



User Manual

POS 70 Series

- *POS70-2EB-370
- *POS70-2EB-478
- *POS70-5EB-370
- *POS70-5EB-478

Mar. 2007

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CHAPTER

1

Introduction

Chapter 1 – Introduction

1.1 System Overview

1.1.1 System Outlook

	<ul style="list-style-type: none">● Power LED● HDD LED● LAN LED● TFT LCD● Speakers● HDD Case
	<ul style="list-style-type: none">● Customer Display (Options)● MSR (Options)
	<ul style="list-style-type: none">● Maintaining screws
	<ul style="list-style-type: none">● Mounting hole for Pole Display or 2nd Display● COM RI/5V/12V selection● System Fan

1.1.2 Rotating Angle



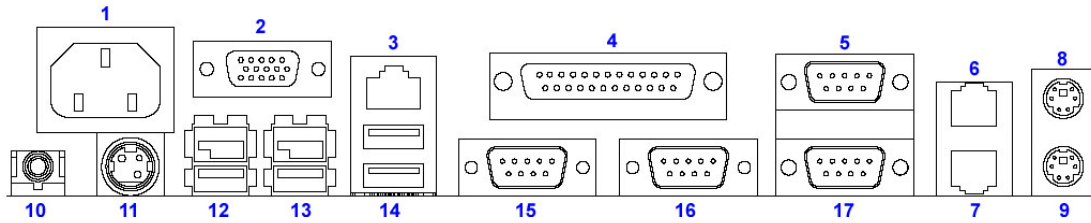
1.1.3 System Maintain



Remove 2 screws for
system maintain



1.1.4 I/O Ports



Number	Description
1	AC Power Connector
2	VGA (For EBN 2 nd display only)
3	LAN
4	Printer Port (LPT)
6	Cash Drawer 2
7	Cash Drawer 1
8	PS/2 Mouse
9	PS/2 Keyboard
10	Audio
11	DC 24V (For Receipt Printer Power)
12	Power USB (24V)
13	Power USB (12V)
14	USB x 2
15	COM 1
16	COM 2
17	COM 3
5	COM 4

1.2 Specifications

			
System			
Model	SolidPOS 72	SolidPOS 75	
P3	POS70-2EB-370	POS70-5EB-370	
P4	POS70-5EB-478	POS70-5EB-478	
Main Board			
CPU	P3: Intel Celeron / PIII 1.2GHz P4: Intel Mobile Celeron 1.2GHz , Celeron 2.0GHz , P4 2.0GHz		
Core Logic	P3: VIA CLE 266 (VT8623+VT8235) P4: Intel 852GM + ICH4		
System Memory	DIMM, DDR266/333, 128MB up to 1GB		
OS Support	Win2000, NT, Win XP, Embedded XP(XPe), WinCE, WEPOS		
Display			
TFT LCD	12.1"	15"	
Brightness	300 nits	250 nits	
Resolution	800 x 600	1024 x 768	
Touch Screen	7 Wire Resistive Type		
Tilt Angle	0 ~ 90 Degree		
Swivel Angle	-20 ~20 Degree		
Storage Device			
HDD	1 x EIDE 3.5" Type		
Compact Flash	1 x Slot Type II, Non-removable		
I/O Ports			
Serial	6 x RS-232 COM 1/ 2/ 3/ 4: DB-9, male, (Pin1 W/ DCD or 5V or 12V Selectable, Pin 9 W/ RI or 5V or 12V Selectable) COM 5/ 6: Internal for MSR and Touch Panel		

Parallel	1 x DB-25, female, supports SPP/EPP/ECP	
USB	4 x USB 2.0 2 x USB2.0 1 x USB2.0 W/ 12V 1 x USB2.0 W/ 24V	
PS/2 Mouse	1 x 6-pin mini DIN	
PS/2 KB	1 x 6-pin mini DIN	
LAN	1 x RJ45, 10/100 Base-T, supports wake on LAN	
VGA	1 x DB-15, female	
Cash Drawer	2 x RJ11 (Power Pin 12/24V Selectable)	
Audio	1x Audio Jack Out	
	AC97 2.0 Compliant, Speaker 2W x 2	
Expansion	1 x Mini PCI	
Others		
Power Input	220W ATX with 100 - 240 VAC input @ 50 - 60 Hz / 5A	
Color	Gray	
Compliance	FCC / CE / WEEE / RoHS	
Weight(Kgs)	12	12.5
Dimension(mm) W x D x H	340 x 275 x 350	370 x 277 x 405
Operating Temperature	5 °C ~ 40 °C	
Storage Temperature	-20°C ~ 60°C	
Storage Humidity	20% - 85% RH, non-condensing	
Main Unit Ordering Information		
POS70-2EB-370	12.1" TFT SolidPOS W/ Intel P3 Socket 370	
POS70-2EB-478	12.1" TFT SolidPOS W/ Intel P4 Socket 478,	
POS70-5EB-370	15" TFT SolidPOS W/ Intel P3 Socket 370,	
POS70-5EB-478	15" TFT SolidPOS W/ Intel P4 Socket 478	
Optional Accessories Ordering Information		
A10400062RH	2 nd Display 12.1" TFT LCD	
A10400107RH	2 nd Display 15" TFT LCD	
A10400264RH	Customer Display: LCD Pole Display, 20 x 2 characters, RS-232 Type (Gray)	
A10400265RH	Customer Display: VFD Pole Display, 20 x 2 characters, RS-232 Type (Gray)	
A10400010RH	MSR: 2 Tracks, KB Type	
A10400009RH	MSR: 3 Tracks, KB Type	
A10400023RH	MSR: 2 Tracks, RS-232 Type	
A10400024RH	MSR: 3 Tracks, RS-232 Type	
A10400019RH	I Button: PS/2 Type	




