K840 Series

Manual

Kiosk
Hardware System

P/N: 48201143
2007 July V2.2

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Manual Version 2.2

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Safety

IMPORTANT SAFETY INSTRUCTIONS

1. To disconnect the machine from the electrial 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.

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.

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”.

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 centres 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.

Cleaning

Cleaning your Kiosk components and peripherals helps keep the machine in good working condition. Make sure your Kiosk is turned off before you begin the cleaning process.

Case:

The plastic case can be cleaned with a lint free cloth that has been slightly dampened with water. For stubborn stains, add a little household detergent to the cloth. Do not use a solvent cleaner on plastics.

Touch Panel:

Use a soft lint free cloth with isopropyl alcohol and wiping slowly without excessive pressure.

Laser Scanner:

Use a clean soft, dry, lint-free cloth and wiping gently without excessive pressure.
Do not use isopropyl alcohol. Do not touch the laser scanner window with your fingers.

DVD-ROM Drive:

Use DVD laser lens cleaner and follow the product instructions to clean the DVD-ROM Drive.

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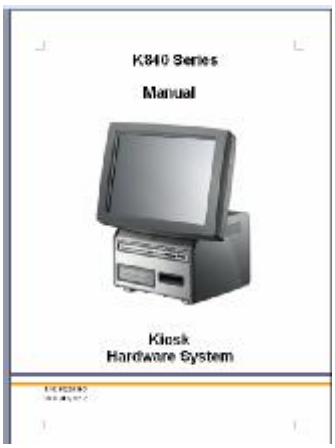
1. Item Checklist

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. Driver CD



b. Manual

c. Power Cable

d. 2 Keys

1.2 Optional Items

Depending on the configuration of your product, you may find the additional items below in the box.

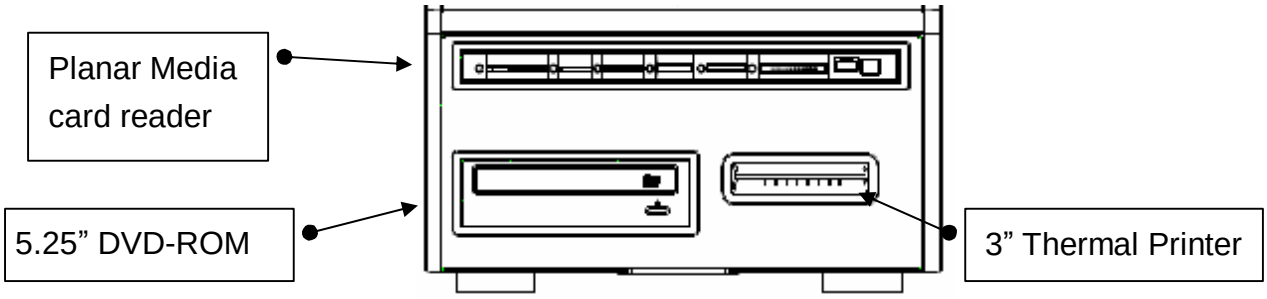
a. Thermal Paper & Paper Holder

b. Magnetic Card Reader / I-Button Module

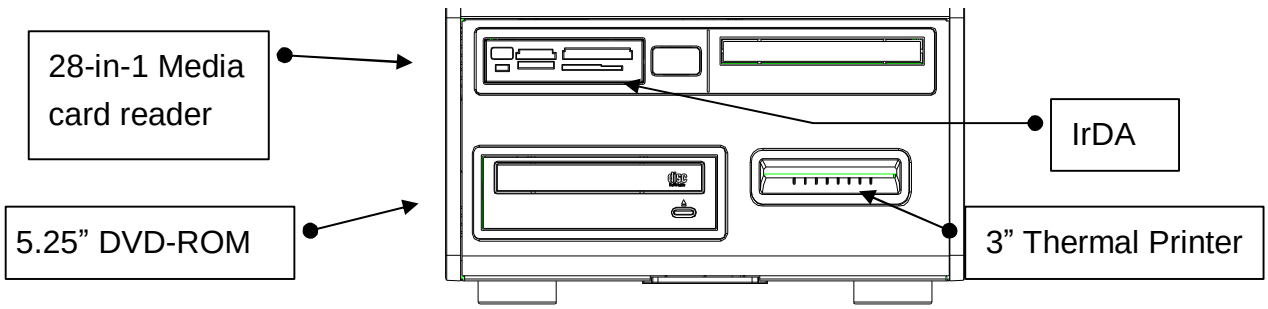
2. System View

2.1 Front view (Type P, A, B, C)

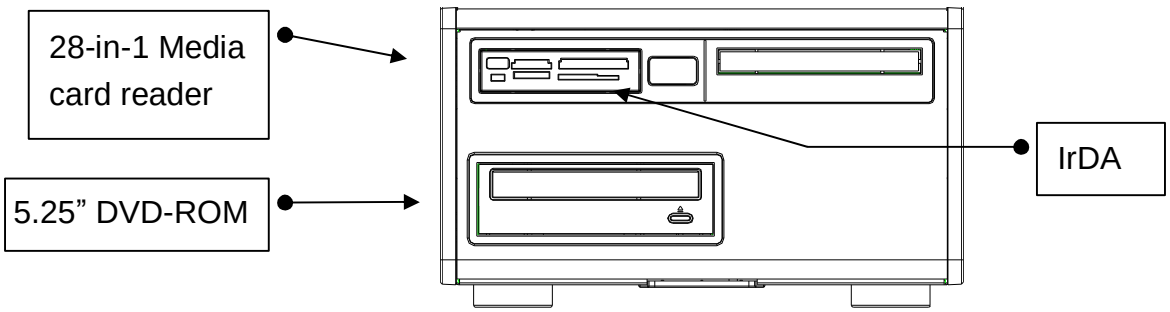
Type P: Planar Media Card Reader, 5.25” DVD-ROM, 3” Thermal Printer



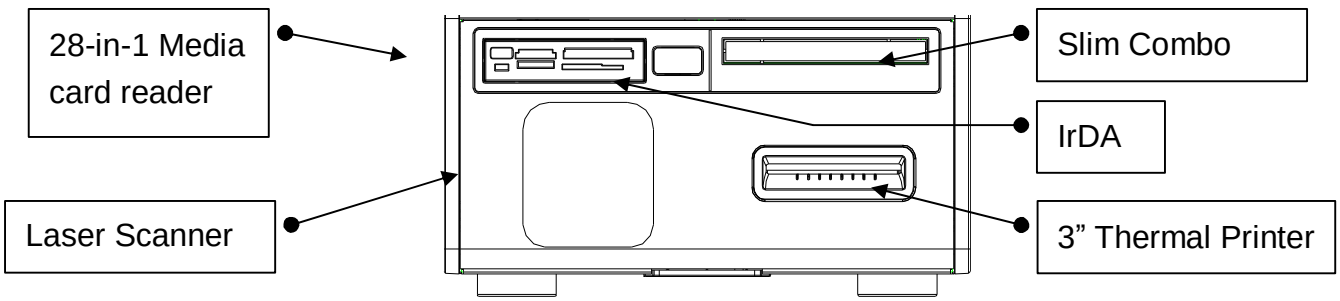
Type A: 28-in-1 Media Card Reader, IrDA, 5.25” DVD-ROM, 3” Thermal Printer



Type B: 28-in-1 Media Card Reader, IrDA, 5.25” DVD-ROM

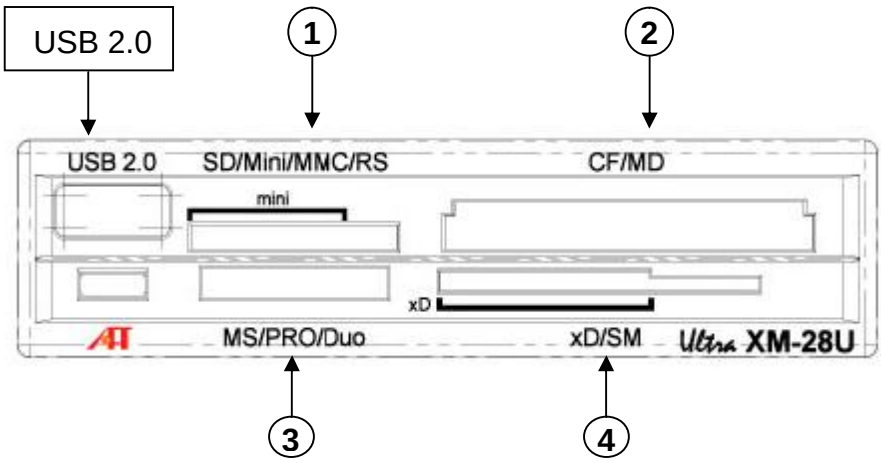


Type C: 28-in-1 Media Card Reader, IrDA, 3” Thermal Printer, Slim COMBO, Laser Scanner



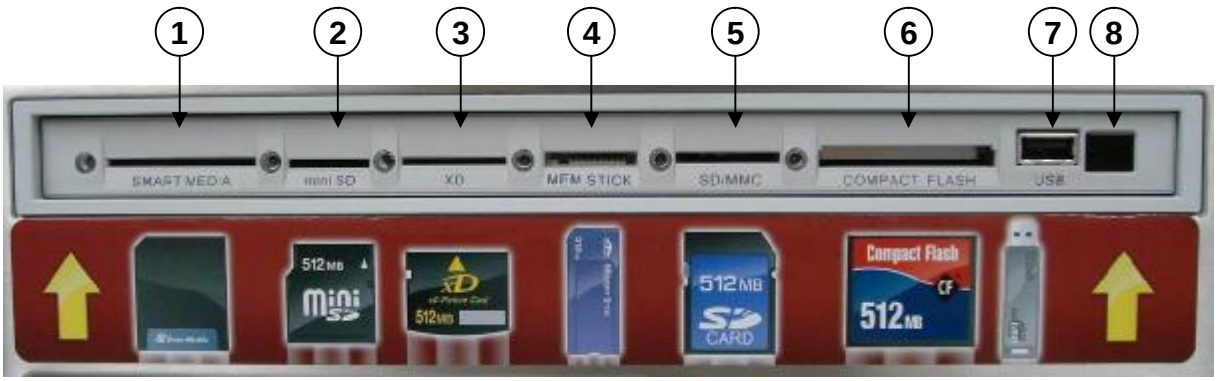
2.3 Media Device Module

2.3.1 3.5” Media Card Reader



NO	Function
1	SD / MMC
2	Compact Flash
3	Memory Stick Memory Stick PRO
4	SmartMedia

2.3.2 Planer Media Device Module



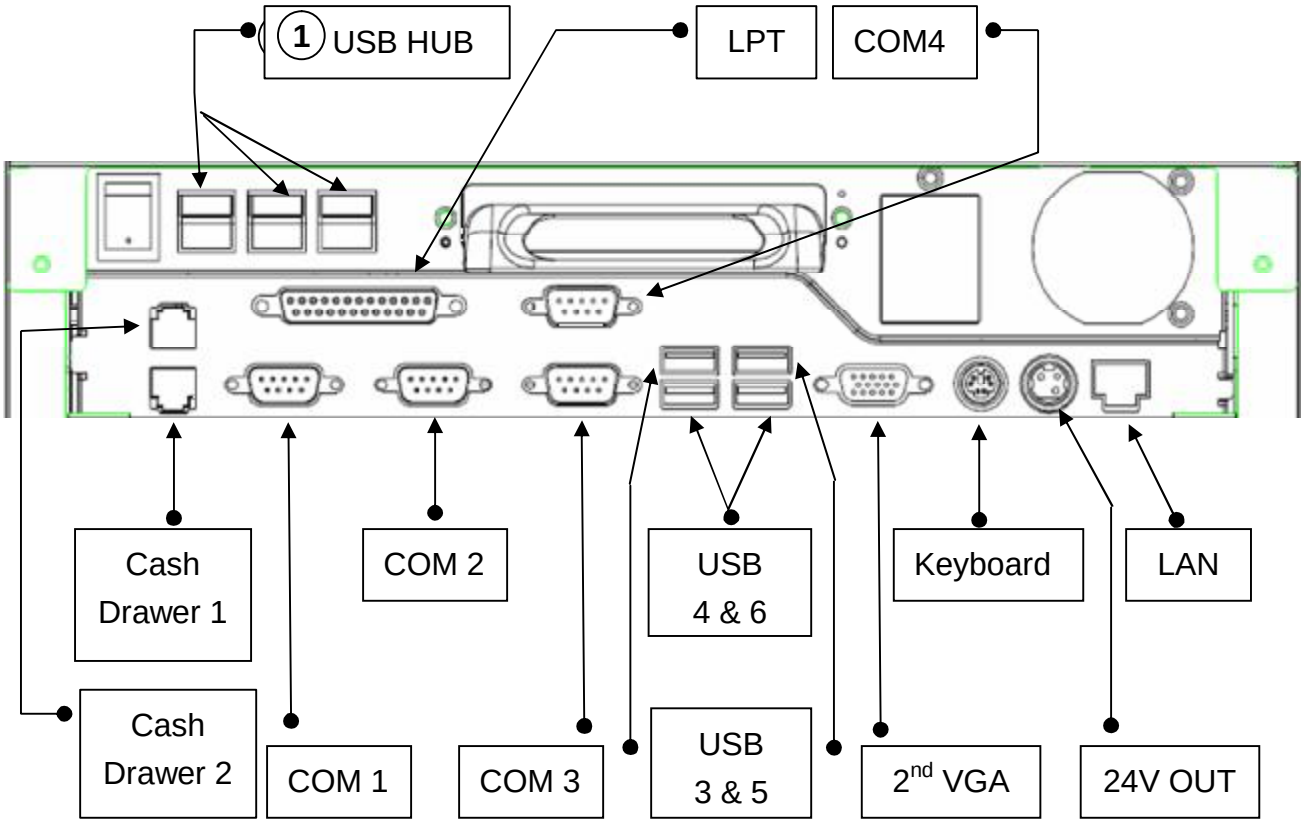
NO	Function
1	SMART MEDIA
2	Mini SD
3	XD
4	MEM. STICK

NO	Function
5	SD / MMC
6	COMPACT FLASH
7	USB
8	IrDA (Option)

2.4 Rear View

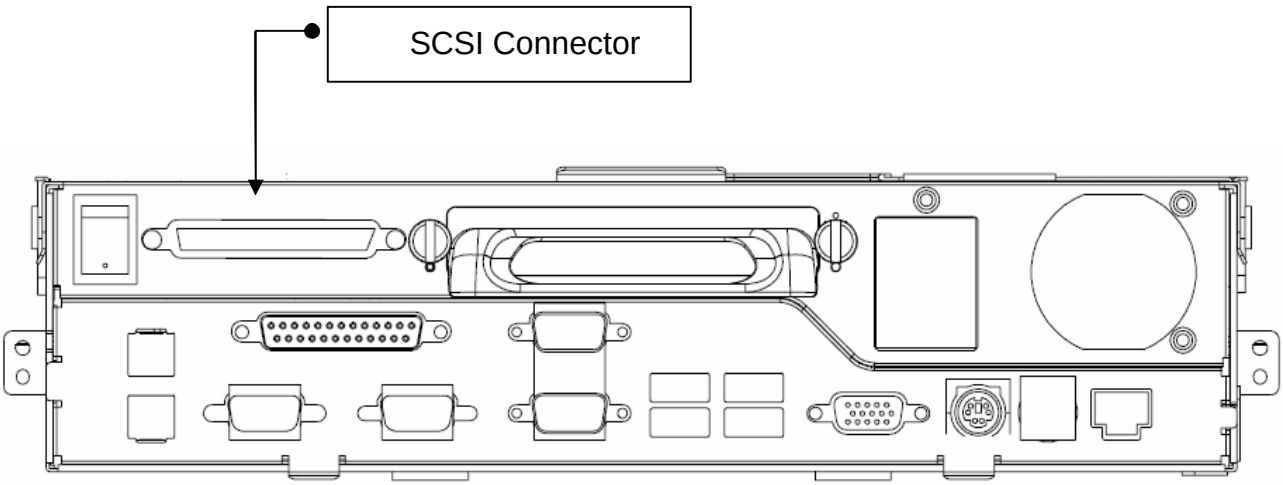
Picture 1:

Depending on your configuration, the USB Hubs are located at the rear of the system, as shown below in figure ①.



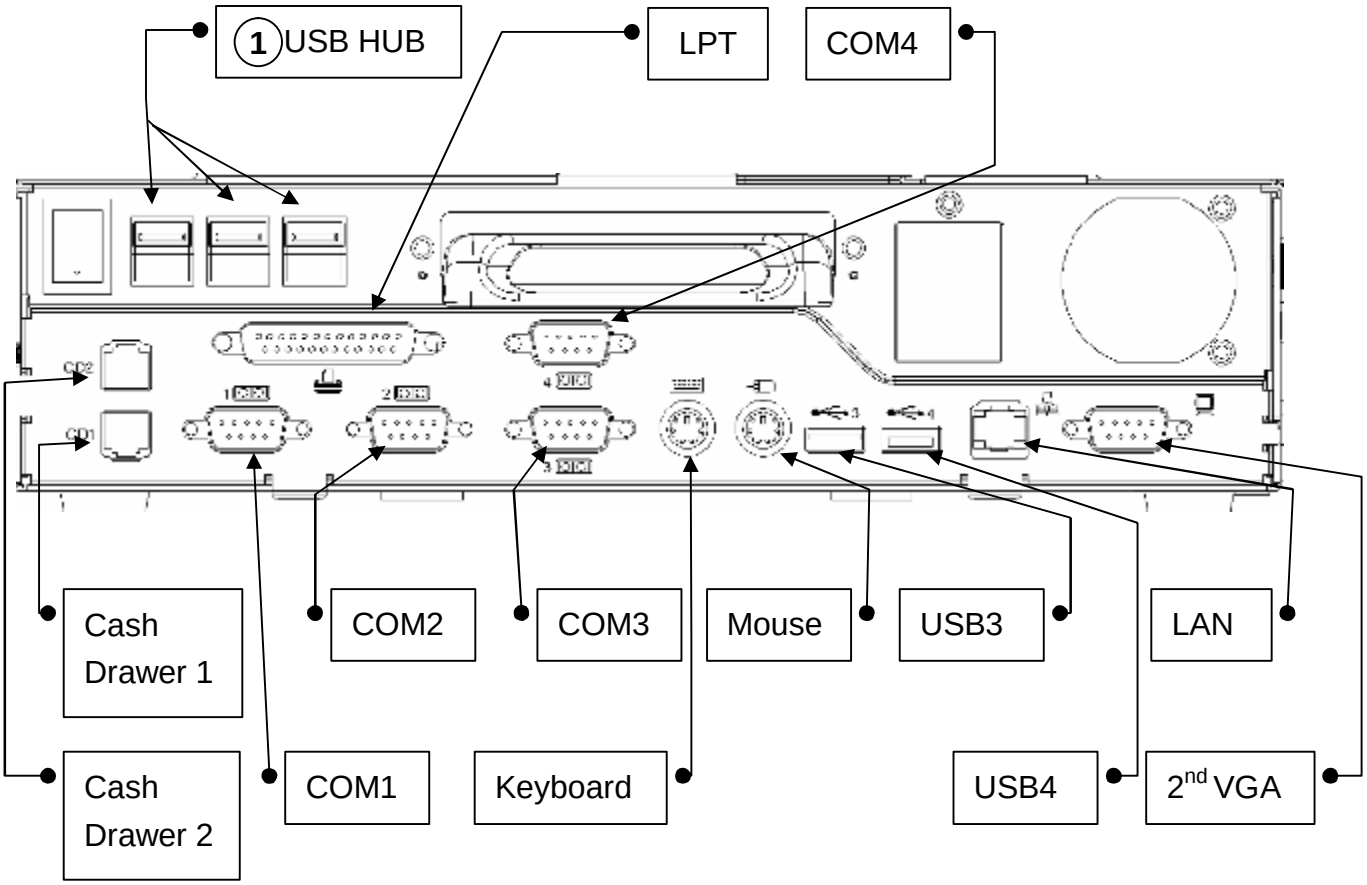
Picture 2:

Depending on your configuration, your system may be equipped with a Mini PCI SCSI card. The I50 connector of the SCSI interface is located at the rear of the system, as shown below in figure ②.



