PP-9635

Aer PPC

User Manual

ver. 0.2

Copyright Notice

This document is copyrighted, © 2014. All rights are reserved. Firich Enterprises Co., Ltd reserves the right to make improvements of the product described in this manual at any time without notice.

No part of this manual may be reproduced, copied, translated, or transmitted in any form or by any means without the prior written permission from Firich Enterprise Co., Ltd. Information provided in this manual is intended to be accurate and reliable. However, Firich Enterprise Co., Ltd assumes no responsibility for its use, nor for any infringements upon the rights of third parties, which may result from its use.

The material in this document is for product information only and is subject to change without notice. While reasonable efforts have been made in the preparation of this document to assure its accuracy, Firich Enterprise Co., Ltd, assumes no liabilities resulting from errors or omissions in this document, or from the use of the information contained herein.

Revision Record

Date	Version	Description	Note
2014/10/1	0.1	Draft	Vince Peng
2014/11/21	0.2		Sabrina Chu

Safety Precaution

Please observe the following precautions to ensure safe use of equipment.

1. Disconnect the equipment from AC outlet before cleaning.

   Use only moist cloth (with water). Do not use detergent.
2. Power outlet must be easily accessible and near the equipment.
3. Keep the equipment away from humid and dusty environment.
4. Place the equipment on a stable surface during installation and operation.
5. Do not place any load on the power cord.
6. All cautions and warnings on the equipment should be noted.
7. When the equipment is not in use, disconnect it from the power source to avoid damage by transient over-voltage.
8. Liquid into the equipment may cause fire or electrical shock.
9. Only qualified service personnel should be allowed to open the equipment.
10. If any of the following situations arises, ask service personnel to check the equipment:
    A. Power cord / plug is damaged
    B. Liquid penetrates into the equipment
    C. The equipment does not function properly and/or cannot work according to the User Manual
    D. The equipment has been dropped
    E. The equipment shows signs of damage
11. Temperature below -20° C (-4°F) or above 60° C (140° F) may damage the equipment

Table of Content

Chapter 1 1

Introduction 1

PP-9635 (Aer PPC) 1

Overview 2

Dimension 3

I/O Connectivity 4

Packing List 5

Chapter 2 6

Hardware Installation and Upgrade 6

2.5" SATA Storage (HDD / SSD) 6

MSR / iButton / RFID / FingerPrint (ID Device) 7

Power Setting (COM / Cash Drawer Port) 8

Cable Cover and Cabling 9

Integrated VFD / LCM 10

LED Backlight Brightness 11

2nd Monitor (15" Pole Type) 12

Cash Drawer 13

Chapter 3 14

Software Installation and Setup 14

Installation Sequence 14

Intel J1900 Chipset Utilities for Windows 7 15

Audio Driver for Windows 7 16

Realtek LAN Driver for Windows 7 17

Intel Graphic Driver for Windows 7 18

Intel TXE Driver for Windows 7 19

Intel TXE Update for Windows 7 20

USB 3.0 Driver for Windows 7 21

ELO TouchKit Tools Installation 22

ELO TouchKit Installation for Windows 7 22

EETI TouchKit for Windows 7 27

EETI TouchKit Control Panel 29

Wireless LAN Driver for Windows *30*

Chapter 4 **31**

Specifications ***31***

Chapter 5 **32**

Troubleshooting ***32***

Touch Panel does not work 32

OSD Buttons do not work 32

HDD / SSD is not detected 32

MSR does not function properly 32

LAN does not function properly 32

COM does not function properly 33

Cash Drawer Port does not function properly 33

Chapter 1

Introduction

PP-9635 (Aer PPC)

PP-9635 is the latest member of Aer PPC series that features a slim all-in-one design with great versatility. It can be easily configured to meet the demand of different store environments as a desktop, wall-mount or pole-mount POS system.

PP-9635 is a fanless system in die-cast aluminum chassis that withstands harsh environments. It is equipped with the latest Intel Celeron J1900 that is both powerful and energy efficient.

Key Features

- Slim & Sleek
- Desktop, Wall-Mount or Pole-Mount
- Fanless & Noise Free
- Resistive (bezel & bezel free) and Projected Capacitive Touch (IP65 compliant panel)
- Rich in I/O Connectivity

PP-9635 (bezel)

PP-9635 (bezel free)

Overview

15” Touch Display
HDD Indicator
Power Switch (w/ LED)

Integrated
Customer
Display
SATA Storage
MSR / ID Device
Speaker

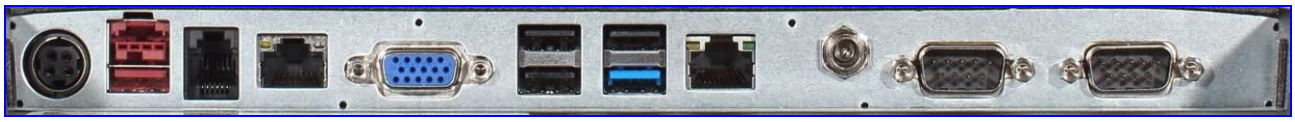
Dimension

I/O Connectivity

I/O – Default

DC IN 12V | POWER USB 24V | Cash Drawer | Ethernet | VGA | USB 2.0 USB 2.0 | USB 2.0 USB 3.0 | COM 1 | DC Out 12V