A10400121RH	MSR+ I Button: 2 Tracks, KB Type and I Button PS/2 Type
A10400120RH	MSR+ I Button: 3 Tracks, KB Type and I Button PS/2 Type
A10400104RH	MSR+ Smart Card: 3 Tracks, RS-232 Type and Smart Card USB Type
A10400005RH	RFID : RS-232 Type
A10400266RH	WIRELESS LAN 802.11b/g MINI PCI MODULE W/ Antenna
20900001RH	OS: Win XP Professional (English Version)
20900008RH	OS: WinXP Home (English Version)
20900003RH	OS: Win 2000 Professional (English Version)
20900002RH	OS: WEPOS (English Version)




Packing List

Chapter 2 – Packing List

The unit comes securely packaged in a shipping carton. Please contact your dealer if you find that anything is missing or damaged after examining the contents. The shipping carton should contain the following standard items :

2.1 Standard Items

	<ul style="list-style-type: none">● Main Unit
	<ul style="list-style-type: none">● Driver CD (Include manual)
	<ul style="list-style-type: none">● Printer power extension cable (24V)

	<ul style="list-style-type: none"> ● IDE extension cable
	<ul style="list-style-type: none"> ● HDD & CD-ROM power extension cable
	<ul style="list-style-type: none"> ● Power Cord (The picture varies from the area you locate)

2.2 Optional Items



	2 nd Display
	Customer Display (LED, VFD, LCD)
	3-in-1 Card Reader (MSR, Smart Card, i-Button)
	RFID



Getting Started

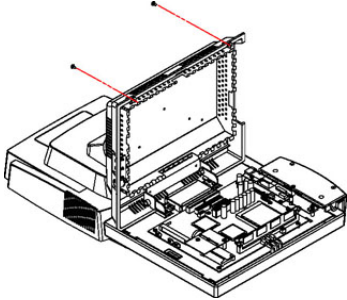




Chapter 3 – Getting Started

3.1 System setup

Item	Photo	Description
1		Plug-in power cord and connect with AC power
2		Push "Start Button"

3.2 Hardware Installation

3.2.1 CPU Installation

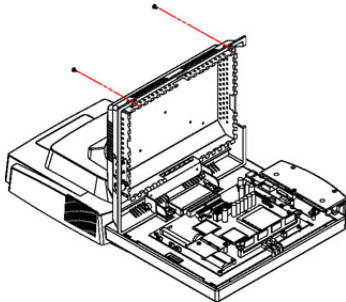
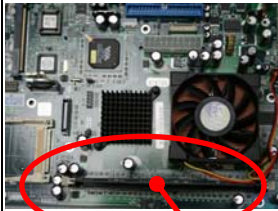
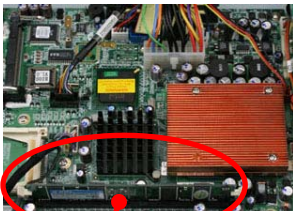

Item	Photo	Description
1		Remove 2 screws
2	<div><div>P3</div><div>P4</div></div>	Install CPU and apply the thermal adhesive
3	<div><div>P3</div><div>P4</div></div>	Install thermal module

3.2.2 Memory Installation

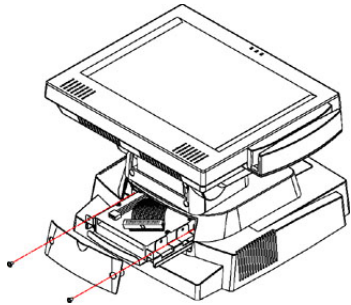



The POS system supports memory up to 1 GHz with frequency of DDR266 and DDR333.

Please follow the below procedures for installation.

- 1. Remove 2 screws from the system
- 2. Insert the memory module

Item	Photo	Description
1		Remove 2 screws
2	<div><div><div>P3</div></div><div><div>P4</div></div></div> 	Install Memory module

3.2.3 HDD Installation



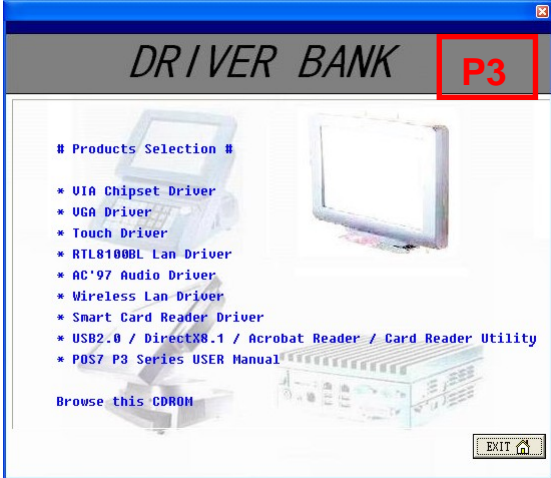
Item	Photo	Description
1		Remove 2 screws from HDD cover and pull out the metal case.
2		Install HDD in the metal case.
3		Slide the HDD into the POS system and connect IDE & Power Cable.
4		Screw 2 screws on the HDD cover

