



AerPOS

User's Manual

Version 0.1

AP-3625
15" Bezel Free Performance POS Terminal

Safety and Warranty

1. Read these safety instructions carefully.
2. Keep this user's manual for later reference.
3. Disconnect this equipment from any AC outlet before cleaning. Do not use liquid or spray detergents for cleaning. Use a damp cloth.
4. For pluggable equipment, the power outlet must be installed near the equipment and must be easily accessible.
5. Keep this equipment away from humidity.
6. Put this equipment on a reliable surface during installation. Dropping it or letting it fall could cause damage.
7. The openings on the enclosure are for air convection. Protect the equipment from overheating. **DO NOT COVER THE OPENINGS.**
8. Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.
9. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
10. All cautions and warnings on the equipment should be noted.
11. If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient over-voltage.
12. Never pour any liquid into an opening. This could cause fire or electrical shock.
13. Never open the equipment. For safety reasons, only qualified service personnel should open the equipment.
14. If any of the following situations arises, get the equipment checked by service personnel:
 - a. The power cord or plug is damaged.
 - b. Liquid has penetrated into the equipment.
 - c. The equipment has been exposed to moisture.
 - d. The equipment does not work well, or you cannot get it to work according to the user's manual.
 - e. The equipment has been dropped and damaged.
 - f. The equipment has obvious signs of breakage.
15. **DO NOT LEAVE THIS EQUIPMENT IN AN UNCONTROLLED ENVIRONMENT WHERE THE STORAGE TEMPERATURE IS BELOW -20°C (-4°F) OR ABOVE 60°C (140°F). IT MAY DAMAGE THE EQUIPMENT.**

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Chapter 1

Introduction

AerPOS (AP-3625) Introduction

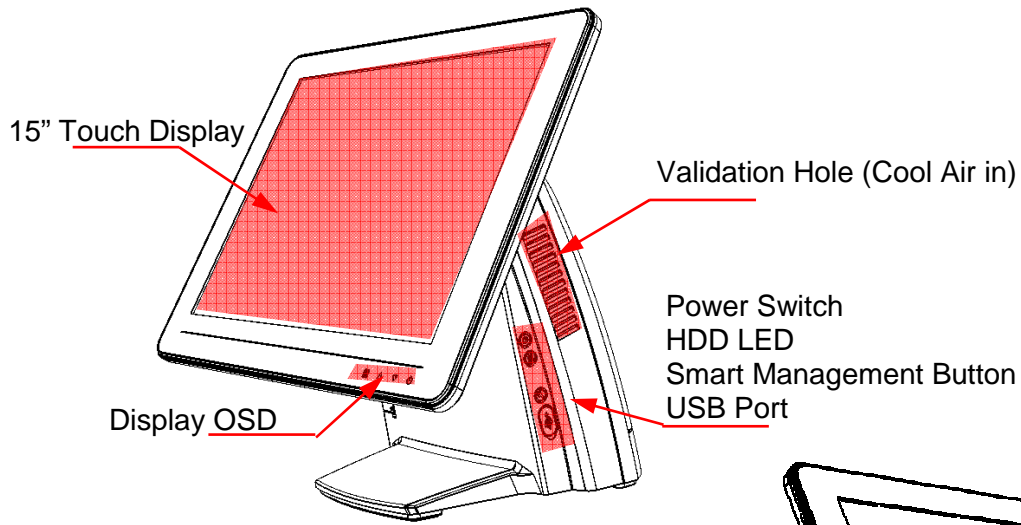
AerPOS is the perfect combination of reducing the Total Cost Ownership and enhanced quality requirement for POS system. With the design base on quality, space-effective and performance, its modularized design helps user no matter on the maintenance but the further upgrade in a very easy way.

Main Features:

- The high quality of resistive touch or durable tempered glass of projective capacitive touch both are IP65 front panel compliant.
- Desktop solution with high performance is perfect for heavy loading environment. Mobile platform aims for green and energy saving requirement
- Modularized design and easy maintenance for the key parts of its system , such as storage device, CPU module and touch display.
- With various devices support and sufficient I/O connectivity requirements.
- Integrated VFD and the 2nd 15" / 11.6" LCD display.



A Quick Tour for AP-3625



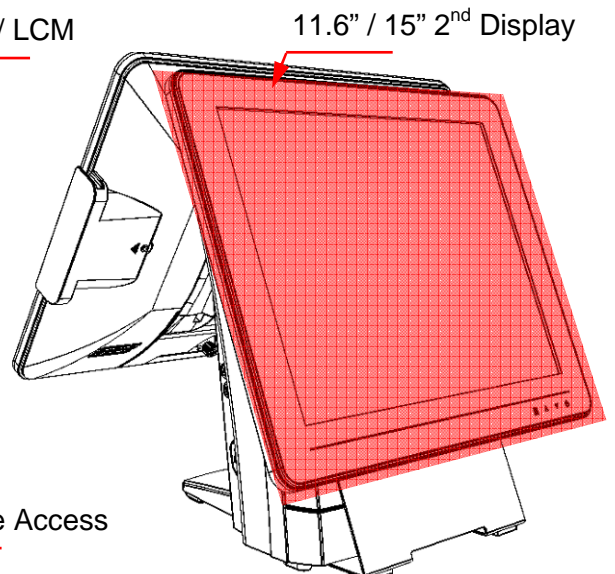
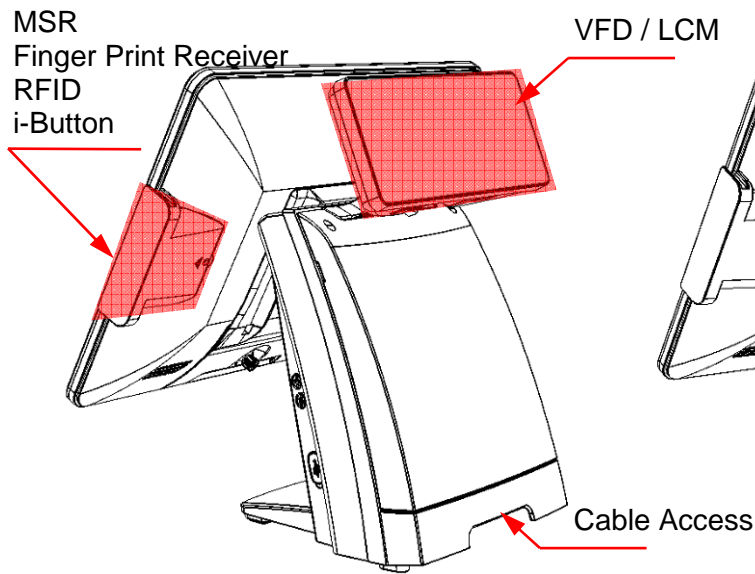
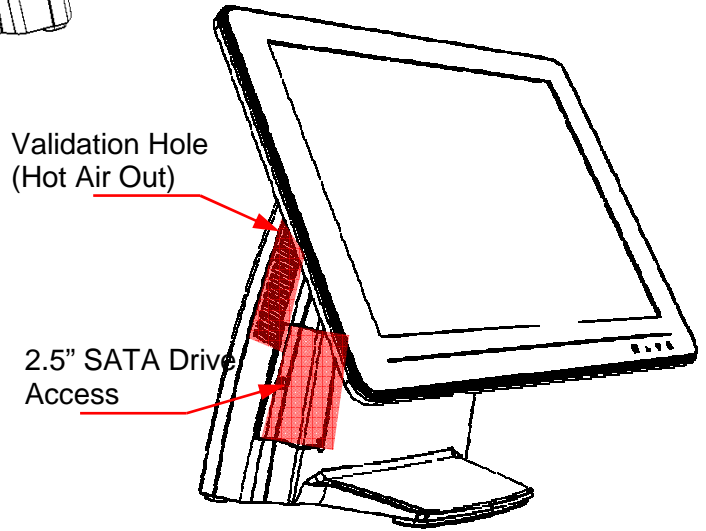
Power Switch / Status
Blue LED: Power ON
Red LED: Power Off / Standby



HDD / SATA Status
Orange LED: Operation



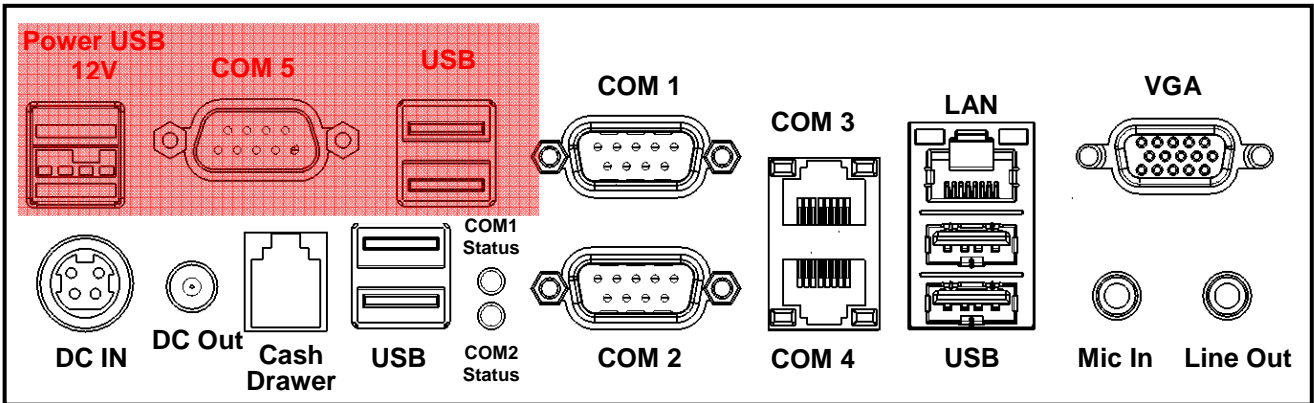
Smart Management
Connection button



AP-3625 Dimension



Rear I/O Panel Connectivity



I/O Port	Connector Type	Description
VGA	D-sub 15	Connect 2 nd LCD screen or CRT monitors
Line Out	Earphone connector	Connect speakers to this port
Mic In	Microphone Connector	Connect microphone to this port
LAN	RJ-45	Connect to Ethernet
USB	A type USB	Connect to standard A type USB devices
COM 3	RJ-45	Serial port COM 3— simple COM RI—NA LED ; 5V—Green Light ; 12V – Orange Light
COM 4	RJ-45	Serial port COM 4 RI—NA LED ; 5V—Green Light ; 12V – Orange Light
COM 1	D-sub9	Serial Port COM 1
COM 2	D-sub9	Serial Port COM 2
COM Status	LED	RI—NA LED ; 5V—Green Light ; 12V – Orange Light
USB	A type USB	Connect to standard A type USB devices
Cash Drawer	RJ-11	Connect to 12V Cash Drawer
DC out	DC out connector	12V DC out put connect to 12V peripherals or devices
DC IN	DC IN connector	Connect the 12V power adaptor to this port
Optional Second IO Board is only available as pre-installed in FEC factory		
Power USB	Power USB 12V (optional)	Connect to standard A type USB devices with 12V Power Supply
COM 5	D-sub9 (optional)	Serial Port COM
USB	A type USB (optional)	Connect to standard A type USB devices



Before you unplug the power USB cable from I/O panel, please ensure unplug the A/C Cord in advanced.

Aer POS AP-3625 Packing List

Standard		Optional & Peripherals	
1	15" AP-3625 AerPOS Touch Terminal	1	Optional IO Board
2	12V 150W Power Adaptor	2	RJ-45 to D-sub9 Convert Cable
3	AC Power Cable	3	MSR / RFID / Finger Print Receiver / I-Button
		4	20x2 VFD / 20x2 LCM / 240x64 LCM
		5	15" / 11.6" 2 nd Display Bracket
		6	Wireless Lan Module

Chapter 2

Hardware Installation and Upgrading



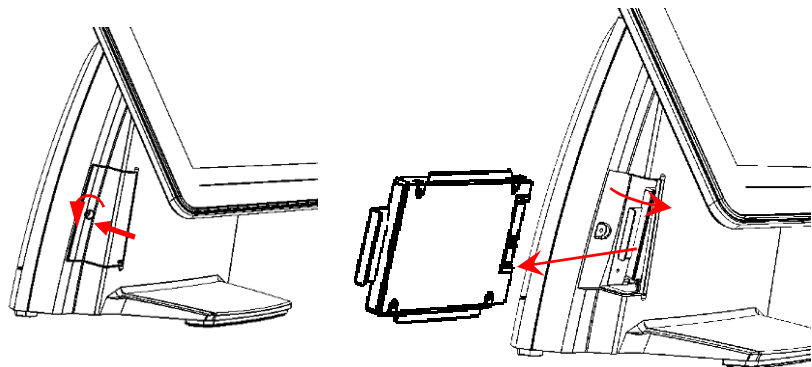
*Do not remove the Display Module without switch off the terminal.
Power must be switched off and power cord must be unplugged. Every
time you service the system, please be aware of this.*

2.5" Hard Disk Drive Installation

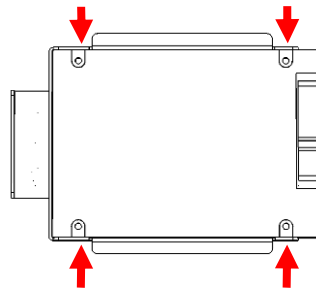
1. Turn off power and remove power cord from the terminal

2. Unscrew the maintenance door at the front side of the terminal body

3. Flip the maintenance door and Extract 2.5" SATA storage bracket out
(no cable connected)



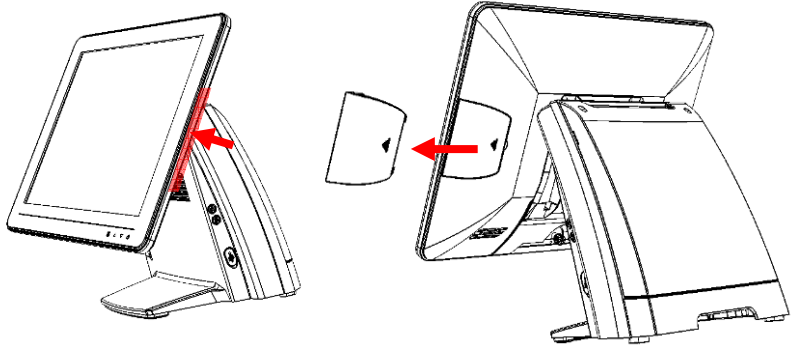
4. Place storage driver on the bracket and fasten it with 4 screws.



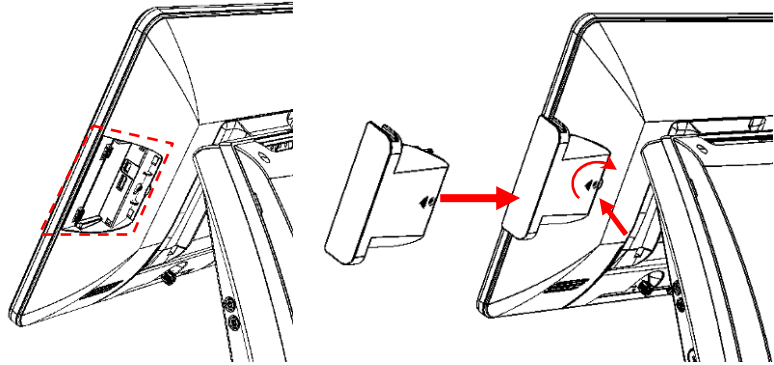
5. Restore the maintenance door to the system.
6. Fix the maintenance door with a screw.
7. Connect power cord to the system.

MSR / Finger Print Receiver / RFID / iButton Installation

1. Remove the plastic cover at the back of Touch Display Module



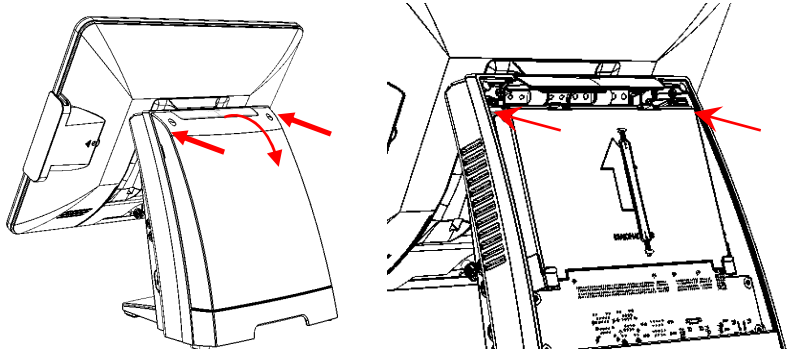
2. Insert the MSR / RFID / Finger Print Receiver / I-button Module into USB A-Type Connector. Fix the Touch Display Module with one screw.