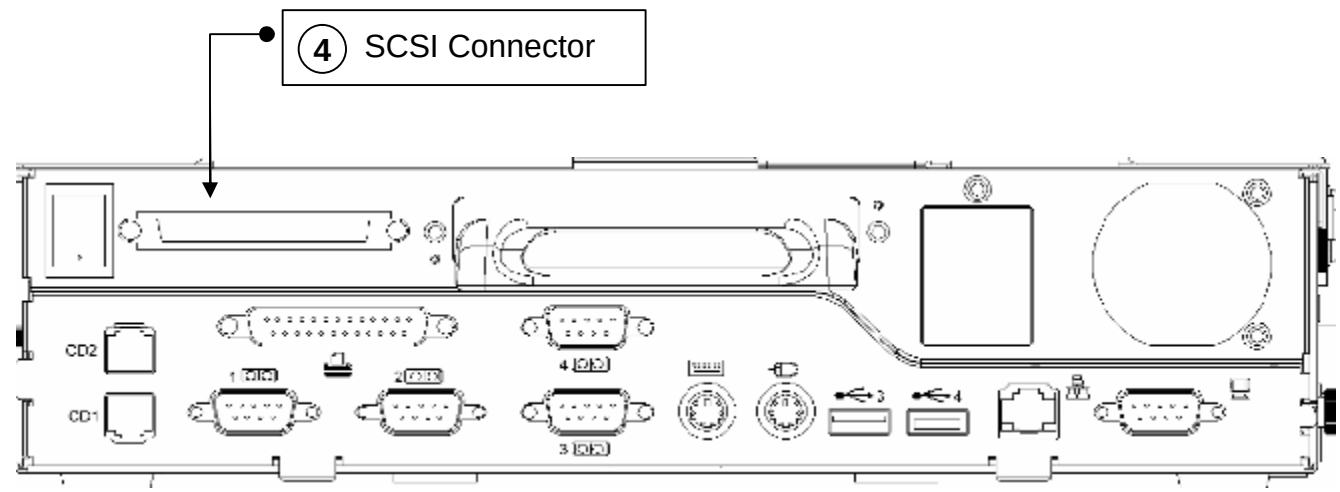
Picture 3:

Depending on your configuration, the USB Hubs are located at the rear of the system, as shown below in figure (3).



Picture 4:

Depending on your configuration, your system may be equipped with a Mini PCI SCSI card. The I50 connector of the SCSI interface is located at the rear of the system, as shown below in figure (4).



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

3. Drivers Installation

3.1 Driver List

B91

Folder/File	File Description
<CD>:\K84X_B91.htm	B91 Driver List
<CD>:\Common\INTEL\Chipset\i9xx	Chipset Driver
<CD>:\Common\INTEL\VGA\i94x	VGA Driver
<CD>:\common\Ac97_codec\Realtek\ALC202A	Audio Driver
<CD>:\Common\Lan_driver\R8139_810x	10/100Mb LAN Driver
<CD>:\Common\Elo_Touch	ELO Touch Screen Driver
<CD>:\Common\POS_Touch	POSTouch Touch Screen Driver
<CD>:\Common\Printer\EPSON BA -T500	EPSON Thermal Printer Driver
<CD>:\Common\Multi-Card Reader\ProGearXM-14U	Pro-Gear XM Media Card Reader Driver
<CD>:\Common\SmartCard	Smart Card Reader Driver

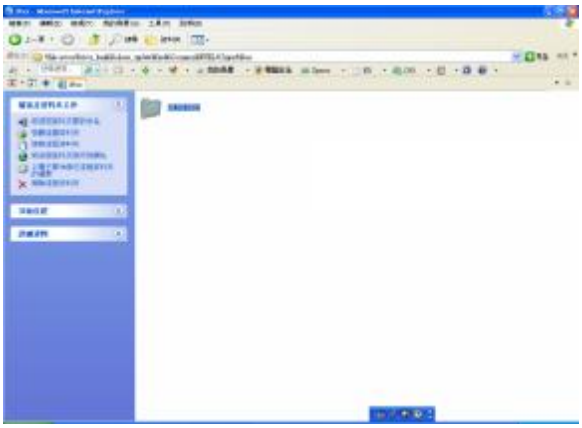
B81

Folder/File	File Description
<CD>:\K84X_B81.htm	B81 Driver List
<CD>:\Common\INTEL\Chipset\i8xx	Chipset Driver
<CD>:\Common\INTEL\VGA\i85x	VGA Driver
<CD>:\Common\Lan_driver\R8139_810x	10/100Mb LAN Driver
<CD>:\Common\INTEL\USB20	USB 2.0 Driver
<CD>:\Common\Elo_Touch	ELO Touch Screen Driver
<CD>:\Common\POS_Touch	POSTouch Touch Screen Driver
<CD>:\Common\Printer\EPSON BA -T500	EPSON Thermal Printer Driver
<CD>:\Common\Multi-Card Reader\ProGearXM-14U	Pro-Gear XM Media Card Reader Driver
<CD>:\Common\SmartCard	Smart Card Reader Driver

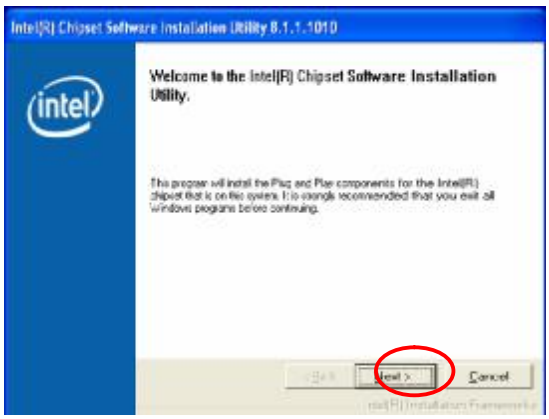
The following procedures are for Windows 2000/XP, other platforms are similar.

3.2 Chipset Driver Installation

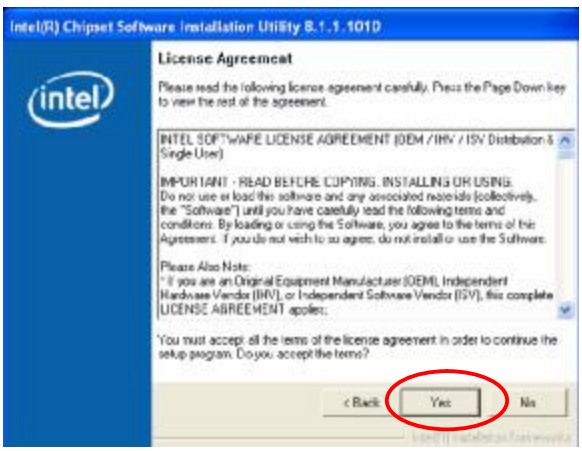
B91



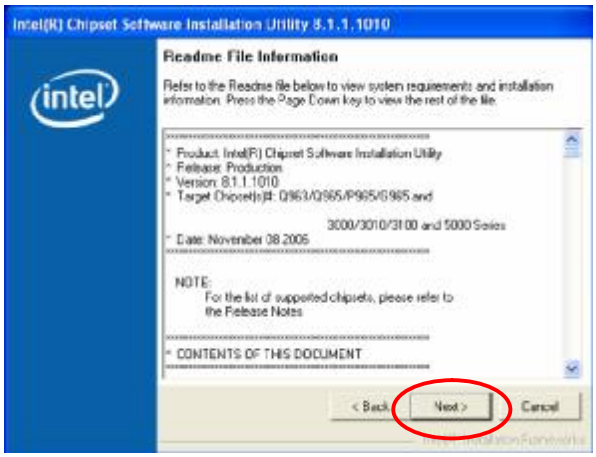
a. Double click “infinst_Autol_v8.1.1013” on the “My Computer” window.



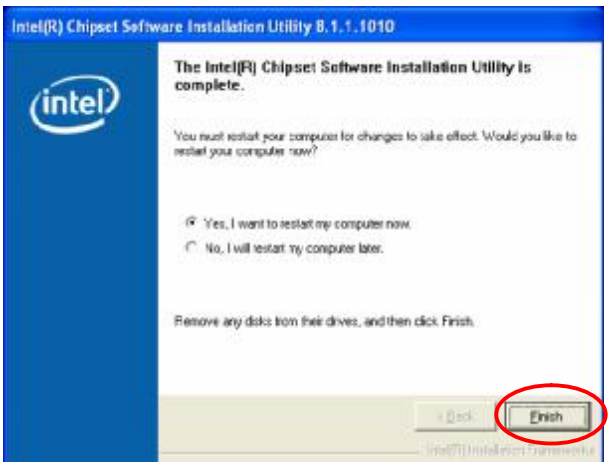
b. Click the “Next” button on the “Welcome” window.



c. Click the “Yes” button on the “License Agreement” window.



d. Click the ”Next” button on the “Readme Information” window.

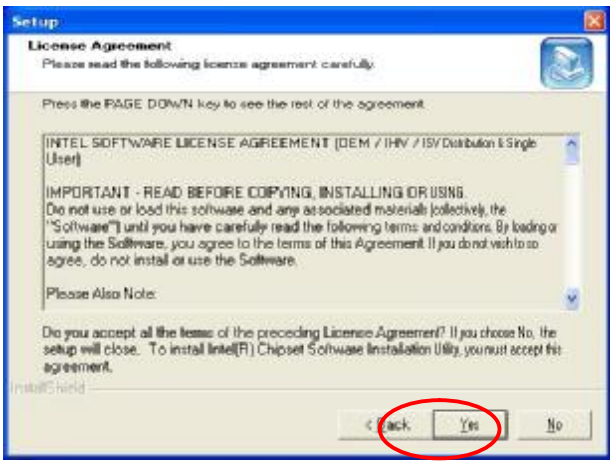


e. Click the “Finish” button and restart your system.

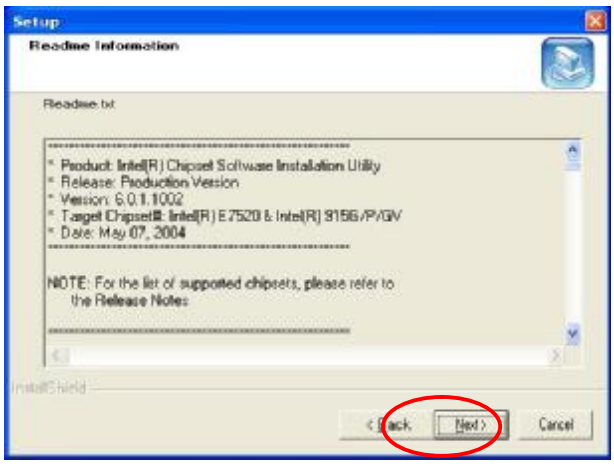
B81

a. Double click “infinst_enu_6.0.1002” on the “My Computer” window.

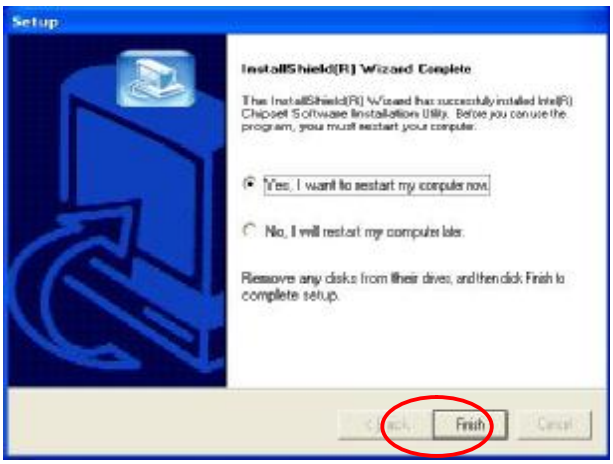
b. Click the “Next” button on the “Welcome” window.



c. Click the “Yes” button on the “License Agreement” window.



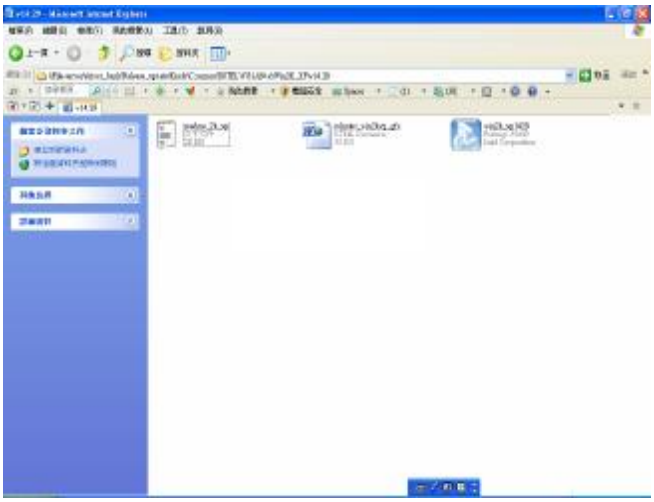
d. Click the ”Next” button on the “Readme Information” window.



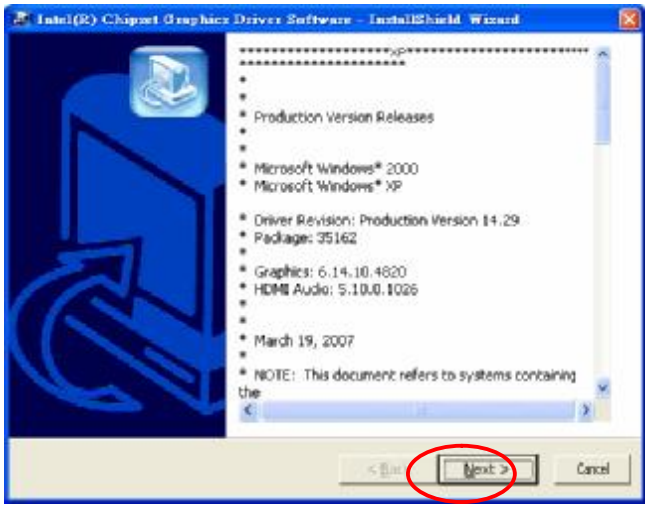
e. Click the “Finish” button and restart your system.

3.3 VGA Driver Installation

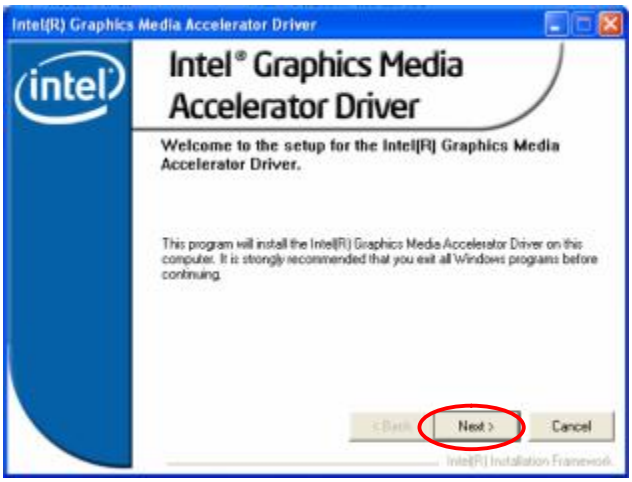
B91



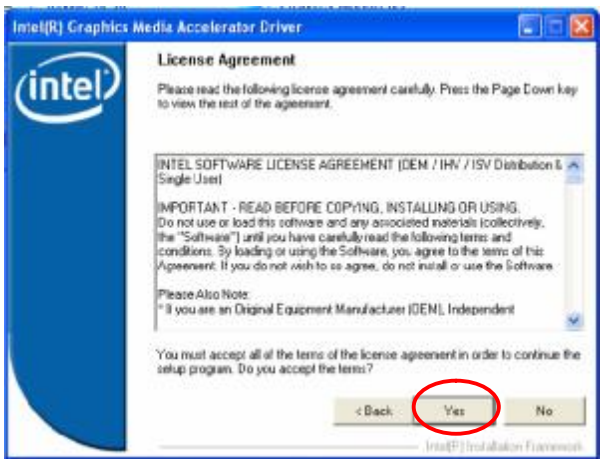
a. Double click “win2k_xp14.29” on the “My Computer” window.