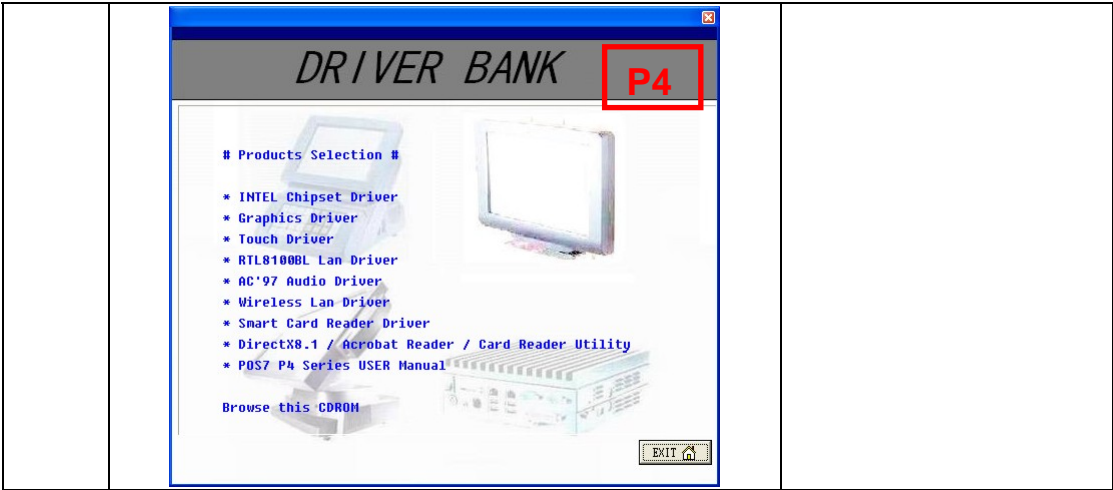
3.2.4 OS Installation

- a. Please prepare a USB CD-ROM .
- b. Plug a USB CD-ROM into the USB port of POS system .
- c. Turn on the system and enter CMOS configuration page
- d. Set the boot up device as USB CD-ROM
- e. Reboot the system
- f. Install OS step by step


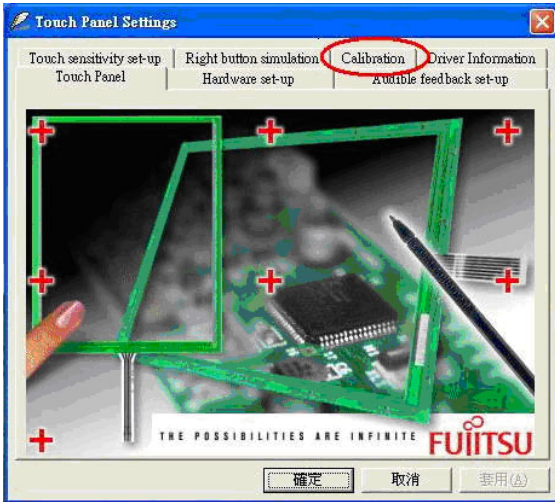
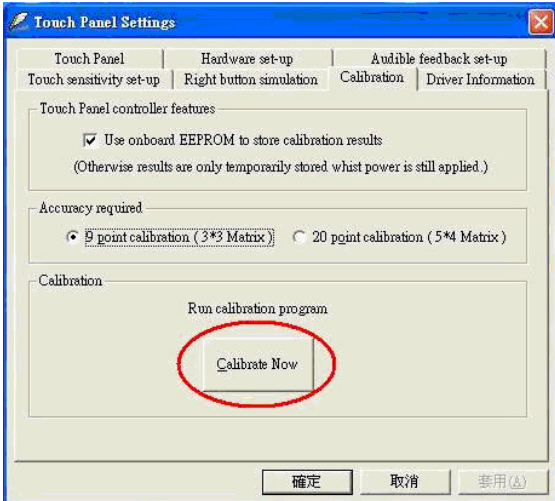
3.3 Software Installation

3.3.1 Driver Installation

Item	Photo	Description
1		Insert driver CD and select POS 7series
2		Select your model (P3 or P4)
3		Install related driver



