

VERSION V1.0 AUG 2010

MiniPOS Hardware System



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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.

C E 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".

FC 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 dust bin 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	Description	Date
1.0	Initial release	2010 August

Table of Contents

1.	Packing List	1
	1-1. Standard Items	. 1
	1-2. Optional Items	.1

2-3. Side View	3
2-4. Rear View	3
2-5. I/O view	4
2-6. Dimensions & View Angles	5

3.	System Assembly	6
	3-1. Display Tilt Angle Adjustment	.6
	3-2. Open the Cable Cover	.7
	3-3. RAM Module Replacement	.8
	3-4. HDD Replacement	.9
	3-5. Power Adapter Installation	10

4.	Peripheral	Installation	 11
	4-1. WLAN Installa	tion	 11

5. Specification		12
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6.	Jumper Setting	13
	6-1. Motherboard Layout	13
	6-2. Connectors & Functions	14
	6-3. Jumper Setting	. 15

Appendix: Drivers Installation 18

1. Packing List

1-1. Standard Items



Note: Power cord will be supplied differently according to various region or country.

1-2. Optional Items





2-1. Front View



2-2. Top View



2-3. Side View



2-4. Rear View



2-5. I/O view



Item No.	Description
а	DC-IN 19V
b	DC-OUT 24V
С	Cash Drawer
d	LAN
е	USB
f	COM1, 2, 3, 4
g	PS/2
h	Screws for fixing the keyboard
i	2nd VGA
j	Parallel

2-6. Dimensions & View Angles



3. System Assembly

3-1. Display Tilt Angle Adjustment

- Take apart the rubber hinge covers (x2) at both sides.
- 2. Loose screws (x2) inside for adjustment.

- **3.** Take apart the rubber hinge covers (x2) near the ventilation holes.
- **4.** Remove screws (x2) inside to adjust display tilt angle.





5. The display viewing angle can be adjusted (total 3 adjustable).

*Note: Default 45 degrees.



3-2. Open the Cable Cover

- **1.** Turn to the rear side of the sytem.
- **2.** Open the cable cover by lifting upward (as arrow shown).



3. To put it back, do parallely push the cable cover untill you hear clicking sound.



3-3. RAM Module Replacement

Before Replacement

- 1. Follow the steps at 3-2 to open the cable cover at the back.
- 2. Remove screws (x2) on upper side of the I/O panel.
- 3. Slide and open the keyboard.

Removing a RAM module

- **4.** Find the memory slow at the left inside of the motherboard.
- 5. Flip the ejector clips outwards to remove the memory module from the memory slot.

Installing a RAM moudle

6. Slide the memory module into the memory slot and press down until the ejector clips click in place.

8







3-4. HDD Replacement

To remove and replace the HDD, please follow the steps below.

- **1.** Follow the steps at 3-2 to open the cable cover at the back.
- 2. Loose the screw (x1) on HDD holding bracket.
- **3.** Pull the screw to slide bracket out of the system.
- **4.** Uninstall the HDD holding bracket.





- **5.** Slide to remove HDD from the system and disconnect the HDD cable.
- **6.** Reverse Step 5 to replace the hard drive disk.
- As for installation, after connecting HDD to the system, slide the bracket reversely, engaging the alignment pin. Finally fasten the screw(x1) to complete replacement.



3-5. Power Adapter Installation

The system is equipped with a 90W power adapter. Please plug it into the system as shown below.

- **1.** Follow the steps at 3-2 to open the cable cover at the back.
- Find the power connector on the left side of the I/O panel.(refer to 2-5 a.)
- **3.** Please connect the power adapter directly to the DC-IN Connector.



4. Peripheral Installation

4-1. WLAN Installation

- 1. Follow the steps of "Before Replacement" at 3-3 to open the system.
- 2. Find the PCI-E WLAN card at the right side of the mother-board.



3. There are 2 wires installed within the system: black and grey. Connect the black wire to Main connector while connect the grey to Aux. connector on the card.



- **4.** Insert the WLAN card into the slot.
- **5.** Fasten the screw (x1) onto the Main side to fix the WLAN card.

*Note: The WLAN antenna and wires will be pre-installed prior to shipping if the function requested.



5. Specification

Motherboard	C35 V0.9B			
Processor	Intel® Atom N270 processor 1.6GHz L2 512K FSB 533MHz			
Chipset	Intel® 945GSE Express + ICH7M			
System Memory		1 x DDR2 DIMM up to 2G	В	
Graphic Memory		Share System Memory up to 2	32MB	
Storage Device				
Hard Drive		1 x 2.5" HDD 160G (SATA inte	rface)	
LCD/Touch Panel				
Size		8.4"		
Brightness		250 cd/m ²		
Resolution		800 x 600		
Touch Type		8.4" Resistive		
System I/O Ports				
PS2		1		
USB 2.0		4 (2 front+2 rear)		
Serial/COM	4 RJ	45 COM (COM3/COM4 with 5V/	(12V power)	
Parallel	1			
LAN	1 x RJ-45 (10/100/1000Mbps Giga LAN)			
2nd VGA	1 x female type connector with power			
DC-IN 19V	1			
DC-OUT 24V	1 (Receipt printer)			
Cash Drawer	1 x RJ11 (12V/24V)			
Power Button		1		
Audio				
Internal Speaker		2W x 2		
Power		Adapter (19V / 90W)		
Programmable Keyboard		60 Keys (PS2)		
Wireless <i>(optional)</i>	N	lini PCI-e WLAN card IEEE 802	.11 b/g/n	
Main Modules	MSR	iButton <i>(optional)</i>	VFD (optional)	
Component Type	3 tracks	DALLAS	2X20	
Environment				
EMC & Safety	FCC / CE Class A, LVD			
Operating Temperature	5°C ~ 35°C (41°F ~ 95°F)			
Storage Temperature	-10°C ~ 60°C (14°F ~ 140°F)		F)	
Dimension (W x D x H)	224 x 300x 238 (mm)			
Weight				
N. W. (kgs)		3.4		
G. W. (kgs)	5.4			

