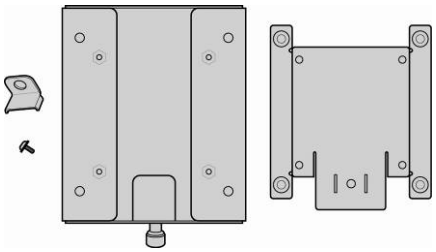
c.



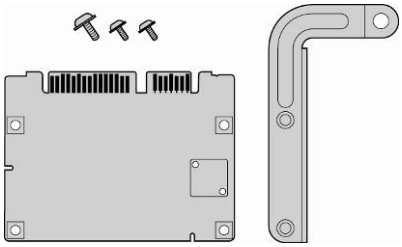
d.



e.



f.



a. MSR Module
b. VFD Module
c. Second Display
d. Wireless LAN Card
e. Wall Mount Kit
f. SSD Card Module

2 System View

2-1 Front View

System Overview table -1

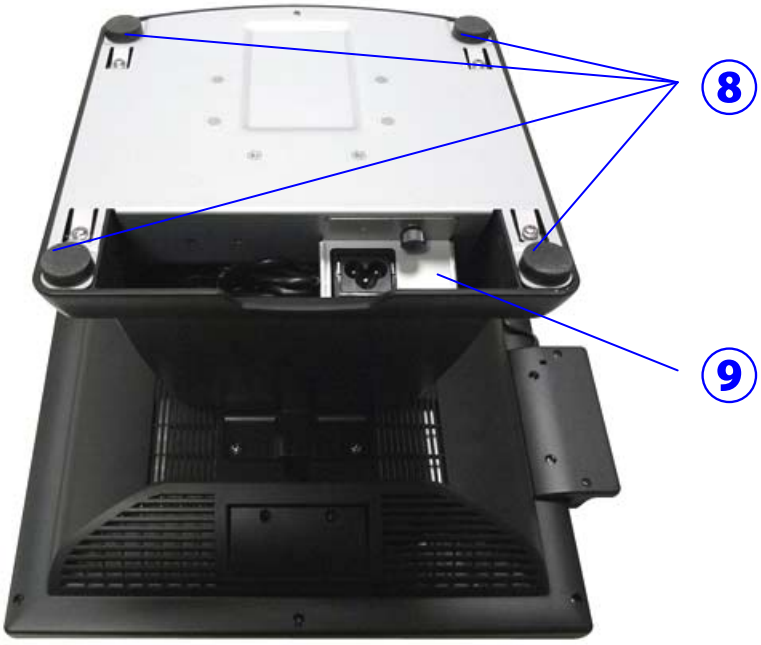
Number	Component
1	Touch Screen
2	MSR Module (Option)
3	Hard Disk Drive Cover

2-2 Rear View

System Overview table -2

Number	Component
4	VFD Cover (for VFD & Second Display installation)
5	Stand/Wall Mount Kit Installing Place
6	Stand
7	Cable Management Outlet

2-3 Bottom View

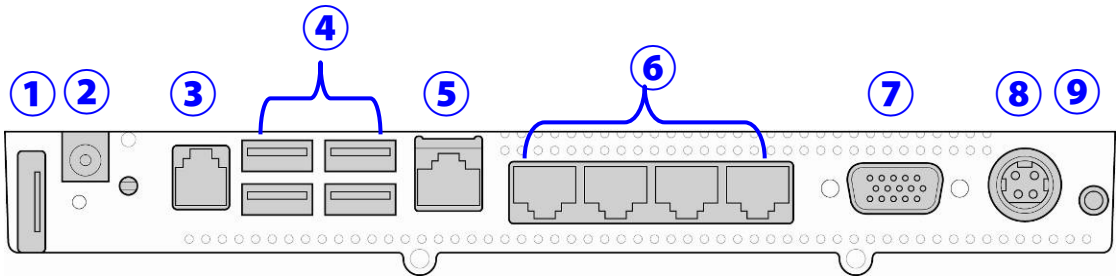


System Overview table -3

Number	Component
8	Stand Pad
9	Easy-Service Retaining Bracket for Power Adapter

2-4 I/O View

Below diagram shows the I/O view of C36 motherboard.



System Overview table -4

Number	Component
1	E-SATA connector
2	Power Jack for HDD
3	Cash Drawer
4	USB x 4
5	LAN
6	COM1~4 (from left to right)
7	VGA
8	Power Jack for System
9	Power Button

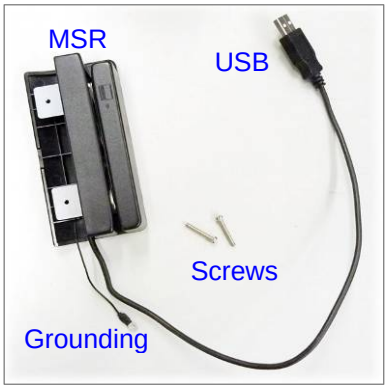
Note: The maximum current that can be drawn from each COM port is 500 mA.

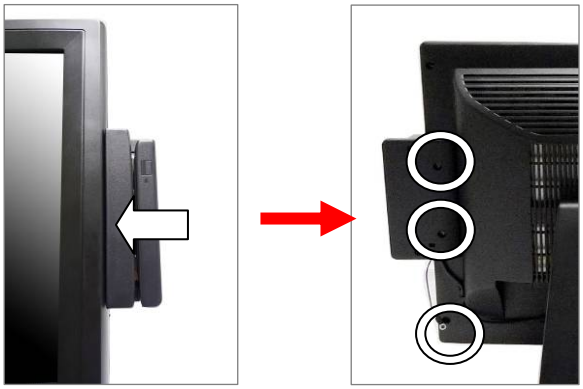
3 Peripheral Installation

The peripheral and modules units provided are tested and can be supplied at your request.