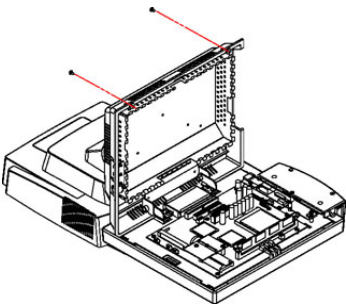

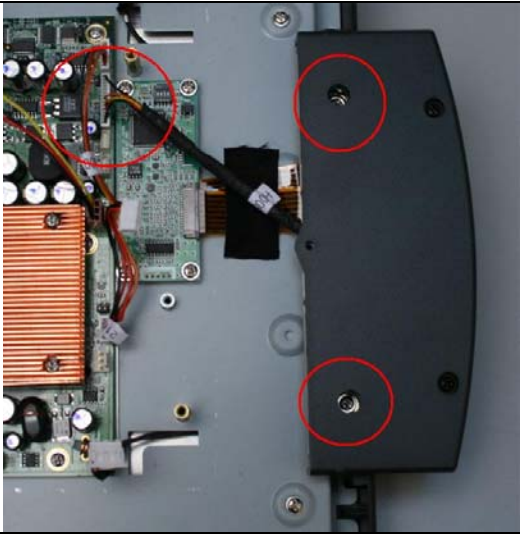
3.3.2 Touch Panel Calibration


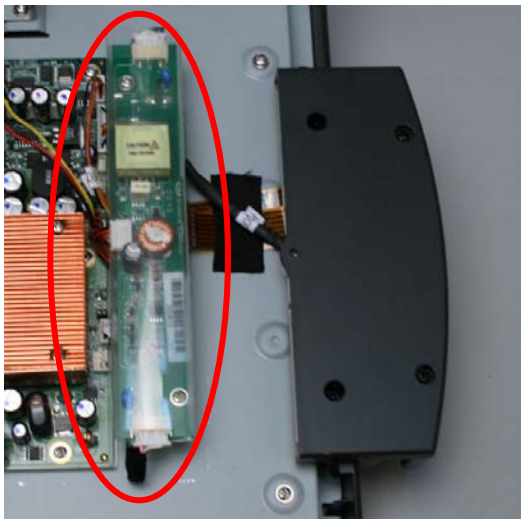
Item	Photo	Description
1		Execute “Touch Panel” from Windows Control Panel
2		Click at “Calibration”
3		Click at “Calibrate Now”

3.4 Optional Items Installation



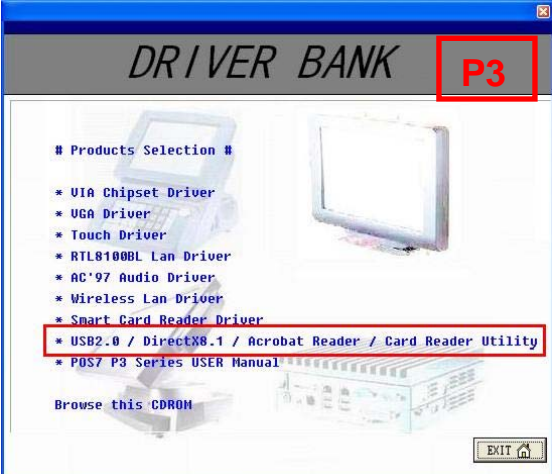
3.4.1 MSR / RFID

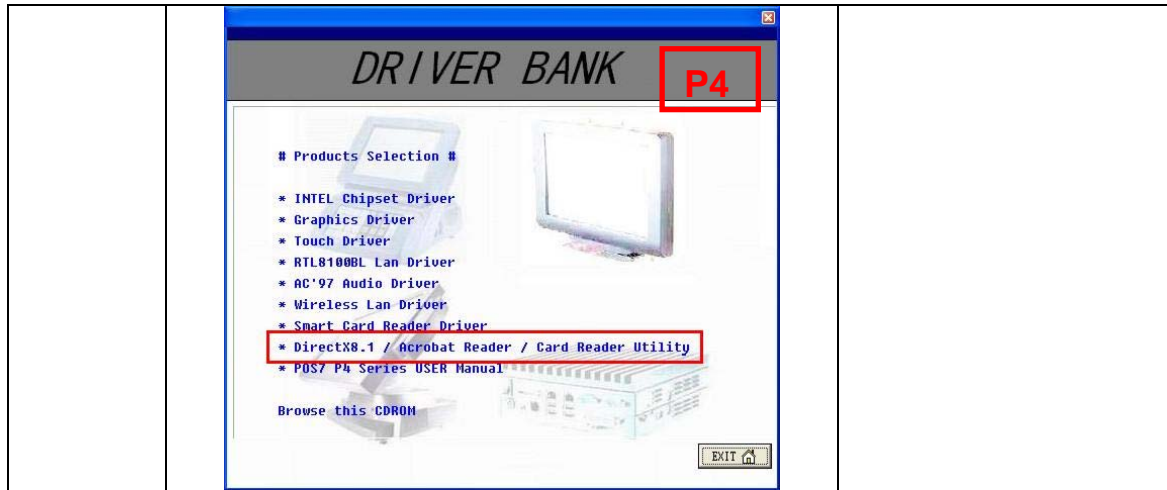
Install hardware

Item	Photo	Description
1		Remove 2 screws from POS system
2		Remove plastic cover and inverter of system
3		Install the MSR / RFID module on the system

4		<p>Connect MSR cable to CN12</p>
5		<p>Install inverter</p>


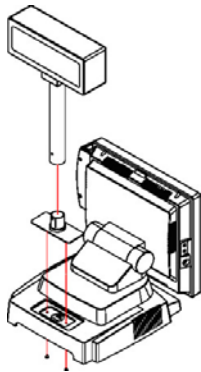

Driver Installation

Item No.	Photo	Description
1		Insert driver CD and select POS 7series
2		Select your model (P3 or P4)
3		Install related driver



Also you could install it form the following path.
(CD-ROM):\Driver\Options Driver\MSR(Megnetic Stripe Reader)
Driver\Driver\Disk1\Setup.exe

3.4.2 Pole Display

Item	Photo	Description
1		Remove plastic cover
2		Install Pole Display Kit
3		Connect RS232 cable to COM1

Note:

Be sure to adjust jumper setting of COM1. Modify pin9 to supply 12V power.
For more information, please refer to chapter **5.3**

3.4.3 2nd Display

Hardware Installation

Item	Photo	Description
1		Remove plastic cover
2		Adjust POS system angle
3		Screw on 2 nd display and plug in the cable

2nd Display with touch panel

If you order the 2nd display comes with touch panel, please remember to adjust the COM port setting on the bottom side of POS system. So that it could supply 5V DC on pin 1 for touch panel.

