



# **Quick Guide**

## *POS50 Series*

*April. 2006 (V1.0)*

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# Chapter 1

## Unpacking

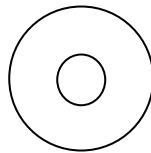
Unpacking the POS Terminal, please check the following items are presented and in good conditions:

*a. Main Unit*



*b. CD: User's Manual & Driver Bank*

The driver disk includes user's manual and all of driver software of peripheral, such as touch screen, VGA, LAN....etc.



*c. Power Cord: Optional USA, Europe, UK or Australia type.*



# Chapter 2

## Specification

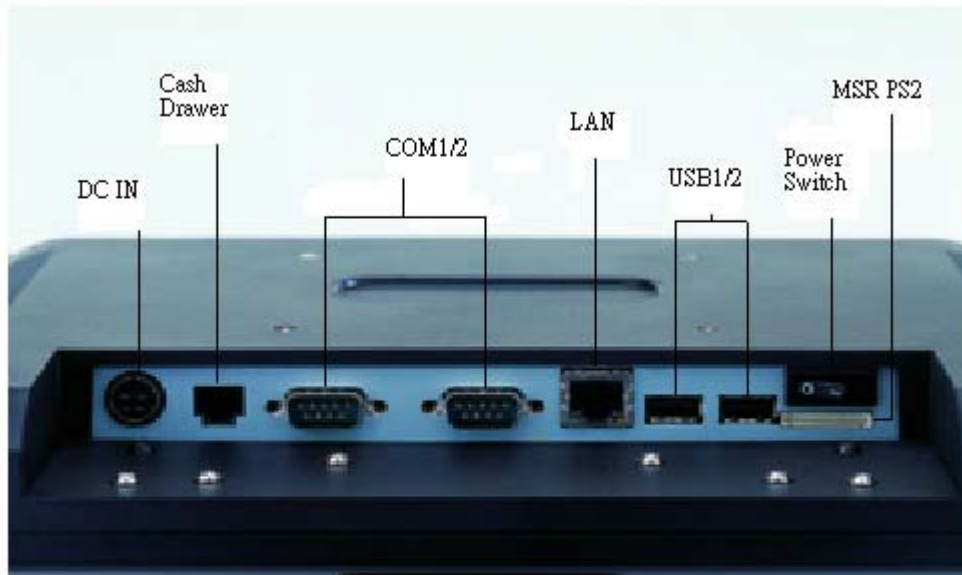
### 2.1 Specification

The POS system configuration including 8.4", 12.1" and 15" as followings,

Main Board			
CPU	AMD Geode LX-800		
System Memory	1 x DDR400 SO-DIMM Socket, up to 1GB		
Display			
TFT LCD Size	8.4"	12.1"	15"
Brightness	180nits	300nits	250nits
Resolution	800x600		1024x768
Touch Screen	5 Wire Resistive Type		
Storage Device			
HDD	No Support	2.5" Slim Type	
Compact Flash	1 x Type II, Slot		
I/O Ports			
Serial	2x RS232 (Pin9 with 5/12V Selected) 2x RS232 (Internal Touch & MSR Used)		
USB	2 x USB2.0 2 x USB2.0 Internal Stand By		
LAN	1 x RJ45, 10/100 Base-T		
Cash Drawer	1 x RJ11 (Power 12V)		
Audio	AC97 2.0 Compliant, Speaker 2 x 2W		
Others			
Power Supply	Internal Adapter, 12V / 80W, ATX		
Compliance	FCC / CE		
Weight (Kgs)	1.8	3.2	4.4
Operating Temperature	5 ~ 40 ° C		
Optional Accessory			
Wireless LAN	802.11g, USB I/F		
MSR	ISO STD 3 Tracks, KB I/F		

## 2.2 I/O ports

Following ports show all of ports of system.



- a. **DC IN:** connector for power adapter input 12VDC.
- b. **Cash Drawer:** provide IO port address 280H for cash drawer control by RJ11.
- c. **COM 1/2:** standard D sub serial port with 5V / 12VDC selected on pin9.
- d. **LAN:** 10 / 100 base-T by RJ45 connector.
- e. **USB:** play and plug USB 2.0.
- f. **Power Switch:** toggle switch for power on.
- g. **MSR PS2:** for attached MSR PS2 interface connection.