3-1 MSR

Components of MSR Kit:

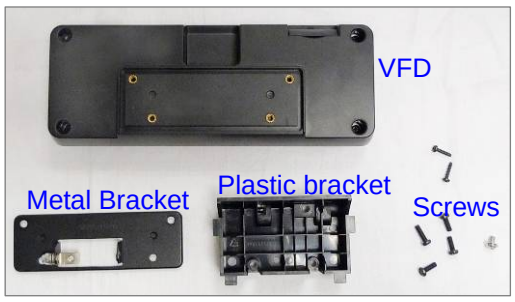


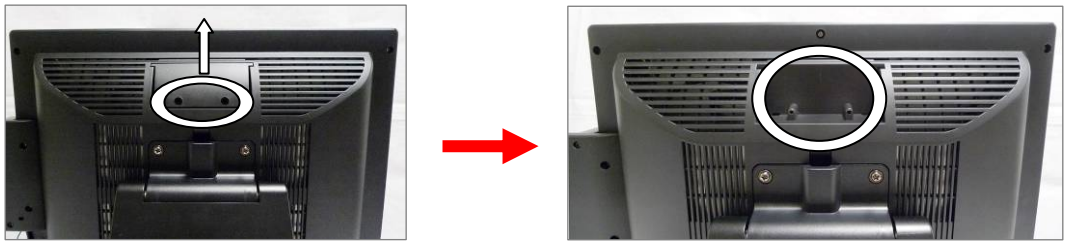


1. Slide the MSR into the right position of the System.
2. Fasten the screws (x2) and grounding cable (x1).

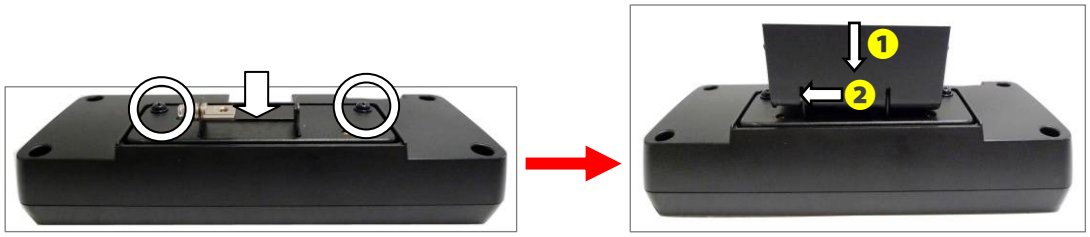
3-2 VFD

Components of VFD Kit:

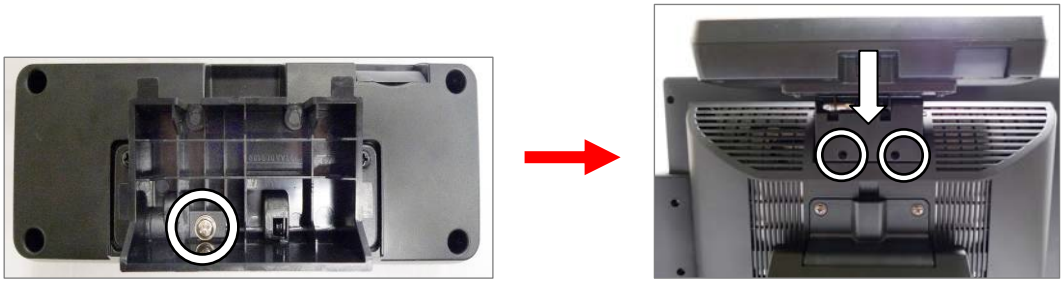




1. Unfasten the screws (x2) and slide the VFD Cover outward.

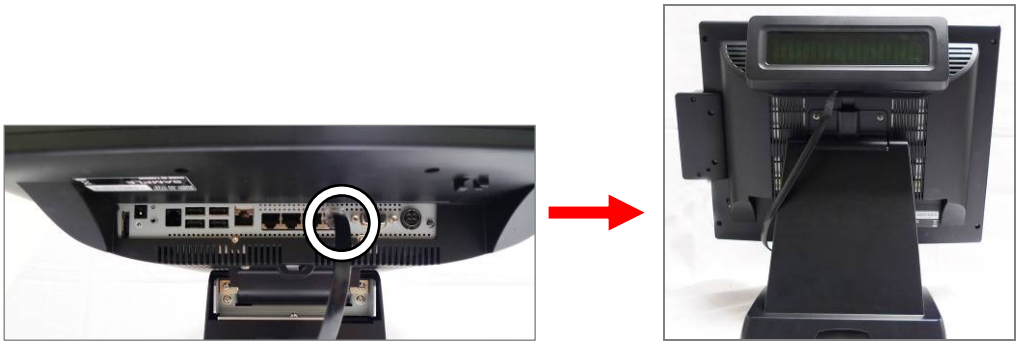


2. Positioning the VFD metal bracket onto the rear side of the VFD module and fasten the screws (x2).
3. Positioning the plastic bracket onto the metal bracket as the direction and steps of arrows show.



4. Fasten the screw (x1) to fix the plastic bracket to the metal bracket and VFD module.
5. Slide the MSR module with bracket into the VFD socket.
6. Fix the MSR module by fasten the screws (x2) as circles show.

7. Connect the VFD cable to the VFD Module.

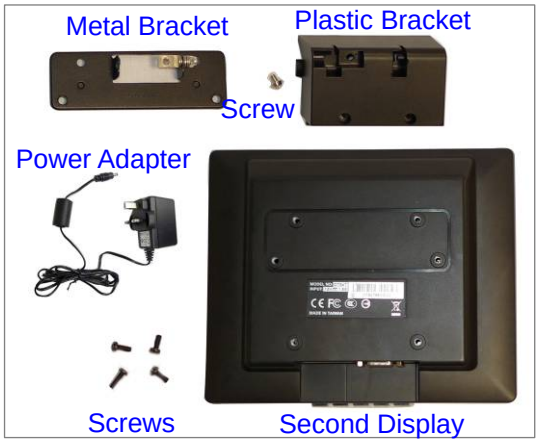


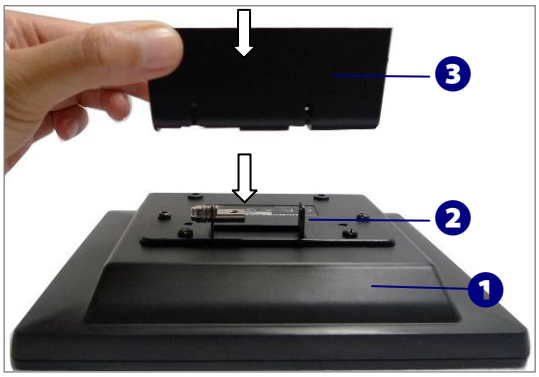
8. Connect to the COM4 port of the System.