Note:

1. The pin 6 of 2nd VGA cable supply 12V DC power directly, so it doesn't need to connect with any external power adapter.
2. The VGA port of the POS system is designed specifically for our display kits. So please do not connect to any normal monitor or LCD.

Pin	Assignment
1	RED
2	GREEN
3	BLUE
4	Monitor ID bit 2
5	Ground
6	+12VDC Output
7	GREEN Ground
8	BLUE Ground
9	no pin (keyway)
10	Sync Ground
11	Monitor ID bit 0
12	Monitor ID bit 1
13	Horizontal Sync
14	Vertical Sync
15	Not Used

BIOS setup

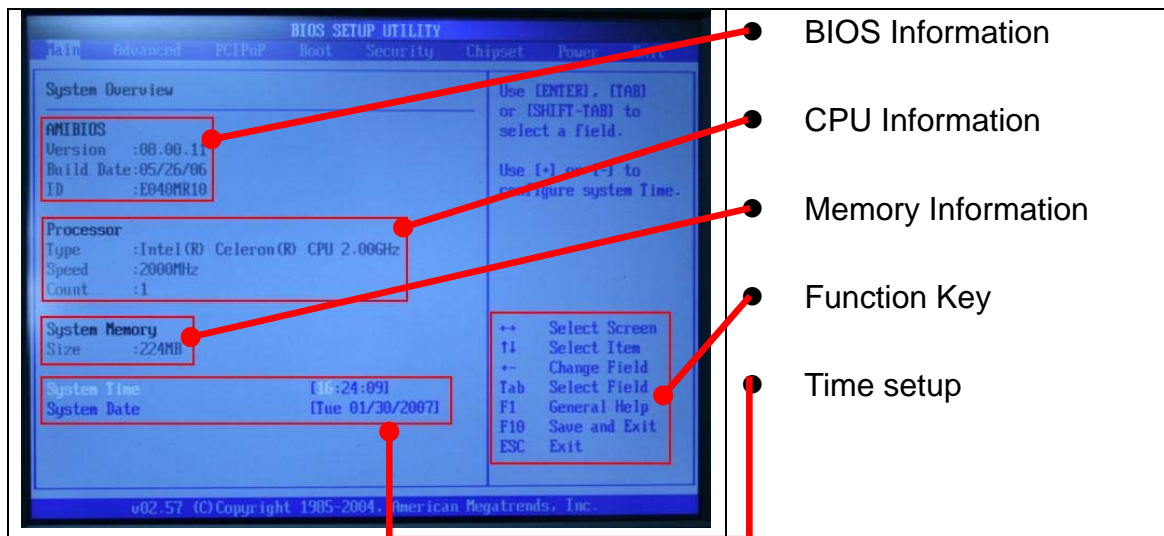
Chapter 4 – BIOS setup

4.1 P4 M/B

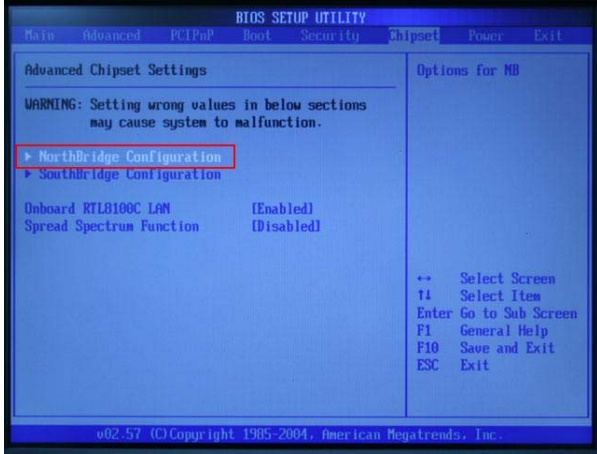
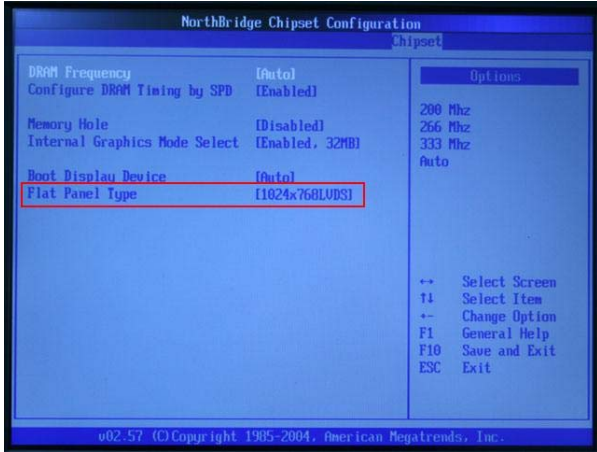
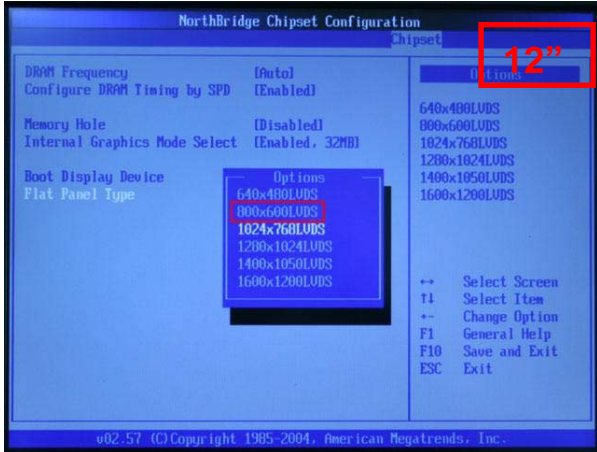
(POS70-2EB-478, POS70-5EB-478)