I/O – Option A



DC IN 12V | POWER USB 24V | Cash Drawer | Ethernet | VGA | USB 2.0 USB 2.0 | USB 2.0 USB 3.0 | COM 1 | DC Out 12V | COM 2 | COM 4

I/O – Option B

DC IN 12V | POWER USB 24V | Cash Drawer | Ethernet | VGA | USB 2.0 USB 2.0 | USB 2.0 USB 3.0 | COM 1 | POWER USB 12V | POWER USB 12V

I/O – Option C

DC IN 12V | POWER USB 24V | Cash Drawer | Ethernet | VGA | USB 2.0 USB 2.0 | USB 2.0 USB 3.0 | COM 1 | USB | USB

I/O Port	Connector Type	Description
12v DC- in	DC-in (4 pin)	12V Power Adapter
24v USB 2.0	24v USB	24v USB device (2A continue / 6A per second)
Cash Drawer	RJ11	12v / 24v Cash Drawer
Ethernet	RJ-45	Gigabit LAN
VGA	D-Sub 15	2nd LCD
USB	USB Type A	USB 2.0
USB	USB Type A	USB 2.0 / 3.0
COM1	RJ45	RI / 5v / 12v (select in BIOS) 5v : Green / 12v : Orange
12v DC-out	DC Jack	2nd LCD or others
Option A		
COM 2	D-Sub 9	RI / 5V / 12V (select in BIOS)
COM 4	D-Sub 9	RI / 5V / 12V (select in BIOS)
Option B		
12v USB 2.0	12v USB	12v USB device
12v USB 2.0	12v USB	12v USB device
Option C		
USB	USB Type A	USB 2.0
USB	USB Type A	USB 2.0

Packing List

Standard		Optional	
1	PP-9635	**1**	2nd I/O
2	Power Adapter (90/150w)	**2**	MSR / iButton / RFID / FingerPrint
3	AC Power Cord	**3**	9mm 20x2 VFD / 20x2 LCM / 240x64 LCM
4	RJ45-DB9 Cable	**4**	5mm 20x2 LCM / 192x32 LCM
		5	2nd Monitor
		6	Wireless LAN

Chapter 2

Hardware Installation and Upgrade

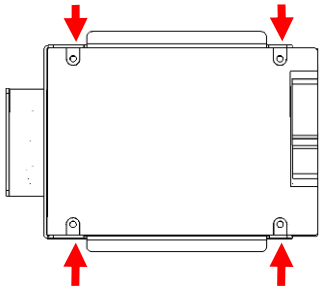
SWITCH OFF POWER AND UNPLUG POWER CORD BEFORE SATA STORAGE IS REMOVED

2.5” SATA Storage (HDD / SSD)

1. power off and unplug power cord from PP-9635

2. remove SATA storage cover

3. fix SATA storage to metal bracket via 4 screws



4. install SATA storage with bracket

5. fix the bracket via 1 x M3 screw

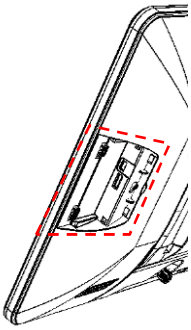
6. replace SATA storage cover

7. plug in power cord and power on

MSR / iButton / RFID / FingerPrint (ID Device)