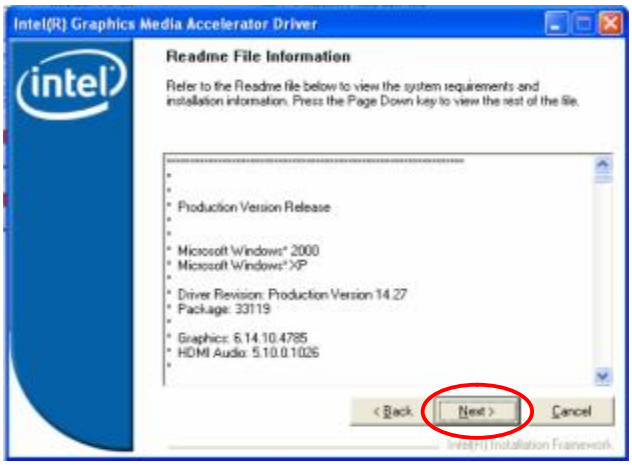
b. Click the “Next” button on the “Welcome” window.



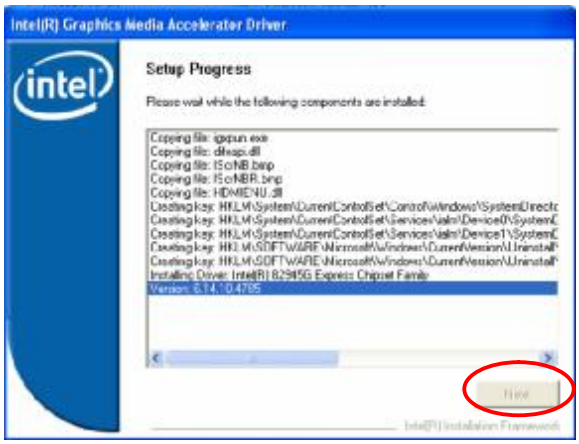
c. Click the”Next” button on the “Welcome window”.



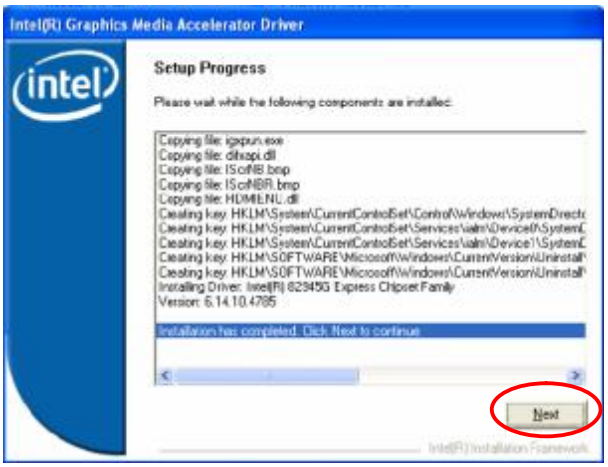
d. Click the ”Yes” button on the “License Agreement” window.



e. Click the ”Next” button on the “Readme Information” window.



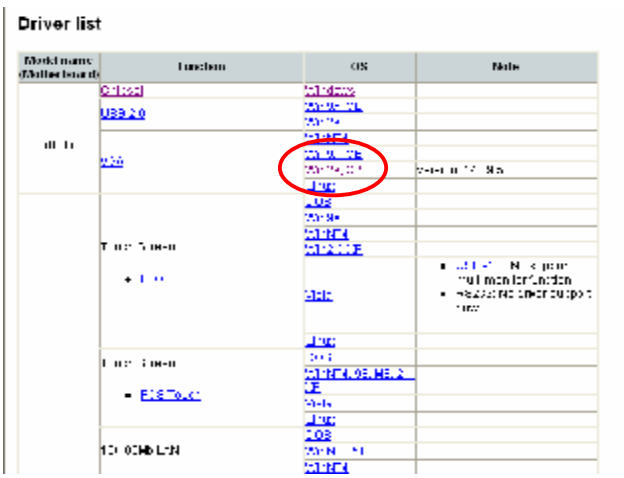
f. Click the ”Next” button on the “Setup Progress” window.



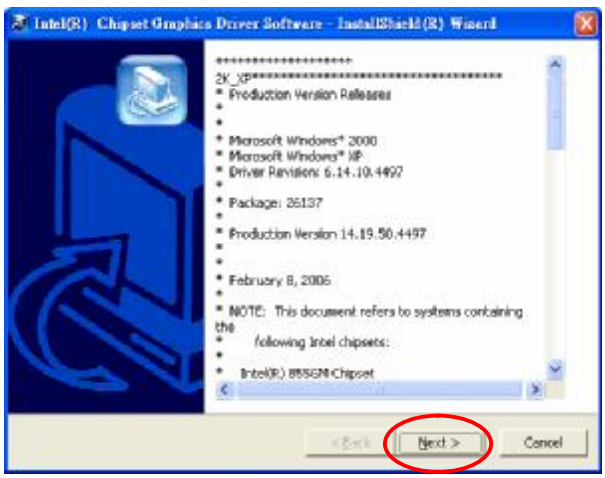
g. Click the ”Next” button on the “Setup Progress” window.

h. Click the ”Finish” button and restart your system.

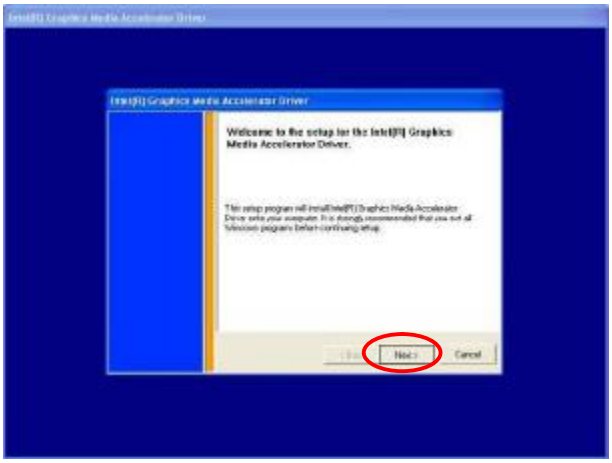
B81



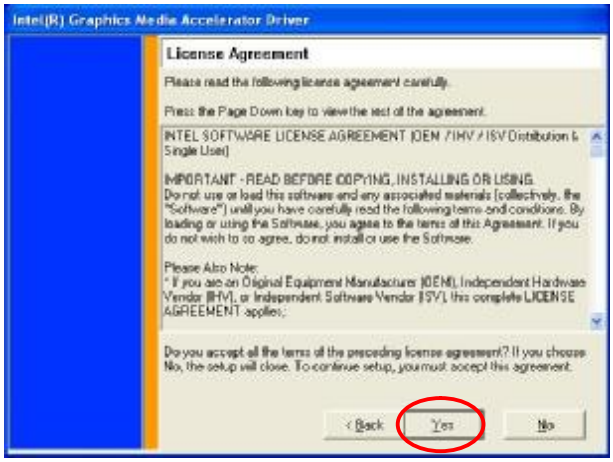
a. Double click “win2k_xp14.19.50” on the “My Computer” window.



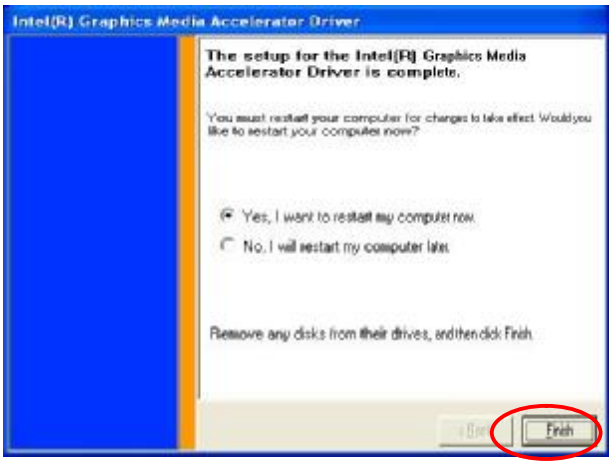
b. Click the “Next” button on the “Welcome” window.



c. Click the ”Next” button on the “Welcome window”.

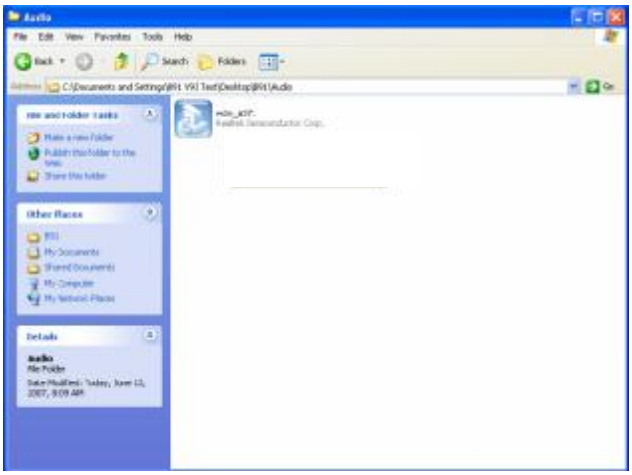


d. Click the ”Yes” button on the “License Agreement” window.



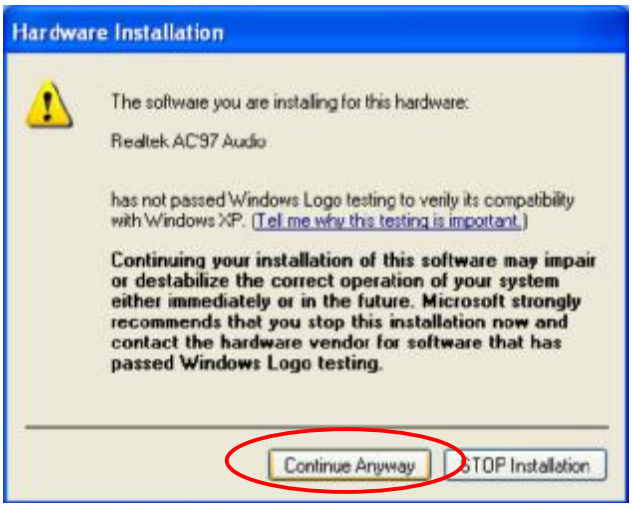
e. Click the ”Finish” button and restart your system.

3.4 Audio Driver Installation

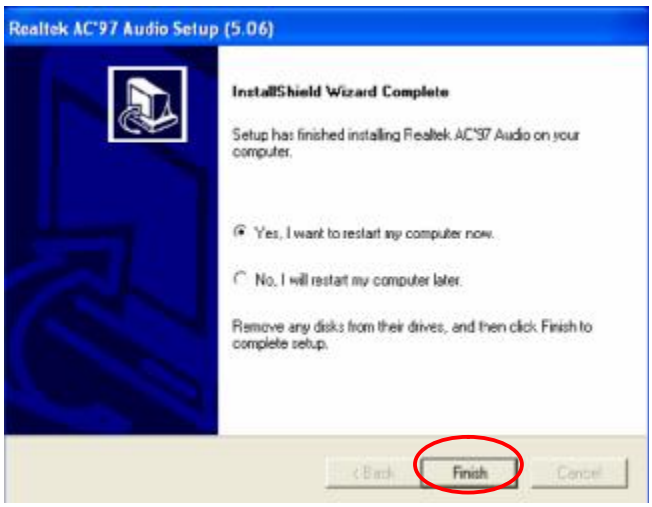


a. Double click “wdm_a371” on the “My Computer” window.

b. Click the “Next” button on the “Welcome” window.

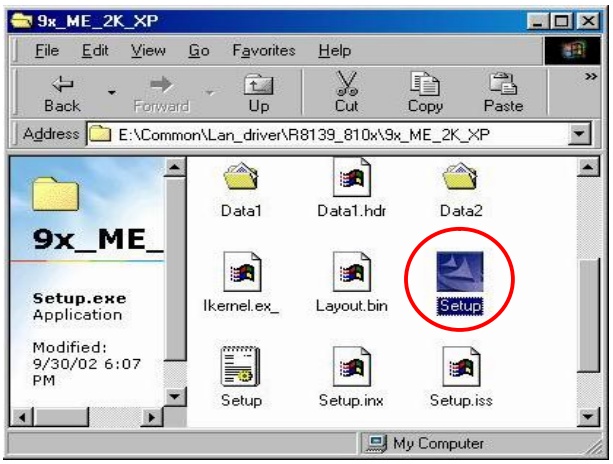


c. Click the ”Continue Anyway” button to install the driver

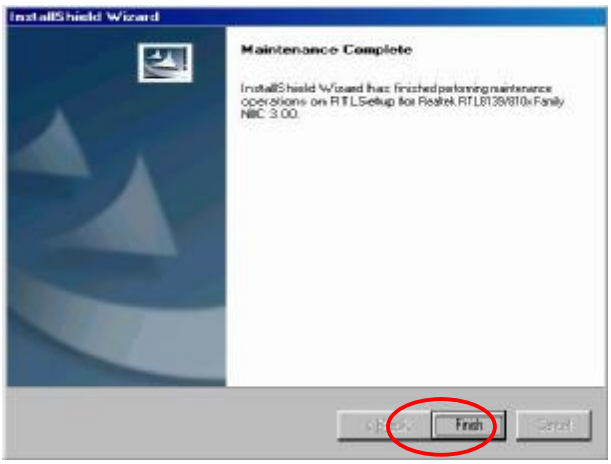


d. Click the”Finish” button and restart your system.

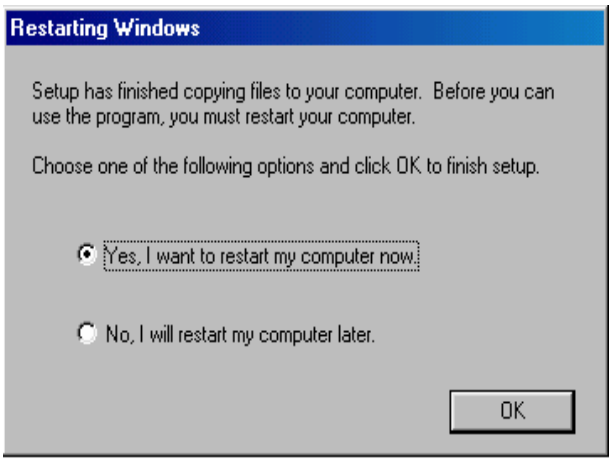
3.5 LAN Driver Installation



a. Double click the"Setup" on the "My Computer" window.



b. Click the "Finish" button on the "Maintenance complete" window.

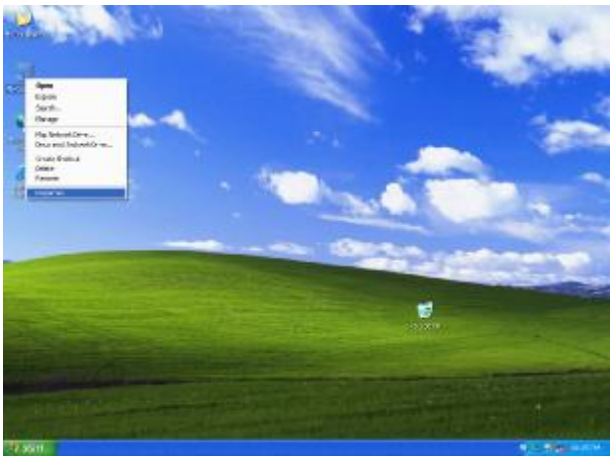


c. Click the"OK" button and restart your system.

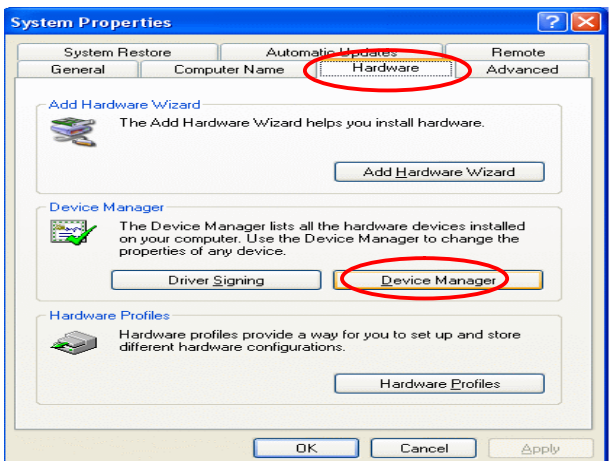
3.6 USB2.0 Driver Installation

OS Requirements

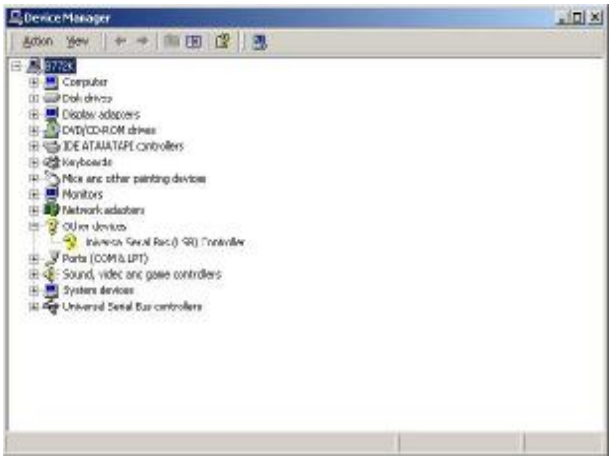
OS	USB 2.0 requirements
Windows XP	USB 2.0 drivers are provided in Service Pack 1 (SP1) for Windows XP, which is available through Windows Update.
Windows 2000	USB 2.0 drivers are available through Windows Update or Service Pack 4.
Windows 98SE/Me	USB 2.0 drivers are available on the Intel developer site.
Windows 98 (Retail)	Developers and OEMs should contact Orange Ware. For end-users, if your device does not ship with Windows 98 drivers, contact your device or system manufacturer. If USB 2.0 drivers are not available, your device will operate at USB 1.1 speeds
Linux	USB 2.0 support is available in kernel 2.4.19 or later development kernels, or in the 2.4.19 or later production kernel. More information.

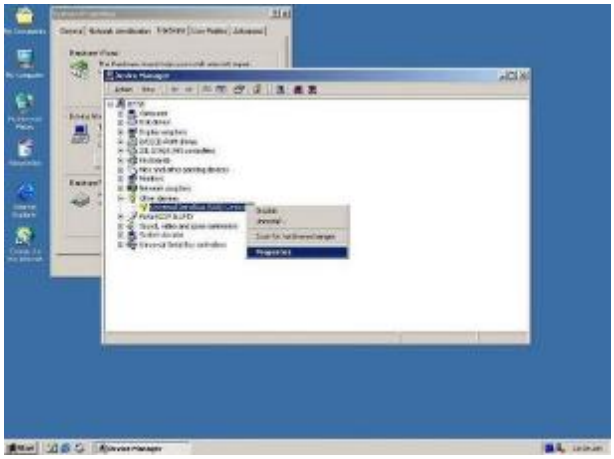


a. Right click “My Computer” on the desktop and select “properties”.



b. Select “Hardware” **à** ”Device Manager” on system properties.