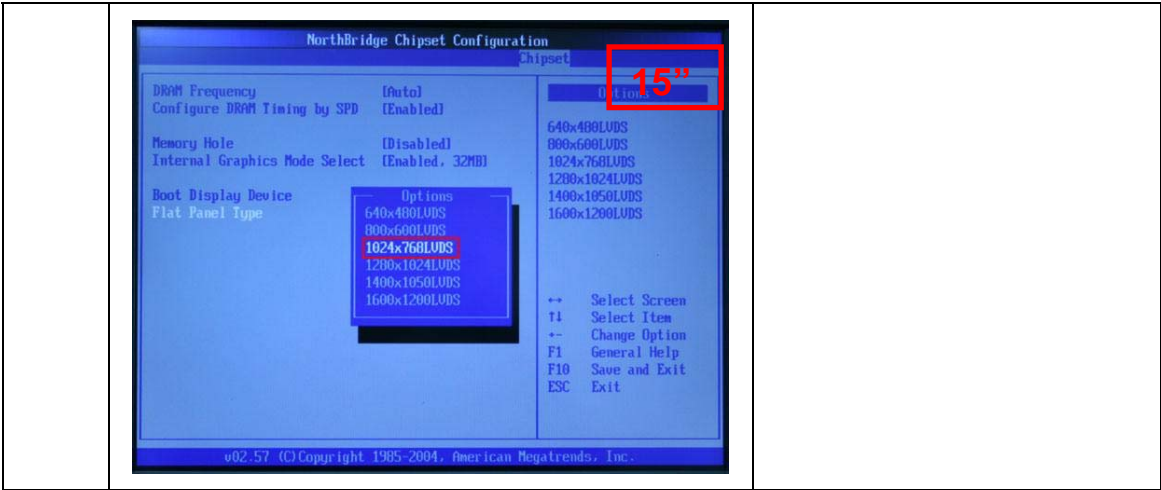
4.1.1 Starting Setup

To enter BIOS, please click at “Delete” when booting up the POS system and you will see the picture below.



4.1.2 Resolution setup

Item	Photo	Description
1	 <p>BIOS SETUP UTILITY</p> <p>Main Advanced PCIPnP Boot Security Chipset Power Exit</p> <p>Advanced Chipset Settings</p> <p>WARNING: Setting wrong values in below sections may cause system to malfunction.</p> <p>→ NorthBridge Configuration</p> <p>→ SouthBridge Configuration</p> <p>Onboard RTL8100C LAN (Enabled)</p> <p>Spread Spectrum Function (Disabled)</p> <p>Options for MB</p> <p>←→ Select Screen</p> <p>F4 Select Item</p> <p>Enter Go to Sub Screen</p> <p>F1 General Help</p> <p>F10 Save and Exit</p> <p>ESC Exit</p> <p>v02.57 (C) Copyright 1985-2004, American Megatrends, Inc.</p>	Enter “Northbridge Configuration” of “Chipset”
2	 <p>NorthBridge Chipset Configuration</p> <p>Chipset</p> <p>DRAM Frequency (Auto)</p> <p>Configure DRAM Timing by SPD (Enabled)</p> <p>Memory Hole (Disabled)</p> <p>Internal Graphics Mode Select (Enabled, 32MB)</p> <p>Boot Display Device (Auto)</p> <p>Flat Panel Type (1024x768LVD)</p> <p>Options</p> <p>200 Mhz</p> <p>256 Mhz</p> <p>333 Mhz</p> <p>Auto</p> <p>←→ Select Screen</p> <p>F4 Select Item</p> <p>← Change Option</p> <p>F1 General Help</p> <p>F10 Save and Exit</p> <p>ESC Exit</p> <p>v02.57 (C) Copyright 1985-2004, American Megatrends, Inc.</p>	Enter “Flat Panel Type”
3	 <p>NorthBridge Chipset Configuration</p> <p>Chipset</p> <p>DRAM Frequency (Auto)</p> <p>Configure DRAM Timing by SPD (Enabled)</p> <p>Memory Hole (Disabled)</p> <p>Internal Graphics Mode Select (Enabled, 32MB)</p> <p>Boot Display Device (Auto)</p> <p>Flat Panel Type</p> <p>Options</p> <p>640x480LVD</p> <p>800x600LVD</p> <p>1024x768LVD</p> <p>1280x1024LVD</p> <p>1400x1050LVD</p> <p>1600x1200LVD</p> <p>←→ Select Screen</p> <p>F4 Select Item</p> <p>← Change Option</p> <p>F1 General Help</p> <p>F10 Save and Exit</p> <p>ESC Exit</p> <p>v02.57 (C) Copyright 1985-2004, American Megatrends, Inc.</p>	Choose your panel type 12” – 800x600 15” – 1024x768