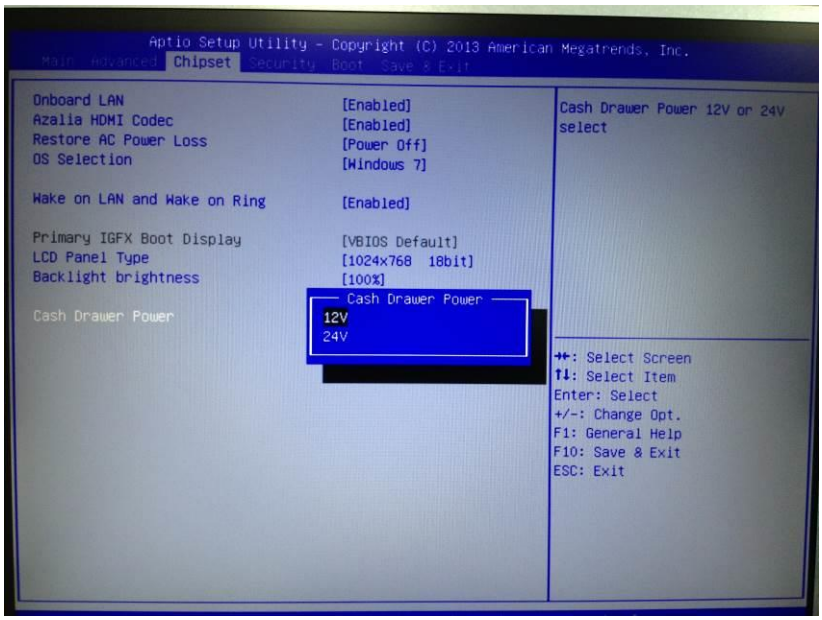
1. remove plastic cover

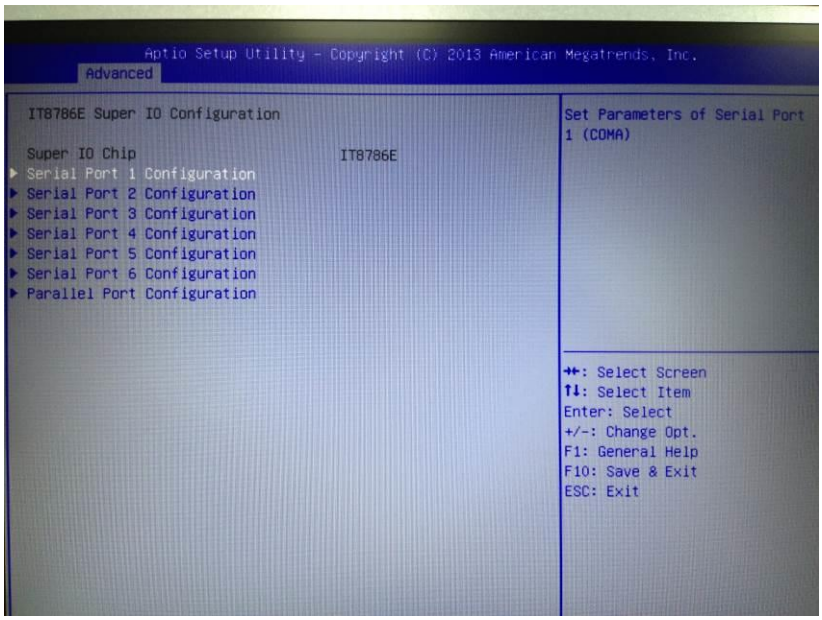
2. plug in ID device (USB) and fix it via 1 x M3 screw



Power Setting (COM / Cash Drawer Port)

You may select the power (5v / 12v) of COM and Cash Drawer Port in BIOS





Make sure the device voltage matches the power setting before connection

Cable Cover and Cabling

1. **connect the adapter to 12v DC-in**

2. **connect all devices**

3. **install cable cover**

4. **tighten 2 x M3 screw**

Integrated VFD / LCM

1. loosen 1 x M3 screw and
   remove the back cover

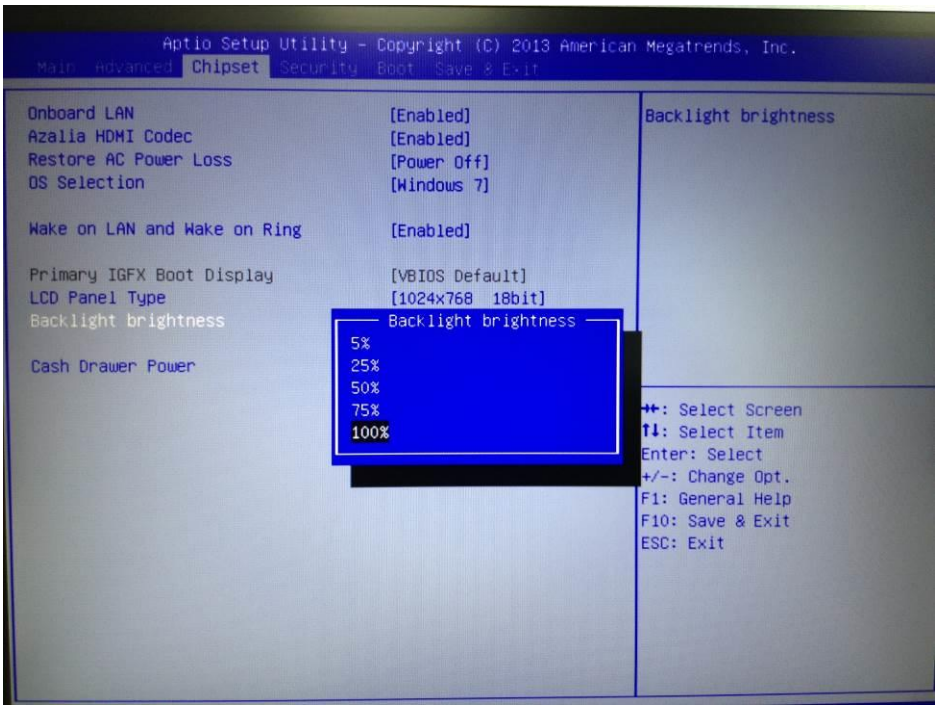
2. connect customer display
   via serial cable and tighten
   3 x M3 screw

3. customer display (integrated type) is connected to COM6
   5mm LCM Module (AP-2025) is 5v
   9mm VFD (AP-2029), 9mm LCM 20x2 (AP-2024), LCM 240x64 (AP-240G) are 12v

   * make sure the power setting of COM6 is correct before customer display is connected

4. do not exceed the tilt angle as
   this may damage internal cable

LED Backlight Brightness



5 levels of backlight brightness (5, 25, 50, 75, 100%) can be selected in the BIOS

2nd Monitor (15” Pole Type)

1. Fasten PP-9635 and 2nd monitor together with 2 x M5 screw

2. connect VGA and 12v DC cables

Cash Drawer

Please make sure the voltage and cable pin assignment of your cash drawer matches the cash drawer port on **PP-9635**.