# Chapter 3

## Installation

### 3.1 OS Installation

#### 3.1.1 Embedded WEPOS / WinCE



CD ROM Driver with USB interface

If you bought the system including WEPOS / WinCE operation system, please follow up below procedure.

- Connect CDROM to the USB port of system.
- Turn on the system and enter completely into WEPOS.
- Up load your application software into WEPOS platform.
- Complete installation and execute the AP.

**Note:** We suggest that you buy and use factory recommend CD-ROM with USB interface while you are placed first sample unit.

#### 3.1.2 Win XP

If you would like to install the Win XP, we suggest the system's configuration include 256MB RAM and HDD.

- Connect CDROM to the USB port of system.
- Turn on the system and press " Del" key enter to CMOS setup.
- Select icon "Advanced BIOS Features".

#### Phoenix – Award BIOS CMOS Setup Utility

- Standard CMOS Features
- **Advanced BIOS Features**
- Advanced Chipset Features
- Integrated Peripherals
- Power Management Setup
- PnP / PCI Configuration
- PC Health Status

ESC: Quit  
F10: Save & Exit Setup

- d. Select "First Boot Device" to "USB-CDROM".
- e. Press "F10" to save setup change and quit.
- f. Install the Win XP, follow up the OS installation guide.

#### Phoenix – Award BIOS CMOS Setup Utility Advanced BIOS Features

Virus Warning	[Disabled]	
CPU Internal Cache	[Enabled]	
Boot From Lan Control	[Disabled]	
First Boot Device	[USB-CDROM]	
Second Boot Device	[HDD-0]	
Third Boot Device	[CDROM]	
Boot Other Device	[Enabled]	
Boot UP NumLock Status	[On]	
Gate A20 Option	[Fast]	
Typematic Rate Setting	[Disabled]	
Typematic Rate (Chars/Sec)	6	
Typematic Delay (Msec)	250	
Security Option	[Setup]	
OS Select For DRAM > 64MB	[Non-OS2]	
Small Logo(EPA) Show	[Disabled]	

### 3.2 Touch Driver Installation

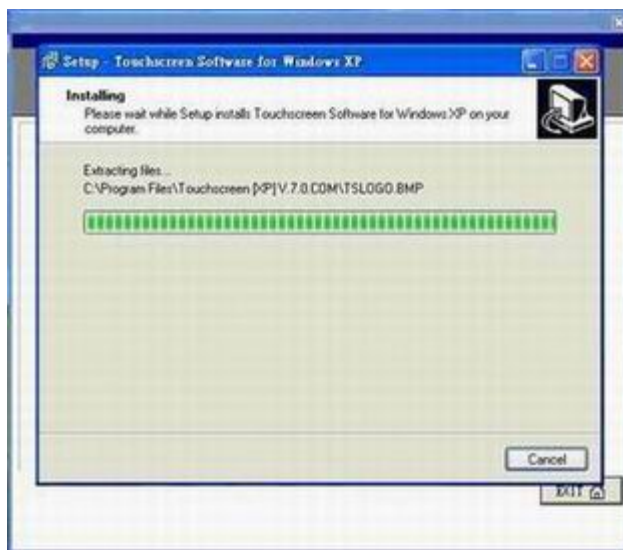
Refer to list procedure of touch driver as followings, which is based on Win XP as example.