* This specification is subject to change without prior notice.

6. Jumper Setting

6-1. Motherboard Layout



Version: C35 v0.9B

6-2. Connectors & Functions

Connector	Purpose	
CN3	Audio Line Out	
CN4 / CN25	Power Connector for HDD	
CN5 / CN6	USB Connector	
CN7	LAN LED Connector	
CN9	MSR Connector	
CN10 / CN14	T-CON Connector	
CN12	IrDA Connector	
CN13	Inverter Connector	
CN15	Power LED Connector	
CN21	Internal Power Switch Connector	
CN24	System Diagnostic Board Connector	
CN27	LPT Port	
CN28	HDD LED Connector	
CN29	Front I/O Board Connector	
CN30	Program Key Board Connector	
CN31	4 Wire Touch	
DDR2_A1	DDR2 SO-DIMM	
FAN_SYS3	System FAN Connector	
MINI_PCIE3	Mini PCI-E Socket	
SW3	Power Button	
PWR3	+19V Power Adapter	
PWR4	+24V Power Adapter for Thermal Printer	
RJ11_3	Cash Drawer Connector	
RJ45_3	LAN Port	
RJ45_4	COM1, COM2, COM3, COM4	
PS1	PS2 Connector	
SATA1	SATA Connector	
SATA2	SATA Connector	
JP3	LCD ID Setting	
JP4	Cash Drawer Power Setting	
JP5	AT/ATX Setting	
JP6	CMOS Operation Mode	
JP7	System Reset	
JP8	COM3 & COM4 Power Setting	
JP9 / JP10	VGA Port Connector	

Motherboard Version: C35 v0.9B

6-3. Jumper Setting

6-3-1. System Reset

Function	JP7 (1-2)
▲ Normal	1 2
Reset	1 2

6-3-2. COM3 & COM4 Power Setting

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

▲ = Manufacturer Default Setting

)-	3-3. Cash Diawer Power	Setting
	Function	JP4
	+12V	$\begin{bmatrix} 1 & 3 \\ 2 & 4 \end{bmatrix}$
	▲+19V	1 3 2 4

6-3-3. Cash Drawer Power Setting

6-3-4. Power Mode Setting

Function	JP5
▲ ATX Power	1 2
AT Power	1 2

6-3-5. CMOS Operation Mode

Function	JP6 (1-2)		
▲ Normal	1 2		
Reset	1 2		

▲ = Manufacturer Default Setting

Donal#	Resolution	LVDS		Output			
Panei#		Bits	Channel	Interface	JP3		
1	1366 x 768	24	Single	LVDS	1 3 5 7 2 4 6 8		
2	1440 x 990	24	Dual	LVDS	1 3 5 7 2 4 6 8		
4	1920 x 1080	24	Dual	LVDS	$ \begin{bmatrix} 1 & 3 & 5 & 7 \\ 2 & 4 & 6 & 8 \end{bmatrix} $		
5	1024 x 768	24	Single	LVDS	1 3 5 7 2 4 6 8		
6	1280 x 1024	24	Dual	LVDS	1 3 5 7 2 4 6 8		
7	800 x 600	24	Single	LVDS	1 3 5 7 2 4 6 8		
9	1024 x 768	18	Single	LVDS	1 3 5 7 2 4 6 8		
11	800 x 600	18	Single	LVDS	$\begin{bmatrix} 1 & 3 & 5 & 7 \\ 2 & 4 & 6 & 8 \end{bmatrix}$		
12	800 x 600	18	Single	LVDS	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		
14	▲800 x 600			TTL	1 3 5 7 2 4 6 8		
15	1024 x 768			TTL	$ \begin{bmatrix} 1 & 3 & 5 & 7 \\ 2 & 4 & 6 & 8 \end{bmatrix} $		
				CRT	1 3 5 7 2 4 6 8		

6-3-6. LCD ID Setting

Remark: Item #12 is only applied for Sharp panel 12" LQ121S1LLG41.

 $\begin{bmatrix} 1 \\ 2 \end{bmatrix}$ Jumper open $\begin{bmatrix} 1 \\ 2 \end{bmatrix}$ Jumper short

▲ = Manufacturer Default Setting

Appendix: Drivers Installation

The shipping package includes a Driver CD in which you can find every individual driver and utility that enables you to install the drivers on the system. Please insert the Driver CD into the drive and double click on the "index.htm" to

select the models. You can refer to the drivers installation guide for each driver in the "Driver/Manual List".