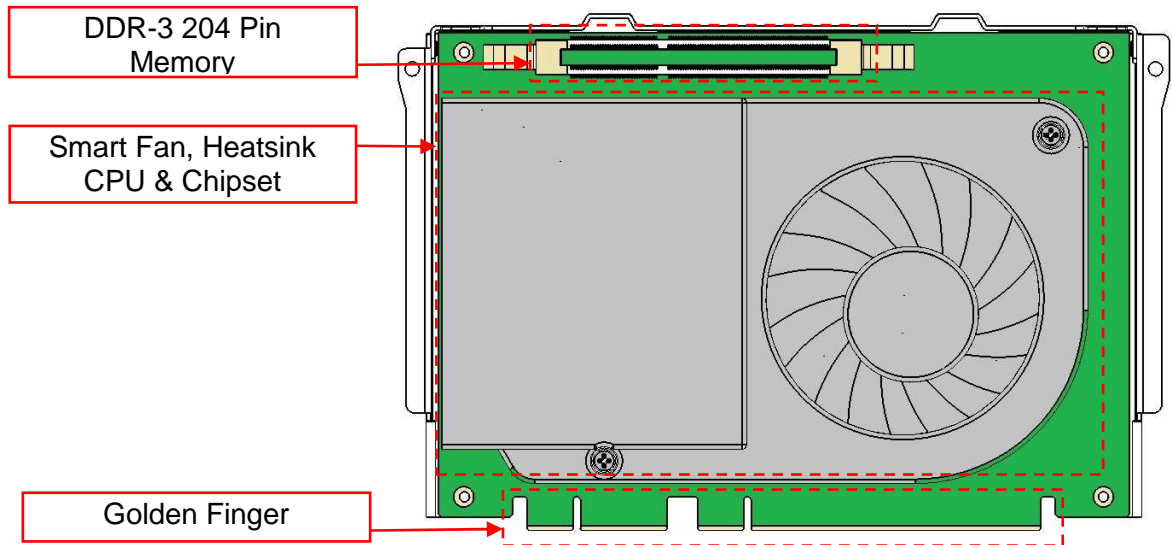
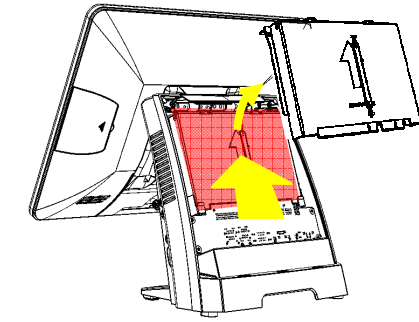
3. Make sure the USB connected and screw is fastened well.
4. If you are looking for the detail Utility of MCR, Finger Print Reader, I-button Reader, RFID Reader, please contact FEC's FAE.(Please refer to FEC website for more information, <http://www.fecpos.com>)

MB / Heatsink & Smart Fan / Memory Installation

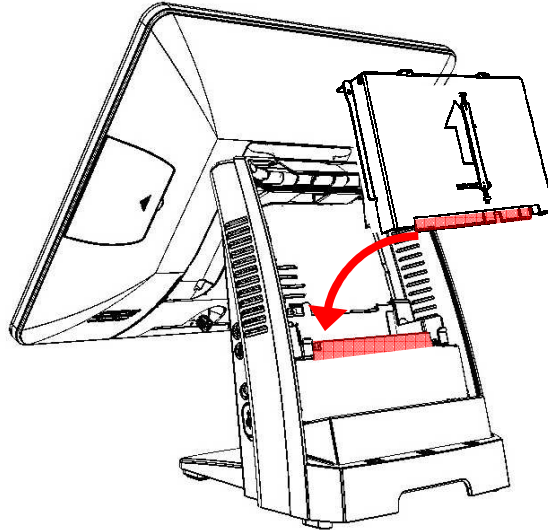
1. Remove back cover of the terminal by two screws on the top side.
2. Another two screws at the both side of MB Module should be removed for the further disassembly.



3. Lift up and Pull out the MB Module from the Terminal Chassis.

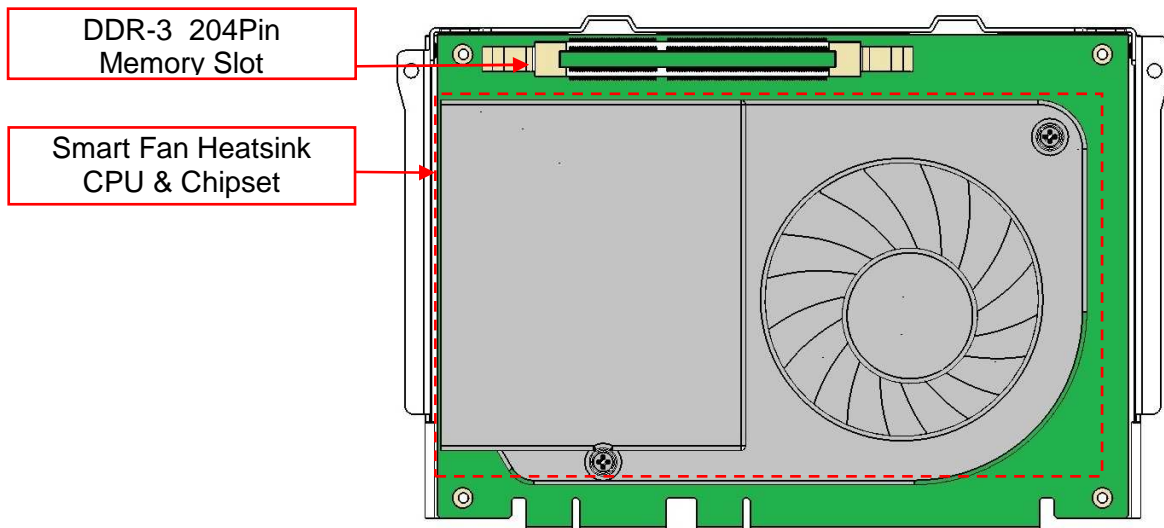


4. During the MB installation, Please Make sure the MB Golden finger is well connected with IO Board Slot.



Memory (DDR3 RAM) & CPU Installation / MB Pin Define, Battery and Clear CMOS Setting

1. Disassembly the MB Module, then Memory installation can be done from the top side of MB Module. CPU installation has to remove Thermal Fan Module by 2 screws, after the CPU installation, please ensure the thermal pads between CPU, chipset and heatsink are well contacted.

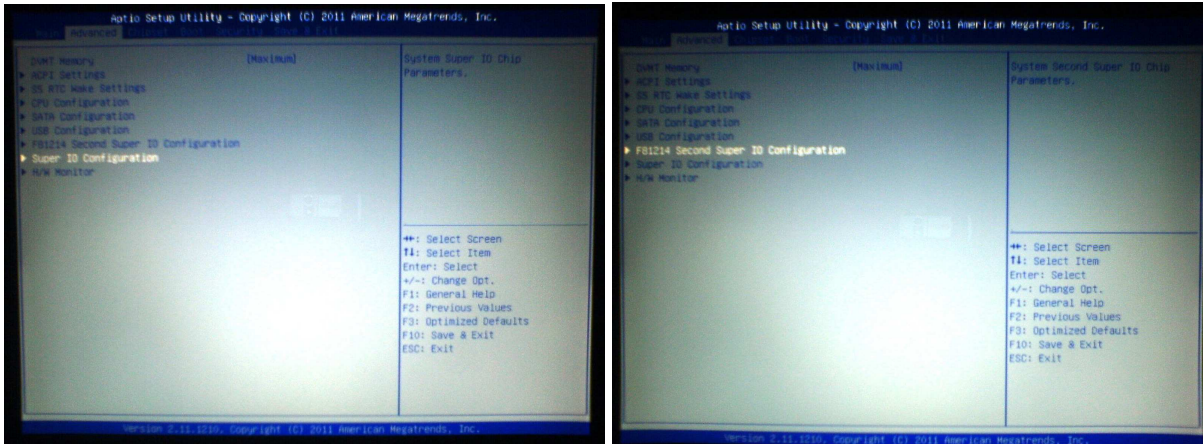


2. According to the MB on-board connectors or golden finger pin define and Battery Setting, CMOS Clear, please refer to the BT-06 MB(QM-67) Manual. (Will update soon)

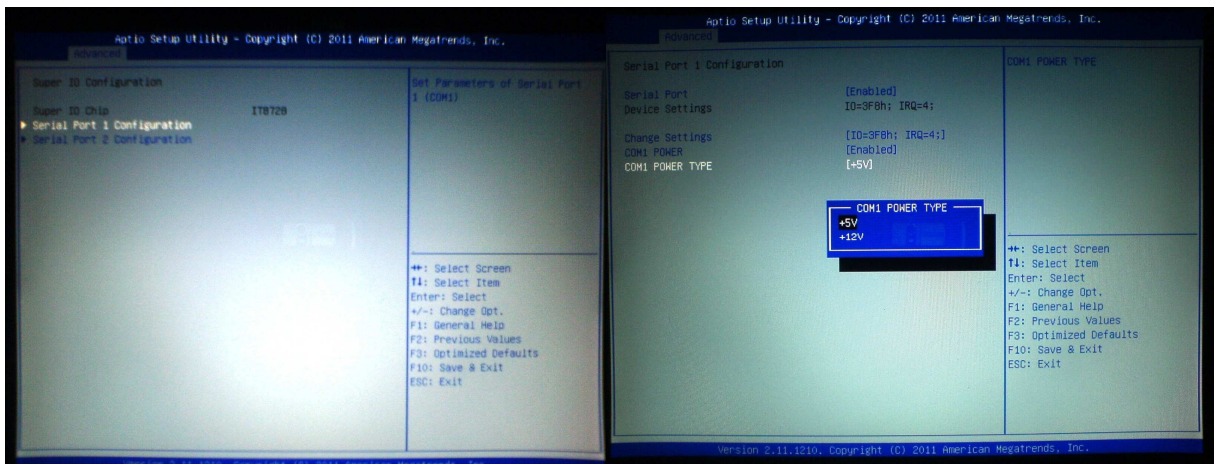
COM Port Power Setting

AP-3625 COM Port Power can adjust via BIOS or Smart Management Tool.

5. COM Port Power Configuration:
6. Advance > Super IO Configuration > Serial Port 1 or 2 Configuration
Advance > F81214 Super IO Configuration > Serial Port 3 or 4 Configuration



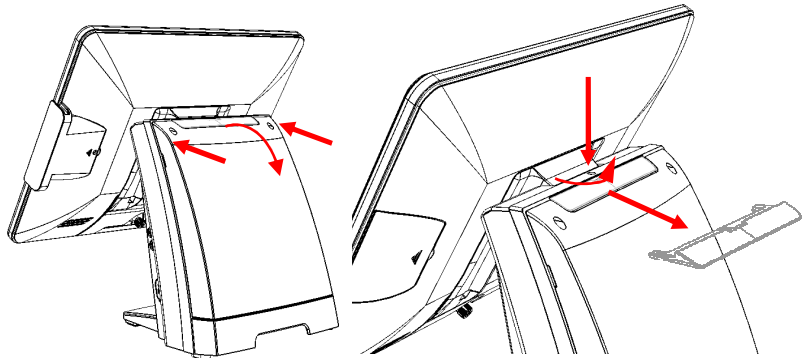
7. COM 1 or 2 or 3 or 4 Port Power > Enable
COM 1 or 2 or 3 or 4 Power Type > +5V or +12V (select the proper power output for proper com port devices)



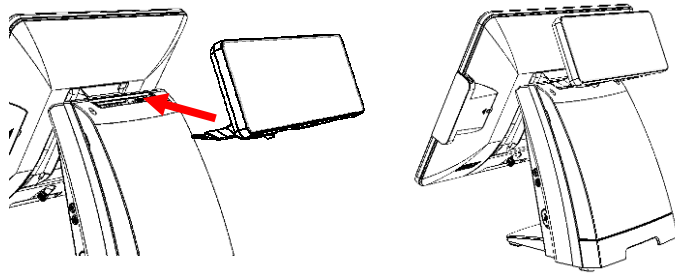
If you need more information about the BIOS setting or Smart Management Setting, please refer to the MB Manual or Smart Management Manual or contact FEC's FAE.

Integrated VFD / LCM Installation

1. Remove the VFD Plastic cover from the terminal



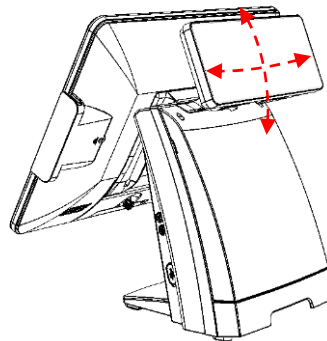
2. Connect the COM 3 internal cable between Terminal and VFD / LCM Module and install the VFD/ LCM module with Terminal. Fasten one screw back and make sure VFD/LCM module is fixed.



3. VFD is connected to the COM3 (COM3 has internal power which has been pre-set as 12V power)

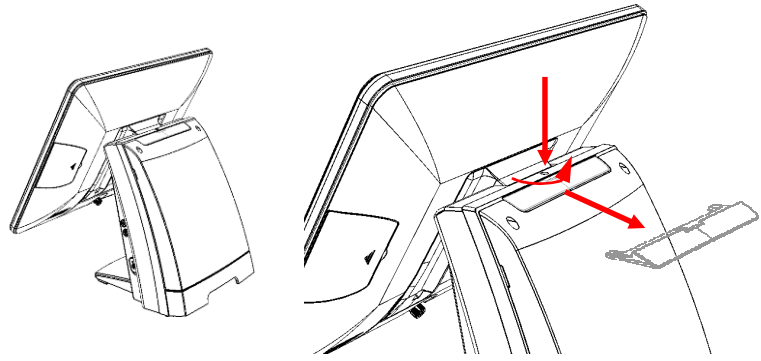
**** Please note When VFD/LCM is integrated, please remove the device which connects to the external COM3 on Rear IO panel to prevent I/O interrupt.**

4. Adjust the VFD / LCM angle into proper position.

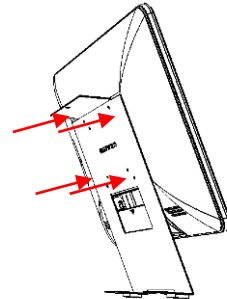


15" / 11.6" 2nd Display Installation

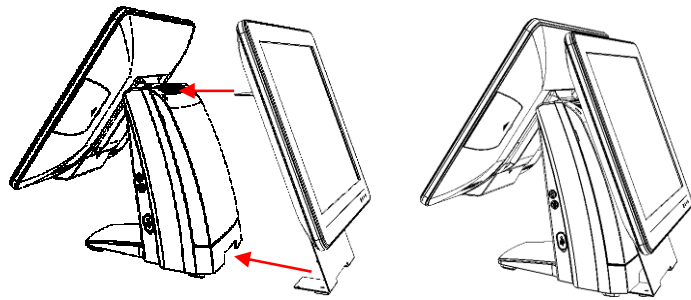
1. Remove the VFD plastic cover



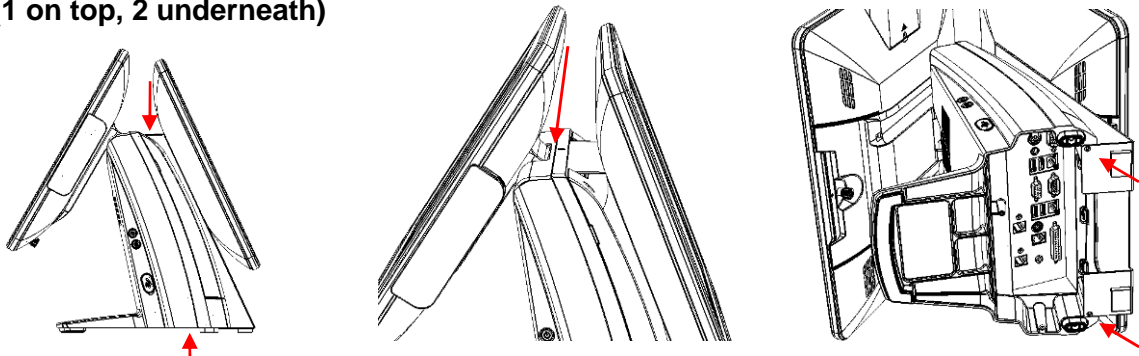
2. Assemble the 2nd screen with bracket with 4 screws



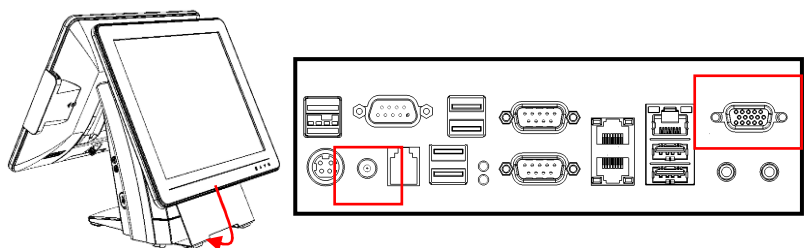
3. Assemble the 2nd Screen with bracket to Terminal.