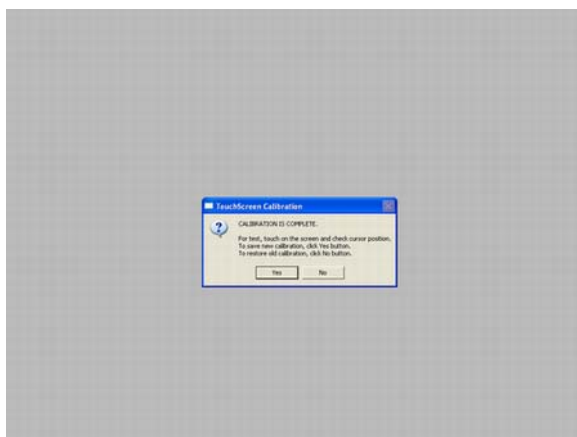






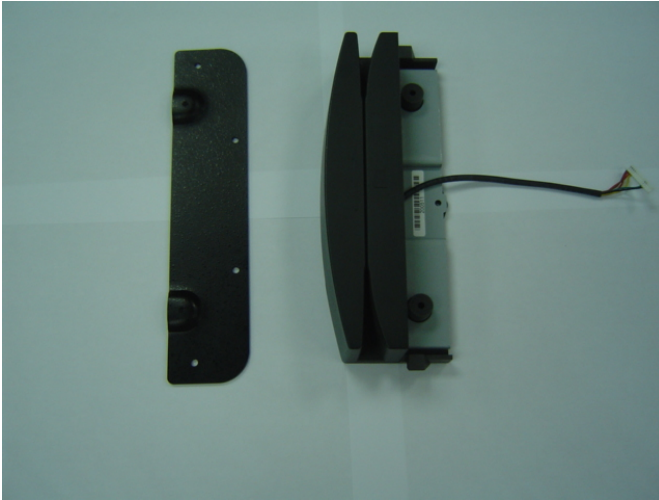






### 3.3 MSR / I-Button PS2 interface Installation

- a. The MSR Kit included Bracket and Module.



- b. Turn the system to rear side.



- c. Screw up the bracket on the fixed hole.



d. Screw up the MSR module and connect the cable into connector.



### 3.4 Cash Drawer

For the 3<sup>rd</sup> version M/B which is released from end of April. The cash drawer pin assignment as followings. In order to program the cash drawer easily, we also provide OPOS driver.

Pin	Assignment
1	GND
2	Data Out
3	Data In
4	12V
5	NC
6	GND

**Note:**

I/O Address: 280H for Cash Drawer which is controlled by

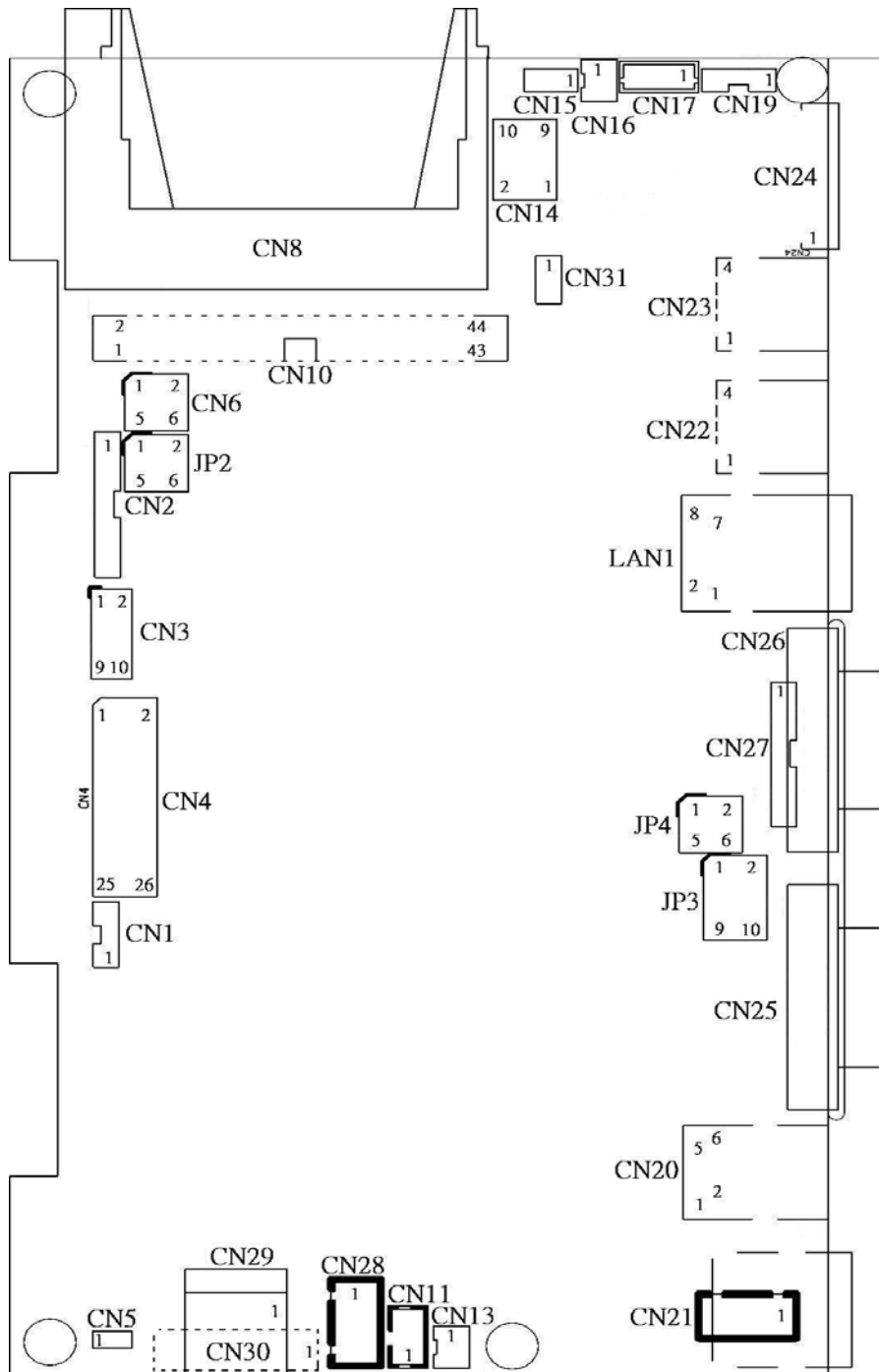
Data bit: Data IN =>Bit 0, Data OUT=>Bit 1