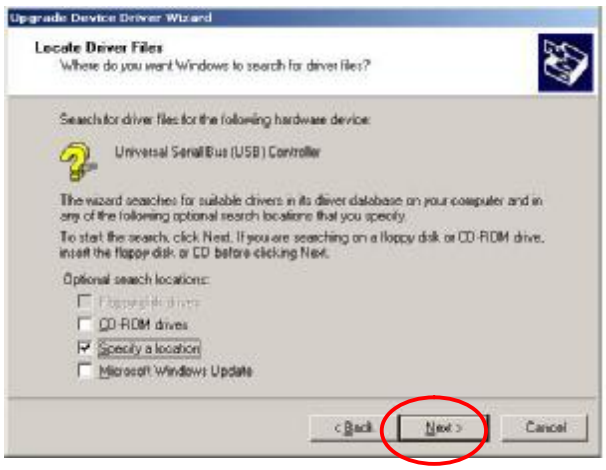


c. Select" Other Devices" **à** "Universal Serial Bus (USB) Controller" **à** "Properties" in the Device Manager.

d. Select "Device" **à** "Update Driver…".

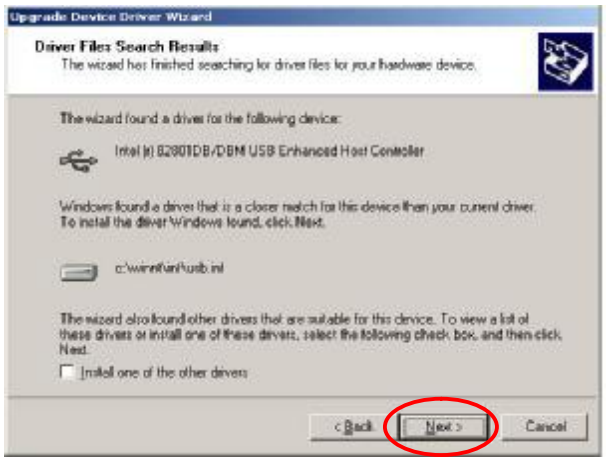
e. Click the "Next" button on the "Welcome" window.

f. Select "Search for a suitable…"and click the "Next" button on the "Install Hardware Device Drivers" window.



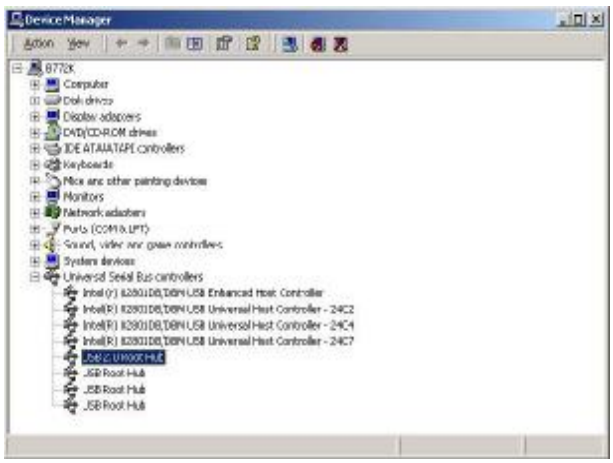
g. Select "Specify a location" and click the "Next" button on the "Locate Driver Files" window.

h. Press “Browse” to select the driver and then click the “OK” button to go to the next page.



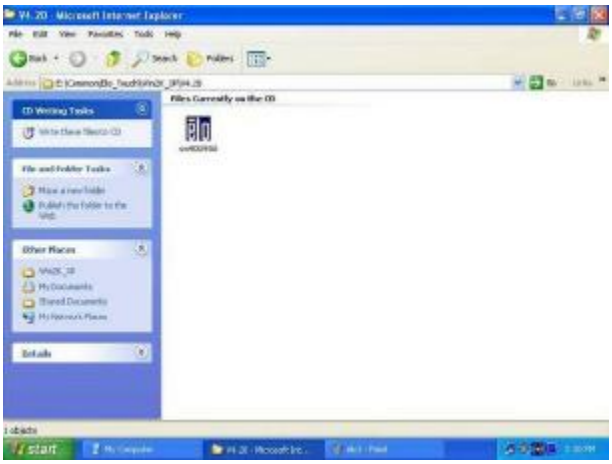
i. Click the “Next” button on “The Driver Files Search Results” window.

j. Click the “Finish” button to complete this process.



k. Finished.

3.7 ELO Touch Screen Driver Installation



a. Click”sw500930” on the “My Computer” window.

b. Click the “OK” button on the WinZip Self-Extractor “Welcome” window.

c. Click the ”Unzip” button on the “WinZip Self-Extractor” window.

d. Select “Install Serial Touchscreen Drivers” and then click the “Next” button on the “Welcome” window.

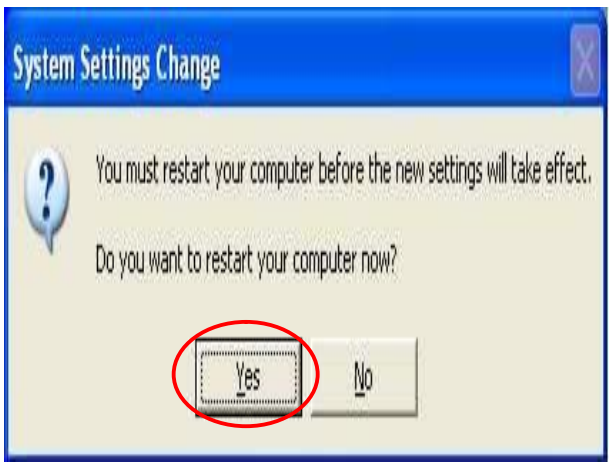
e. Click the “Yes” button on the “License Agreement” window.

f. Click the “Next” button on the on the “Select the COM ports…” window.

g. Select “COM5” and click the “Next” button on the “Choose the COM ports…” window.

h. Click the “Next” button on the “You have selected the COM ports…” window.

i. Click the “Finish” button on the “Setup Complete” window.

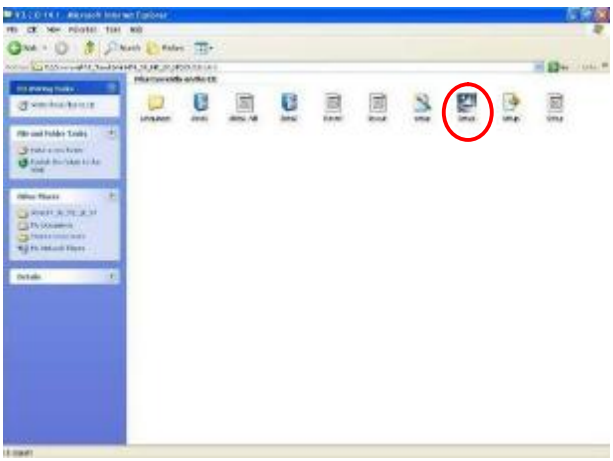


j. Click the “Yes” button and restart your system.

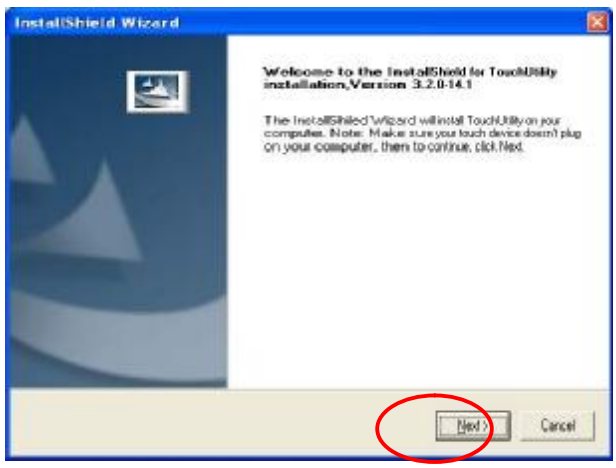
k. After the computer has restarted, click “Align” on the Elo Touchscreen Properties window.

l. Follow the instruction on the screen to calibrate the touch panel.

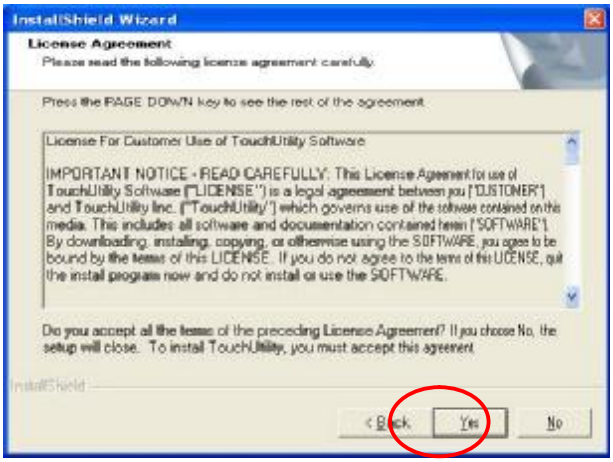
3.8 POSTouch Touch Screen Driver Installation



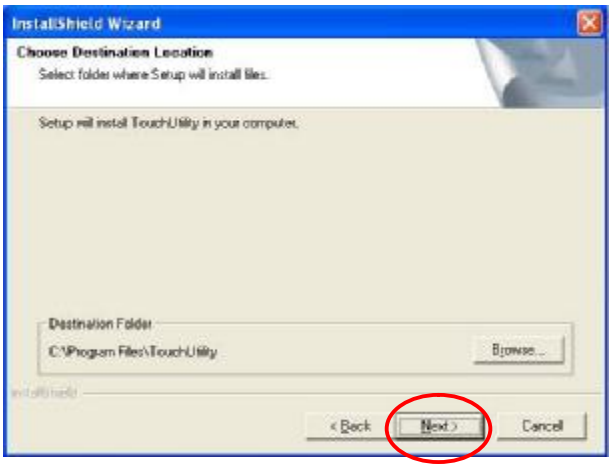
a. Double click the ”Setup” on the “My Computer” window.



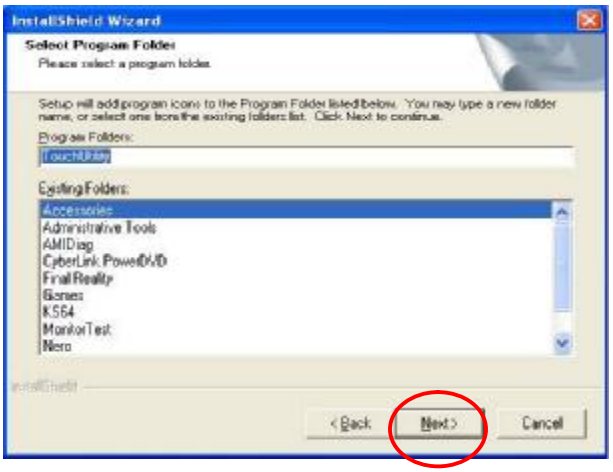
b. Click the “Next“ button on the “Welcome window”.



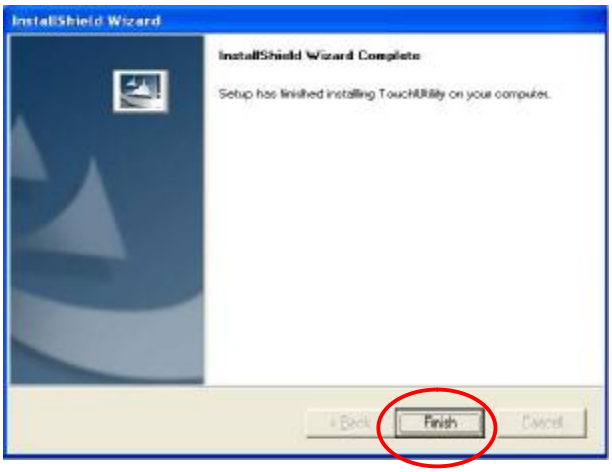
c. Click the ”Yes” button on the “License Agreement” window.



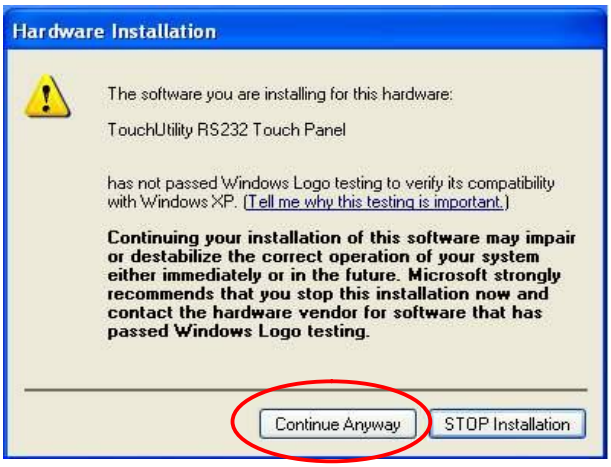
d. Click the ”Next” button on the “Choose Destination Location” window.



e. Click the “Next” button on the “Select Program Folder” window.



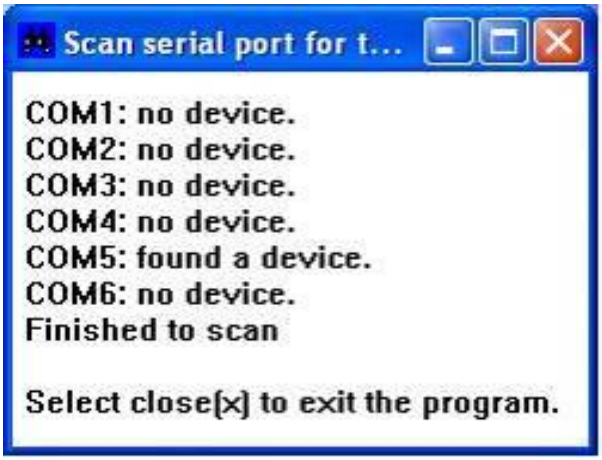
f. Click the “Finish” button on the “Install Shield Wizard Complete” window.



g. Click the “Continue Anyway “ button on the “Hardware Installation” window.

h. Select the “Yes” and click the ”OK” button and restart your system.

i. After the computer has restarted, select “Programs **à** TouchUtility **à** Scan RS232 Touch Device”.

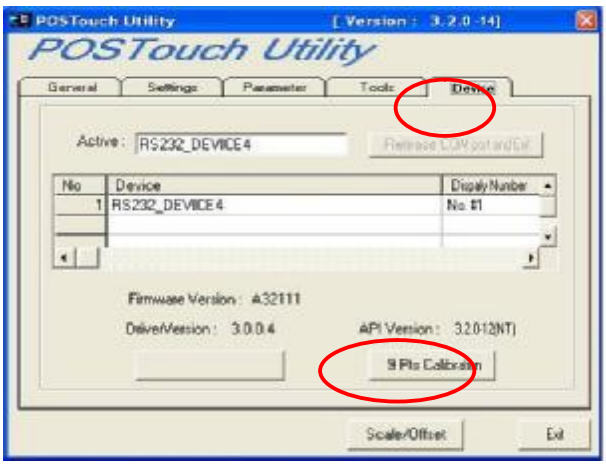


j. The serial ports are scanned for a touch device.

k. Select “Programs **à** TouchUtility **à** Touch Utility”.

l. Click “Scale / Offset” on the POSTouch Utility window.

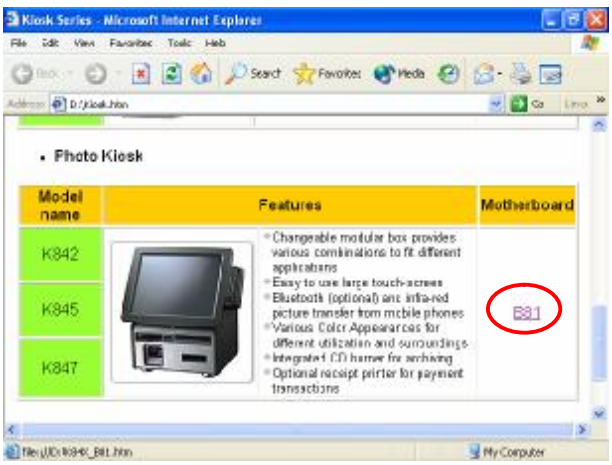
m. Follow the instructions on the screen to do a three point calibration of the touch panel.



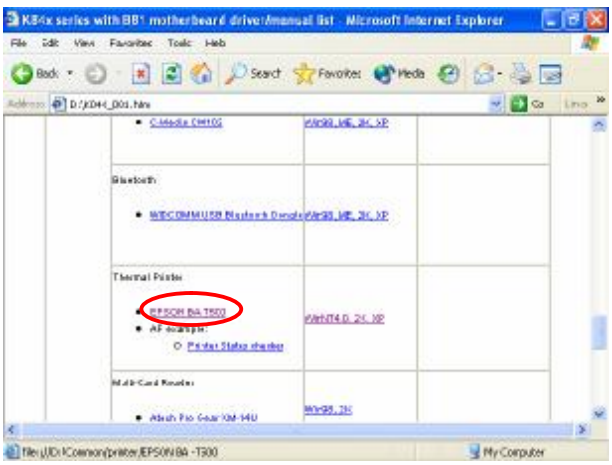
n. Select “Device **à** 9Pts Calibration” on the POSTouch Utility window.

o. Follow the instructions on the screen to do a nine point calibration of the touch panel.