3-3 Second Display

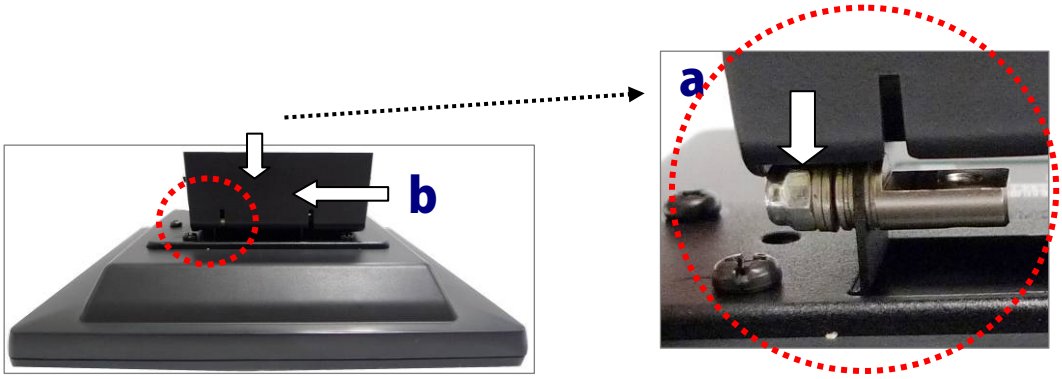
To install the Second Display, please open the VFD cover first (Chapter 3-2-1).

Components of Second Display Kit with power adapter:





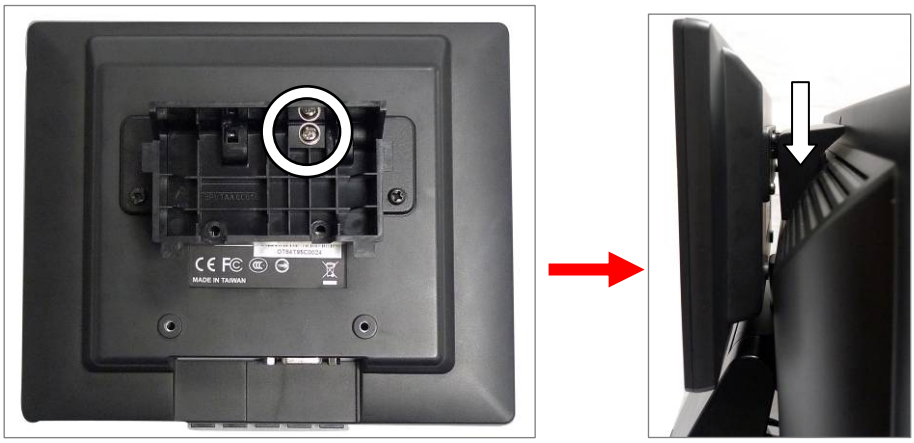
1. Fix the parts of Second Display modules as steps ❶ → ❷ → ❸ as above left picture shows. (detail steps as below)
   ❶ Put the second display upside down.
   ❷ Place the metal bracket onto the rear side of the second display and fasten the screws (x4) to fix metal bracket with the system.



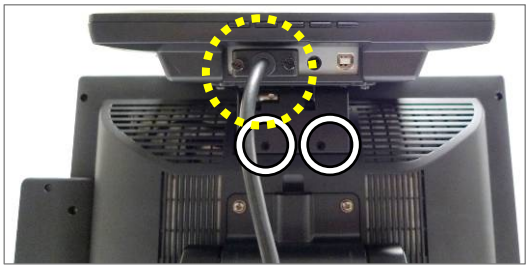
❸ Align the plastic bracket into the right position of metal bracket.

(a) Align the plastic bracket onto the metal bracket.

(b) Push to left until the click sound appears.



2. Fasten the screw (x1) to fix the platic bracket and Second Display module with metal bracket.
3. Slide the Second Display Module into the slot.



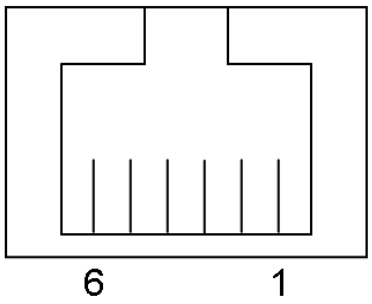
4. Fasten the scrws (x2) to fix the Second Display moudle with the System.
5. Connect the VGA cable to the Second Display Module and the System.

6. Finish.

3-4 Cash Drawer

You can install a cash drawer through the cash drawer port. Please verify the pin assignment before installation.

Cash Drawer Pin Assignment



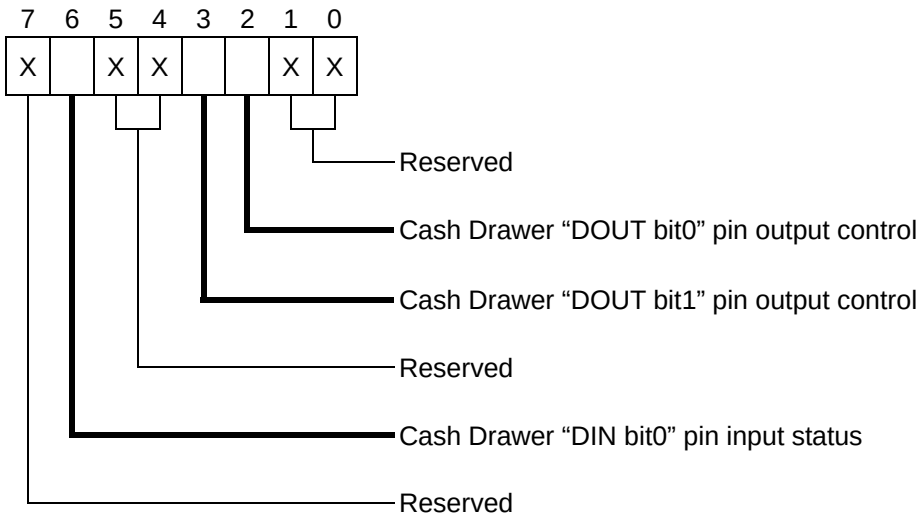
Pin	Signal
1	GND
2	DOUT bit0
3	DIN bit0
4	12V / 19V
5	DOUT bit1
6	GND

Cash Drawer Controller Register

The Cash Drawer Controller use one I/O addresses to control the Cash Drawer.