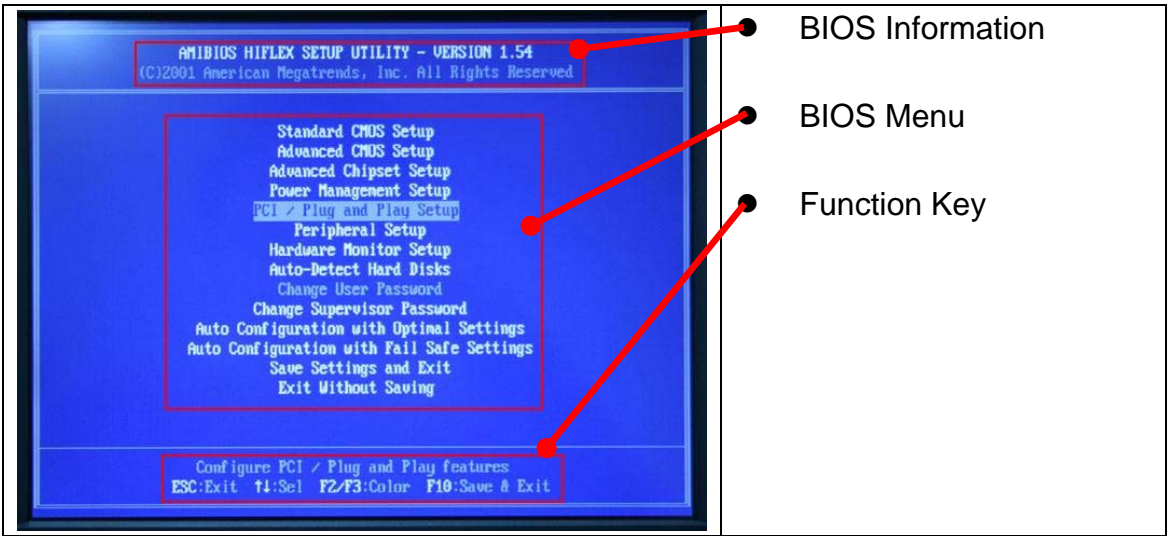


4.2 P3 M/B

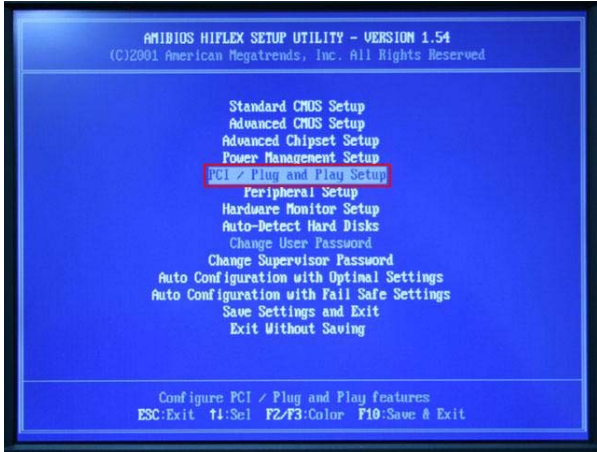

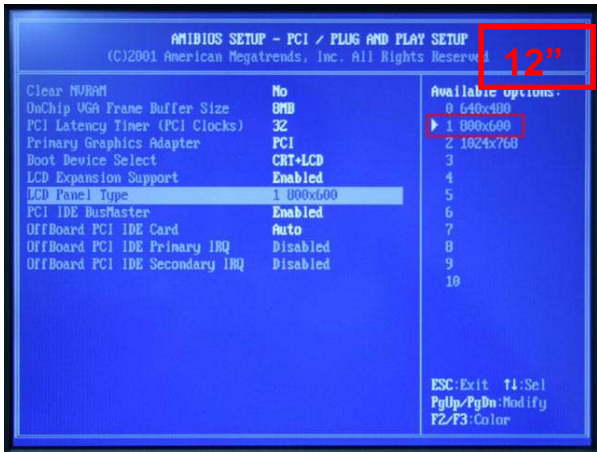
(POS70-2EB-370, POS70-5EB-370)

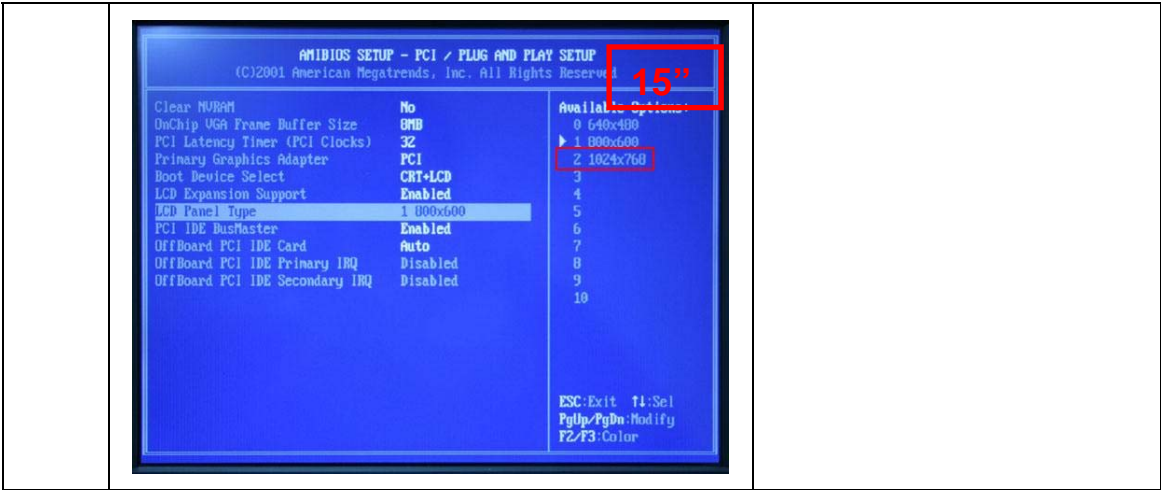
4.2.1 Starting Setup

To enter BIOS, please click at “Delete” when booting up the POS system and you will see the picture below.