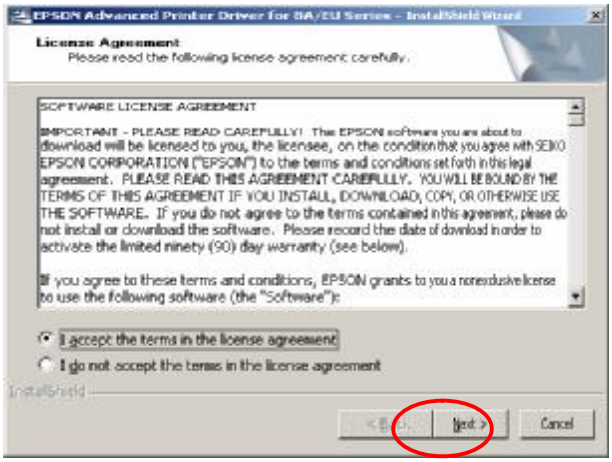
3.9 EPSON-BA-500 Thermal Printer Driver Installation



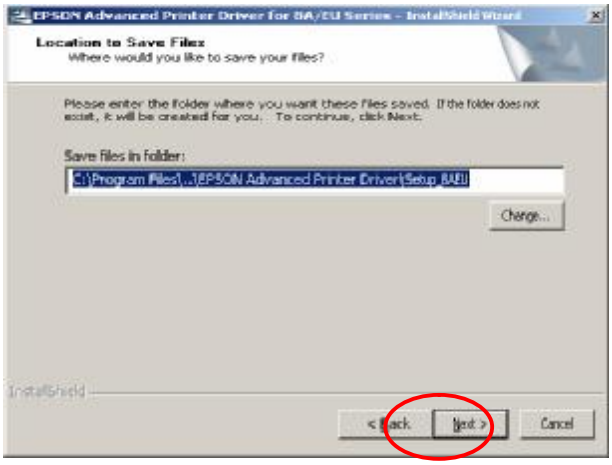
a. Click on the “B81” link.



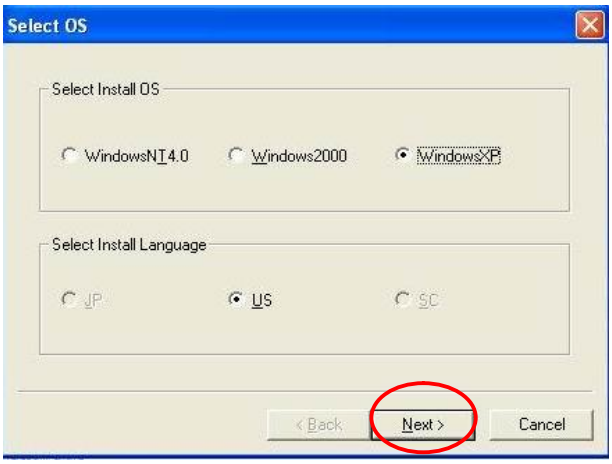
b. Click on the “EPSON-BA-T500” link on the window.



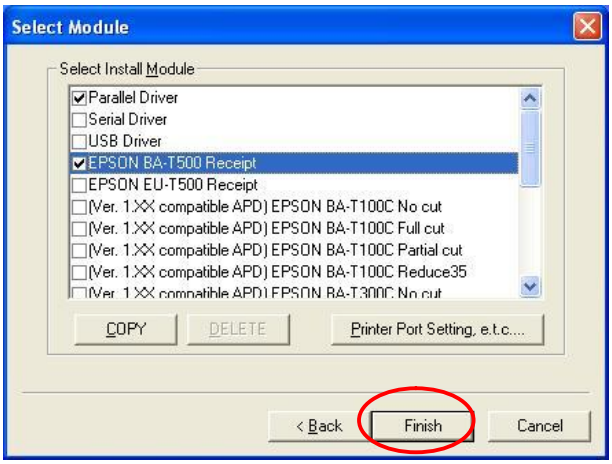
c. Select “I accept…” and click the “Next” button on the “License Agreement” window.



d. Click the ”Next” on the “Location to Save Files” window.



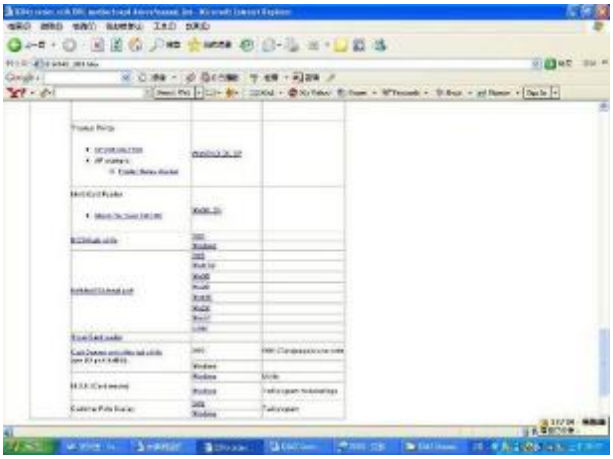
e. Select your Operating system and click “Next” on the “Select OS window”.



f. Select “Parallel Driver” and “EPSON BA-T500” Receipt and click “Finish” on the “Select Module” window.

g. Click the ”Yes” button and restart your system

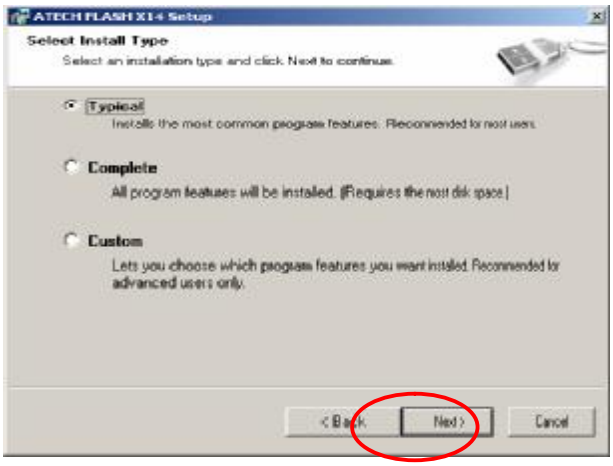
3.10 ProGearXM-14U Media Card Driver Installation



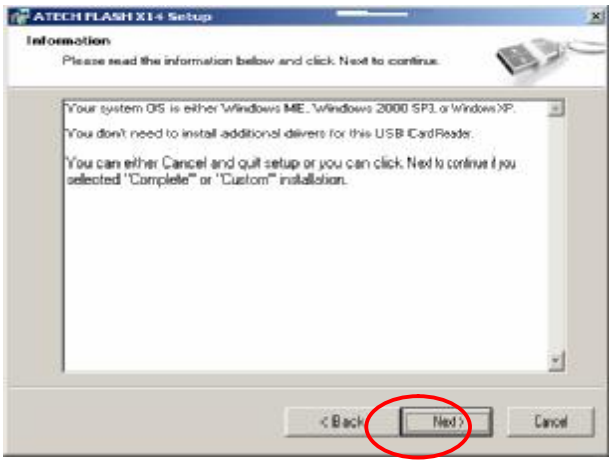
a. Click the “ATECH PRO GEAR x14” link in the window.

b. Click on the ”SETUP” icon.

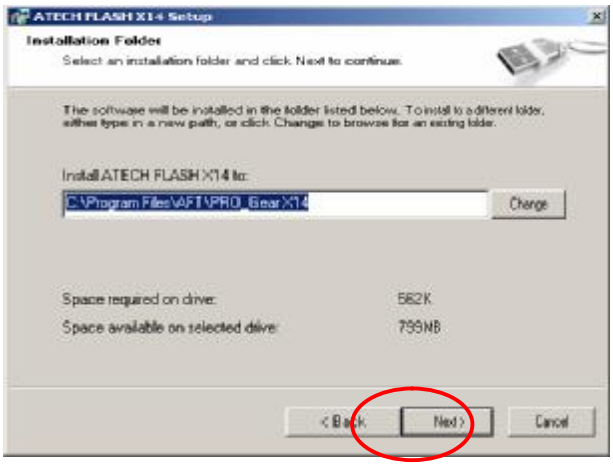
c. Click the “Next “button on the “Welcome window”.



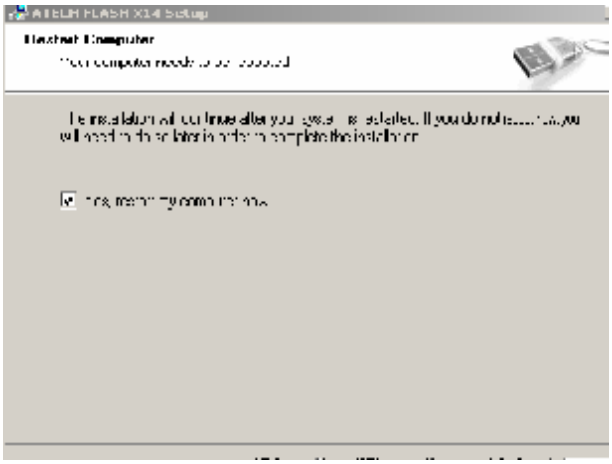
d. Select “Typical “and click “Next” on the “Select Install Type” window.



e. Click the “Next” button on the “Information” window.



f. Click “Next” button on the “Installation Folder” window.

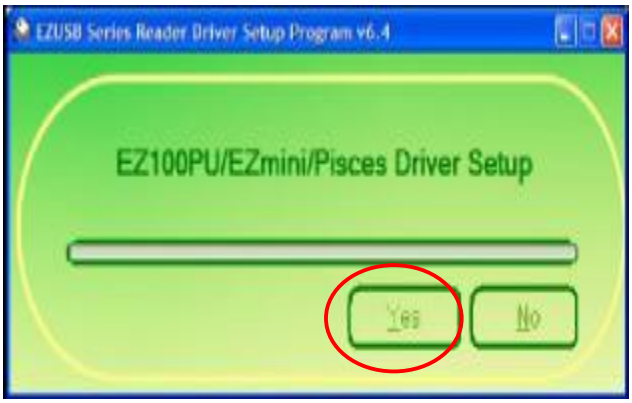


g. Click the ”Yes” button and restart your system.

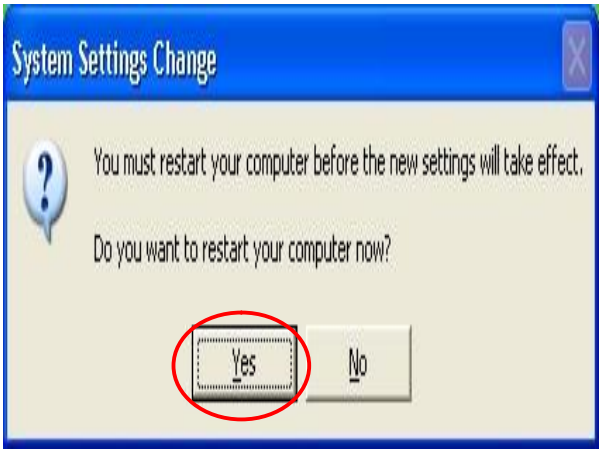
3.11 Smart Card Reader Driver Installation

a. Plug the EZUSB Smart Card Reader into your computer and Click the "Cancel" button if the "Found New Hardware Wizard" dialog appears.

b. Choose the “ Smart Card Reader”. Click “ Win2K, XP” on the window.



e. Click the "Yes" button on “EZUSB Series Reader Driver Setup Program v.6.4” window.



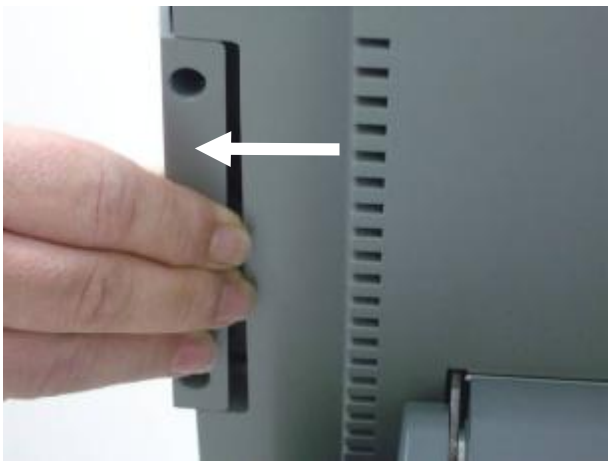
f. Click the ”Yes” button and restart your system.

4. Peripherals Installation

4.1 Magnetic Card Reader / I-Button Installation

The module is tested and can be supplied at your request. This module is removed during transportation and can be connected by the user.

a. Remove the screws (2) of the plastic cover on the right side of the display.



b. Slide the cover out as shown in the picture.

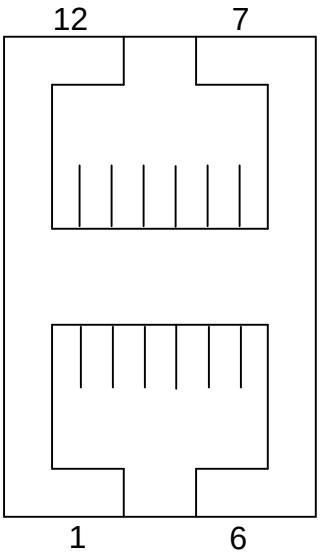
c. Connect the module connector on the right side of the system.

d. Slide the module into position as shown in the picture, and fasten it to the display housing by tightening the screws (2).

4.2 Cash Drawer Installation

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

4.2.1 Cash Drawer Pin Assignment



Pin	Signal	Pin	Signal
1	GND	7	GND
2	DOUT bit0	8	DOUT bit2
3	DIN bit0	9	DIN bit1
4	12V / 24V	10	12V / 24V
5	DOUT bit1	11	DOUT bit3
6	GND	12	GND

4.2.2 Cash Drawer Controller Register

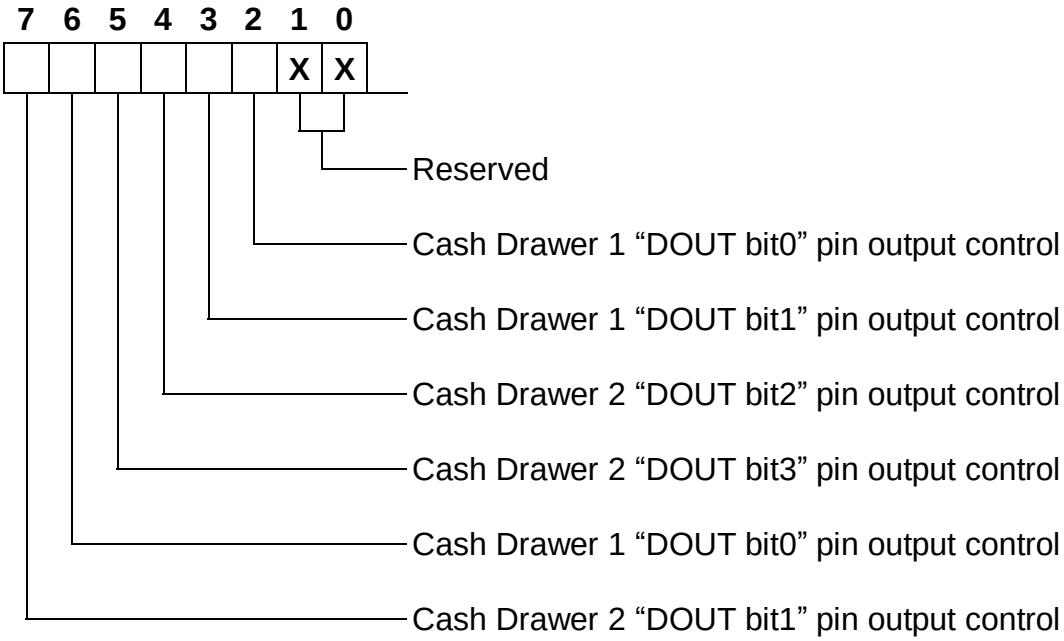
The Cash Drawer Controller use two I/O addresses to control the Cash Drawer –
The Cash Drawer Control Register and the Cash Drawer Status Register.

4.2.2.1 Cash Drawer Control Register and Cash Drawer Status Register

Register Location: I/O port 4B8h
Attribute: Write / Read
Size: 8bit

B91

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



Bit 7: Cash Drawer2 “DIN bit2” pin input status
= 1: the Cash Drawer2 closed or no Cash Drawer
= 0: the Cash Drawer2 opened
Bit 6: Cash Drawer1 “DIN bit0” pin input status
= 1: the Cash Drawer1 closed or no Cash Drawer
= 0: the Cash Drawer1 opened
Bit 5: Cash Drawer2 “DOUT bit3” pin output control.
= 1: Opening the Cash Drawer2
= 0: Allow close the Cash Drawer2.
Bit 4: Cash Drawer2 “DOUT bit2” pin output control.
= 1: Opening the Cash Drawer2.
= 0: Allow close the Cash Drawer2.
Bit 3: Cash Drawer1 “DOUT bit1” pin output control.
= 1: Opening the Cash Drawer1
= 0: Allow close the Cash Drawer1
Bit 2: Cash Drawer1 “DOUT bit0” pin output control.
= 1: Opening the Cash Drawer1
= 0: Allow close the Cash Drawer1

Bit 1: Reserved
Bit 0: Reserved

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

B81

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

Bit 7: Reserved.
Bit 6: Reserved.

Bit 5: Cash Drawer2 “DIN bit1” pin input status.
= 1: the Cash Drawer2 closed or no Cash Drawer.
= 0: the Cash Drawer2 opened.
Bit 4: Cash Drawer1 “DIN bit0” pin input status.
= 1: the Cash Drawer1 closed or no Cash Drawer.
= 0: the Cash Drawer1 opened.
Bit 3: Cash Drawer2 “DOUT bit3” pin output control.
= 1: Opening the Cash Drawer2
= 0: Allow closing the Cash Drawer2
Bit 2: Cash Drawer2 “DOUT bit2” pin output control.
= 1: Opening the Cash Drawer2
= 0: Allow closing the Cash Drawer2
Bit 1: Cash Drawer1 “DOUT bit1” pin output control.
= 1: Opening the Cash Drawer1
= 0: Allow closing the Cash Drawer1
Bit 0: Cash Drawer1 “DOUT bit0” pin output control.
= 1: Opening the Cash Drawer1
= 0: Allow closing the Cash Drawer1
Note: Please follow the Cash Drawer control signal design to control the Cash Drawer.

4.2.3 Cash Drawer control command example

Use Debug.EXE program under DOS or Windows98

B91

Command	**Cash Drawer**
O 48C 01	Opening
O 48C 00	Allow to close
Ø Set the I/O address 4B8h bit2 =1 for opening the Cash Drawer1 by “DOUT bit0” pin control. **Ø** Set the I/O address 4B8h bit2 = 0 to allow closing Cash Drawer1.	

Command	**Cash Drawer**
I 48C	Check status
Ø The I/O address 48Ch bit6 =1 means the Cash Drawer1 is opened or not exist. **Ø** The I/O address 48Ch bit6 =0 means the Cash Drawer1 is closed.	