4. Fasten 3 screws
(1 on top, 2 underneath)

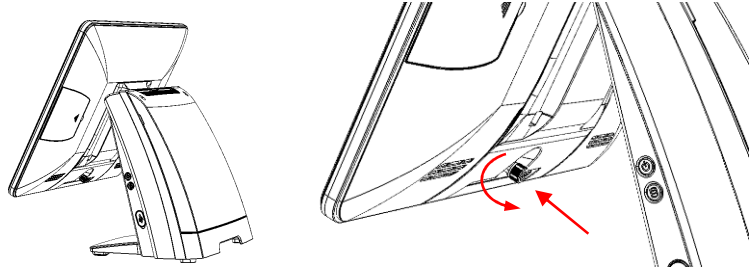


5. Connect the monitor to AP-3625 by VGA & DC cable

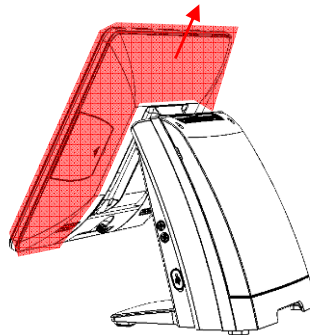


15" 1st Touch Display Installation & Swapping

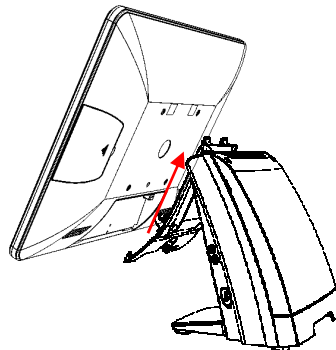
1. Release 1 thumb screw at the back side of Display



2. Lift the Display Module up to disassemble from the main unit of terminal

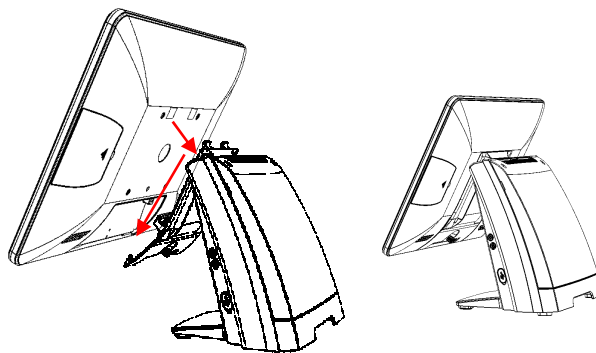


3. Display and main body units are separated.



4. Reverse the process can assembly back the Touch Display Module.

**** please make sure the touch display module is firmly connected to the docking slot ****

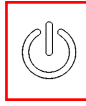
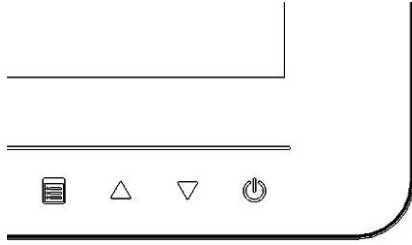


****Note****

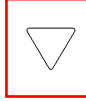
During the process of disassembly and installation, please ensure the terminal is "Power Off" and remove AC cord. "Hot Swap" could casue the internal protection to block touch display functionality.

OSD Function and Adjustment

OSD function and adjustment



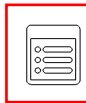
Back Light Power (finger touch for 5 seconds)
Back Light Power On – Blue LED indication
Back Light Power Off – Red LED indication
P-CAP Touch re-calibrates during Power Off and On



Button Down (finger touch for 2 seconds)
Back Light Dimmer Down



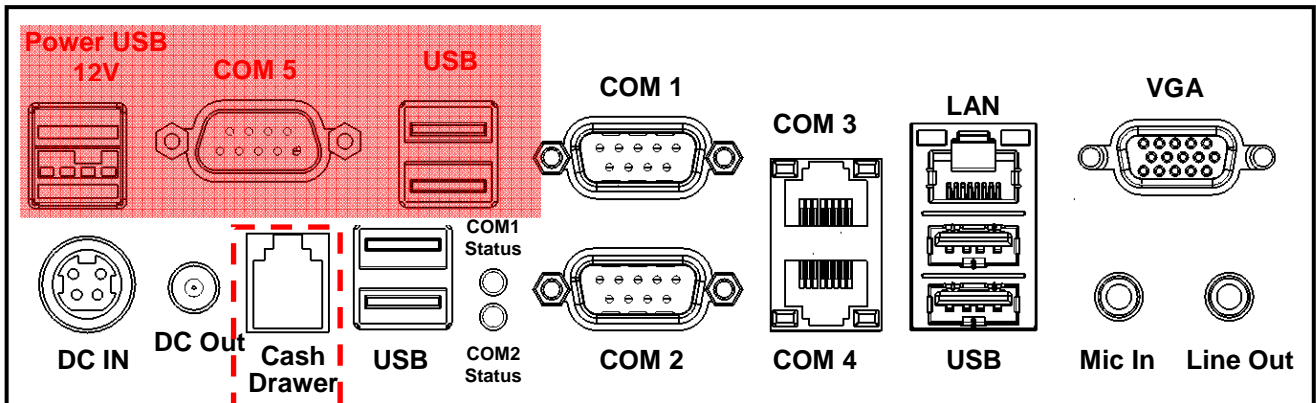
Button Up (finger touch for 2 seconds)
Back Light Dimmer Up



No Function / Reserve Function for AerTouch Monitor

Cash Drawer Installation

Before connecting the cash drawer to the **AP-3625**, please make sure the drive voltage and cable pin assignment of the cash drawer matches the definition of the cash drawer port of **AP-3625**.



Note: If the cash drawer cannot be detected by the system, please refer to [trouble shooting](#).

Up to two cash drawers may be driven from this port. Driving voltage of the solenoid is DC+12V. I/O port 284 is used for drawer operation. A test program is supplied, for Linux and Windows, source code of which is available on request by software developers.

	Value	Description
Byte 1 (0xA0)	0x00	GPIO / 0x01 or DIO / 0x00.
Byte 2-3 (0xA1 ~ 0xA2)	0xA07	Output address.
Byte 4-5 (0xA3 ~ 0xA4)	0xA07	Input address.
Byte 6 (0xA5)	0xFD	Open cashdrawer1 value.
Byte 7 (0xA6)	0xFB	Open cashdrawer2 value.
Byte 8 (0xA7)	0xFF	Close cashdrawer value.
Byte 9 (0xA8)	0x01	Cashdrawer status mask.

Chapter 3

Software Installation and Setup

AP-3625 comes with a variety of drivers for different operating systems.

You can download all the necessary drivers and utilities from <http://www.fecpos.com>.

Or send an e-mail to the Customer Service Department of FEC for further assistance.

Chipset Driver Installation

Intel Chipset Installation Utilities for Windows XP

1. Download drivers from website or insert the Driver CD into your CD ROM Drive.
2. Execute **Setup.exe** and Click **Next**.



3. Read the License Agreement and click **Yes** & Click **Next** and the drivers for the Intel Chip set will install.

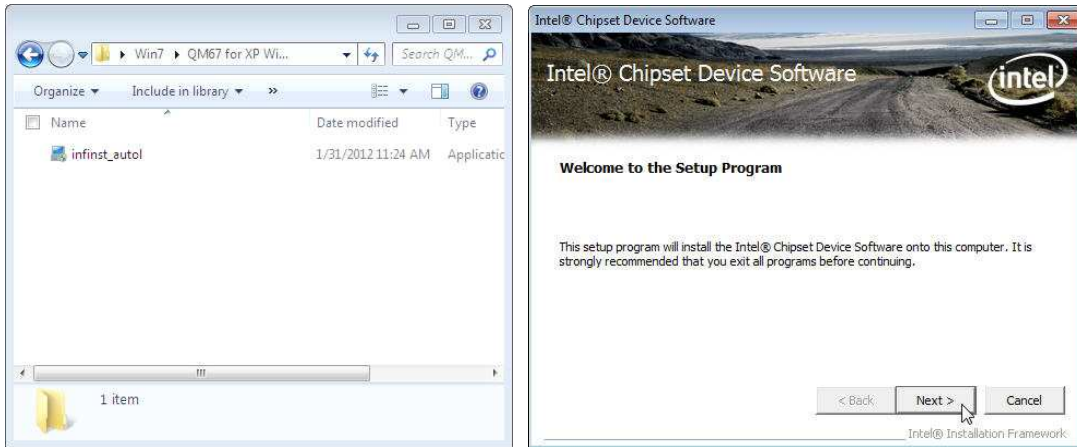


4. Click **Next** and choose "restart computer", then click to **Finish**.

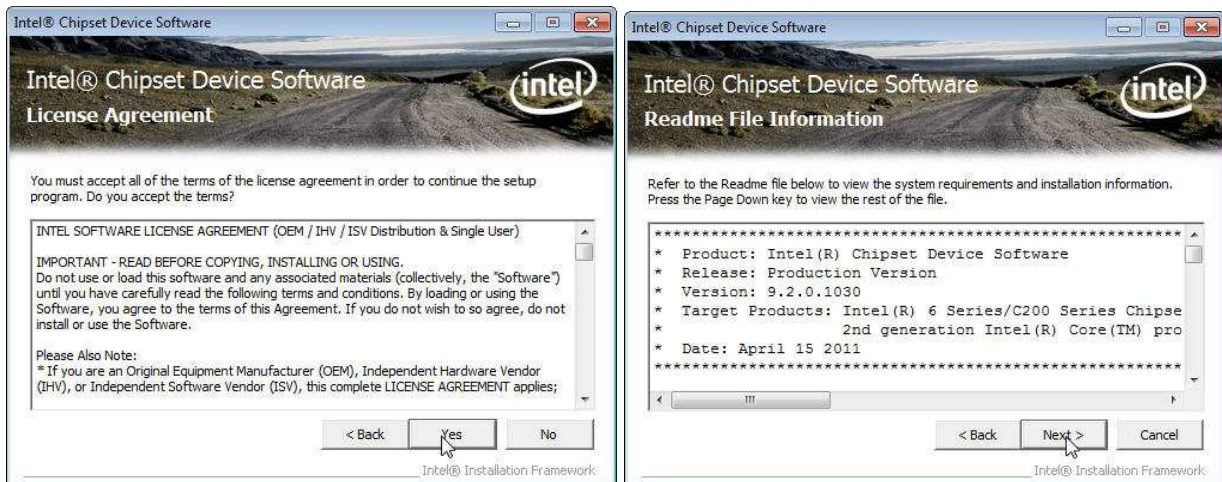


Intel Chipset Installation Utilities for Windows 7

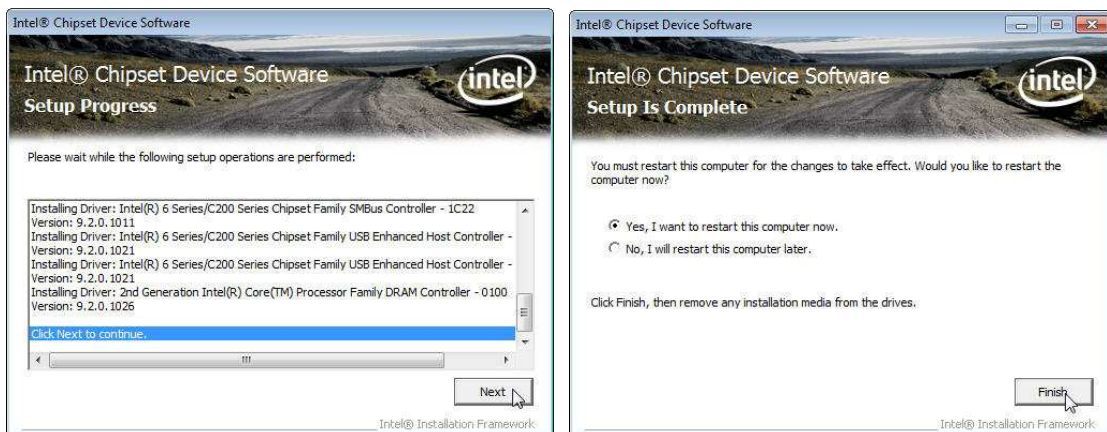
1. Download drivers from website or insert the Driver CD into your CD ROM Drive.
2. Execute **Setup.exe** and Click **Next**.



3. Read the License Agreement and click **Yes** & Click **Next** and the drivers for the Intel Chip set will install.



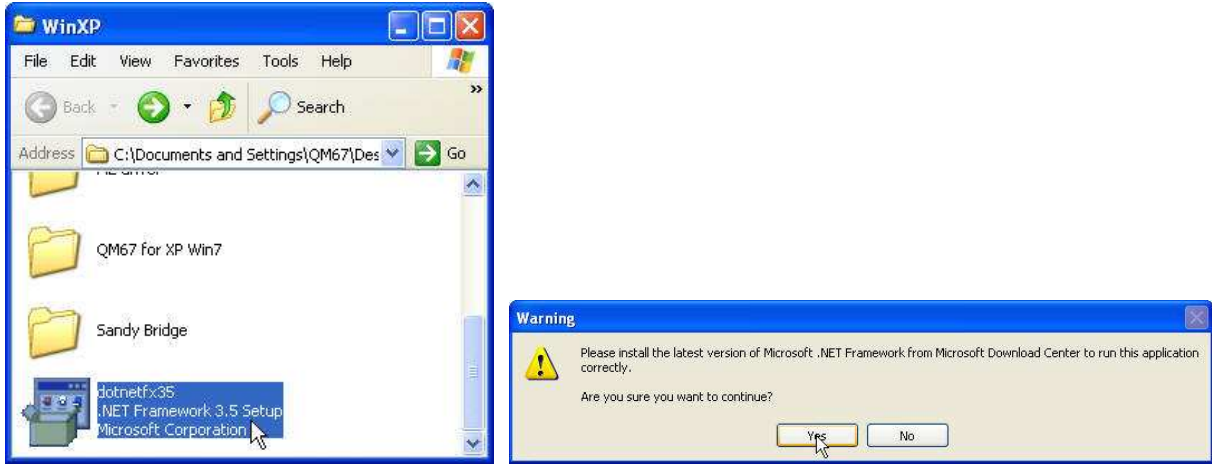
4. Click **Next** and choose restart computer for finishing the Chipset Driver, click to **Finish**.



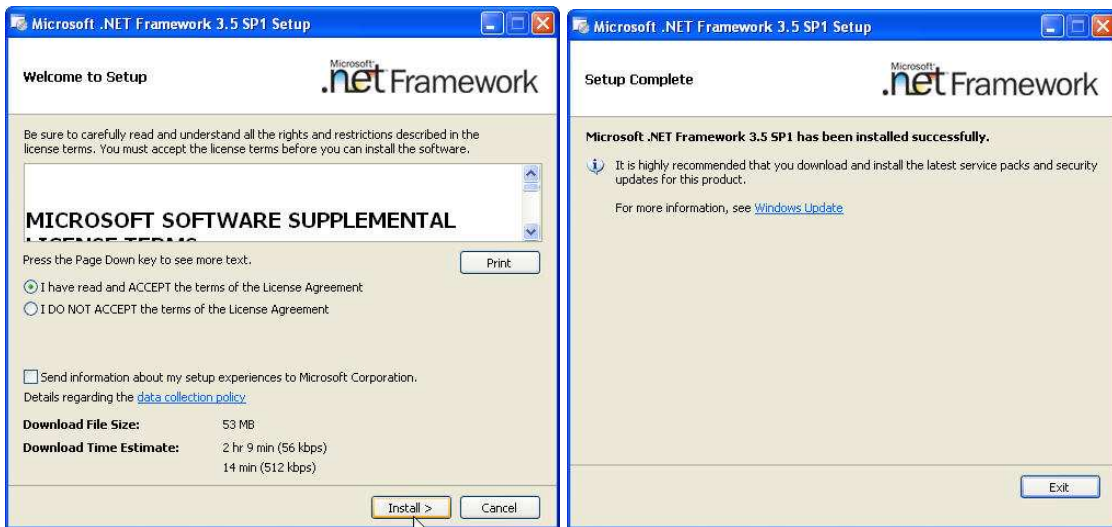
.Net Framwork 3.5 Tool Installation

.Net Framework 3.5 Tool for Windows XP

1. Download drivers from FEC website or insert the Driver CD into your CD ROM Drive.
2. Double click **Setup.exe**, and Click **Next** to start tool installation



3. choose **I have read and ACCEPT** the terms of the license Agreement and click **Install** for the following steps



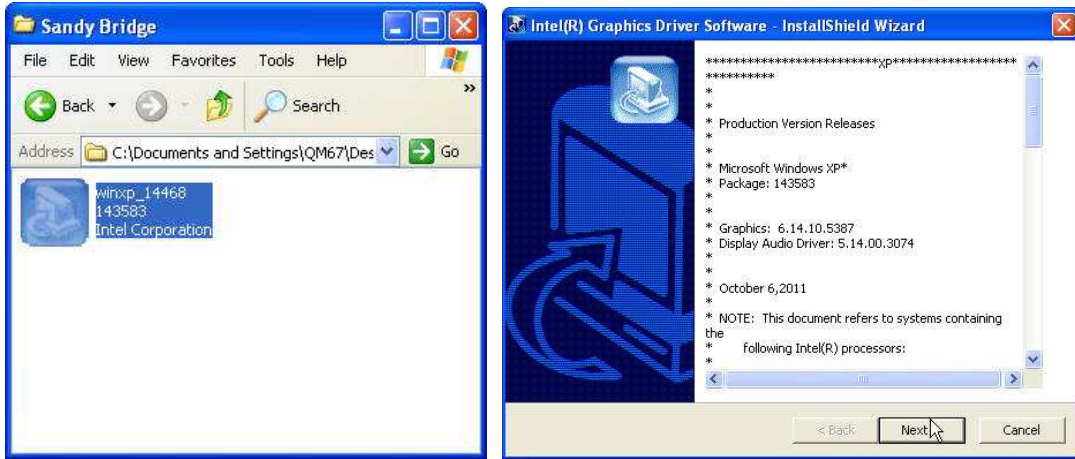
4. Click the message pop out to check for the detail process. Finally, click **Exit** to finish the installation.