**Normally recommend drive the Cash Drawer by out FF to I/O 280H.**

# Chapter 4

## Jumper Definition

## 4.1 Main Board Layout



## 4.2 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

## 4.3 COM1/2 Power Selection

JP3	Description
1-3	COM1 RI Pin Use +12V
3-5	COM1 RI Pin Use +5V
7-9	<b>COM1 RI Pin Use RI</b>
2-4	COM2 RI Pin Use +12V
4-6	COM2 RI Pin Use +5V
8-10	<b>COM2 RI Pin Use RI</b>

## 4.4 COM3 Power Selection

JP4	Description
1-2	COM3 RI Pin Use +12V
5-6	COM3 RI Pin Use +5V
3-4	<b>COM3 RI Pin Use RI</b>

## 4.5 IDE Disk Drive Connector

- a. CN10: Primary IDE Connector (Pitch 2.00 mm)

PIN	Description	PIN	Description
1	RESET#	2	GROUND
3	DATA 7	4	DATA 8
5	DATA 6	6	DATA 9
7	DATA 5	8	DATA 10
9	DATA 4	10	DATA 11
11	DATA 3	12	DATA 12
13	DATA 2	14	DATA 13
15	DATA 1	16	DATA 14
17	DATA 0	18	DATA 15
19	GROUND	20	N/C
21	IDE DREQ	22	GROUND
23	IOW#	24	GROUND
25	IOR#	26	GROUND
27	IDE DRDYA	28	GROUND
29	IDE DACK	30	GROUND
31	INTERRUPT	32	N/C

33	SA1	34	CABLE_80P
35	SA0	36	SA2
37	HDC CS0#	38	HDC CS1#
39	HDD ACTIVE#	40	GROUND
41	VCC5	42	VCC5
43	GND	44	

#### b. CN8: Compact Flash Storage Card Socket

PIN	Description	PIN	Description
1	GROUND	26	CARD DETECT1
2	D3	27	D11
3	D4	28	D12
4	D5	29	D13
5	D6	30	D14
6	D7	31	D15
7	CS1#	32	CS3#
8	N/C	33	N/C
9	GROUND	34	IOR#
10	N/C	35	IOW#
11	N/C	36	OBLIGATORY TO PULL HIGH
12	N/C	37	IRQ15
13	VCC	38	VCC
14	N/C	39	SLAVE
15	N/C	40	N/C
16	N/C	41	RESET#
17	N/C	42	IORDY
18	A2	43	DRQ
19	A1	44	ACK
20	A0	45	ACTIVE#
21	D0	46	PDIAG#
22	D1	47	D8
23	D2	48	D9
24	N/C	49	D10
25	CARD DETECT2	50	GROUND

## 4.6 Fan Connector

These connectors can supply +5V/500mA to the cooling fan. In the connector there have a “rotation” pin. The rotation pin is to get the fan’s rotation signal to system. So the system BIOS could recognize the fan speed. Please note only specified fan offers the rotation signal.

- CN11 : Fan connector**

PIN	Description
1	Rotation Signal
2	VCC5
3	GND



## 4.7 Serial Ports

The system provides three high speed NS16C550 compatible UARTS with Read/Receive 16 byte FIFO. Four com ports are in IO connector.