B81

Command	Cash Drawer
O 4B8 01	Opening
O 4B8 00	Allow to close

- Ø Set the I/O address 4B8h bit0 =1 for opening the Cash Drawer1 by “DOUT bit0” pin control.
- Ø Set the I/O address 4B8h bit0 = 0 to allow closing Cash Drawer1.

Command	Cash Drawer
I 4B8	Check status

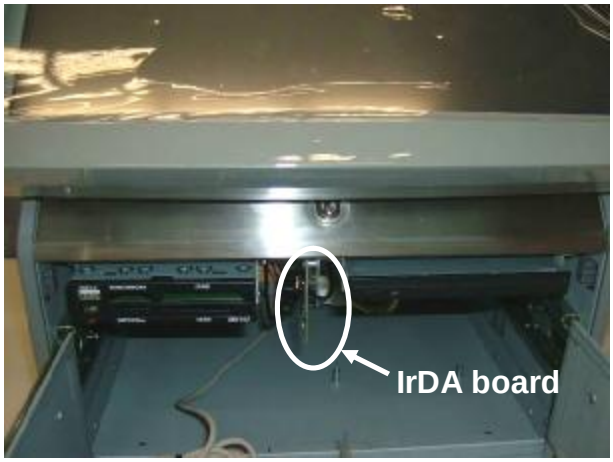
- Ø The I/O address 4B8h bit4 =1 means the Cash Drawer1 is closed or no Cash Drawer.
- Ø The I/O address 4B8h bit4 =0 means the Cash Drawer1 is open.

4.3 Wireless LAN and Bluetooth USB Dongles Installation

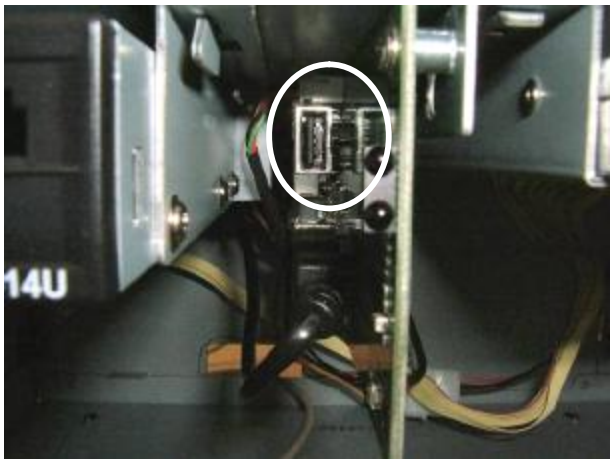
The USB Wireless LAN and USB Bluetooth Dongles are connected to the USB connector which is on the IrDA board.

a. Use the key to unlock the main modular box.

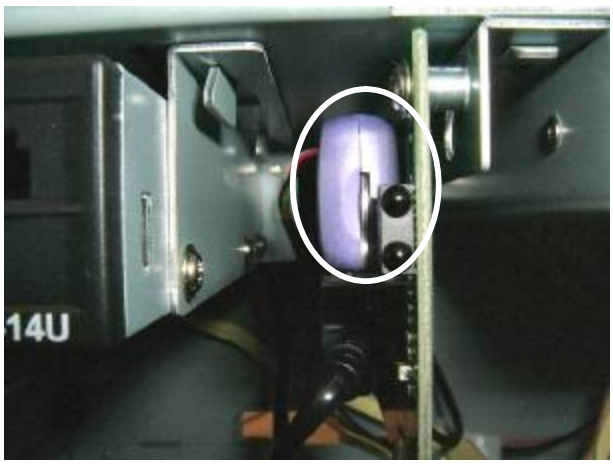
b. Open the main modular box.



c. The IrDA board is located to the right of the Media Card Reader.



d. Connect the USB dongle device (Wireless LAN or Bluetooth) to the USB connector.



e. Installed Bluetooth USB dongle.
The Wireless LAN Dongle is similar and is installed in the same way (no picture shown).

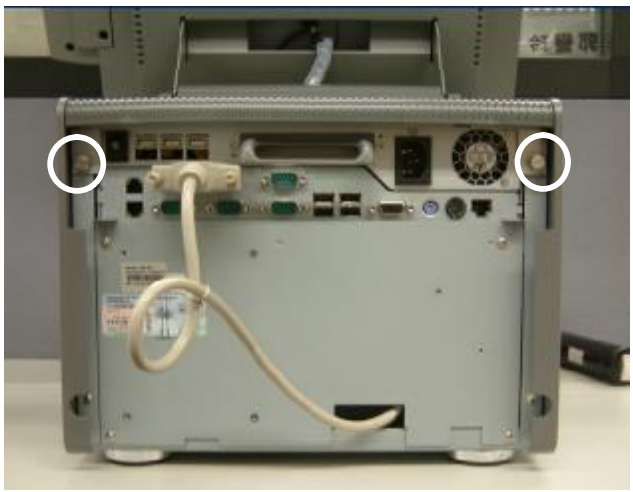
5. System Disassembly

The HDD, CPU + Cooler, Memory and Mini PCI SCSI Card can be replaced by opening the chassis box, which is located in the top part of the main modular box.

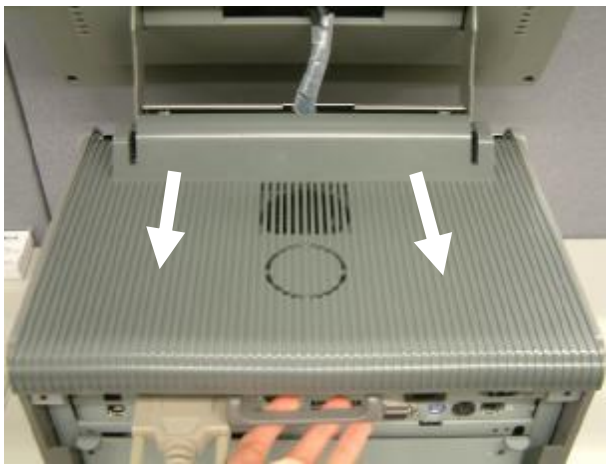
The Power Supply,

Media Card Reader, IrDA module, Slim Combo modules are located in the bottom part of the main modular box.

5.1 Opening the Chassis Box

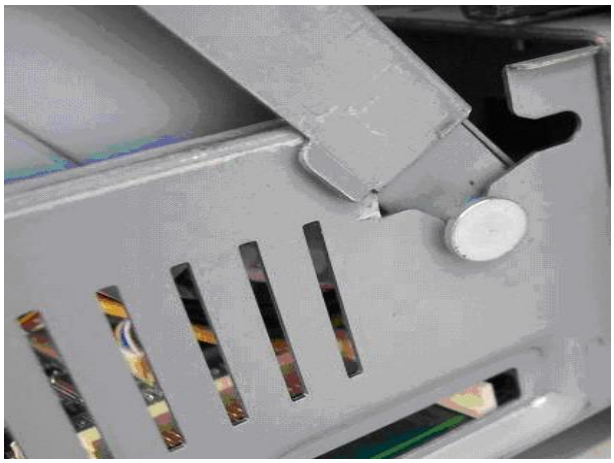


a. Remove the thumbscrews (2).



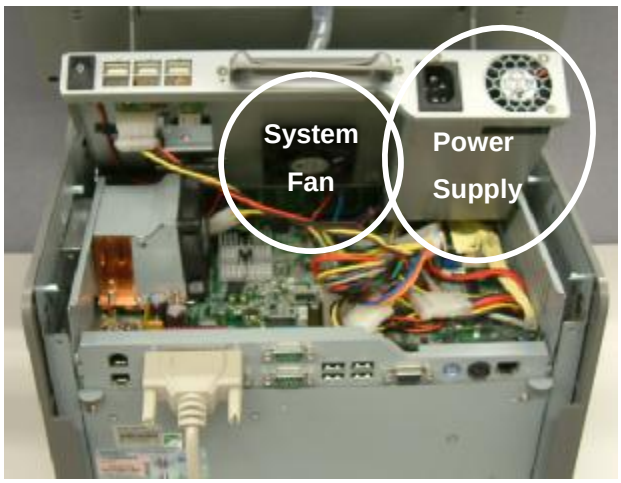
b. Slide the cover towards you and remove it from the main modular box.

c. Pull the chassis box cover towards you by the handle, and lift it up.



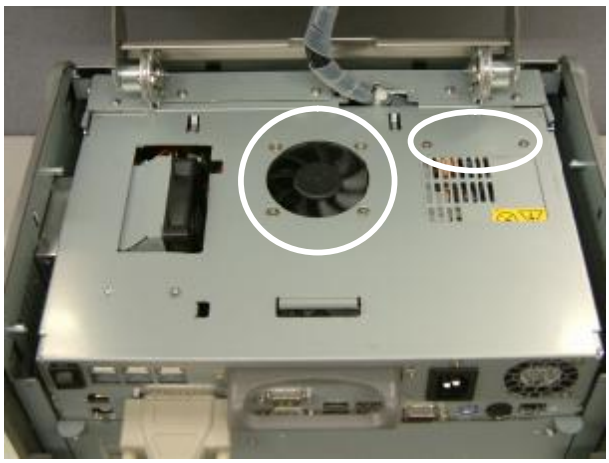
d. Fix the chassis box cover in the open position as shown in the picture.

5.2 Replacing the Power Supply and the System Fan



a. The System Fan is on the left side and the power supply is on the right side of the chassis cover.

b. Disconnect the cables (2) as shown in the picture.



c. To remove the power supply, remove the screws (2) at the back as shown in the picture. To remove the System Fan, remove the screws (4) in the middle of the chassis box cover.

5.3 Installing the Mini PCI Card

a. The Mini PCI Card slot is located at the right front side of the mainboard.

b. Install the Mini PCI Card by inserting it into the slot**.**

c. Push the card down gently until the two metal latches on the side of the slot click into place.

5.4 Replacing the Memory

The memory slots are located at the rear of the motherboard. To access the slots, it is necessary to remove the chassis box cover. Open the chassis box as described in chapter 5.1.

a. Lift the chassis box cover to disengage it from the chassis box.

b. Place the chassis box cover in front of the box, taking care not to stretch the cables which are still connected to it.

c. The memory slots are located at the back of the mainboard. To remove the memory module, use your finger to push the DIMM slot ejector clips into the down position. Remove the memory module from the slot.

d. Installing a memory module:

Do not touch the gold colored contacts as this can damage the Ensure memory that the notches in the memory module line up with the DIMM slot keys.

Gently but firmly push the memory into the slot until it is seated fully. The ejector clips should rise to the vertical position and click in place.

5.5 Replacing the Motherboard Tray

Open the chassis box as described in chapter 5.1.

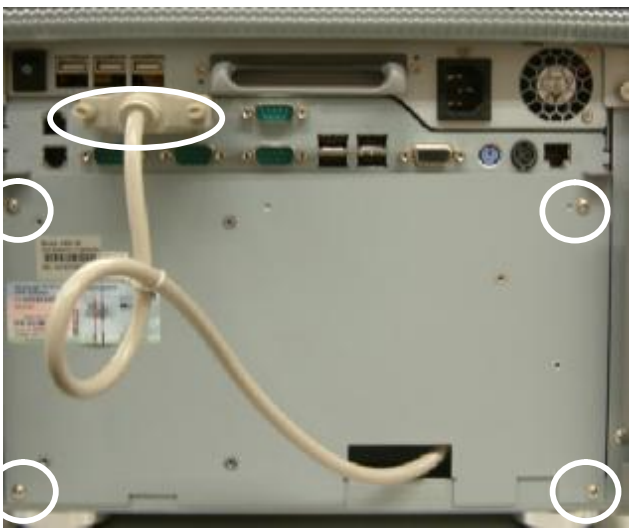
a. Lift the chassis box cover to disengage it from the chassis box.

b. Disconnect the cables (6) to release the chassis box cover from the system

c. Disconnect all cables (4)

d. Remove the screws(2) to release the side covers(2) from the system

e. Remove the thumb screw (1)



f. Remove the printer cable (1) and remove the screws (4) to remove the main modular box back panel.

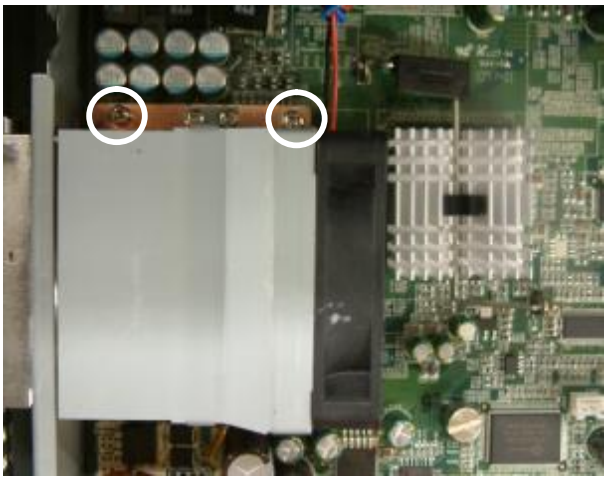
g. Pull the cables one by one from the modular box as shown in the photo

h. Slide the motherboard tray towards you and remove it.

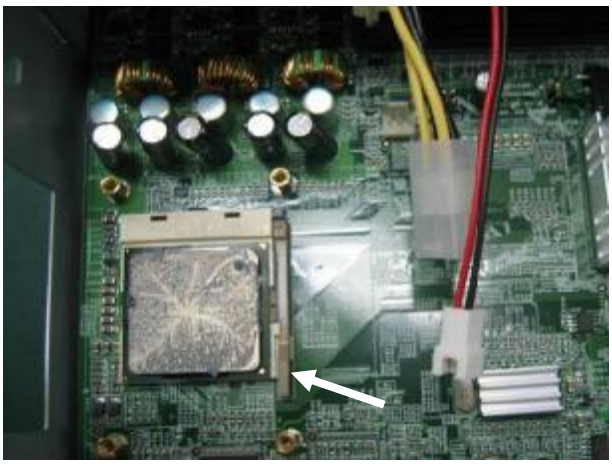
5.6 Replacing the CPU and the Cooler

a. Disconnect the fan cable (1) from the mainboard.

b. Remove the screws (2) as shown in the picture.

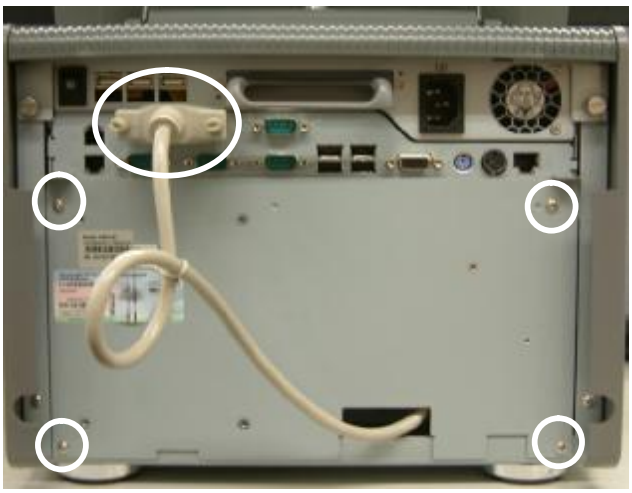


c. Remove the screws (2) to remove the cooler.

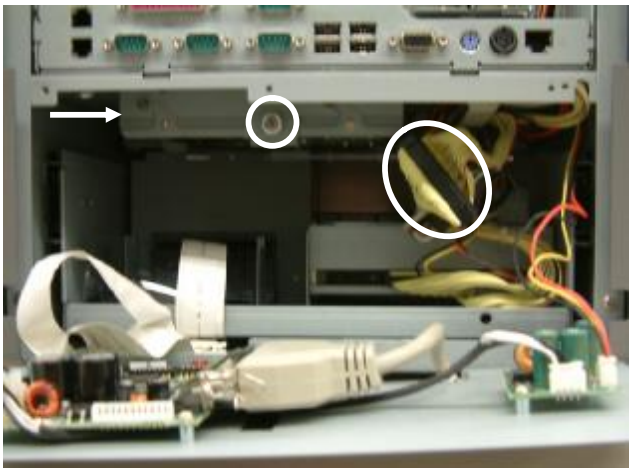


d. To remove the CPU, push the CPU socket lever down and away from the socket, and lift it up.
The CPU can now be removed from the socket.

5.7 Replacing the HDD



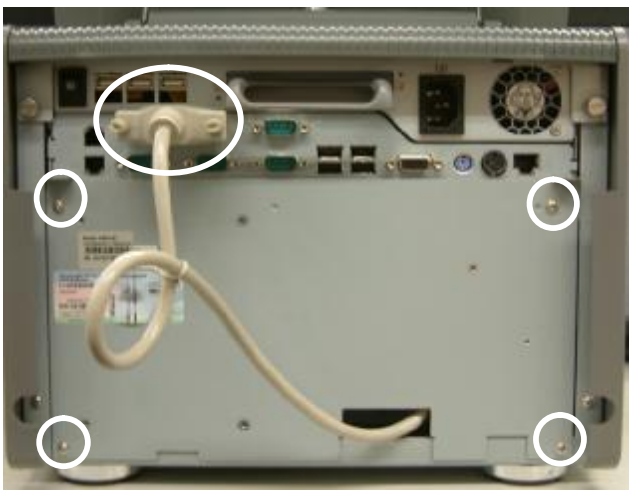
a. Remove the printer cable (1) and remove the screws (4) to remove the main modular box back panel.



b. Disconnect the IDE cable and loosen the thumbscrew (1). Push the HDD holder in the direction as shown by the arrow to remove it from the system

5.8 Replacing the Media Card Reader

5.8.1 Replacing the 3.5” Media Card Reader



a. Remove the printer cable (1) and remove the screws (4) to remove the main modular box back panel.

b. Disconnect the cables (2) from the Media Card Reader.

c. Remove the screws (2).

d. Pull the media card reader towards the front and then downward to remove it from the system. Remove the Media Card Reader from the system.

5.8.2 Replacing the Planar Media Card Reader

a. Use the key to unlock the main modular box.

b. Open the main modular box.

c. Remove the screw (1).