Register Location: 48Ch
Attribute: Read / Write
Size: 8bit

BIT	BIT7	BIT6	BIT5	BIT4	BIT3	BIT2	BIT1	BIT0
Attribute	Reserved		Read	Reserved	Write		Reserved	



Bit 7: Reserved
Bit 6: Cash Drawer “DIN bit0” pin input status.
= 1: the Cash Drawer closed or no Cash Drawer
= 0: the Cash Drawer opened
Bit 5: Reserved
Bit 4: Reserved
Bit 3: Cash Drawer “DOUT bit1” pin output control.
= 1: Opening the Cash Drawer
= 0: Allow close the Cash Drawer
Bit 2: Cash Drawer “DOUT bit0” pin output control.
= 1: Opening the Cash Drawer
= 0: Allow close the Cash Drawer
Bit 1: Reserved
Bit 0: Reserved

Note: Please follow the Cash Drawer control signal design to control the Cash Drawer.

Cash Drawer Control Command Example

Use Debug.EXE program under DOS or Windows98

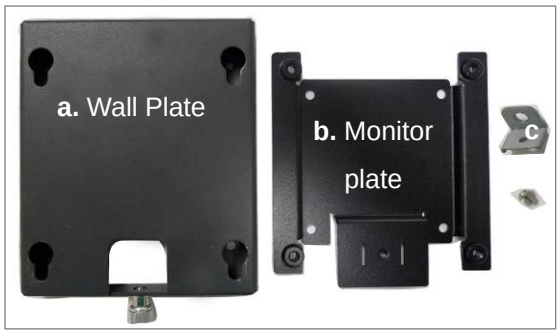
Command	**Cash Drawer**
O 48C 04	Opening
O 48C 00	Allow to close
➢ Set the I/O address 48Ch bit2 =1 for opening Cash Drawer by “DOUT bit0” pin control. ➢ Set the I/O address 48Ch bit2 = 0 for allow close Cash Drawer.	

Command	**Cash Drawer**
I 48C	Check status
➢ The I/O address 48Ch bit6 =1 mean the Cash Drawer is opened or not exist. ➢ The I/O address 48Ch bit6 =0 mean the Cash Drawer is closed.	

3-5 Wall Mount Kit

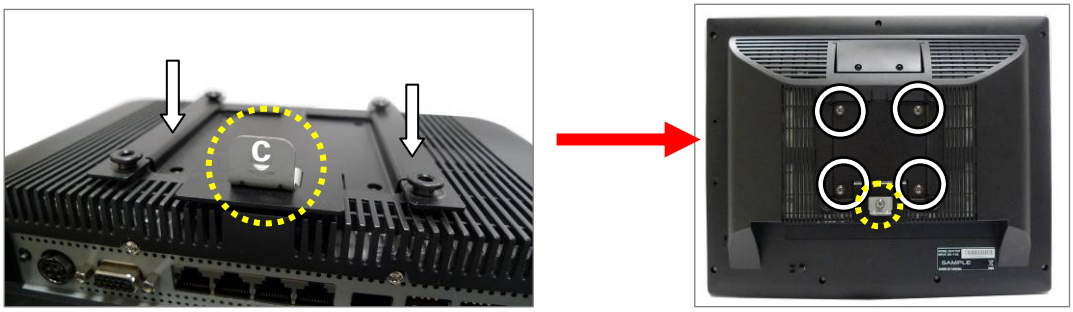
Before installing the Wall Mount Kit, please remove the stand first if needed. (See Chapter 4-3 for removing the stand)

(Parts of Wall Mount Kit)

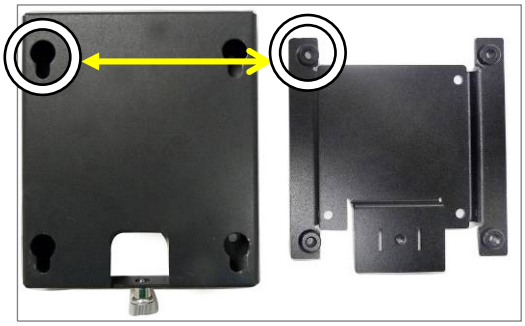


(Place to install)

1. Components of VESA-standard wall mount kit includes follows.
   a. Wall-mounting plate
   b. Monitor-mounting plate & screws
   c. Screw metal bracket
2. The wall mount Kit installing place is at the rear side of the system.



3. Place “b” which has 4 fixed hooks onto the rear side of the LCD rear cover.
4. Place “c” onto the hole of the monitor plate as the position as picture shows and fasten the screw (x1).
5. Fasten the screws (x4) to fix the monitor plate.

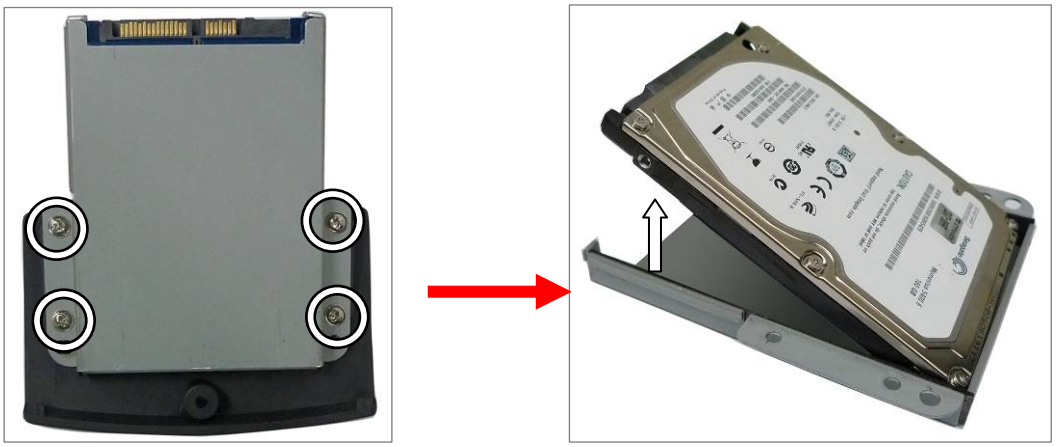


6. Fix “a” on the wall at your request.
7. Fasten the thumb screw (x1).
8. Align the hooks of “monitor plate” into the keyholes of the “wall plate”.