4.2.2 Resolution setup

Item	Photo	Description
1		Enter “PCI / Plug and Play Setup” page of BIOS
2		Select “LCD Panel Type”
3		Choose your panel type by “Page UP” & “Page Down” 12” – 800x600 15” – 1024x768



CHAPTER

5

M/B Information

Chapter 5 – M/B Information

5.1 P4 M/B Jumper Setting

(POS70-2EB-478, POS70-5EB-478)

Clear CMOS Setup

If you want to clear the CMOS Setup (for example forgot the password you should clear the setup and then set the password again.), you should close the JP1 about 3 seconds, then open again. Set back to normal operation mode.

JP1: Clear CMOS Setup

JP1	Description
1-2	Keep CMOS Setup (Normal Operation)
2-3	Clear CMOS Setup

Compact Flash Card Master/Slave Mode Setting

JP2: Master/Slave Mode Setting

JP2	Description
OPEN	SLAVE
SHORT	MASTER

Keyboard Setting

JP3: Keyboard Setting

JP3	Description
Open	Disabled
Short	Enabled

DCD or DTR Select of COM6 Setting

JP4: DCD/DTR Setting

JP4	Description
1-2	DCD
2-3	DTR

Pentium 4/Mobile P4/Mobile P4-M Select

JP7: Pentium 4/Mobile P4/Mobile Pentium 4-M Select

JP7	Description
1-2	Pentium 4
2-3	Mobile Celeron/P4-M

LCD Power setting

JP8: This jumper is for the setting of LCD panel voltage.

JP8	Description
1-2	+3.3V
3-4	+5V

5.2 P3 M/B Jumper Setting

(POS70-2EB-370, POS70-5EB-370)

Compact Flash Card Master/Slave Mode Setting

JP1: Master/Slave Mode Setting

JP1	Description
OPEN	SLAVE
SHORT	MASTER

LCD Power setting

JP2: This jumper is for the setting of LCD panel voltage.

JP2	Description
2-4	+3.3V
4-6	+5V

JP2: This jumper is for the setting of LCD panel shift clock.

JP2	Description
1-3	Inverted
3-5	Normal

Clear CMOS Setup

If you want to clear the CMOS Setup (for example forgot the password you should clear the setup and then set the password again.), you should close the JP5 about 3 seconds, then open again. Set back to normal operation mode.

JP5: Clear CMOS Setup

JP5	Description
2-3	Keep CMOS Setup (Normal Operation)
1-2	Clear CMOS Setup

ATX / AT Power Use Selection

JP8: This jumper is for the setting of Power use selection.

JP8	Description
OPEN	ATX Power
CLOSE	AT Power

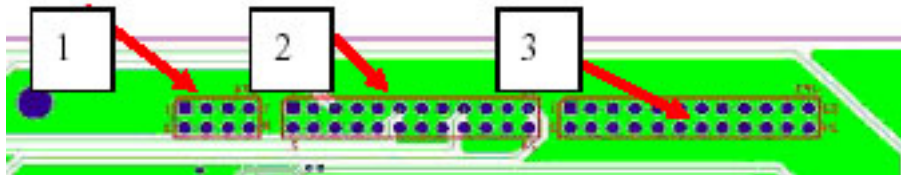
DCD or DTR Select of COM6 Setting

JP10: DCD/DTR Setting

JP10	Description
1-2	DCD
2-3	DTR

5.3 COM & RJ-11 Jumper Settings

Before installing the cash drawer or any peripherals which use COM ports, please make sure you configure all the “Power” settings accurately.



1. Cash Drawer

Cash Drawer	JP4
12V	5-6,7-8
24V	1-2,3-4

2. COM1 & COM2

COM 1	Pin 1	Pin9	COM 2	Pin1	Pin9
5V	21-22	15-16	5V	9-10	3-4
12V	19-20	13-14	12V	7-8	1-2
DCD/RI	23-24	17-18	DCD/RI	11-12	5-6

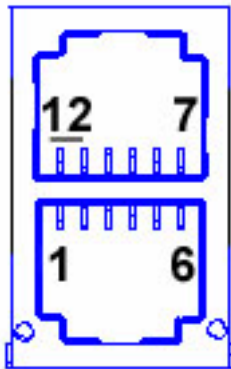
3. COM3 & COM4

COM 3	Pin 1	Pin9	COM 4	Pin1	Pin9
5V	21-22	15-16	5V	9-10	3-4
12V	19-20	13-14	12V	7-8	1-2
DCD/RI	23-24	17-18	DCD/RI	11-12	5-6

5.4 Cash Drawer Introduction

The POS system provides RJ-11 x 2 for cash drawer. And both could support 12V & 24V cash drawer which could be configured on the bottom side of POS system. For more information of configuration, please refer to chapter 3.3.

Pin Assignment



Pin	Assignment	Pin	Assignment
1	GND	7	GND
2	DOUT 0	8	DOUT 1
3	DIN 0	9	DIN 1
4	12V/24V	10	12V/24V
5	NC	11	NC
6	GND	12	GND

I/O Address

I/O Address: 280H (For both Cash Drawers which are controlled by data bit)

Cash Drawer 1: DIN0=>Bit0, DOUT0=>Bit4

Cash Drawer 2: DIN1=>Bit1, DOUT1=>Bit5

CHAPTER

6

Reversion

Chapter 6 – Reversion History

Version	Item	Descriptions	Page