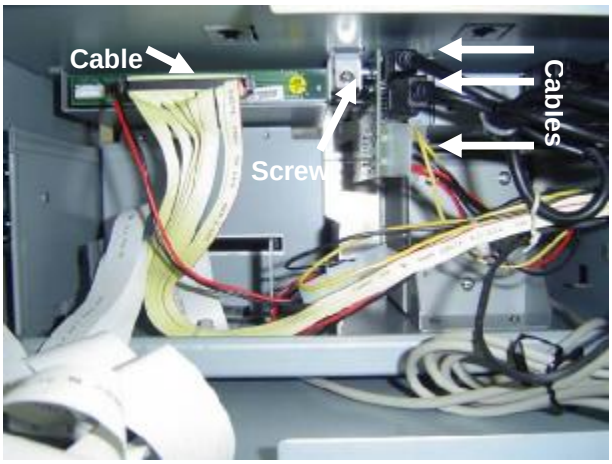
d. Remove the screw (1).

e. Pull the Media Device Module towards the front.

Note: Take care not to stretch the cables which are still connected.

f. Disconnect the cables (2) to replace the media device module.

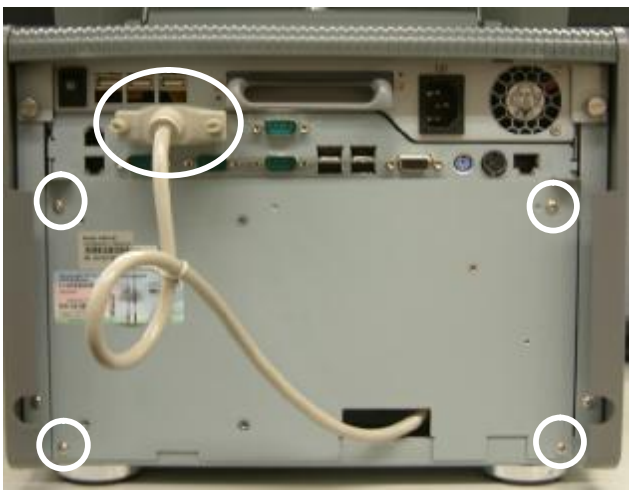
5.9 Replacing the IrDA and Slim Combo



a. Disconnect the cables (4) and remove the screw (1).

b. Pull the IrDA / Slim COMBO towards the front and then downward to remove it from the system.

5.10 Replacing the 3” Thermal Printer



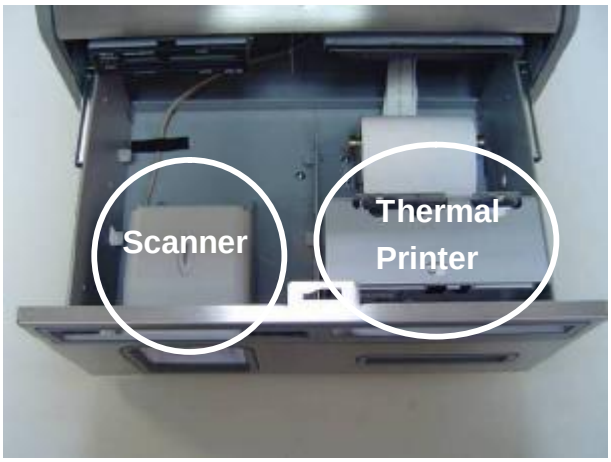
a. Remove the thermal printer cable (1) and the screws (4).

b.

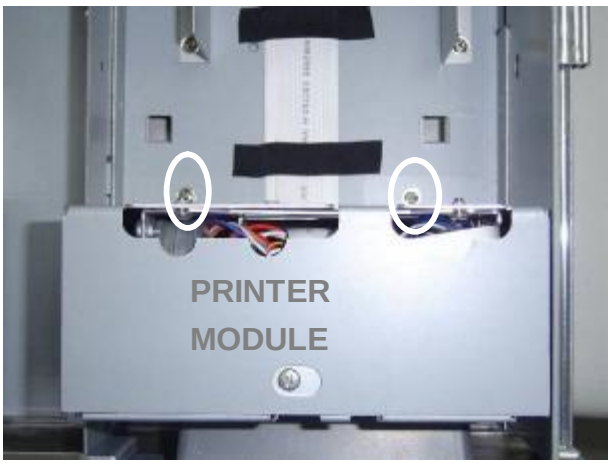
c. Disconnect the ribbon cables (2) from the printer control board.

d. Use the key to unlock the main modular box.

e. Open the main modular box.



f. Depending on your configuration, you will have one or more of the following devices:
   - Ø 3” Thermal Printer
   - Ø 5.25” DVD drive
   - Ø Laser Scanner



f. Remove the screws (2) at the back of the printer.

g. Slide the printer towards the back of the system and remove the screws (2) at the front of the printer module. Take out the thermal printer**.**

5.11 Replacing the Laser Scanner

a. Remove the screws (2) at the back of the scanner. Take the laser scanner out of the system.

5.12 Replacing the 5.25” DVD ROM

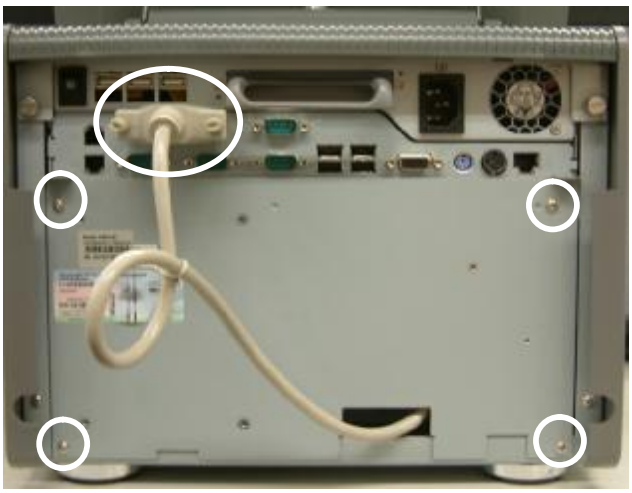
a. Disconnect the cables (2) from the DVD drive.

b. Remove the screw (1) on the right side of the DVD drive.

c. Slide the thermal printer box towards the back of the system. Remove the other screw (1) on the right side of the DVD drive.

d. Remove the screws (2) on the left side of the drive. Take the DVD-ROM drive out of the system.

5.13 Removing the Main Modular Box



a. Disconnect the thermal printer cable (1) and remove the screws (4).

b. Disconnect all the cables (4)**.**

c. Open the main modular box. Press the black plastic release levers on the rail mechanism and remove the main modular box from the system.
The right side lever should be pressed downwards, and the left side lever should be pressed upwards**.**

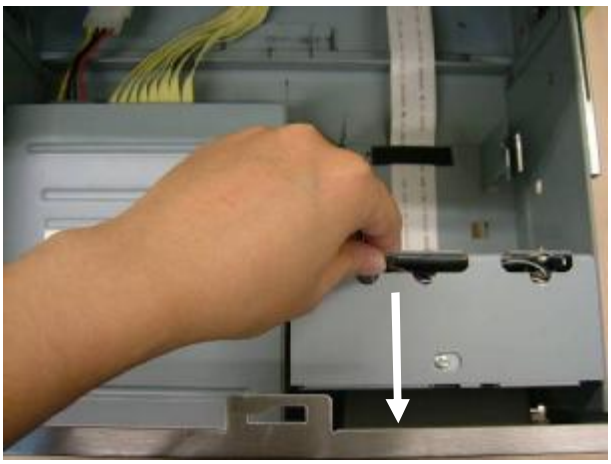
5.14 Loading the Thermal Printer Paper

You can load thermal printer paper through the main modular box.
Do not switch off the system. The printer must be switched on when replacing the printer paper.

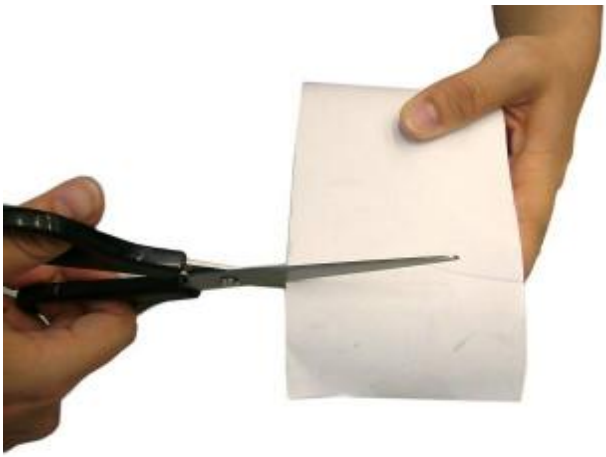
a. Use the key to unlock the main modular box.

b. Pull out the main modular box.

Notice: Do not pull the printer cover as shown in the picture.



c. Slide the thermal printer box towards to you.



d. Cut away the first five (5) cm of the paper, to obtain a straight edge and remove the label at the end of the roll.

e. Put the paper holder through the paper roll.

f. Keep the paper flat to load the paper into the printer slot.
   Do not fold the paper.

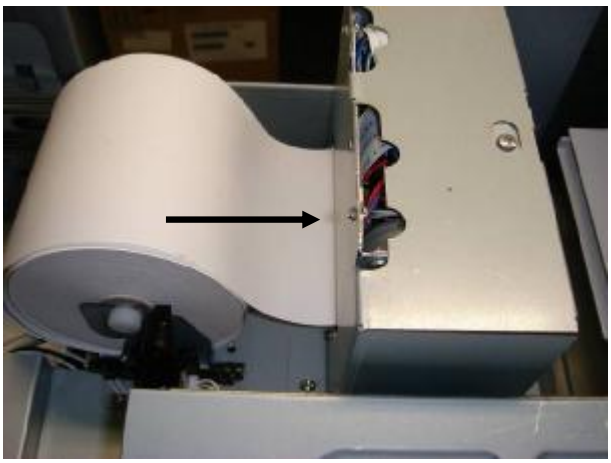
g. The paper will feed automatically through the printer (the system must be powered on).

5.15 Adjusting the Thermal Printer Paper

a. Keep the paper flat to load the paper into the printer slot.
Do not fold the paper.

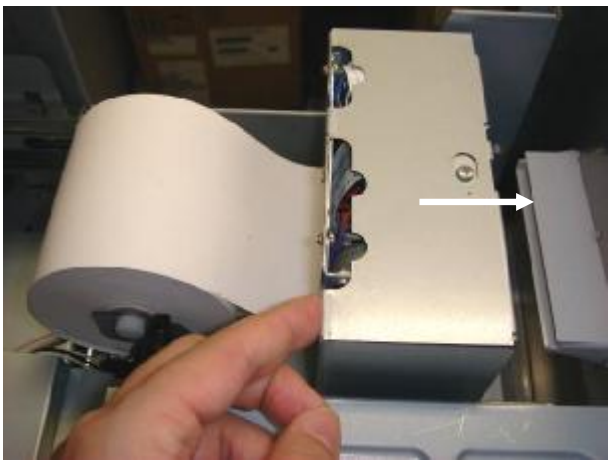
b. Slide the thermal printer box away from the drawer.

c. Push the green button to loosen the paper lock.



d. Pull the paper out of the presenter. Keep the paper flat to load the paper into the presenter. Do not fold the paper.

e. Pull the black button up to fix the paper location.



f. Slide the thermal printer box towards the front of the drawer.

Appendix A: Specification

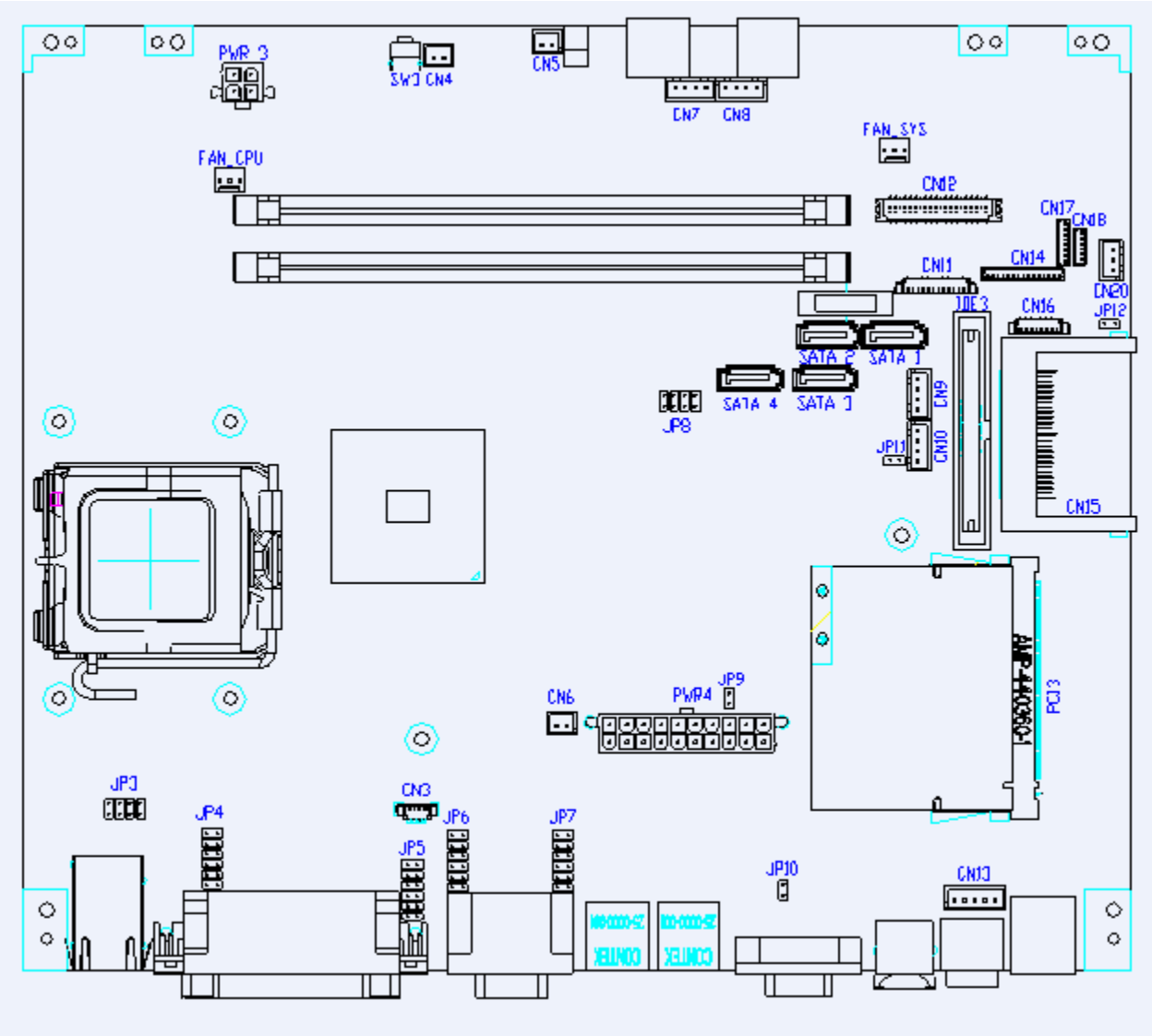
Model Name	K845	K847
Motherboard	**B81**	**B91**
CPU Support	P4 / Celeron processor mP478-pin	P4 / Celeron processor LGA775
Chipset	Intel 852GME + ICH4	Intel 945G + ICH7R
System Memory	2 x 240-pin DIMM socket up to 2 GB	2 x 240-pin DIMM socket up to 4 GB DDR2 667/800 Mhz
Graphic Memory	Shared System Memory	
BIOS	Award PnP	
Storage Devices		
HDD	1 X 3.5” HDD Drive Bay	1 X 3.5” SATA HDD Drive Bay
Expansion		
PCI Slot	N/A	
Mini-PCI Socket	1	
LCD / Touch Panel		
LCD Size	15” TFT	17” TFT
Brightness (nits)	250 cd/㎡	400 cd/㎡
Maximal Resolution	1024 x 768	1280 x 1024
Touch Screen Type	Resistive / SAW (by request)	
Tilt Angle (Degrees)	0° ~ 90°	
External I / O Ports		
Rear I / O		
PS / 2 Keyboard	1	
PS/2 Mouse	1	
USB	4 (V1.1/V2.0)	
Serial/COM	4 (pin 1 / pin 9 with 5V / 12V)	
LAN (10 / 100)	1	
2nd VGA Output	1 x female type connector with power	
Parallel	2 (12V/ 24V)	
24V receipt print	1	
Audio Jack	N/A	
Mic in	N/A	
Internal Speaker	1W x2	
Internal Interface		
USB	USB 5/6	USB 7/8
COM	COM5 for touch, COM6 for MSR	
2nd VGA	1	

Audio	CD-in, Line-in, Line-out, MIC						
Control/ Indicator							
Power Button	1						
Power							
Power Supply	250W ATX						
Environment							
EMC & Safety	FCC, Class A, CE, LVD						
Operating Temperature	5 ℃ ~ 35℃ (41℉ ~ 95℉)						
Storage Temperature	-20℃ ~ 60℃ (-4℉ ~ 140℉)						
Operating Humidity	20% - 80% RH non condensing						
Storage Humidity	20% - 85% RH non condensing						
Main Modular Box	Planar Media Card Reader	3.5" Media Card Reader	IrDA	DVD-ROM	3" Thermal printer	Slim COMBO	Laser Scanner
P Type	v		v	v	v		
A Type		v	v	v	v		
B Type		v	v	v			
C Type		v	v		v	v	v
Optional Module							
Smart Card Reader	Half-Insert type						
Magnetic Card Reader	3 Tracks (RS-232 / PS2 interface)						
Customer Display	VFD / LCD / Pole Display						
I-Button	Dallas Key (PS2)						
ODD	CD-ROM / COMBO ; Slim CD-ROM /DVD-ROM						
Wireless LAN	USB Dongle						
Bluetooth	USB Dongle, Class I/II						
Mini PCI Card	Mini PCI SCSI Card, supported SCSI I 50 pins						
USB Hub Board (Rear)	Supports 3 x USB2.0 ports (either one option with Mini PCI SCSI card)						
Dimensions (W x D x H) mm	378~427 x 316 x 437~448				408~457 x 322 x 469~480		
(W x D x H) in	14.8~16.8x12.4x 17.2x17.6				16.0~17.9x12.6x 18.4x18.8		
Weight	13Kg / 28.6lbs				15KG/ 33lbs		
OS Support	Windows XP, WEPOS, XP Embedded, XP professional Embedded, WIN 2000 professional Embedded, WIN NT 4.0, Redhat 7.2						

· This specification is subject to change without prior notice.