- **COM1: CN25 DB9-pin header**
- **COM2: CN26 DB9-pin header**

PIN	Description
1	DATA CARRIER DETECT (DCD)
2	RECEIVE DATA (RXD)
3	TRANSMIT DATA (TXD)
4	DATA TERMINAL READY (DTR)
5	GROUND
6	DATA SET READY (DSR)
7	REQUEST TO SEND (RTS)
8	CLEAR TO SEND (CTS)
9	RING INDICATOR (RI)

- **COM2: CN27 pin header 2.0mm**

PIN	Description
1	DATA CARRIER DETECT (DCD)
2	RECEIVE DATA (RXD)
3	TRANSMIT DATA (TXD)
4	DATA TERMINAL READY (DTR)
5	GROUND
6	DATA SET READY (DSR)
7	REQUEST TO SEND (RTS)
8	CLEAR TO SEND (CTS)
9	RING INDICATOR (RI)
10	N/C
11	+5V
12	N/C
13	+12V
14	GROUND

- **COM3: CN24 for Card Reader.**

PIN	Description
1	GROUND
2	+5V
3	RXD3
4	TXD3
5	KB_DATA_OUT
6	KB_CLK_OUT
7	KB_DATA_IN
8	KB_CLK_IN
9	RI3
10	DTR3
11	CTS3
12	RTS3
13	DSR3
14	DCD3
15	KB_EN

## 4.8 Power Connector

- **CN21: Power Connector Input**

PIN	Description	PIN	Description
1	GND	3	Power IN(+12V)
2	GND	4	Power IN(+12V)

- **CN28: Power Connector Output**

PIN	Description	PIN	Description
1	+5V	3	GND
2	GND	4	+12V

- **VGA Connector**

The pin assignments are as following.

- **CN3: 10-pin Connector**

PIN	Description	PIN	Description
1	RED	2	DDCDAT
3	GREEN	4	DDCCLK
5	BLUE	6	GROUND
7	HSYNC	8	GROUND
9	VSYNC	10	GROUND

- **LCD & INVERTOR Connector**

The pin assignments are as following.

- CN2: 15-pin Connector for LCD**

PIN	Description
1	LVD0-
2	LVD0+
3	GROUND
4	N/C
5	N/C
6	GROUND
7	LVD1-
8	LVD1+
9	LVD2-
10	LVD2+
11	GROUND
12	LVDCK-
13	LVDCK+
14	LCD_VCC
15	LCD_VCC

- **CN1: 6-pin Connector for INVERTOR**

PIN	Description
1	+12V

2	BKL_Enable
3	GROUND
4	N/C
5	+12V
6	GROUND

#### ○ **USB Port Connector**

- **USB1: CN22**
- **USB2: CN23**
- **USB3: CN31**
- **USB4: CN15**

PIN	Description
1	+5V
2	DATA-
3	DATA+
4	GROUND

#### ○ **Audio Connector**

The pin assignments are as following.

- **CN17: LINE\_OUT connector**

PIN	Description
1	LINE_OUT_L
2,3	LINE_OUT_GROUND
4	LINE_OUT_R

- **CN16: MIC\_IN connector**

PIN	Description
1	MIC_IN
2	GROUND

#### ○ **LED**

The pin assignments are as following.

- **CN6: LED connector**

PIN	Description	PIN	Description
1	POWER LED-	2	POWER LED+
3	HDD LED-	4	HDD LED+
5	LAN LED-	6	LAN LED+

#### ○ **Power & Reset Button**

- **CN13: ATX Power button**

PIN	Description
1	ATX Power button +
2	ATX Power button -

- **CN5: Reset button**

PIN	Description
1	Reset button +
2	Reset button -

- **Cash Drawer Connector**

- **CN20**

PIN	DESCRIPTION	PIN	DESCRIPTION
1	GROUND	2	DOUT_0
3	DIN_0	4	+12V
5	N.C	6	GROUND

- **Keyboard / Mouse connector**

- **CN19: Keyboard/Mouse Connector**

PIN	DESCRIPTION
1	VCC5
2	MOUSE DATA
3	MOUSE CLK
4	KEYBOARD DATA
5	KEYBOARD CLK
6	GROUND

- **Touch Connector**

The pin assignments are as following.

- **CN29: Touch 5W connector**

PIN	DESCRIPTION
1	RT
2	RL
3	SG
4	LT
5	LL

- **CN30 : Touch 7W connector**

PIN	DESCRIPTION
1	NC
2	U
3	NC
4	R
5	NC
6	A
7	NC
8	L
9	NC
10	B
11	NC
12	D
13	NC
14	C
15	NC