You may find the jumper setting and pin definition in M/B J1900 user manual.

Please refer to **trouble shooting** if the cash drawer cannot be detected by PP-9635

To open drawer 1 (the default):
port[openaddr] <= open1
wait(sleep(ms))
port[openaddr] <= close

To open drawer 2:
port[openaddr] <= open2
wait(sleep(ms))
port[openaddr] <= close

To get status:
StatusValue <= port[status] and statusmask

The parameters, which are in the cashdrawer.ini
openaddr=a04
status=a05
sleep=200
open1=40
open2=80
close=00
statusmask=01

Chapter 3

Software Installation and Setup

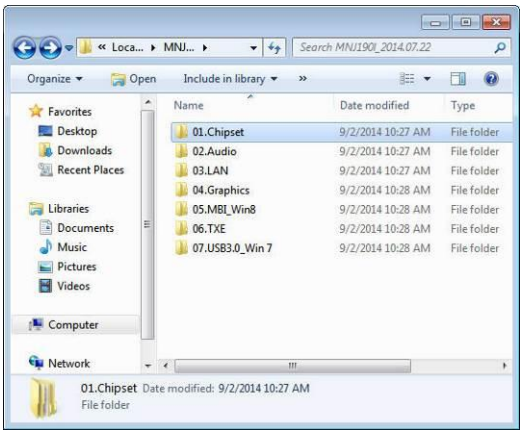
Please download drivers and utilities from www.fecpos.com/en-global/ams/Download

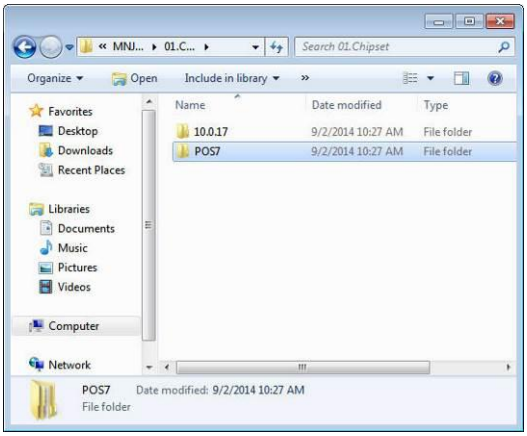
Installation Sequence

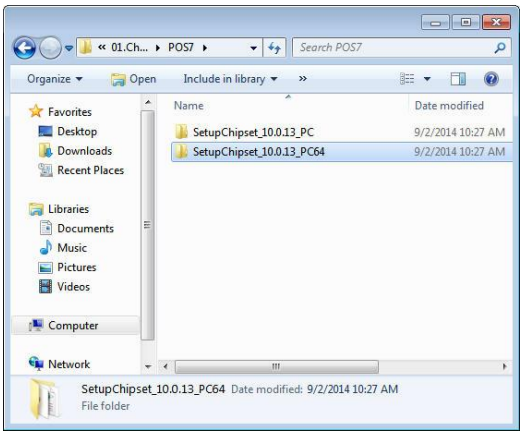
1. Chipset Driver
2. Audio Driver
3. LAN Driver
4. Graphic Driver
5. TXE Driver → TXE Update
6. USB3.0 Driver
7. Touch Tools (Touch Utility)

Intel J1900 Chipset Utilities for Windows 7

1. download drivers from www.fecpos.com/en-global/ams/Download



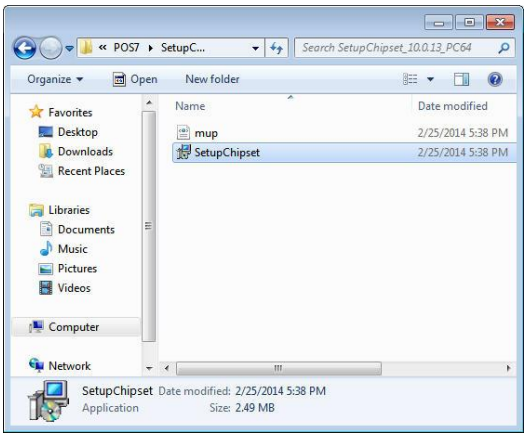




“setupChipset_10.0.13PC” → Win7 **32** bit

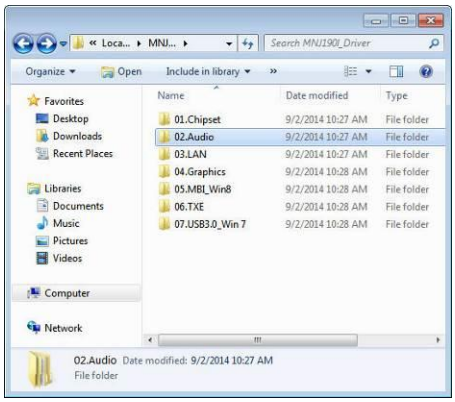
“setupChipset_10.0.13PC64” → Win 7 **64** bit