4 System Assembly & Disassembly

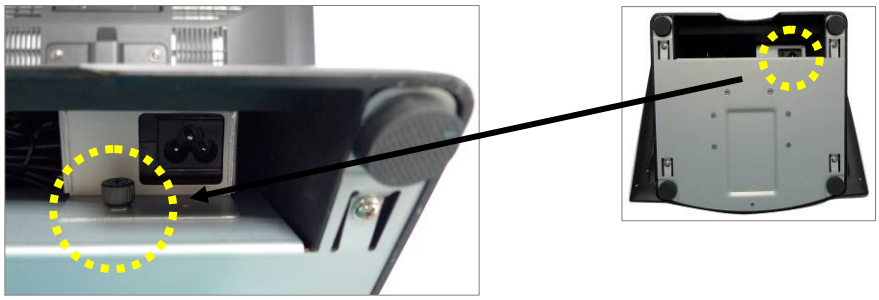
4-1 Replace the HDD

1. Unfasten the screw (x1).
2. Slide out the HDD Cover.



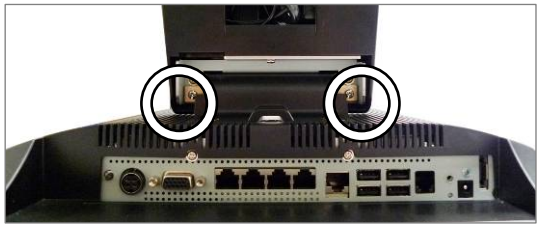
3. Unfasten the screws (x4)
4. Separate the HDD from the metal bracket.

4-2 Replace the Power Adapter



1. Release the thumb screw to seperate the retaining metal bracket from the stand and take out the power adapter.

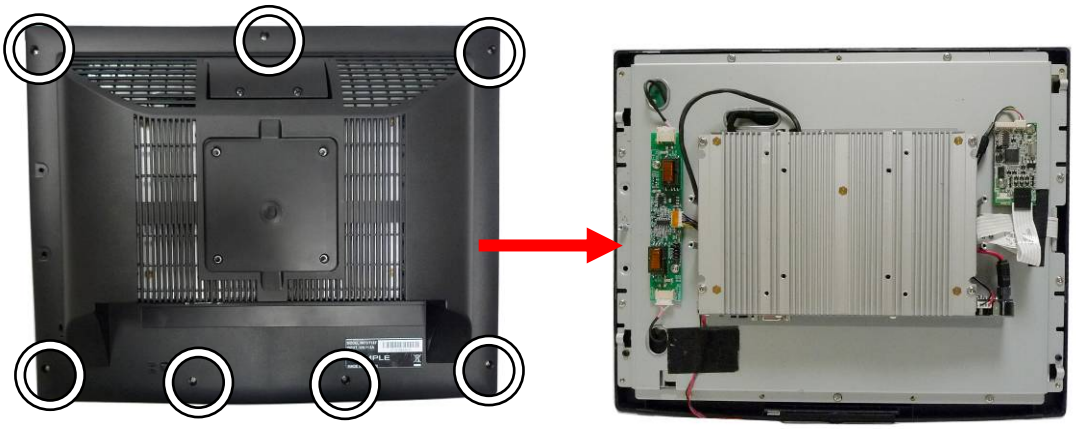
4-3 Remove the System Stand



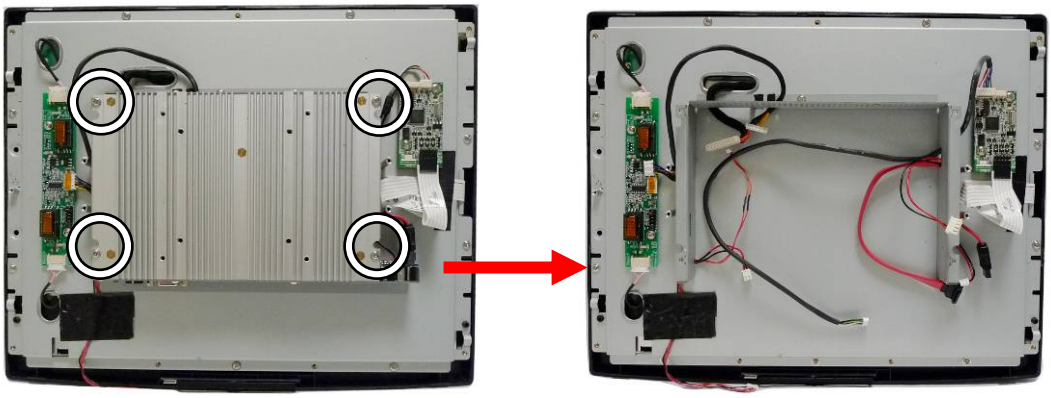
1. Release the screws (x2) that fasten the stand and the system.
2. Release the screws (x4) that fasten the plastic VESA mounting plate and the LCD rear cover.

3. Remove the VESA metal bracket,.

4-4 Remove the LCD Rear Cover & the System Box

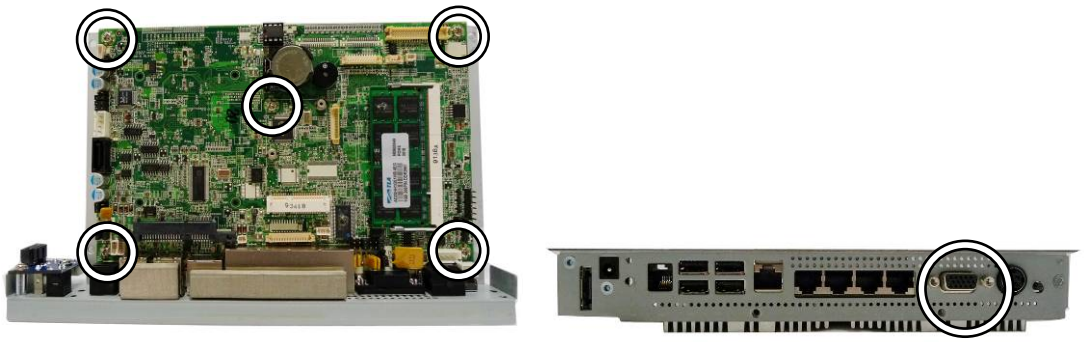


1. Remove the system stand (Chapter 4-3).
2. Unfasten the screws (x7) to separate the LCD Rear Cover.
3. After remove the LCD Rear Cover, you will see the “system box” inside. Inside of the system box is the motherboard place.