HD Graphic Driver Installation

HD Graphic Driver installation for Windows XP

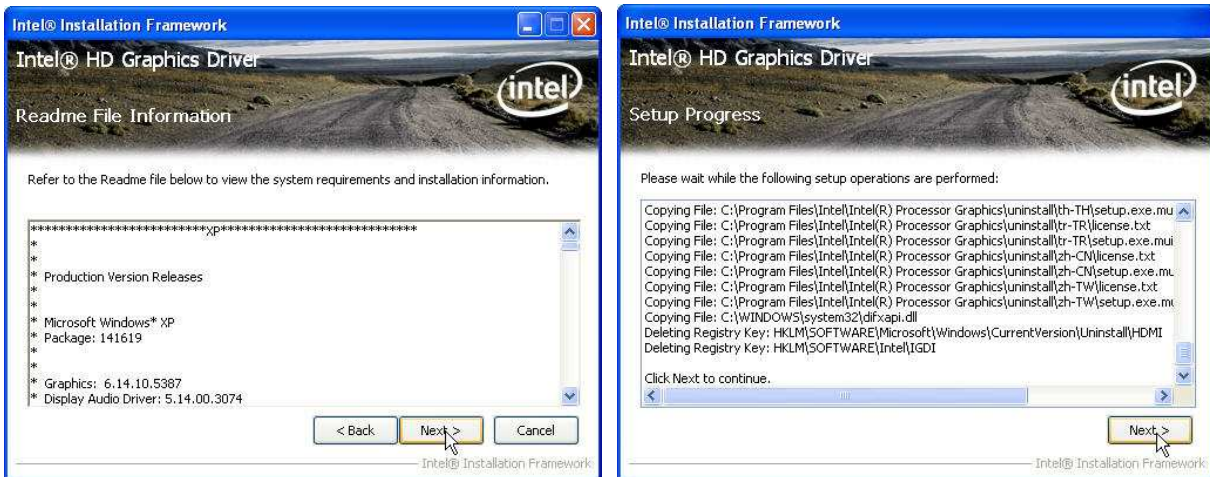
1. Download drivers from website or insert the CD into your CD ROM Drive.
2. Execute **Steup.exe**



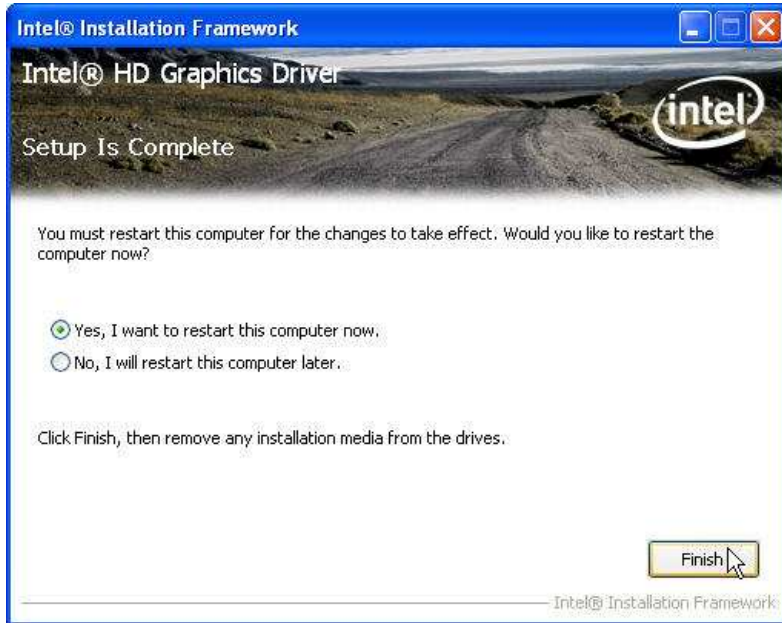
3. Select **Next** and click **Yes** of License Agreement Page.



4. Select **Next** to continue driver installation.

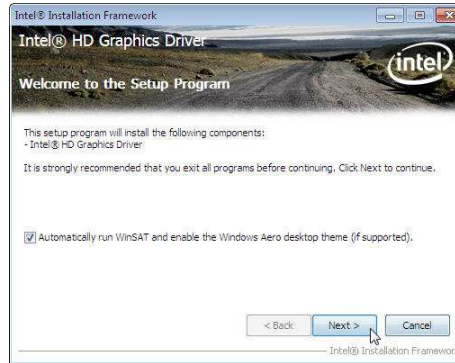
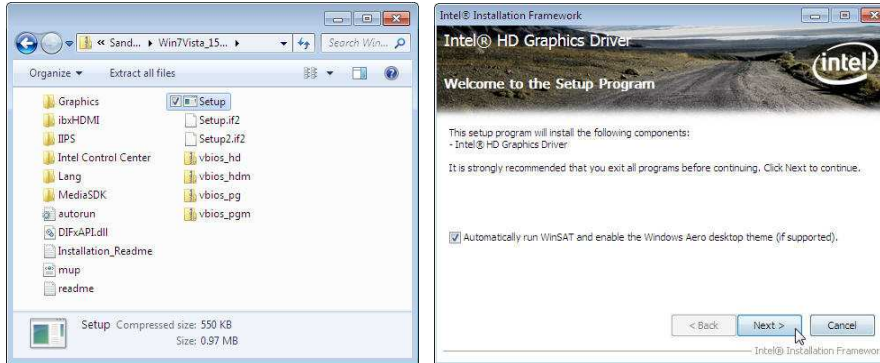


5. Finally, **Finish** and **Restart** the system

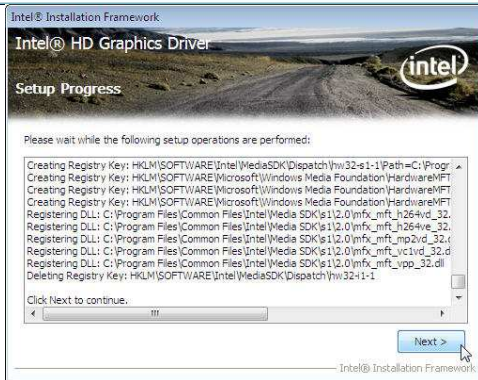
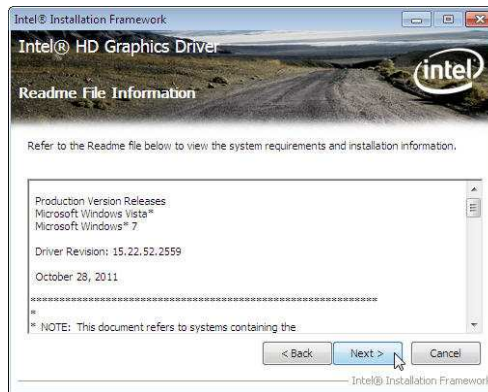


HD Graphic driver installation for Windows 7

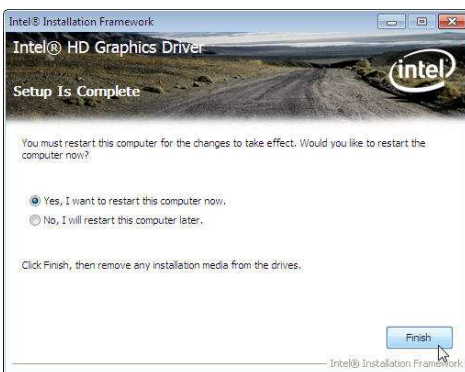
1. Download drivers from website or insert the CD into your CD ROM Drive.
2. Execute **Steup.exe** and select **Next**



3. Click **Yes** of License Agreement Page and select **Next** to continue driver installation.



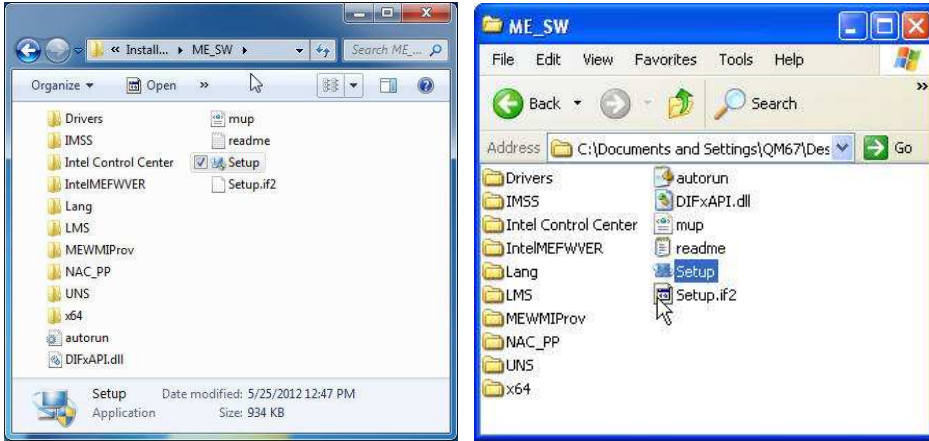
4. Finally, **Finish** and **Restart** the system



Intel Management Engine Components Driver Installation

Intel Management Engine Driver for Windows XP & Win 7

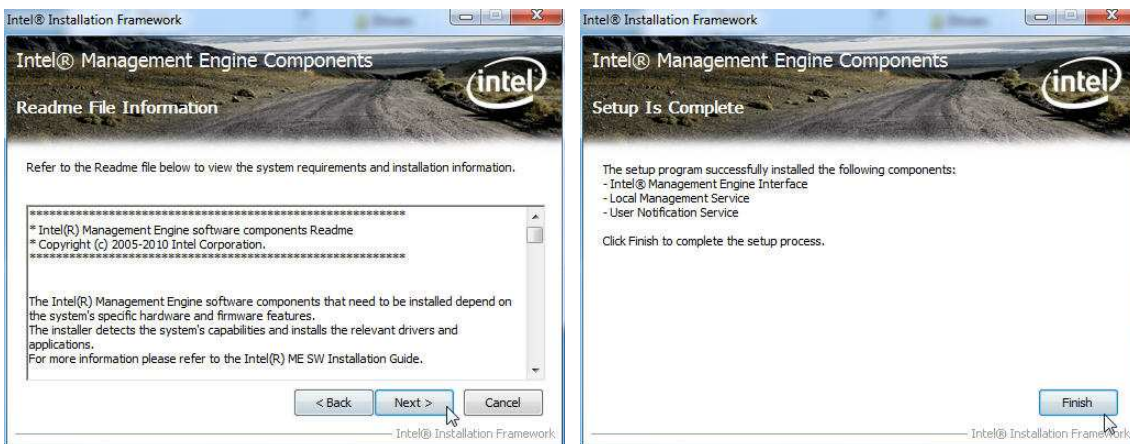
1. Download drivers from website or insert the CD into your CD ROM Drive.
2. Execute **Steup.exe**



3. Select **Next** and click **Yes** of License Agreement Page.



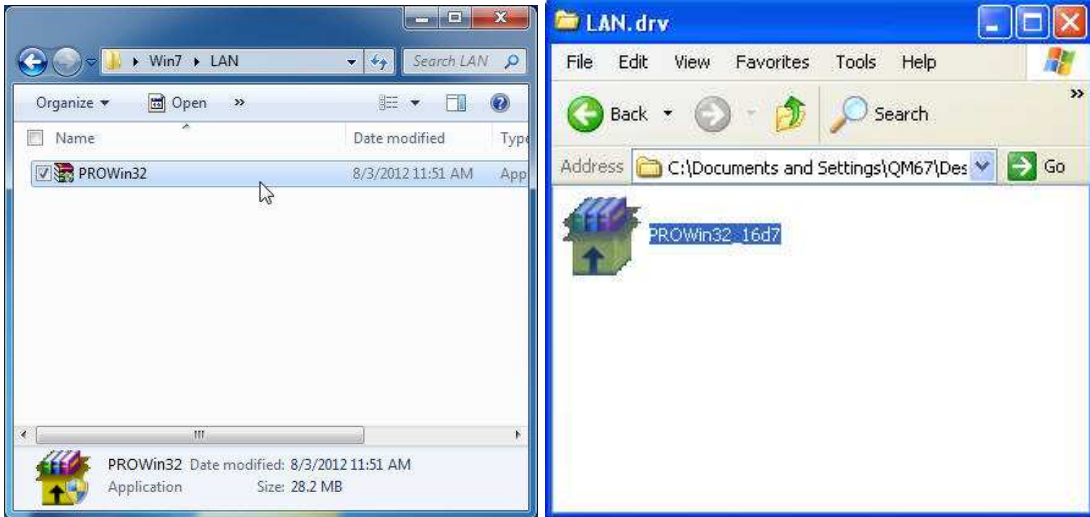
4. Select **Next** to continue driver installation; **Finish** and **Restart** the system



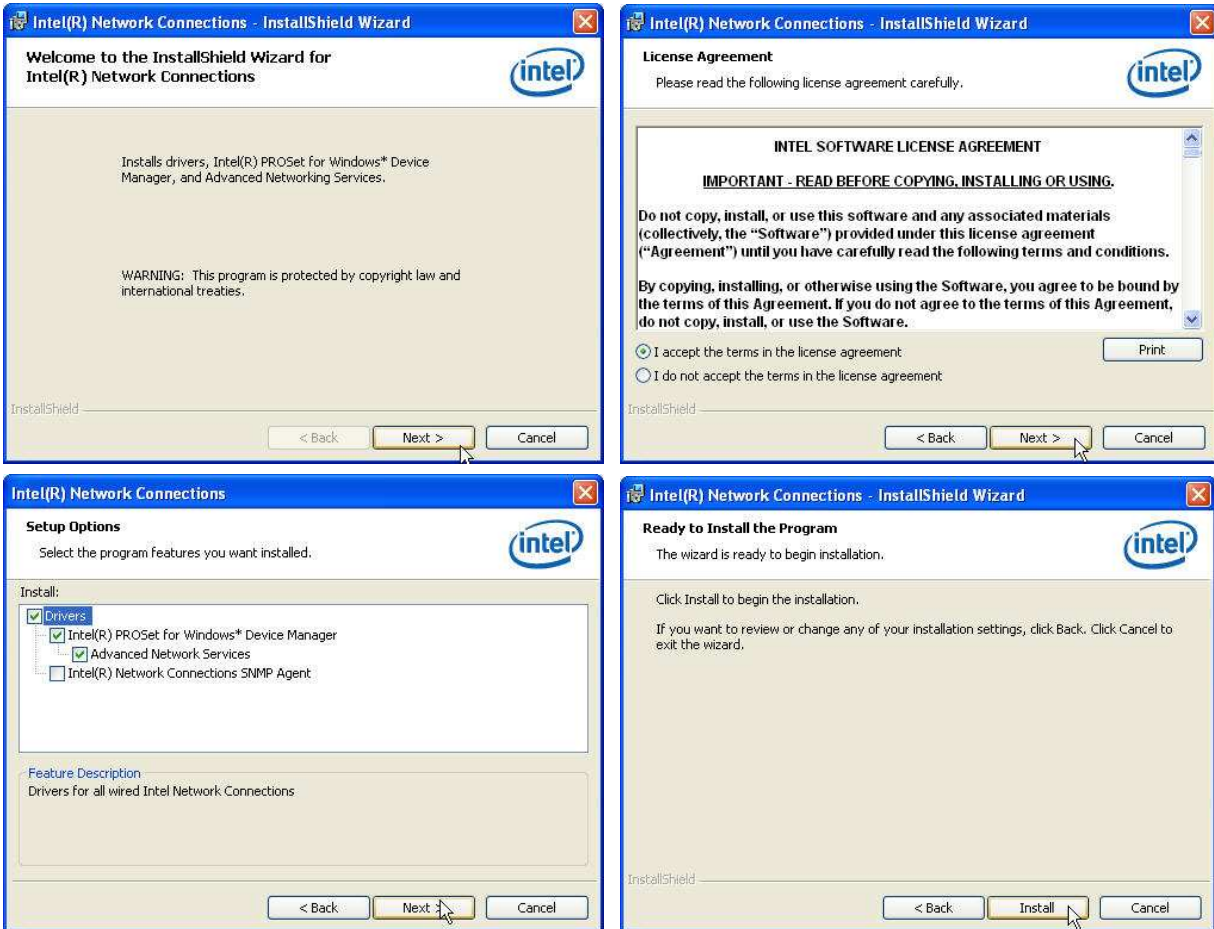
LAN Driver Installation

Intel LAN Driver Installation for Win7 & Windows XP

1. Download drivers from website or insert the CD into your CD ROM Drive.
2. Execute **Setup.exe**.



3. Click **Next** to continue



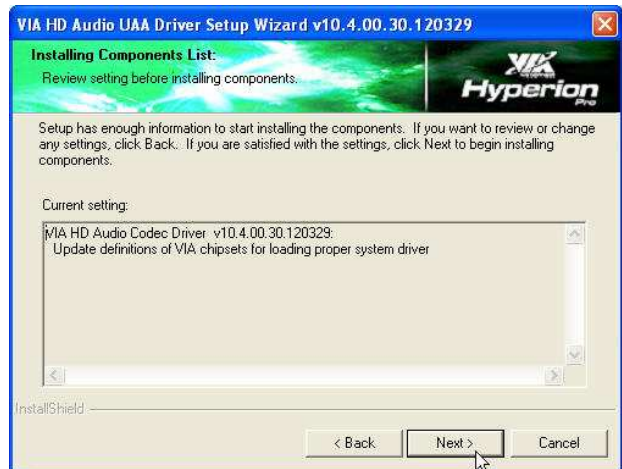
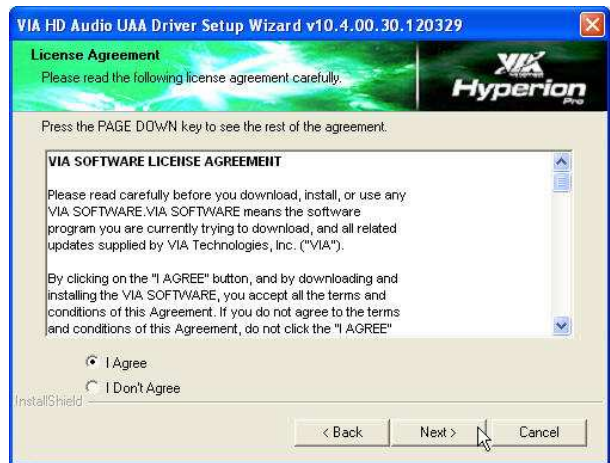
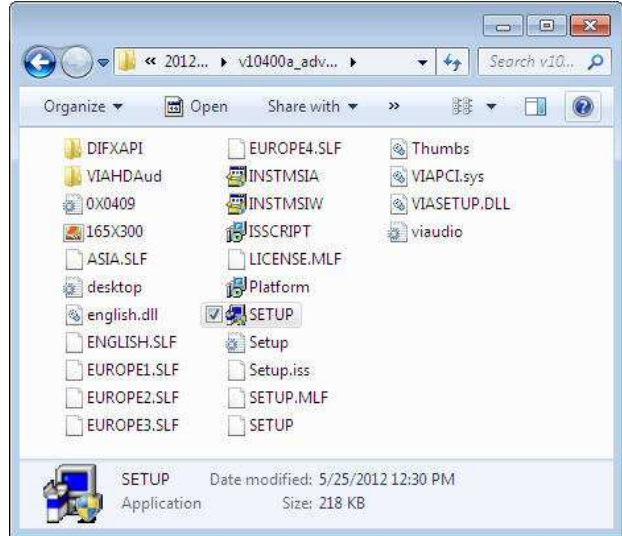
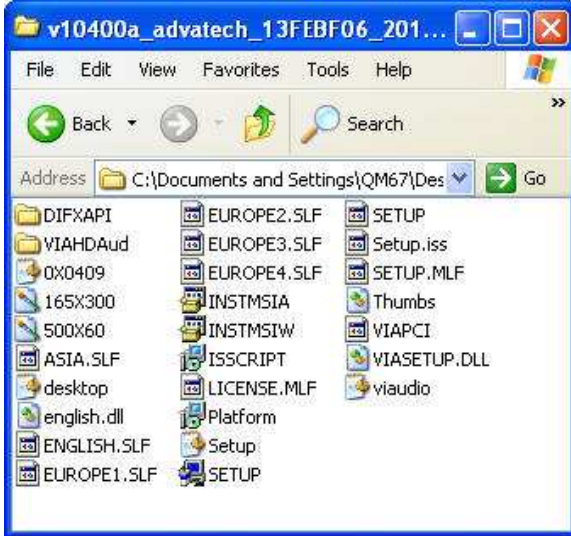
4. Click **Finish** to complete the installation procedure.