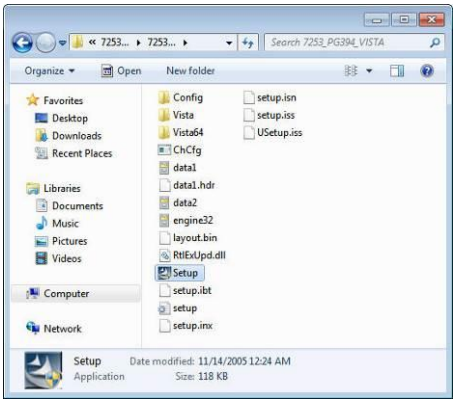
2. run **SetupChipset.exe**

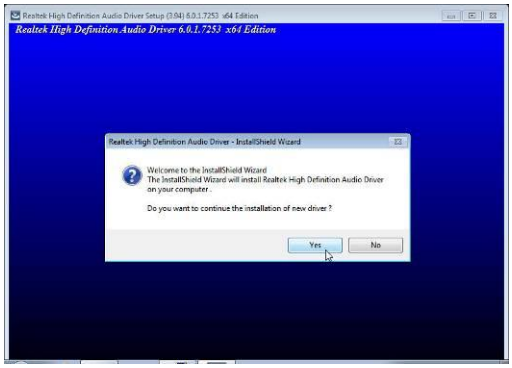


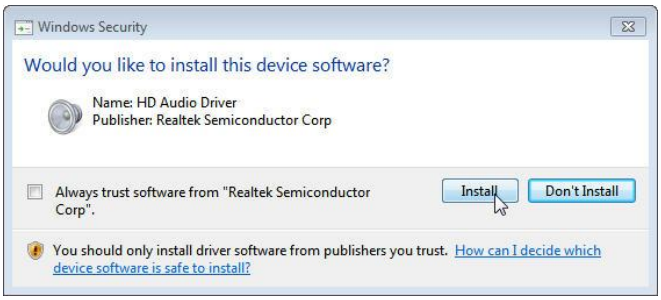
Audio Driver for Windows 7

1. download drivers from www.fecpos.com/en-global/ams/Download
2. run **Steup.exe**





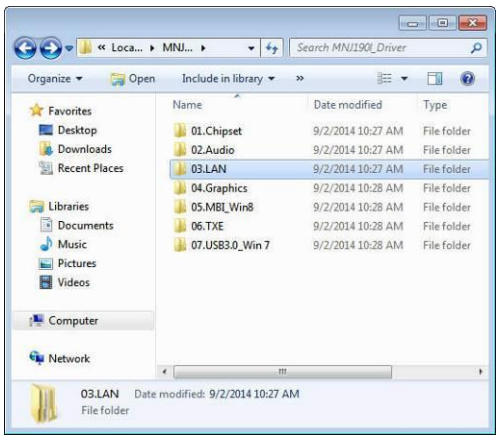


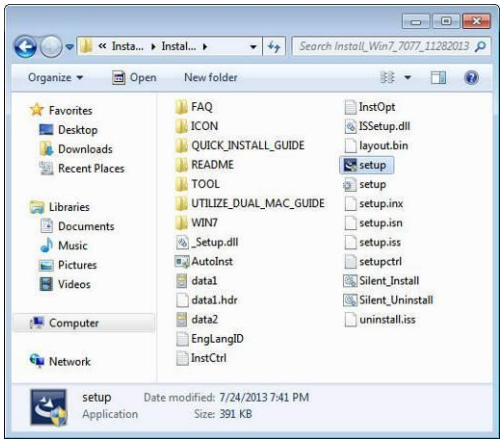


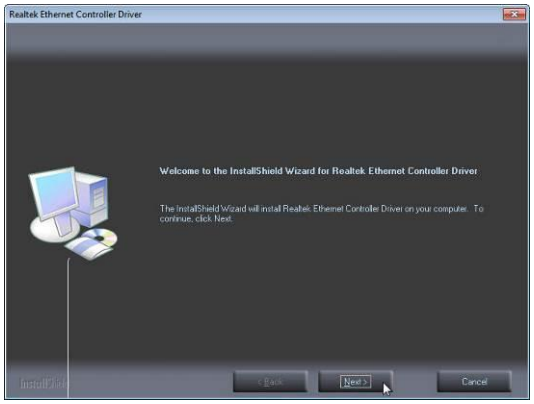
3. restart PP-9635 to complete installation