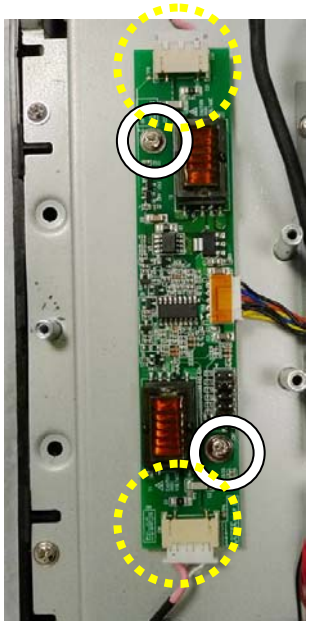
4. Unfasten the scrws (x4) at both sides of the system box to uncover the Motherboard.
5. **Gently** flip up the system box.
   Note: Please release all the connectors on the Motherboard before you completely open the system box.

4-5 Replace the Motherboard



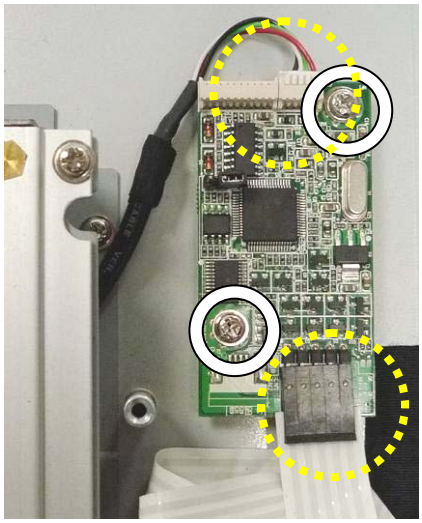
1. To open the LCD rear cover & system box first as steps in Chapter 4-4.
2. Unfasten the screws (x5) on the Motherboard.
3. Unfasten the hex screws (x2) to release the I/O metal panel from the Motherboard.

4-6 Replace the Inverter Board



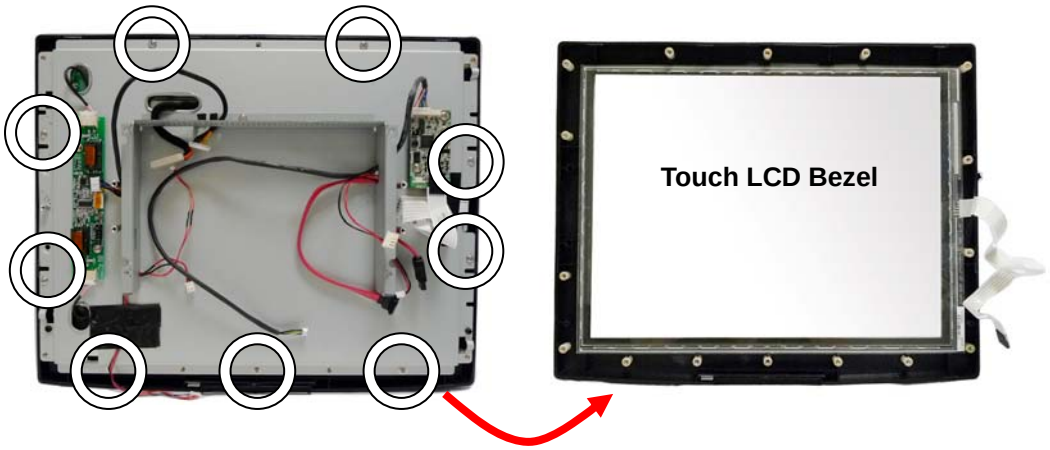
1. To open the LCD rear cover first (see Chapter 4-4).
2. Unfasten the screws (x2).
3. Release the backlight connectors (x2).

4-7 Replace the Touch Board



1. Open the LCD rear cover first (see Chapter 4-4).
2. Unfasten the screws (x2).
3. Release the connectors (x2).

4-8 Replace the LCD Panel



1. Remove the LCD rear Cover (Chapter 4-4)
2. Remove the system box and release all the connectors on the Motherboard (Chapter 4-4)
3. Release inverter cables & touch cables (Chapter 4-6 and 4-7)
4. Remove the screws (x9) to separate the Touch LCD bezel from the LCD Panel Module.