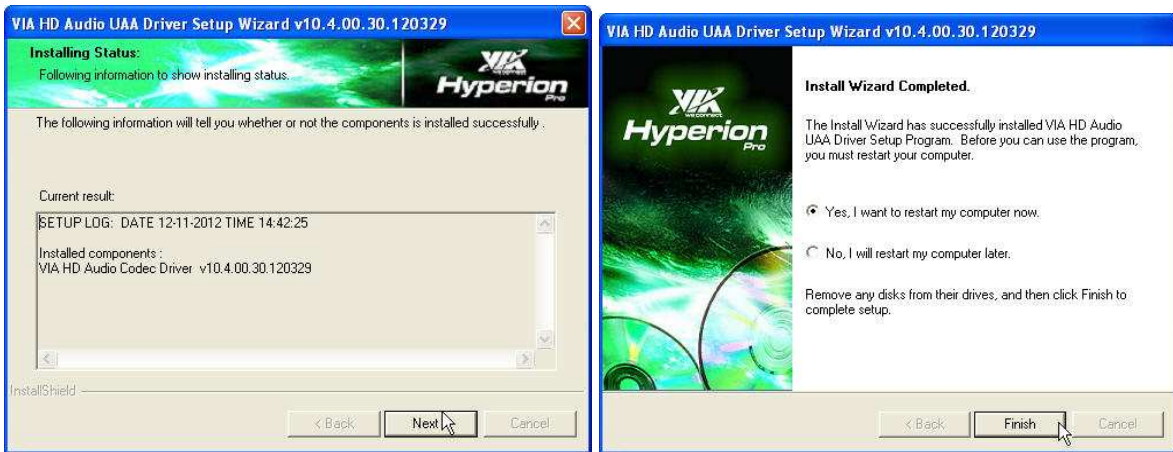
Audio Driver Installation

VIA HD Audio Driver Installation for Windows XP & Windows 7

1. Download drivers from website or insert the CD into your CD ROM Drive.
2. Double click **Setup.exe**, and Click **Next** to continue



3. Click **Finish** and restart the system.



FEC Project – Capacitive Touch Utility (Raydium Controller)

FEC Projective – Capacitive Touch Utility Introduces:

1. Mode of FEC Capacitive Touch Panel and default settings
2. Capacitive Touch Sensitivity
3. Right Click Function Setting
4. Double Click Function Setting
5. F/W Reading or F/W Update

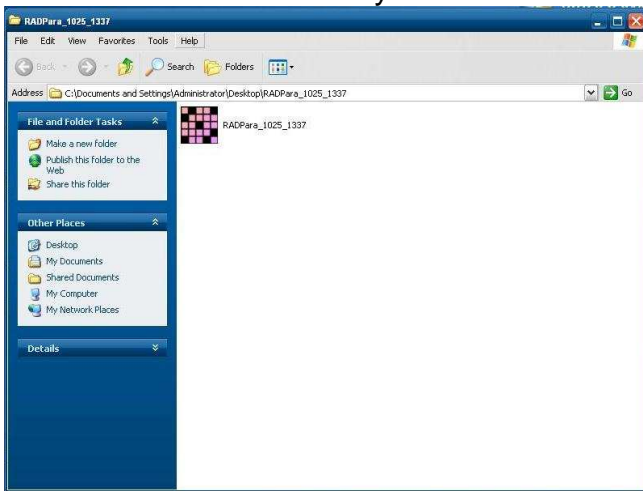
Mode of FEC P-Capacitive Touch Panel and Default Settings

The default setting of FEC P-CAP touch will be always “Mouse Mode” with Single Touch as the factory default setting. If the application requires Multi Touch (Dual Touch), FEC P-CAP touch can also be accordingly set as “Touch Mode” (Dual Touch with two fingers) via Touch Utility, but it has to be in Win7 or POS Ready 7 OS environment.

	Win XP, POS Ready 2009	Win7, POS Ready7
Mouse Mode	Yes No Driver Needed	Yes No Driver Needed
Touch Mode	N/A	Yes No Driver Needed

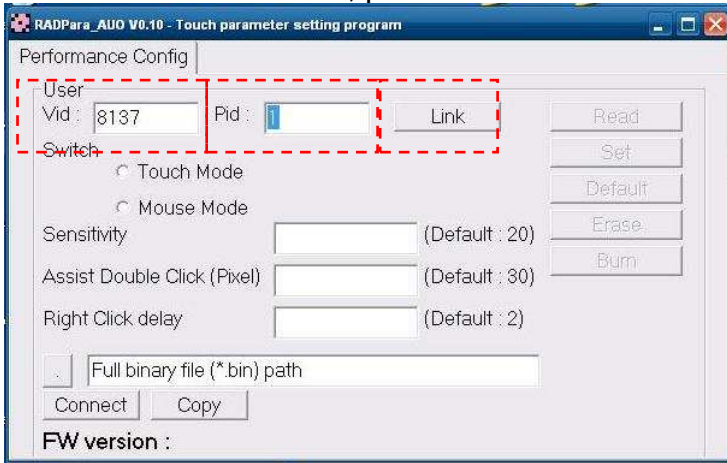
Mode setting can be done in the utility:

1. Execute the touch utility

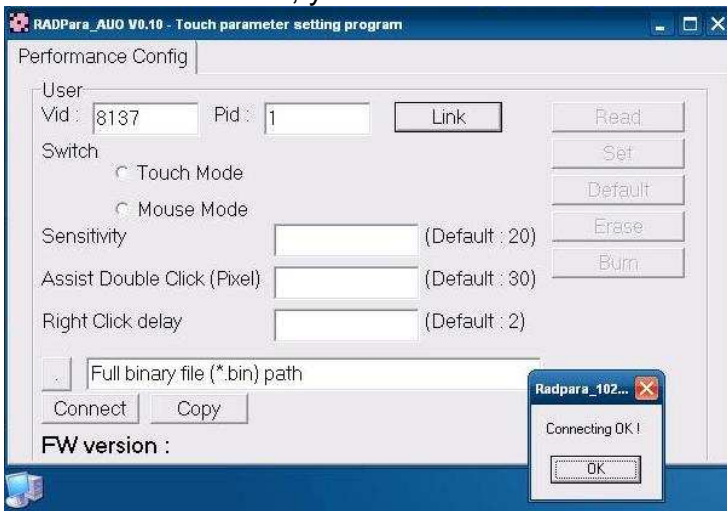


AerPOS Series AP-3625

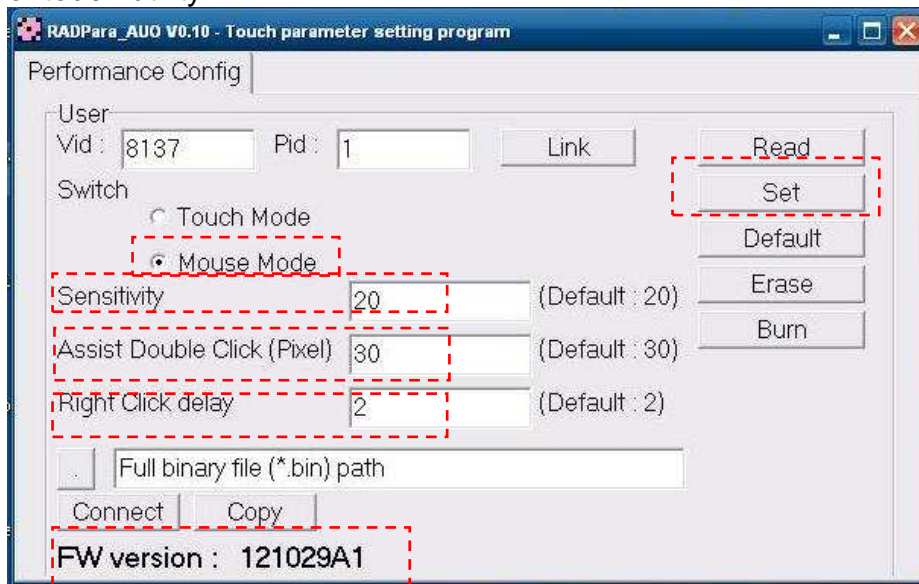
2. Keep the Value of Vid as “8137” ; Value of Pid as “1”, then Click “Link” Button (before it links, if it is factory default setting Mouse Mode, please keep Pid Value as “1”; if it is set as touch mode, please make Pid Value as “3”)



3. “Connection OK”, you will see a window shows about the connection OK



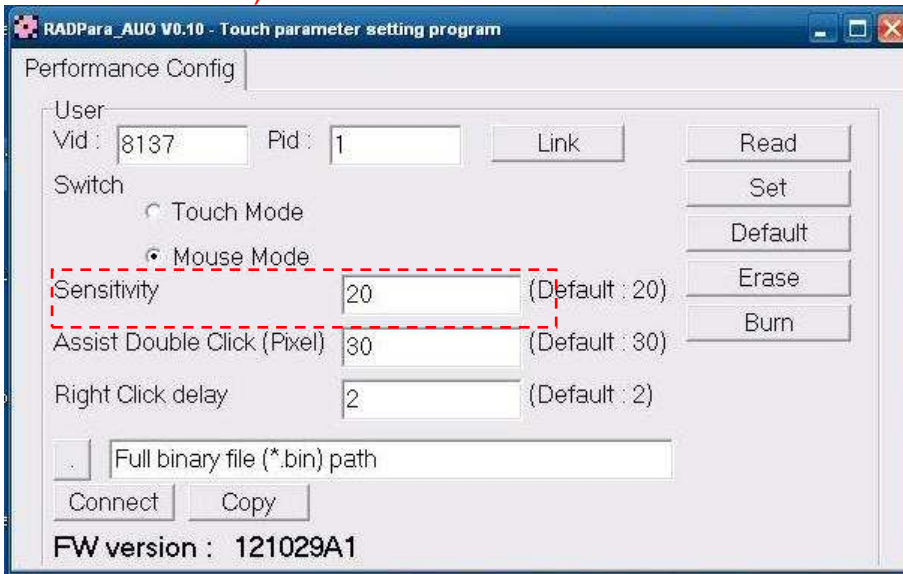
4. after the successful connection, Click “Read” button, it will show some default status of touch utility



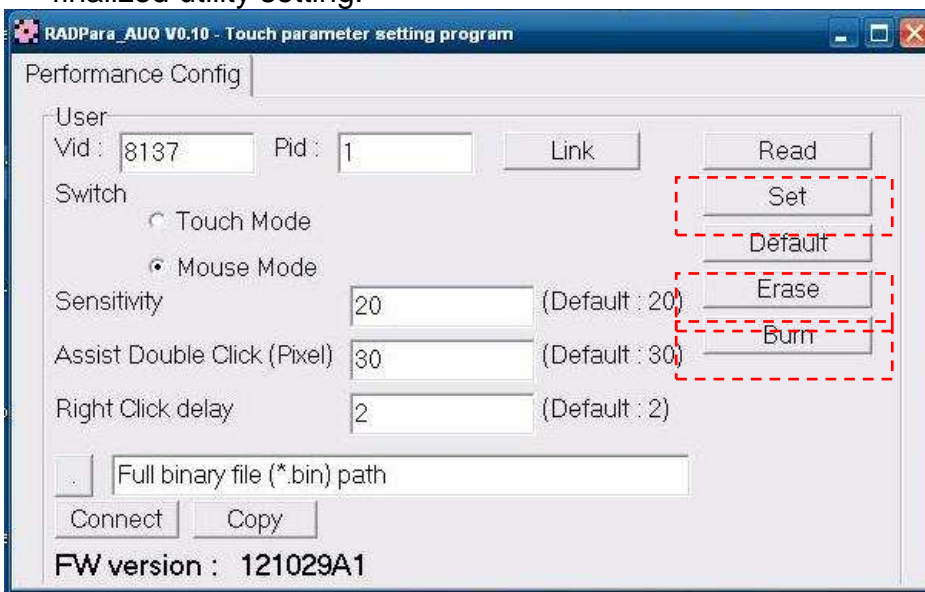
P-Capacitive Touch Sensitivity

The P-Capacitive Touch Sensitivity is relating to humidity of environment, humidity of finger tips or touching area size of finger tips. Thus, if the application requires more or less touch sensitivity, it can also be adjust by utility.

1. After the successful linked connection with touch controller, you might key in the value to adjust the touch sensitivity. (the value is form “0” ~ “100”, “0” means the highest sensitive “100” means the lowest sensitive) **(Before the adjustment, please note the default factory setting “20” is the most optimized to fit with the majority of POS environments.)**



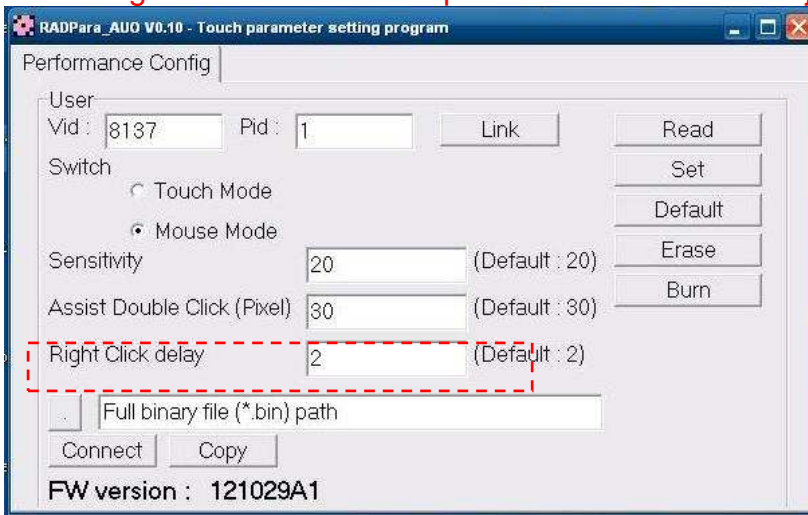
2. After key in a proper Value, Click “Erase” → “Set” → “Burn” step by step, then the certain value of sensitivity is applied into touch controller. Reboot the system to finalized utility setting.



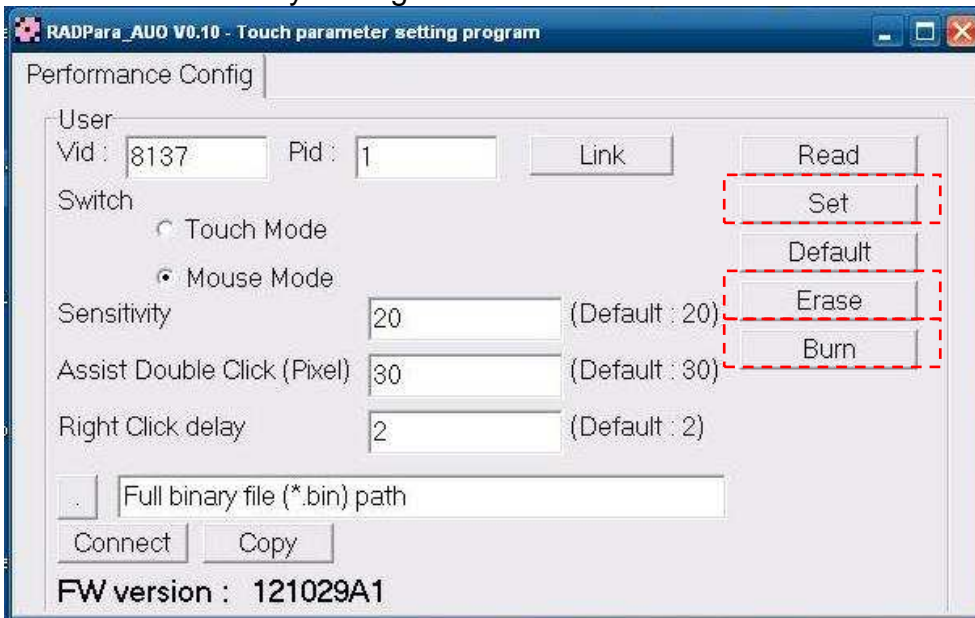
Right Click Function Setting

The FEC P-CAP touch is simulating a USB mouse; therefore it has also the right click function of normal mouse. When finger tip stays on the touch glass for more than 2 seconds (factory default setting is 2 sec), right click will occur. If the application require longer times for right click function, it can be adjusted via the utility.