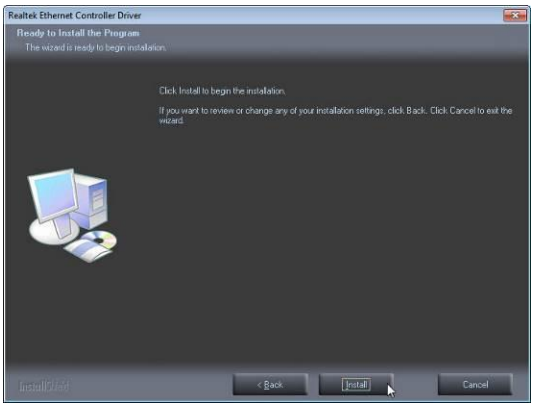
Realtek LAN Driver for Windows 7

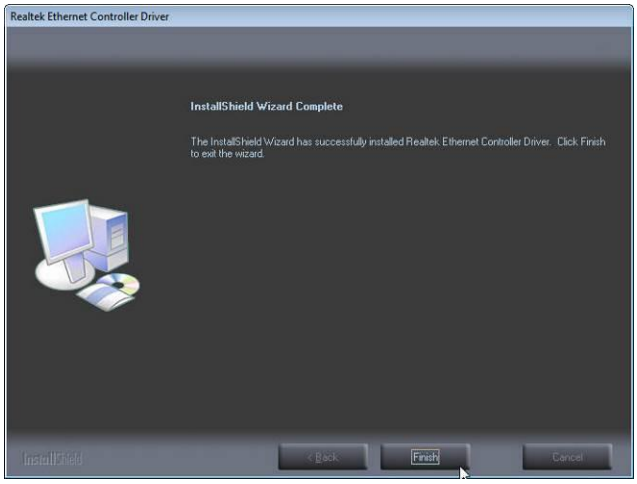
1. download drivers from www.fecpos.com/en-global/ams/Download
2. run **Steup.exe**





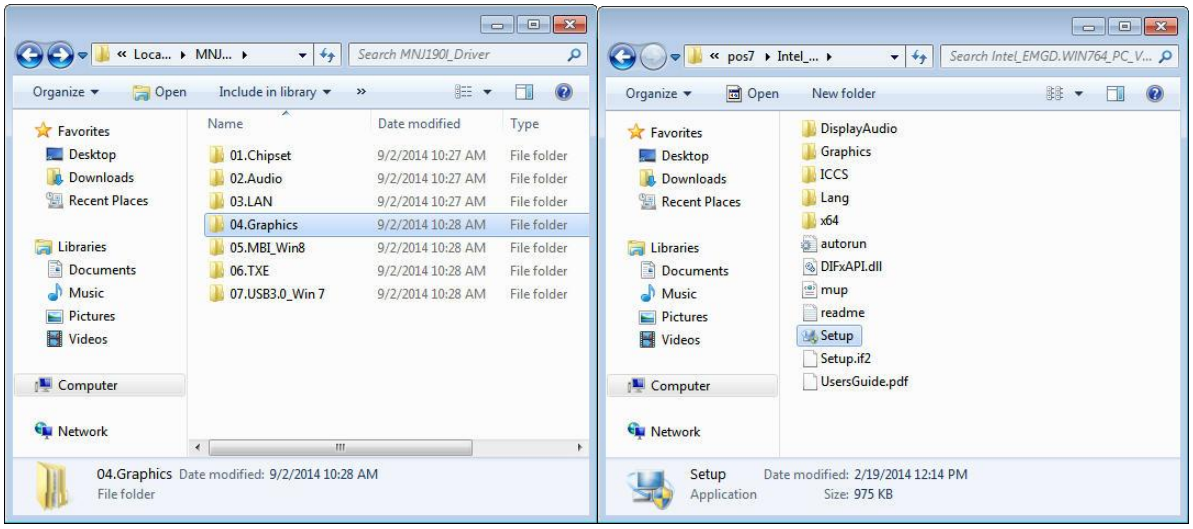


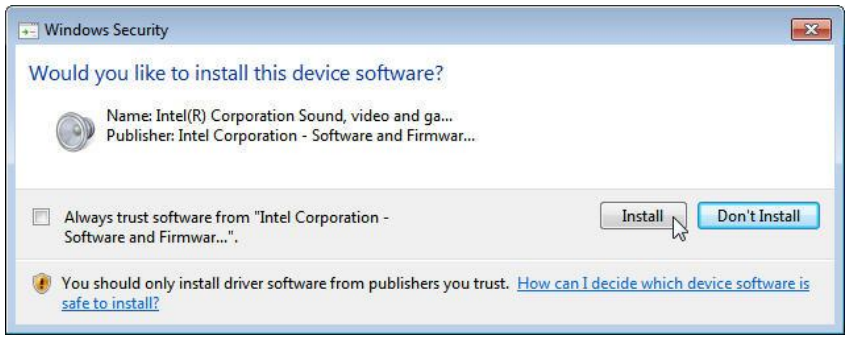




Intel Graphic Driver for Windows 7

1. download drivers from www.fecpos.com/en-global/ams/Download
2. run **Steup.exe**