5. Release the screws (x4) that fix the sheet metal bracket to separate it from the LCD Panel.

5 Specification

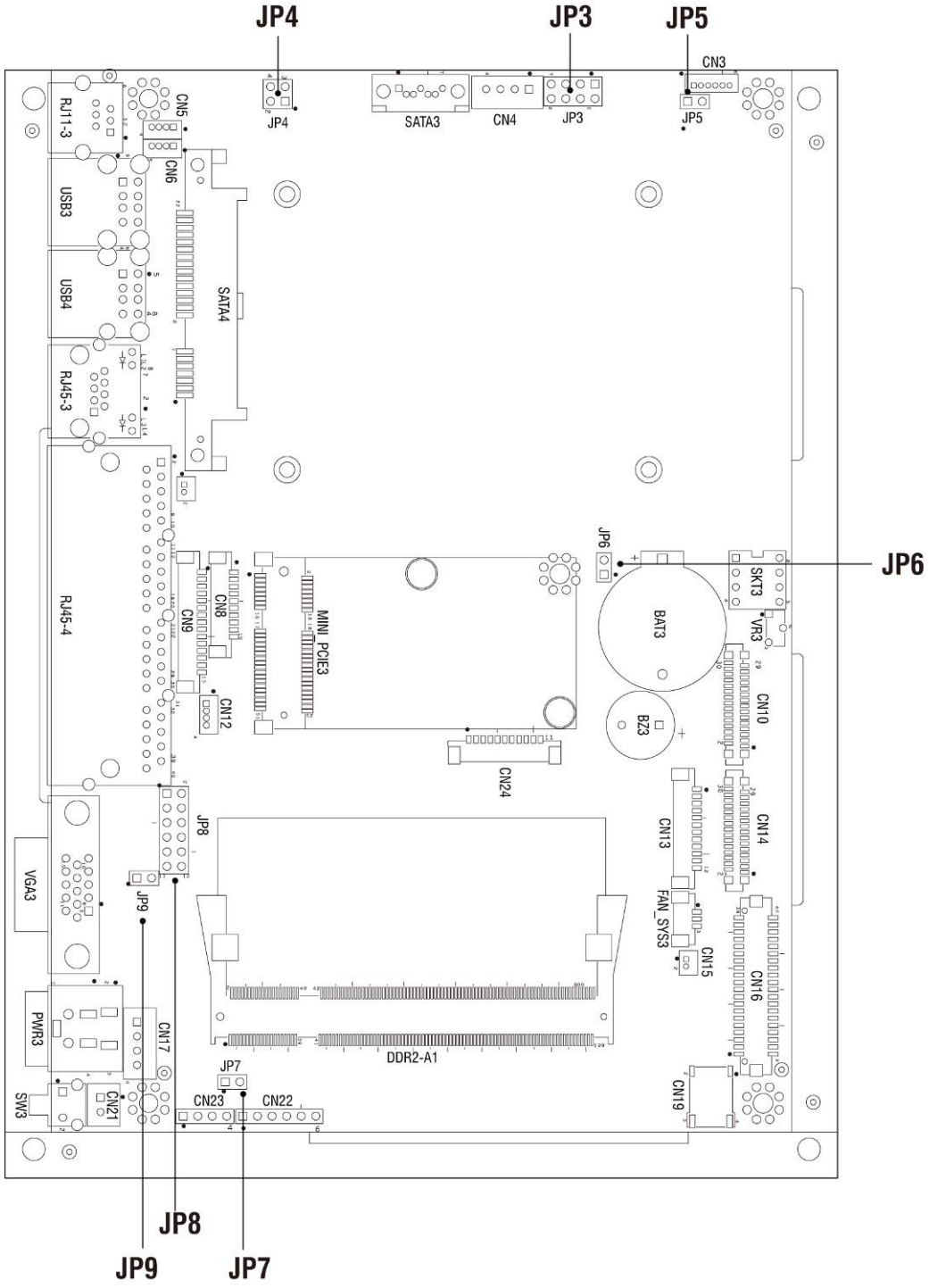
Model Name	POS Terminal
Motherboard	**C36**
CPU Support	Intel Atom N270 processors 1.6G L2 512K FSB 533MHz
Chipset	Intel 945GSE Express chipset + ICH7M
System Memory	1 x DDR2 SO-DIMM up to 2GB
Graphic Memory	Intel GMA 950 share system memory up to 224MB
LCD Touch Panel	
LCD Size	15” TFT LCD
Brightness	250nits
Maximal Resolution	1024 x 768
Touch Screen Type	Resistive
Tilt Angle	0° ~ 90°
Storage	
HDD	One 2.5" SATA HDD bay
Flash Memory	Option SATA SSD flash card
Expansion	
PCI-E Socket	1
External I/O Ports	
USB	4 ports (V2.0)
Serial / COM	4 x RJ-45 COM connectors (COM1 & COM2 standard RS-232; COM3 & COM4 pin10 with 5V /12V power by jumper)
LAN (10 /100 / 1000)	1 x RJ45
DC Jack	1(19V-IN)
E-SATA interface	DC-OUT, E-SATA
2nd VGA	1
Cash Drawer Port	1 x RJ 11 (12V /19V)
Audio	
Speaker	Option 2 x 2W speakers
Power	
Power Adapter	Ext. 65W, 19V/3.4A

Control / Indicator	
Power Button	1
Indicator LED	1
Peripheral	
MSR module	MSR (USB)
Customer display	2 x 20 VFD customer display (COM)
Second display	8.4” 2nd display without touch
Communication	
Wireless LAN	Option (802.11 b/g/n wireless LAN card & antenna)
Environment	
EMC & Safety	FCC/CE Class A, LVD
Operating Temperature	5°C ~ 40°C (41°F ~ 104°F)
Storage Temperature	-20°C ~ 55°C (-4°F ~ 131°F)
Operating Humidity	20% ~ 80% RH non condensing
Storage Humidity	20% ~ 85% RH non condensing
Dimension (W x D x H)	LCD 90 degree : 365.2 x 296.2 x 282.2 mm
	LCD 0 degree : 365.2 x 217.76 x 343.1 mm
Weight (N.W./G.W.)	5.8kgs / 6.8kgs
Mounting	100mm x100mm VESA Standard holes
OS Support	Windows XP, Windows XP Embedded, Windows CE, Linux

* This specification is subject to change without prior notice.

6 Jumper Settings

6-1 C36A V1.1 Motherboard Layout

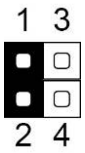
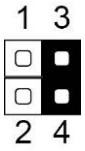


6-2 Connectors Description

Connector	Purpose
BAT3	CMOS Battery Base (Use CR2023)
CN3	Speaker & MIC Connector
CN4	Power Connector For HDD
CN5	USB5
CN6	USB7
CN7	LAN LED
CN9	Card Reader Connector
CN12	IrDA Connector
CN13	Inverter Connector
CN15	Power LED
CN16	LCD Interface Connector
CN17	Internal DC-JACK connector
CN21	Internal Power On Switch Connector
CN22	5 Wire Touch
CN24	FT Status Interface
DDR2_A1	DDR2 SO-DIMM
PWR3	+19V Power Adaptor
RJ11_3	Cash Drawer Connector
RJ45_3	LAN (On Board)
RJ45_4	COM1, COM2, COM3, COM4
FAN_SYS3	System FAN Connector
MINI_PCIE3	Mini PCI-E Socket
SATA3	SATA Connector
SKT3	SPI ROM
SW3	Power On Button
USB3	USB1, USB2
USB4	USB3, USB4
VGA3	VGA Port