1. After the successful linked connection with touch controller, you might key in the value of Right Click delay. (Value unit is second. it means the bigger value you key in, the longer delay second it will be.) **(Before the adjustment, please note the default factory setting “2” sec is the most optimized to fit with the majority of POS environments.)**



2. After key in a proper Value, Click “Erase” → “Set” → “Burn” step by step, then the certain value of sensitivity is applied into touch controller. Reboot the System to finalized the utility setting.



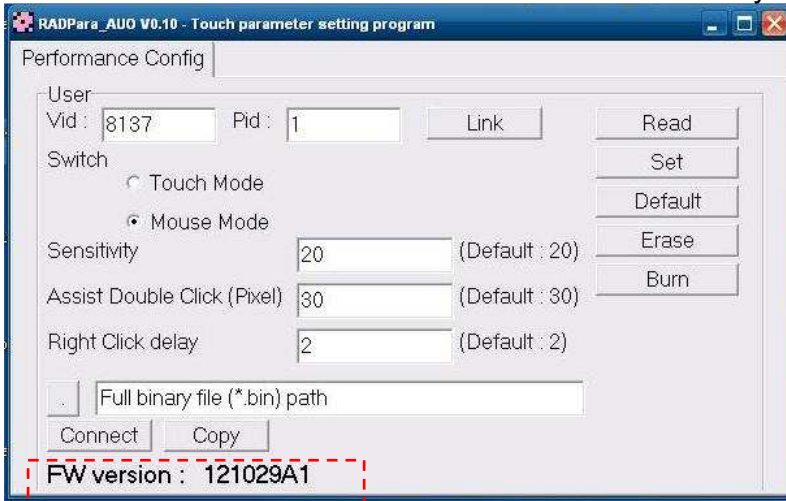
Double Click Function Setting

Due to the application and user preference, the timing of double click is always required differently. However, FEC P-CAP touch is a simulate device as USB mouse, therefore the sensitivity of double click can be easily adjust by default mouse utility in any of windows OS.

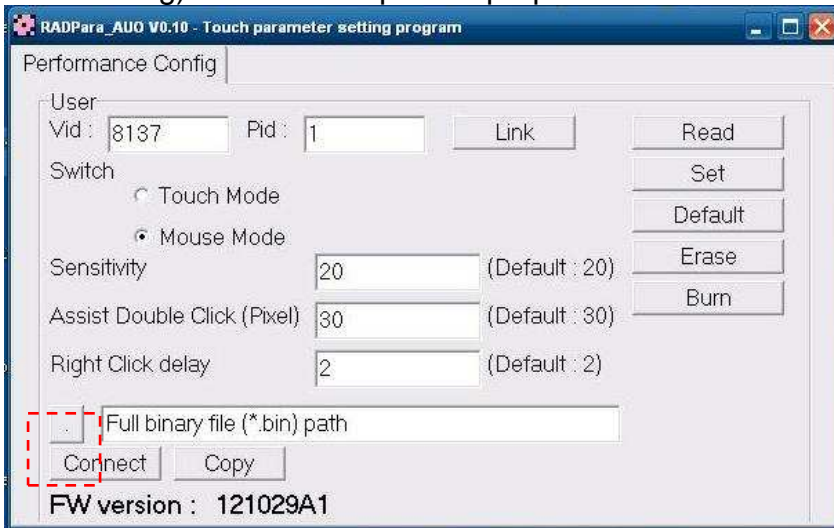
F/W Reading and F/W Update

The touch F/W can be updated by the utility.

1. F/W current Status Reading, after a successful linked connection. It will show the touch controller F/W Version at the bottom of utility window.

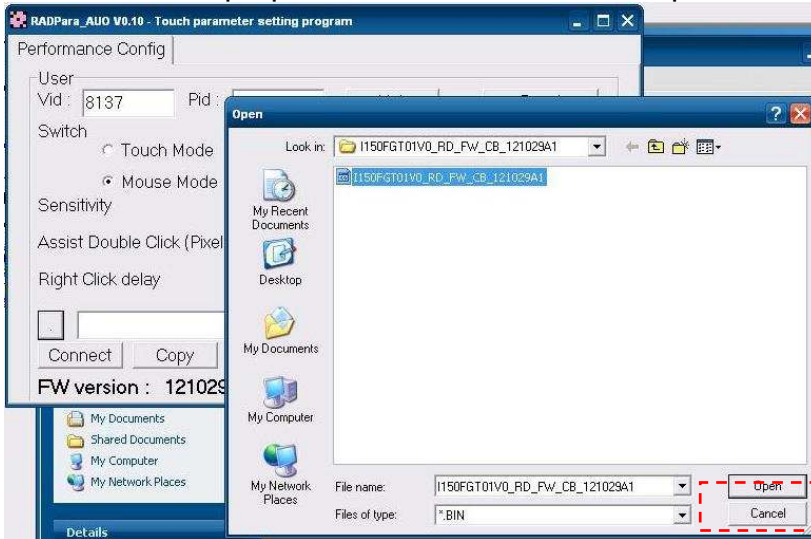


2. However, if F/W needs to update, first Click the square button (circled in red as following) to locate the path of proper BIN file.

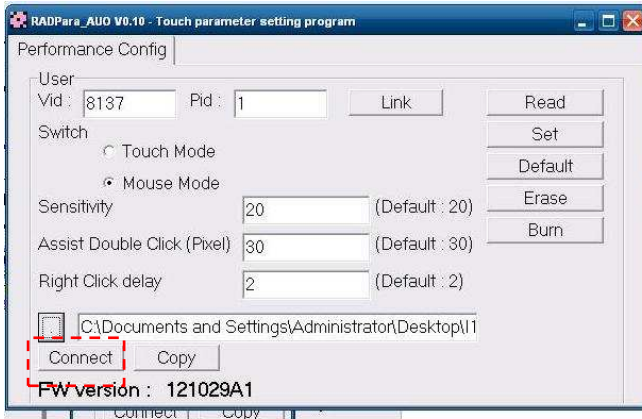


AerPOS Series AP-3625

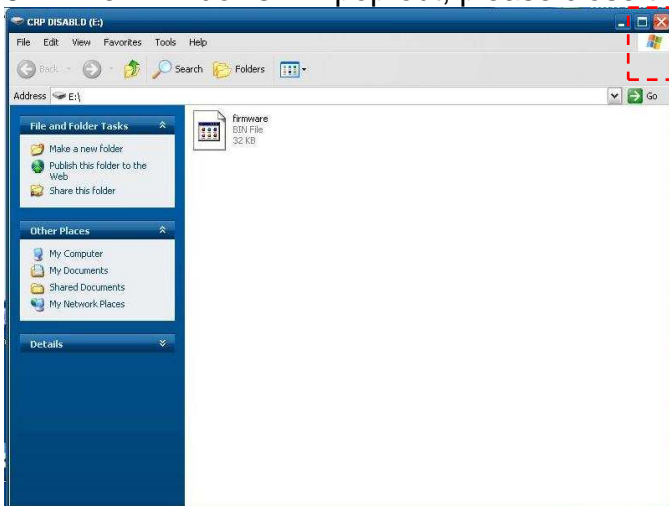
3. Choose the proper BIN file from the correct path, then “open”



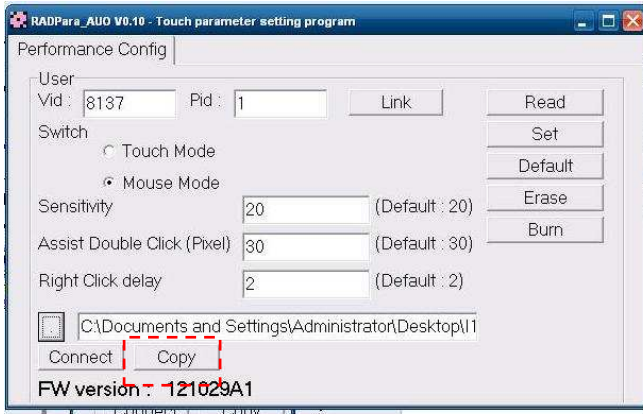
4. Then Click “Connect” button for further step



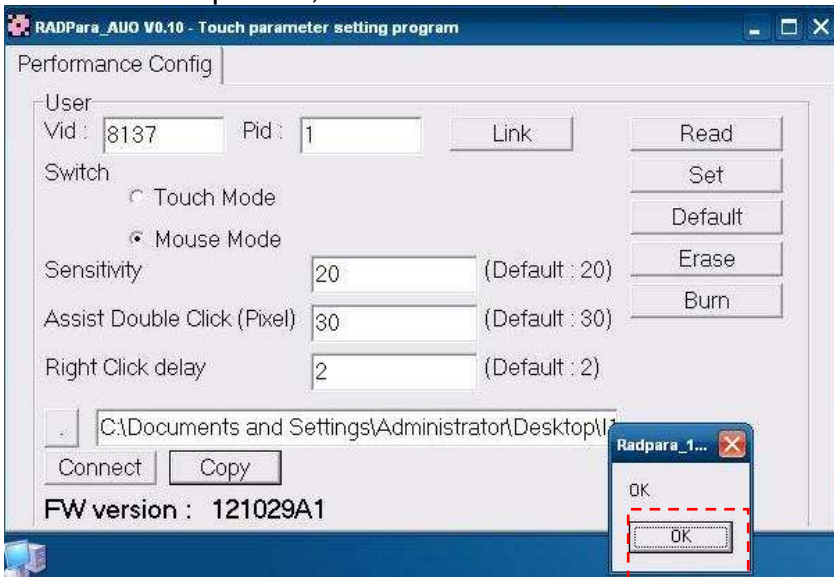
5. A new windows will pop out, please close this pop out windows and back to the utility.



6. Click “Copy” and wait for 1 minute for the new F/W applies into the controller and re-calibration.



7. Firmware updated, Click “OK” and reboot the terminal to finalized the utility setting.



FEC-AUO Capacitive Touch Calibration

This Capacitive Touch has auto calibration controller via USB interface. There are two different methods which can initiate the touch auto calibration: (1) Reboot the Terminal. (2) Switch Off the Display Module then Switch On Again

****Note**** Capacitive touch screen will not operate with either a gloved hand or with a mechanical stylus. It is made of glass, which makes it extremely durable and scratch resistant. Capacitive touch might need the calibration when too many water or liquid stays on the glass during touch operation or the humidity goes too high to meet 80% non density . Thus, FEC recommends users to keep the liquid from the touch glass and calibrate the touch screen.

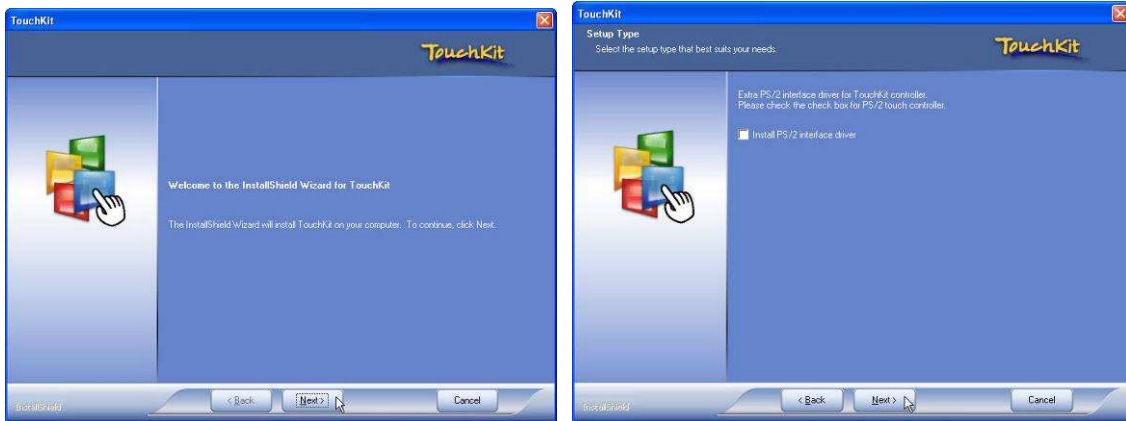
EETI TouchKit Tools Installation

EETI TouchKit Installation for Windows XP

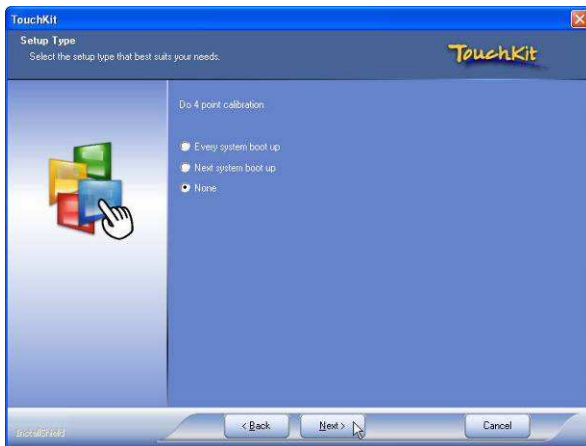
1. Down load Touch Kit for WinXP from FEC website or Driver CD
2. Execute **Setup.exe**



3. Click **Next**



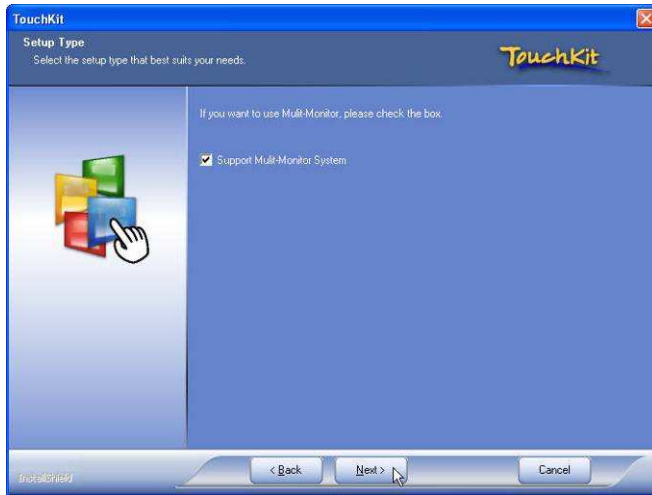
4. Choose **“None”** and Click **Next** for further installation process



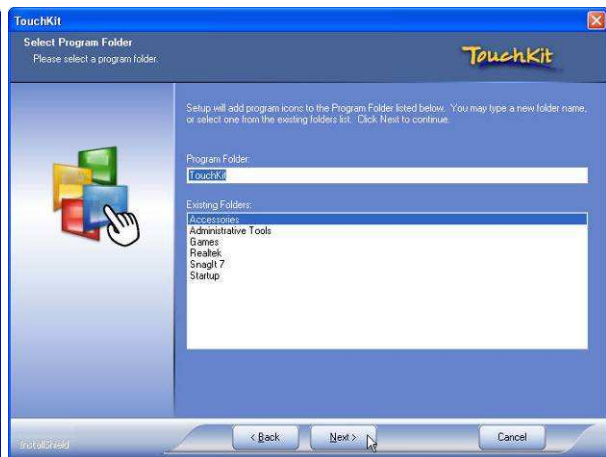
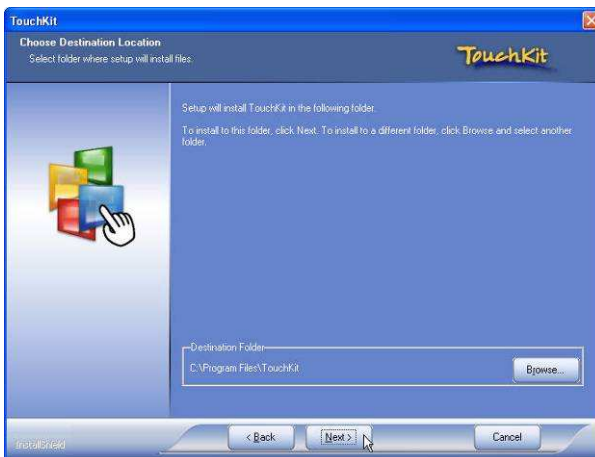
5. Click **OK** to close the pop-up dialog.



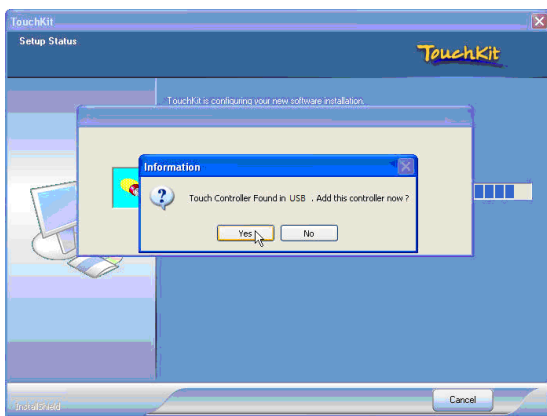
6. Click **“Support Multi-Monitor System”** and then **Next** to continue.