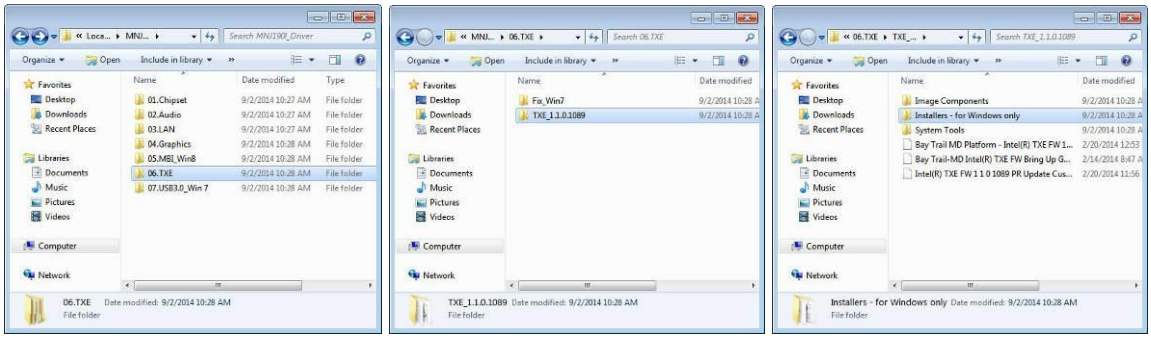


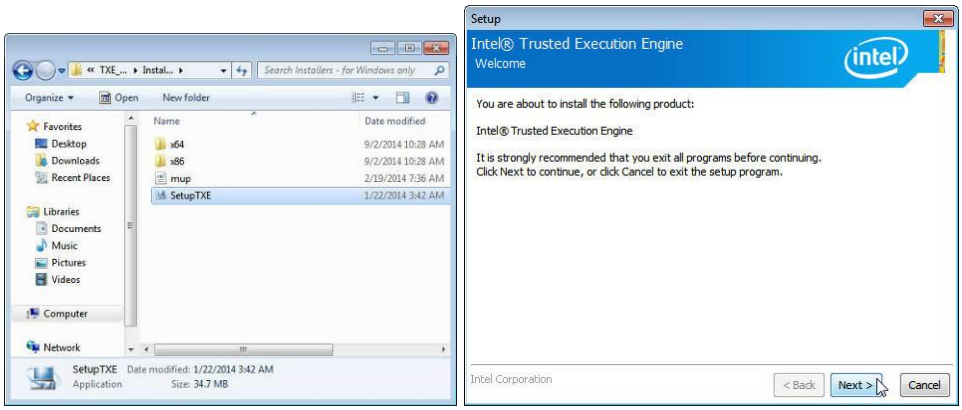
3. restart PP-9635 to complete installation