6-3 Jumper Settings

6-3-1 Cash Drawer Power Settings: JP4

Function	**JP4** (1-2) (3-4)
+12V	
◎**+19V**	

6-3-2 Power Mode Settings: JP5

Function	**JP5** (1-2)
◎ATX Power	
AT Power	

6-3-3 CMOS Operation Mode: JP6

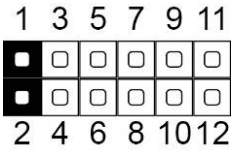
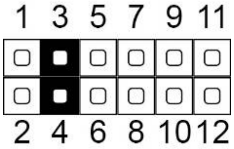
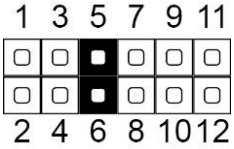
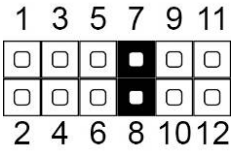
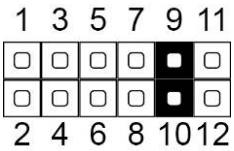
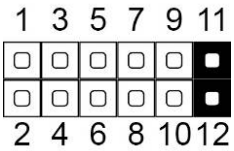
Function	**JP6** (1-2)
◎CMOS Normal	
CMOS Reset	

◎ = Factory default settings

6-3-4 System Reset Settings: JP7

Function	JP7 (1-2)
◎Normal	
Reset	

6-3-5 COM3 & COM4 Power Settings: JP8

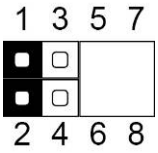
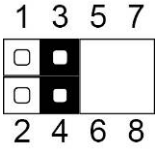
Function		JP8 (1-2) (3-4) (5-6) (7-8) (9-10) (11-12)
COM3 Pin10	RI	
	◎+5V	
	+12V	
COM4 Pin10	RI	
	+5V	
	◎+12V	

◎ = Factory default settings

6-3-6 VGA Power Settings: JP9

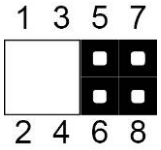
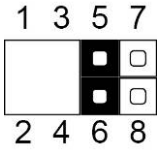
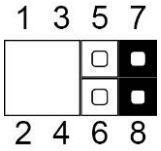
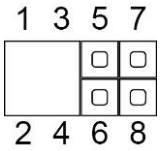
Function	JP9 (1-2)
◎No Power	
+12V	

6-3-7 Boot Display Device Settings: JP3

Function	JP3 (1-2) (3-4)
Force CRT only	
◎Force LCD only	

◎ = Factory default settings

6-3-8 LCD ID Settings for LVDS Panel:

Panel Number	Resolution	LVDS		JP3 (5-6) (7-8)
		Bits	Channel	
1	1024 x 768	24	Single	
2	1280 x 1024	24	Dual	
3	800 x 600	18	Single	
4	1024 x 768	18	Single	

◎ = Factory default settings

Note:

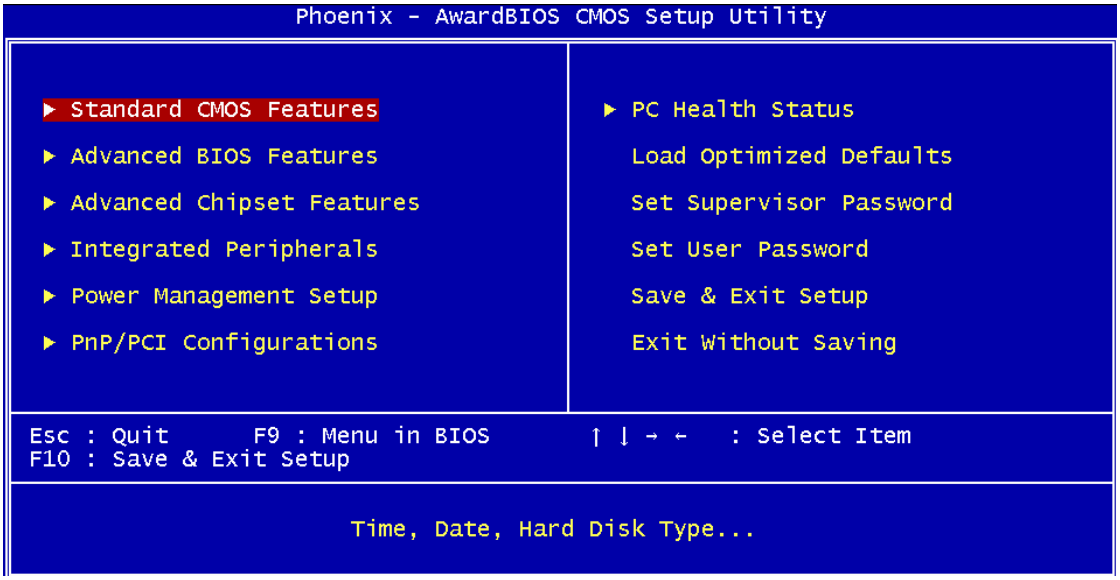
OPEN **SHORT**

7 BIOS Settings

BIOS Main Menu

When the BIOS Main Menu is displayed, the following items can be selected. Use the arrow keys to select items and the Enter key to accept and enter the sub-menu.

Note: The BIOS setup menus shown in this section are for reference only and may not exactly match the items of your BIOS version.



Standard CMOS Features

Use this menu for basic system configuration.

Advanced BIOS Features

Use this menu to set the Advanced Features available on the system.

Advanced Chipset Features

Use this menu to change the values in the chipset registers and optimize the system's performance.

Integrated Peripherals

Use this menu to specify your settings for integrated peripherals.

Power Management setup

Use this menu to specify your settings for power management.

PnP/PCI Configurations

This entry appears if your system supports Plug and Play and PCI Configuration.

PC health status

Displays CPU, System Temperature, Fan Speed, and System Voltages Value.

Load Optimized Defaults

Use this menu to load the BIOS default values, i.e., factory settings for optimal performance system operations. While Award has designed the custom BIOS to maximize performance, the factory has the option to change these defaults to meet their needs.

Set Supervisor Password

Enables you to change, set, or disable the supervisor or user password.

Set Password

Change, set, or disable the password. It allows you to limit access to the system and to the setup, or just to the setup.

Save & exit setup

Save CMOS value changes to CMOS and exits setup.

Exit without saving

Ignores all CMOS value changes and exits setup.

Appendix

Drivers Installation:

The shipping package includes a Driver CD. You can find every individual driver and utility that enables you to install the drivers in the Driver CD.
Please insert the Driver CD into the drive and double click on the “index.htm” to pick up the models. You can refer to the drivers installation guide for each driver in the “Driver/Manual List”.