7. Click **Next** and choose a program folder to **“Touch Kit”**, then **“Next”**

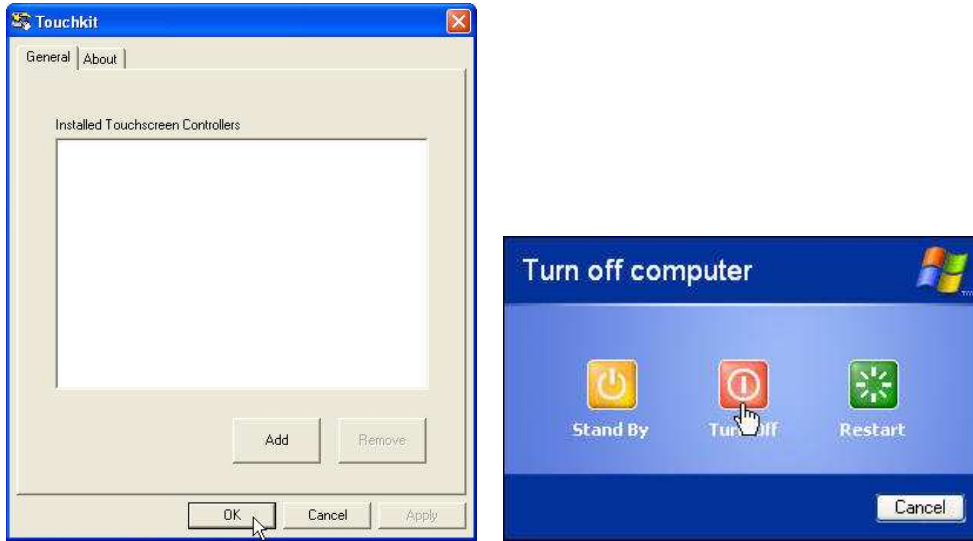


8. Touch Controller found in USB, then Click **Yes**



9. Click **OK** and turn off the computer to restart your system again.

After the system finish rebooting follow the instruction to calibrate the Touch screen.

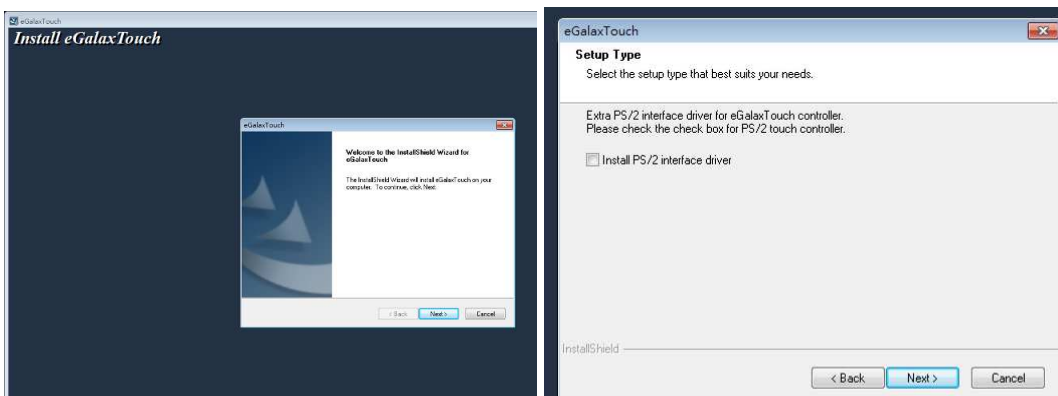


EETI TouchKit Installation for Windows 7

1. Down load Touch Kit for Win 7 from FEC website or Driver CD
2. Execute **Setup.exe**

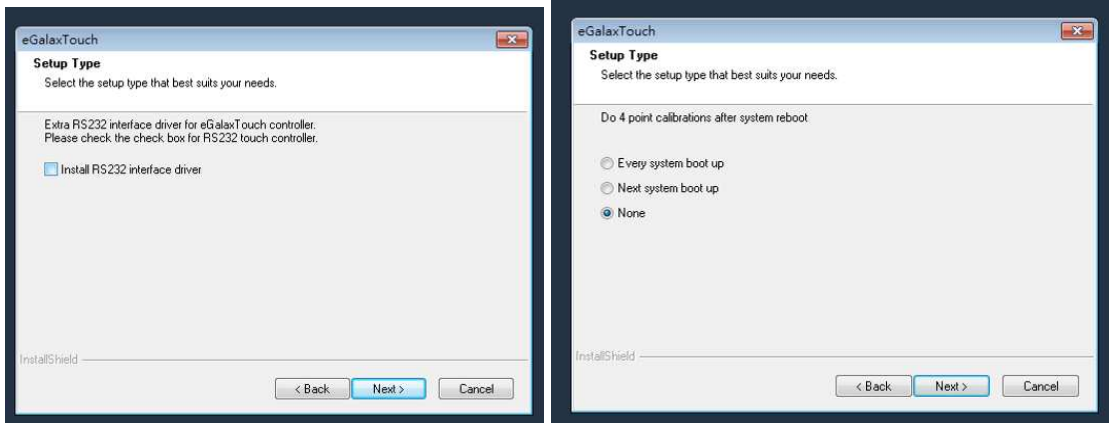


3. Click **Next**

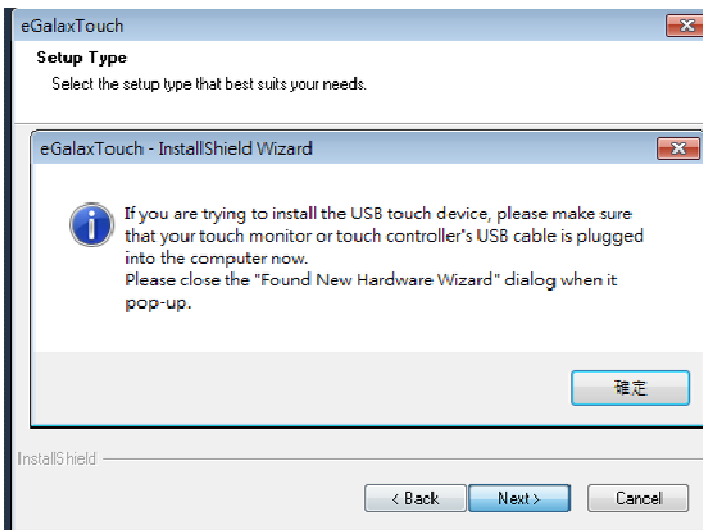


AerPOS Series AP-3625

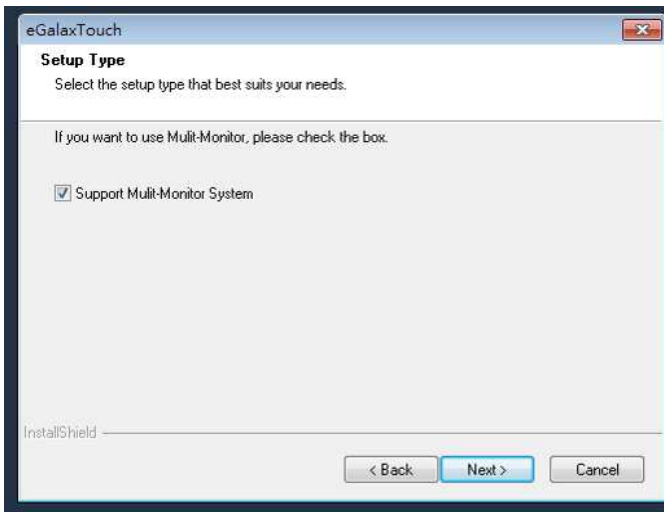
4. Un-tick “Install RS232 interface driver” and Click “Next” to go for further process.



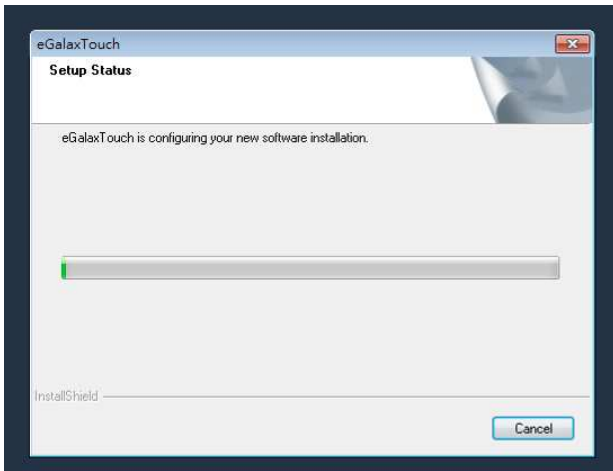
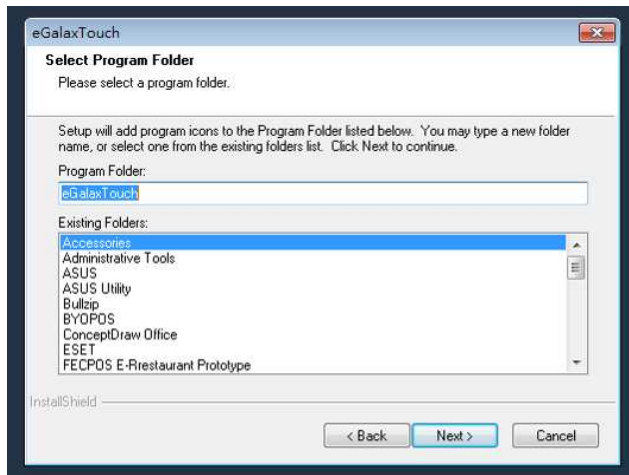
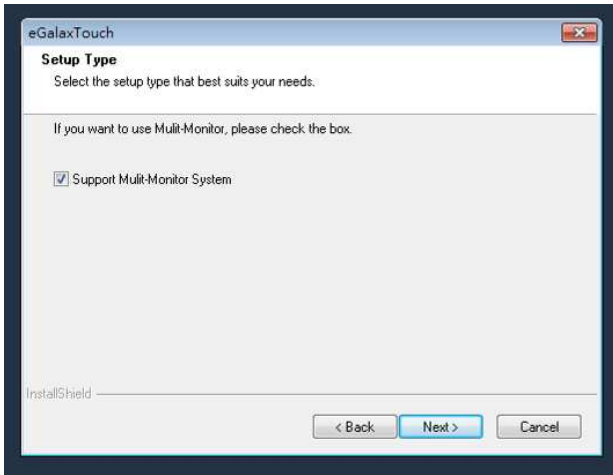
5. Click “Yes” and confirm the USB touch controller is plugged.



6. Click “Support Multi-Monitor System” and then Next to continue.

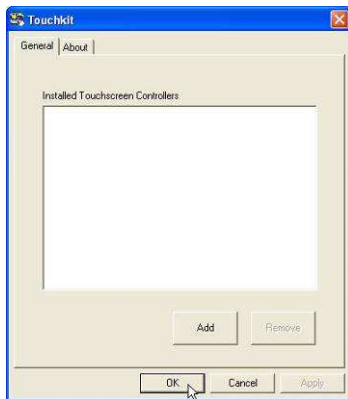


7. Click Next



8. Click **OK** and turn off the computer to restart your system again.

After the system finish rebooting follow the directions to calibrate the Touch screen.



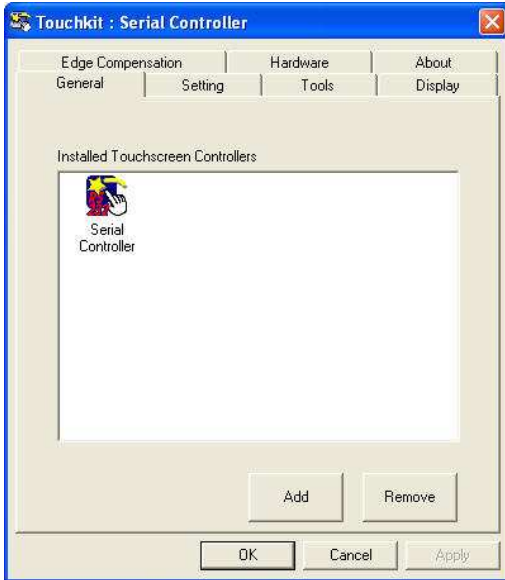
TouchKit Control Panel

This section explains the different options in the TouchKit control Panel.

General tab

The general tab allows you to:

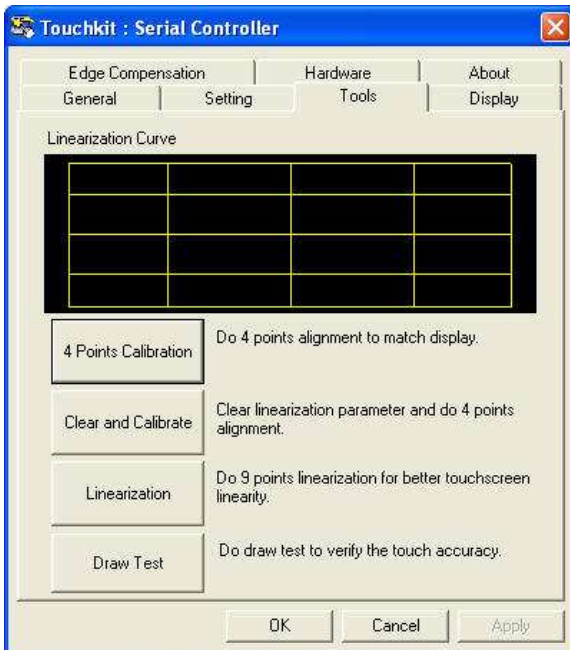
- Manage the touch screen controller you installed.



Tools tab

The tools tab allows you to:

- Calibrate the touch screen with the **4 Points Calibration** button.



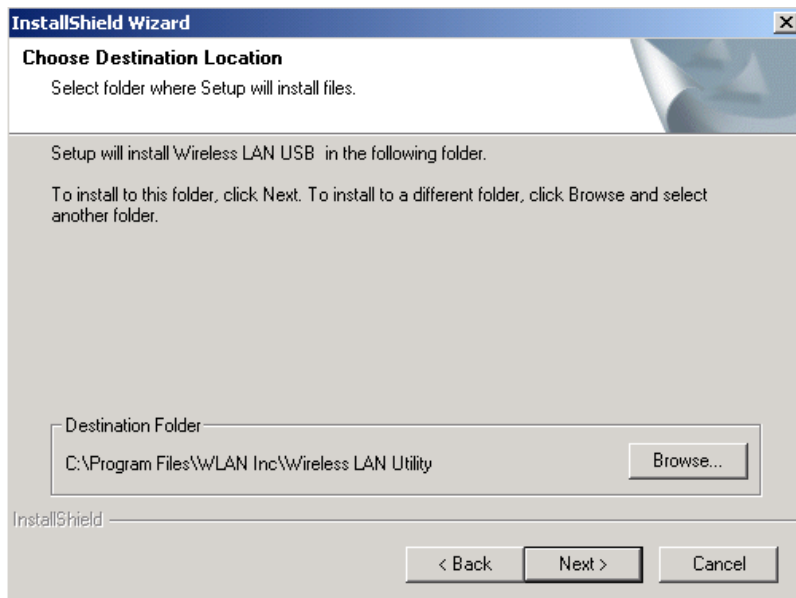
Wireless LAN Driver Installation

Wireless LAN Driver Installation for all Windows Operating Systems (Optional)

1. Download drivers from website or insert the CD into your CD ROM Drive.
2. Run **Setup.EXE**



3. Click **Next**



4. Click **Next**

Chapter 4

Specifications

AP-3625 Specifications

Aer POS		AP-3625 Performance	
Main Specifications	Chipset	Intel Sandy Bridge QM-67	
	Processor	Intel Dual Core Celeron B810 1.6G Intel i5 2510E 2.5G	
	Memory	DDR3 Standard 2GB, Max 8GB	
	Power Supply	12V 150W	
	Thermal	Smart Fan	
	Storage Device	1 x 2.5" SATA Driver Bay	
	Speakers	Internal Speaker 2W x 2	
Touch Display	Display Design	15" True Flat (Ultra Slim) Bezel Free	
	Touch	Projective-Capacitive (Tempered Glass)	5W Resistive
	Backlight	LED	CCFL
	Brightness	350 nits	250 nits
	Backlight MTBF	50 K hours	30 K hours
Peripherals & Optionals	MSR	Track 1/2/3 , USB interface	
	Finger Print Receiver	Optical Finger Print Receiver, USB interface	
	RFID Reader	13.56M Hz RFID reader , USB interface	
	I - Button Reader	USB interface	
	Optional COM Port	Additional Stand USBx1; COM 5; 12V Power USB x 1	
	Wireless LAN	802.11.b.g.n wireless LAN , USB interface	
	VFD	(Integration Type) 20x2 (9mm) Character Mode	
	LCM	(Integration Type) 20 x 2 Character Mode (Integration Type) 240x64 Graphic Mode	
	2 nd Display	(Integration Type) 11.6" / 15" 2nd Monitor	
	Brochure	B5 Brochure Bracket	

Chapter 5

Troubleshooting

Please note that the following troubleshooting guide is designed for engineer who has strong computer hardware knowledge or Engineers and Maintenance.

Touch Panel Does Not Work

- A) Check "Touch Display Module" is connected well with terminal.
- B) Check HID USB touch device is detected by OS.
- C) (Resistive Touch) Check if the EETI driver or the TouchKit driver has been properly installed. Or try to re-install again (Please refer to the EETI driver and touch kit installation).
- D) (Capacitive Touch) Check if the FEC-AUO Capacitive touch is automatically detected by Windows 7, or properly installed the touch driver in Windows XP.
- E) (Capacitive Touch) Please do not keep the capacitive touch in high humidity and condensing environment, such as out door or bathroom, where might affect the touch performance or might need to be calibrate more frequently.
- F) Check if the cable connects well between touch panels and touch controller
- G) (Capacitive Touch Calibration) Reboot the system, and the Capacitive Touch can be calibrated automatically.