Appendix B: Jumper Settings & Connectors

Motherboard B91



1. Jumper Setting:

1.1. Compact Flash Master/Slave Setting

Function	JP12 (SHORT)
Master	◎1-2
Slave	N/C

1.2. CMOS Operation Mode

Function	JP11(SHORT)
CMOS Normal	◎N/C
CMOS Reset	1-2

1.3. Cash Drawer Power Setting

Function		JP3 (SHORT)
Cash Drawer 1	+12 V	◎1-2
	+24V	3-4
Cash Drawer 2	+12 V	◎5-6
	+24V	7-8

1.4. COM1 Power Setting

Pin	Function	JP4 (SHORT)
1	DCD#	◎1-2
	+5V	3-4
	+12V	5-6
9	RI#	◎7-8
	+5V	9-10
	+12V	11-12

1.5. COM2 Power Setting

Pin	Function	JP5(SHORT)
1	DCD#	◎1-2
	+5V	3-4
	+12V	5-6
9	RI#	◎7-8
	+5V	9-10
	+12V	11-12

1.6. COM3 Power Setting

Pin	Function	JP7 (SHORT)
1	DCD#	◎1-2
	+5V	3-4
	+12V	5-6
9	RI#	◎7-8
	+5V	9-10
	+12V	11-12

1.7. COM4 Power Setting

Pin	Function	JP6 (SHORT)
1	DCD#	◎1-2
	+5V	3-4
	+12V	5-6
9	RI#	◎7-8
	+5V	9-10
	+12V	11-12

1.8. LCD ID Setting

Panel Number	Resolution	LVDS		JP8			
		Bits	Channel	1-2	3-4	5-6	7-8
1	1024 x 768	24	Single	N/A	N/A	SHORT	SHORT
2	1280 x 1024	24	Dual	N/A	N/A	SHORT	OPEN
3	Reserve	N/A	N/A	N/A	N/A	N/A	N/A
4	Reserve	N/A	N/A	N/A	N/A	N/A	N/A

1.9. Second Display Power Setting

Function	JP10 (SHORT)
+12V	1-2
NC	◎1

1.10. Power Mode Setting

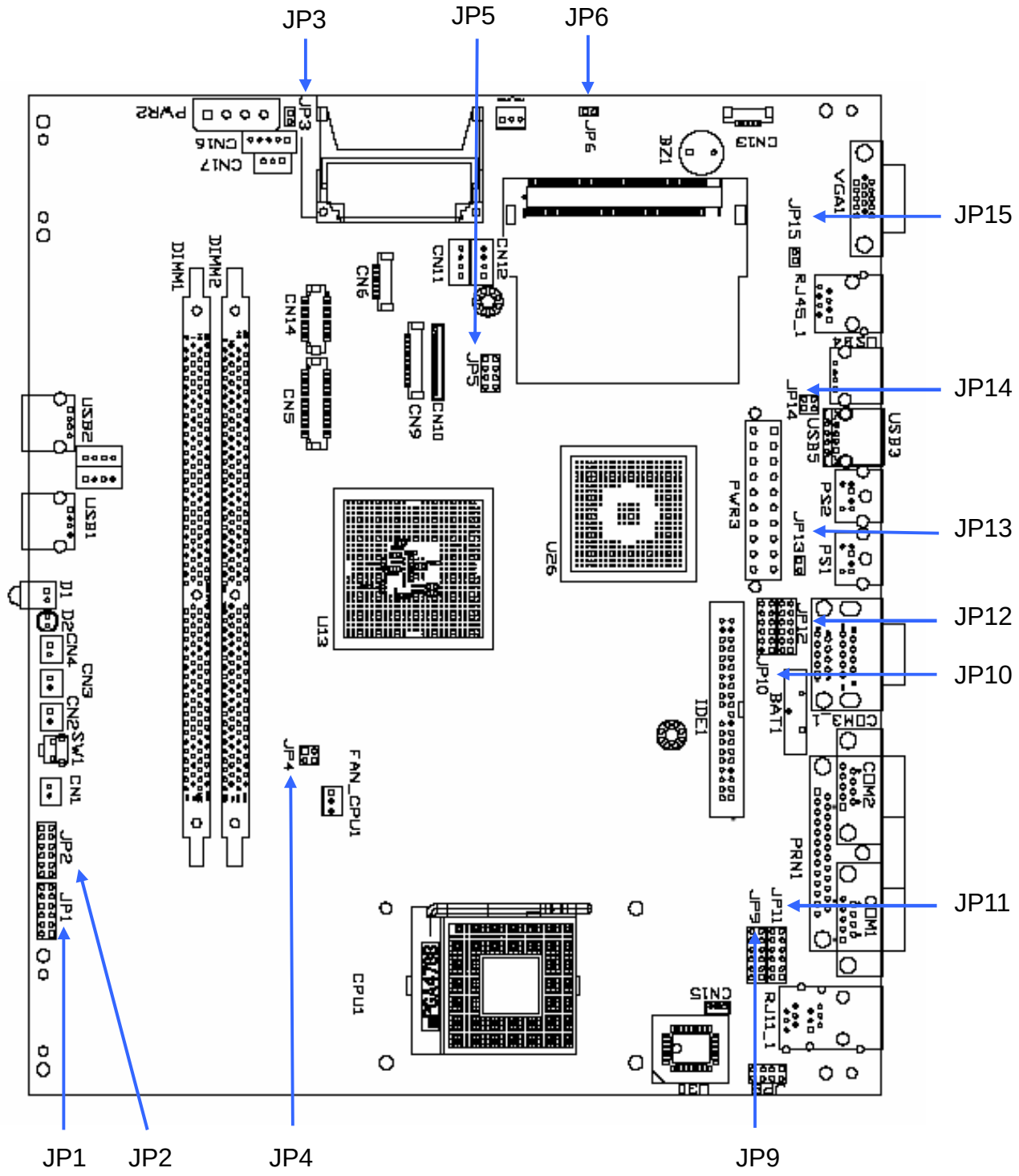
Function	JP9 (SHORT)
ATX Power	◎N/C
AT Power	1-2

Note:

OPEN

SHORT

Motherboard B81



1. Jumper Settings

1.CPU Frequency Setting

◎ Factory Default Setting

Function	JP4 (SHORT)
FSB400	◎1-2, 3-4
FSB533	3-4

2. Compact Flash Master/Slave Setting

Function	JP3 (SHORT)
Master	◎1-2
Slave	N/C

3. CMOS Operation Mode

Function	JP6 (SHORT)
CMOS Normal	◎N/C
CMOS Reset	1-2

To clear the CMOS:

1) Remove AC power from the unit.
2) Open the cabinet.
3) Change the JP6 jumper setting from N/C to 1-2.
4) Wait 1 minute.
5) Change the JP6 jumper setting back to N/C.
6) Close the cabinet.
7) Apply AC power and continue.

4. POWER USB Power Setting (Reserved)

Function	JP14 (SHORT)
+24V	1-2
+12V	3-4

5. Cash Drawer Power Setting

Function		JP8 (SHORT)
Cash Drawer 1	+12 V	◎1-2
	+24V	3-4
Cash Drawer 2	+12 V	◎5-6
	+24V	7-8

6. COM1 Power Setting

Pin	Function	JP9(SHORT)
1	DCD#	◎1-2
	+5V	3-4
	+12V	5-6
9	RI#	◎7-8
	+5V	9-10
	+12V	11-12

7. COM2 Power Setting

Pin	Function	JP11(SHORT)
1	DCD#	◎1-2
	+5V	3-4
	+12V	5-6
9	RI#	◎7-8
	+5V	9-10
	+12V	11-12

8. COM3 Power Setting

Pin	Function	JP10(SHORT)
1	DCD#	◎1-2
	+5V	3-4
	+12V	5-6
9	RI#	◎7-8
	+5V	9-10
	+12V	11-12

9. COM4 Power Setting

Pin	Function	JP12(SHORT)
1	DCD#	◎1-2
	+5V	3-4
	+12V	5-6
9	RI#	◎7-8
	+5V	9-10
	+12V	11-12

10. CPU Voltage Setting

CPU Type	JP1 (SHORT)	JP2 (SHORT)
◎P4	1-2, 3-4, 5-6, 7-8, 9-10, 11-12	N/C
P4-M (1.3V)	N/C	3-4, 9-10

11. LCD ID Setting

Panel Number	Resolution	LVDS		JP5			
		Bits	Channel	1-2	3-4	5-6	7-8
0	640 x 480	18	Single	SHORT	SHORT	SHORT	SHORT
1	800 x 600	18	Single	SHORT	SHORT	SHORT	OPEN
2	1024 x 768	18	Single	SHORT	SHORT	OPEN	SHORT
3	1280 x 1024	24	Dual	SHORT	SHORT	OPEN	OPEN
4	1024 x 768	24	Single	SHORT	OPEN	SHORT	SHORT
5	800 x 600	24	Single	SHORT	OPEN	SHORT	OPEN

12. Second Display Power Setting

Function	JP15 (SHORT)
+12V	1-2
N/C	◎1

13. Power Mode Setting

Function	JP13 (SHORT)
ATX Power	◎N/C
AT Power	1-2

Note:

OPEN

SHORT

Appendix C: BIOS Settings

1. BIOS Setup Utility

The BIOS setup defines how the system is configured. You need to run this program the first time you configure this product. You may need to run it again if you change the configuration.
You need to connect a PC keyboard to the keyboard connector to run the BIOS setup utility.

2. Starting the BIOS Setup

1. Turn on or reboot this product.
2. Press the DEL key immediately after the product is turned on, or press the DEL key when the following message is displayed during POST (the Power on Self-Test).

   Press DEL to enter SETUP.
3. The main menu of the BIOS setup is displayed.
4. If the supervisor password is set, you must enter it here.

3. When a Problem Occurs

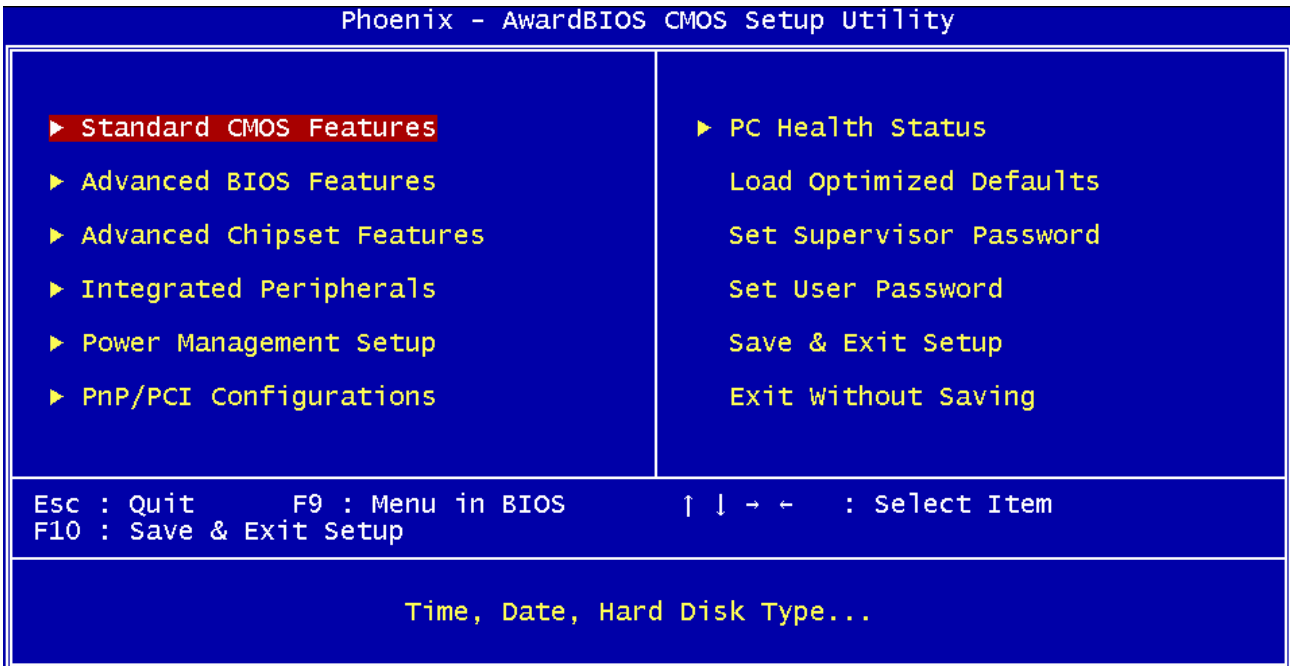
If, after making and saving system changes with the Setup utility, you find that this product no longer boots, start the BIOS setup and execute the following.

Load Optimized Defaults

4. 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 menu below is from B81 BIOS version B81FV10D.BIN. If you have a different BIOS version, the contents of the menu may different.



Standard CMOS Features

This setup page includes the standard CMOS features.

Advanced BIOS Features

This setup page includes the enhanced AWARD BIOS features.

Advanced Chipset Features

This setup page includes the Chipset features

Integrated Peripherals

Change, set, or disable on board super I/O functions.

Power Management setup

This category determines the system power consumption of the system.

PNP/PCI Configurations

This category specifies the value (in units of PCI bus clocks) of the latency timer for the PCI bus master and the IRQ level for PCI devices.

PC health status

This page shows hardware monitor information.

Load Optimized Defaults

BIOS defaults indicate the most appropriate value of the system parameters for a standard system performance.

.

Set Supervisor Password

Change, set, or disable password. It allows the supervisor to change BIOS settings.

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 exit setup.

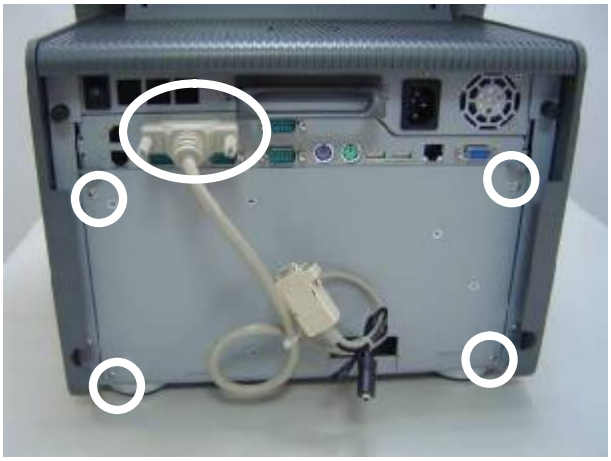
Exit without saving

Discard all CMOS value changes and exit setup.

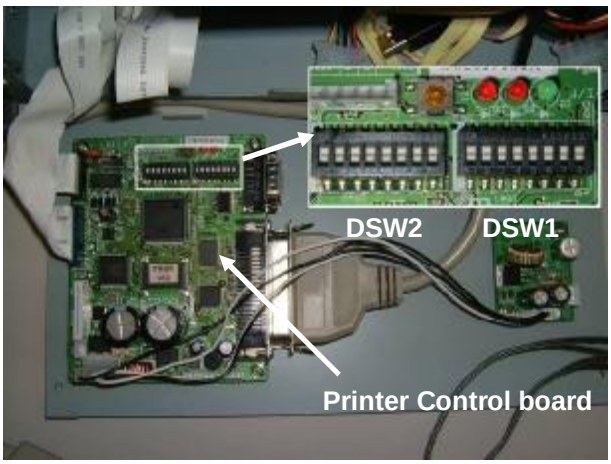
Appendix D: EPSON-BA-500 Thermal Printer DIP Switch settings

1. DIP Switches

There are two DIP switches on the printer control board, which is mounted on the rear panel of the system. To access the switches, please follow the instructions below

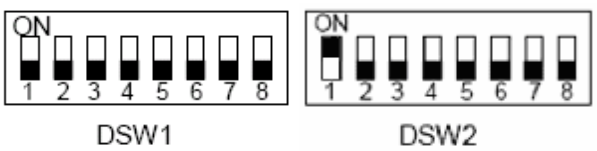


a. Remove the thermal printer cable and loosen the four rear panel screws. Remove the panel.



b. The two DIP switches are located in the top right part of the printer control board.

The DIP switch number is printed on the board.



c. The illustration shows the layout of the DIP switches.

2. DIP Switch 1 (DSW1)

SW No.	Function	ON	OFF	Factory setting
1	Black Mark sensor	Enabled	Disabled	Off
2	Interface selection	Refer to Table 2.1.		Off
3				Off
4	Serial interface handshaking	XON/XOFF	DTR/DSR or CTS/RTS	Off (*1)
5	Serial interface parity check	Yes	No	Off (*1)
6	Serial interface parity selection	Even	Odd	Off (*1)
7	Serial interface baud rate selection	Refer to Table 2.2.		Off (*1)
8				Off (*1)

(*1) Effective only when the serial interface is selected.

Table 2.1 Interface Selection

Interface	Switch number	
	2	3
Parallel interface (IEEE 1284)	Off	Off
Serial interface (RS-232)	Off	On
Optional interface	On	On or Off

Table 2.2 Baud Rate Selection

Transmission Speed (bps)	Switch number	
	7	8
4800	On	On
9600	Off	On
19200	On	Off
38400	Off	Off

bps: bits per second

3. DIP Switch 2 (DSW2)

SW No.	Function	ON	OFF	Factory setting
1	Model type selection	Refer to Table 3.1		On
2				Off
3	Print density selection	Refer to Table 3.2		Off
4				Off
5	Operation mode selection	Refer to Table 3.3		Off
6	Factory use			Off
7	I/F pin 6 reset signal-1	Enabled	Disabled	Off
8	I/F pin 6 reset signal-2	Enabled	Disabled	Off

Table 3.1 Model selection

Model	Switch Number	
	1	2
M-T540 (82.5 mm paper-width model) (640 dots, 3.25")	Off	Off
M-T530 (79.5 mm paper-width model) (576 dots, 3.15") (*1)	On	Off
M-T520 (60 mm paper-width model) (448 dots. 2.36")	Off	On
M-T510 (58 mm paper-width model) (432 dots. 2.28")	On	On

(*1) The K84x is supplied with the M-T530 printer

Table 3.2 Print Density Selection

Level	Print Density	Switch Number	
		3	4
1	Slightly Light	On	On
2	Normal	Off	Off
3	Slightly dark	On	Off
4	Dark	Off	On

Table 3.3 Operation Mode Selection

Operation mode	Switch Number
	5
Hexadecimal dump	Off
Normal	Off