OSD Panel Cannot Work Precisely

- A) Please touch each single OSD button for more than two seconds in order to trigger the function.
- B) Make sure the finger is not touching more than one button each time.

Cannot Detect SATA Storage HDD/SSD

- A) Make sure storage device is well connected in the SATA Connector.
- B) HDD FFC cable is not connected properly to the main board or it could be defective.
- C) Check CMOS setup, set SATA HDD to Auto Detect.
- D) On-board SATA port could be defective.

LAN Is Not Functioning Properly

- A) Check if the LAN driver is installed properly.
- B) Check if there are any IRQ conflicts.
- C) Check if the RJ45 cable is properly connected.
- D) The on-board LAN chip could be defective.

COM1 ~ COM5 Are Not Functioning Properly

- A) Check if the I/O ports are enabled in the CMOS setup.
- B) Check if there are any IRQ conflicts.
- C) The main board or I/O board could be defective.
- D) (Reminder) The COM3 is shared by the read I/O and VFD, if you connector the VFD, please remove the device which is connected with external COM3.

Cash Drawer Port Is Not Functioning Properly

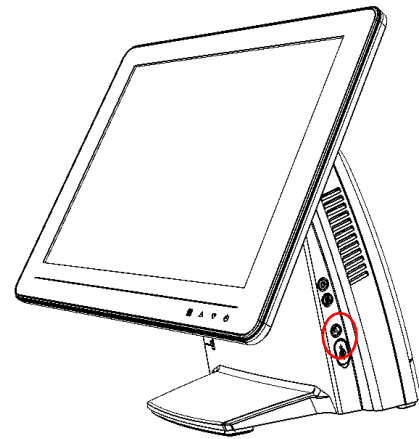
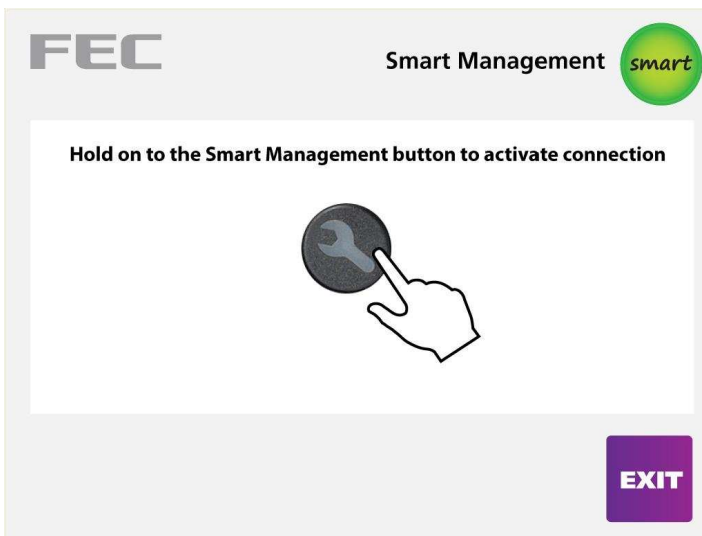
- A) Make sure the pin assignment matches between the cash drawer and the RJ11 cash drawer port.
- B) Verify if the digit I/O port address and bit are correct.
- C) The main board could be defective.

Appendix A:

Smart Management Tool User Guide

Smart Management Tool is FEC latest hardware management engine built in AerPOS (AP-3615, AP-3625) & BP-500 (BP-561, BP-562). With this tool, user could easily access the data inside the system that could user to identify the status and error during operation.

1. Move this Smart Management.exe to Desktop or any preferred location in your system (Windows XP & Windows 7 only)
2. Double click the .exe file to activate Smart Management as the following picture.



3. Press the Smart Management button aside the AP-3625 for 5 seconds to enter the **Terminal Status**. (This button is just above the external USB connector, Please make sure you did not press the Power Button or HDD LED)



Please refer to the following definition table for the information showed on the **Terminal Status**

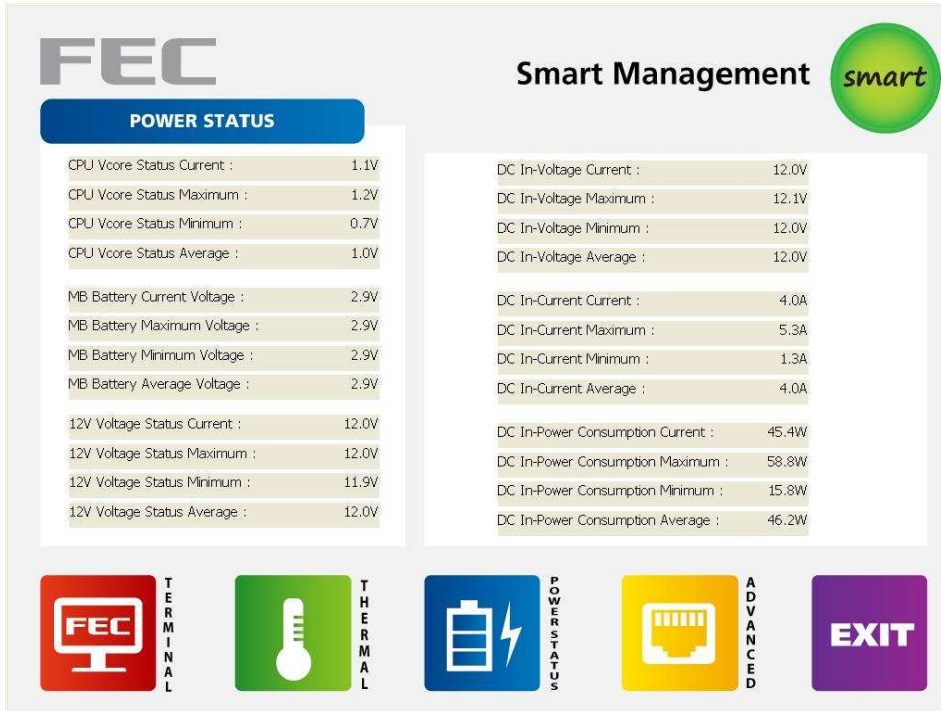
Item	Description
MB Version	Shows the M/B version
BIOS Version	Shows the BIOS version of the M/B
IO Version	Shows the firmware version on the I/O board
Display Version	Shows the firmware version on the Display board (AerPOS only)
Operation Service Hours	Shows the time this system has been powered up
Stand-by Service Hours	Shows the time this system has been connected to A/C input
Abnormal On/Off Count	Shows the times this system has been force disconnect with A/C input
ON/OFF Total	Shows the times this system has been power on & off normally
System Operation Hours	Shows the latest time the system has been operated
Display Module Plug in Time	Shows the times the display module has been re-plugged (AerPOS only)
Total Display Module Standby Hours	Show the time the display module has been connected with the system & the system has been connected to A/C input (AerPOS only)
Total Back Light Hour	Show the time the backlight has been used (AerPOS only)

Each data would be recorded after the system is shutdown normally, for any incorrect operation or force shutdown, only Abnormal On/Off Count & ON/OFF Total will be recorded, the rest data will missed.

4. User could monitor the Thermal & Fan Status inside the system by clicking the icon **Thermal**.



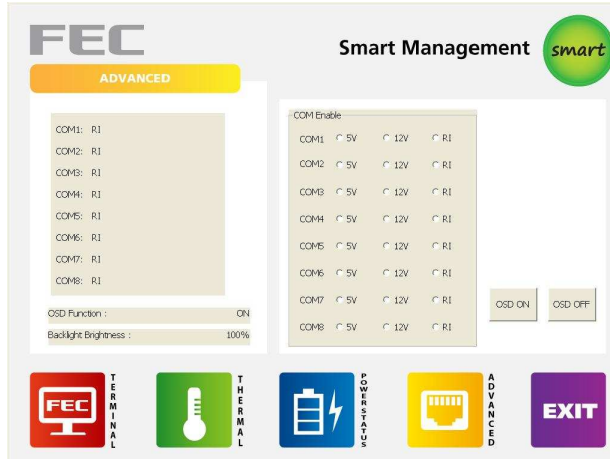
5. User could monitor the power status on the M/B by clicking the icon **POWER STATUS**.



Item	Description
CPU Vcore Status	Shows CPU Vcore status
MB Battery Voltage	Shows the Voltage of M/B battery (If the data of current is too low, please contact FEC Service Department for battery replacement)
12V Voltage Status	Shows the voltage of 12V on the M/B
DC In-Voltage	Shows the voltage of DC-IN (If the data is too low, please check the power adaptor)
DC In-Current	Shows the current of 12V DC-IN(If the data is too low, please check the power adaptor)
DC in-Power Consumption	Shows the power consumption of AP-3625 or BP-500

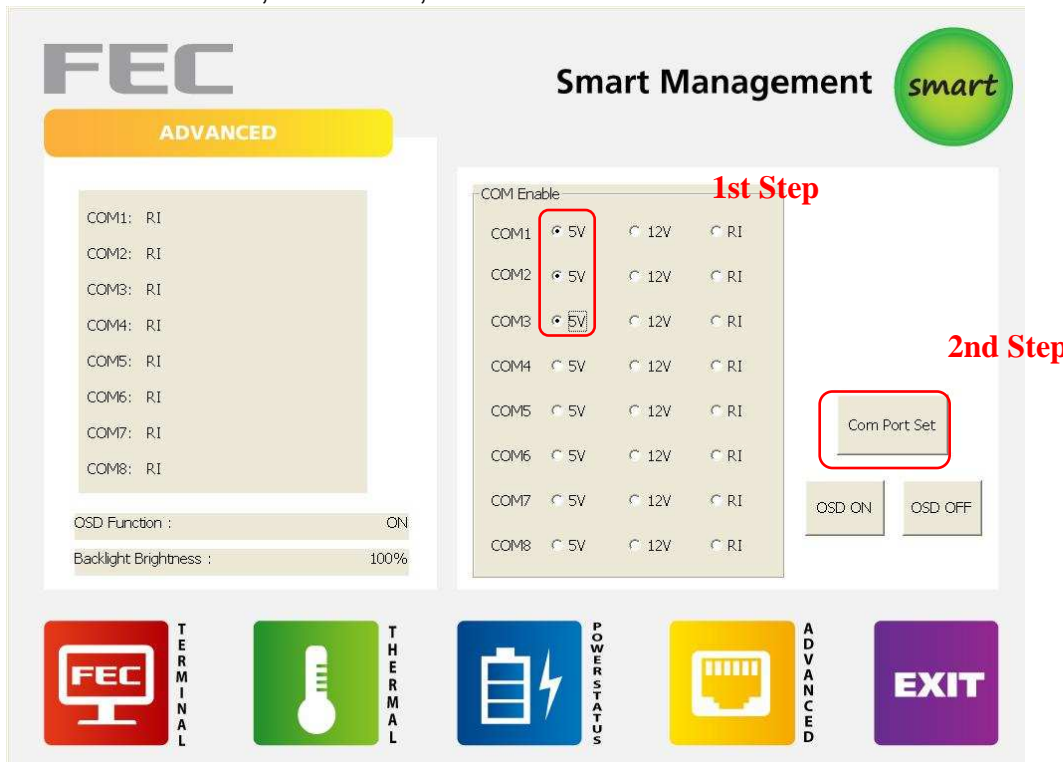
6. In **Advanced mode**, there are 3 settings could be accessed by the user.

- a. COM Port Voltage Setting: Please ensure this setting must be operated by the engineer who with strong knowledge of AerPOS & BP-500 and its devices. Inappropriate operation might cause the damage of the powered devices.
- b. OSD Enable or Disable (AerPOS only)
- c. Backlight Brightness: Display only, the adjustment must be through OSD

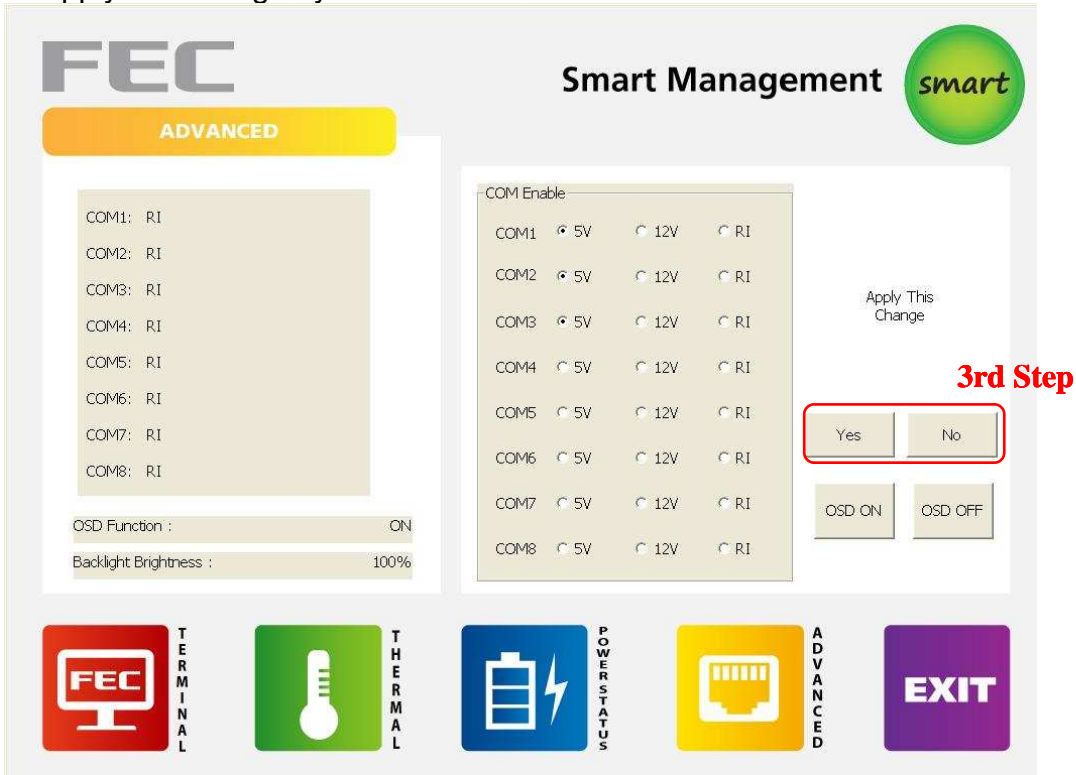


7. Following is the example to adjust the setting of COM1, COM2 & COM3 from RI mode to 5V enabled.

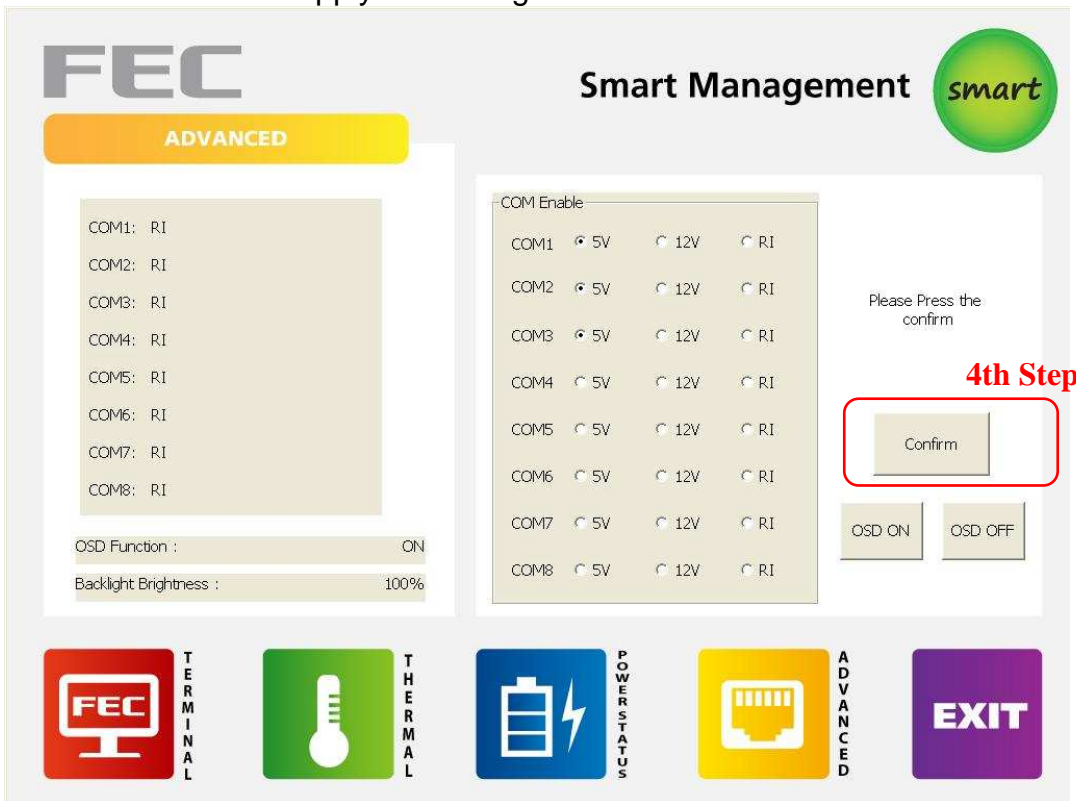
- a. Click COM1 5V, COM2 5V, COM3 5V and COM Port Set



b. Apply the change by click the icon



c. Double confirm to apply this change



- d. Shutdown the system and proceed the cold reboot
- 8. User could enable/disable the OSD function by select following options. After apply the setting, **A cold reboot is required.**