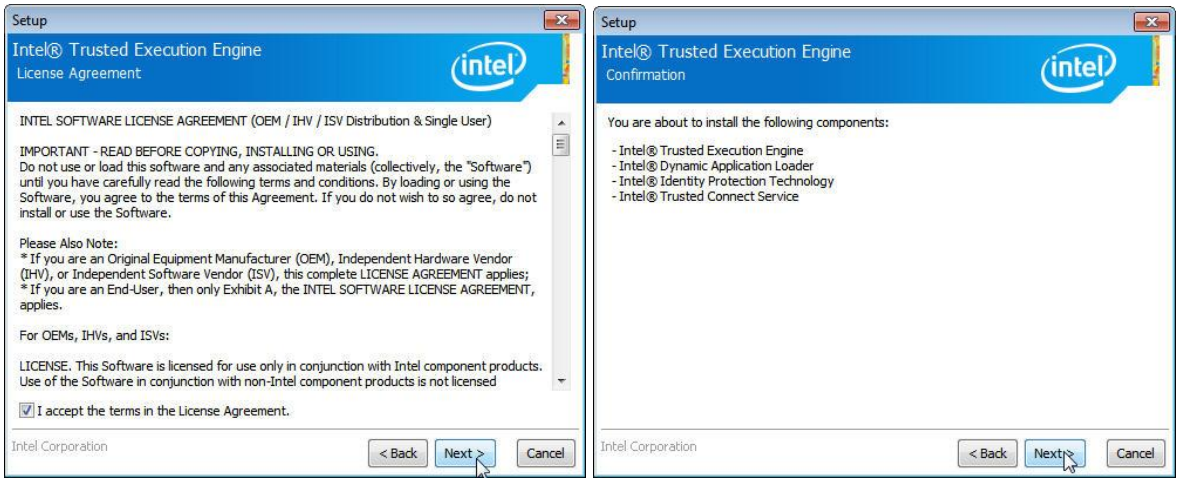
Intel TXE Driver for Windows 7

1 download drivers from www.fecpos.com/en-global/ams/Download

2 run **Steup.exe**



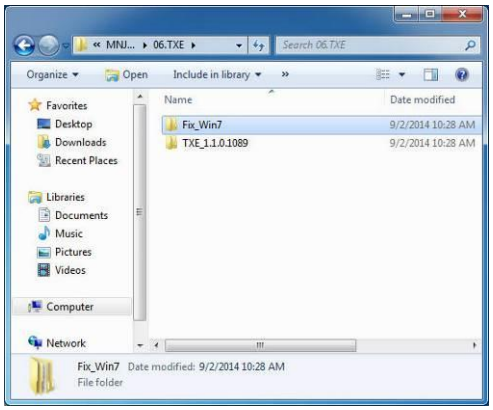


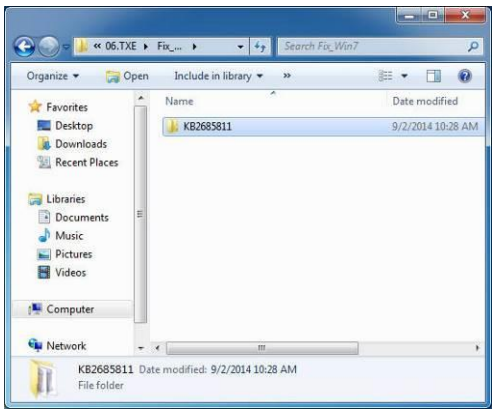


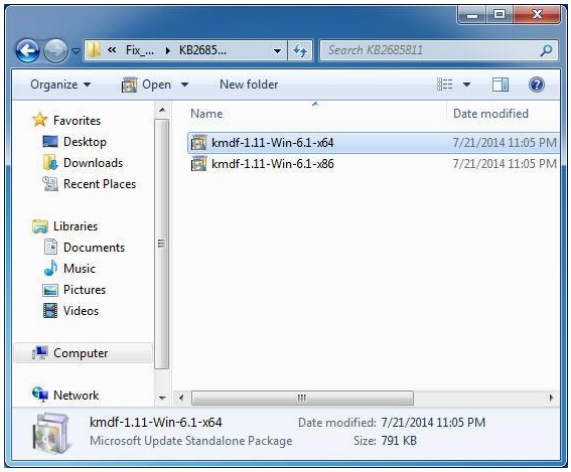
3 restart PP-9635 to complete installation

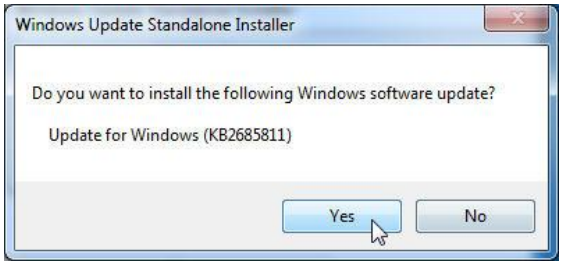
Intel TXE Update for Windows 7

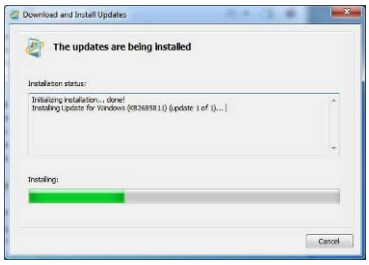
1. download drivers from www.fecpos.com/en-global/ams/Download
2. run **kmdf1.11-win-6.1-x64.exe**







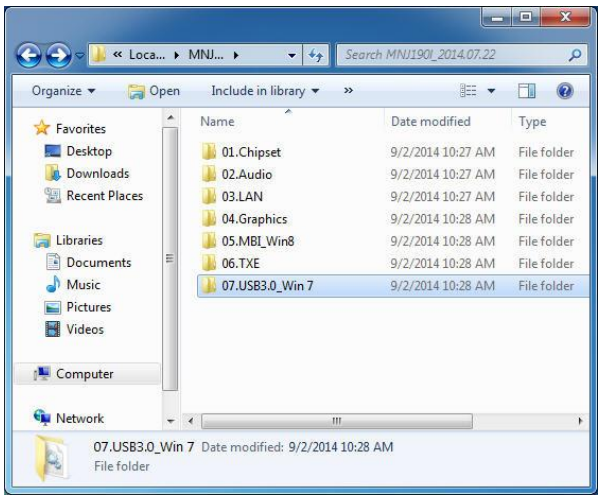


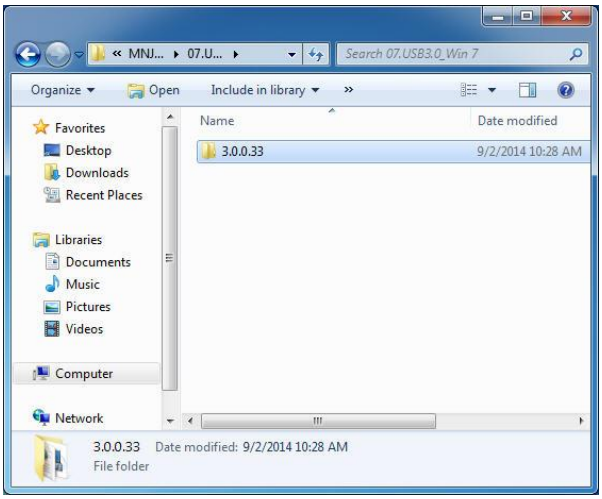


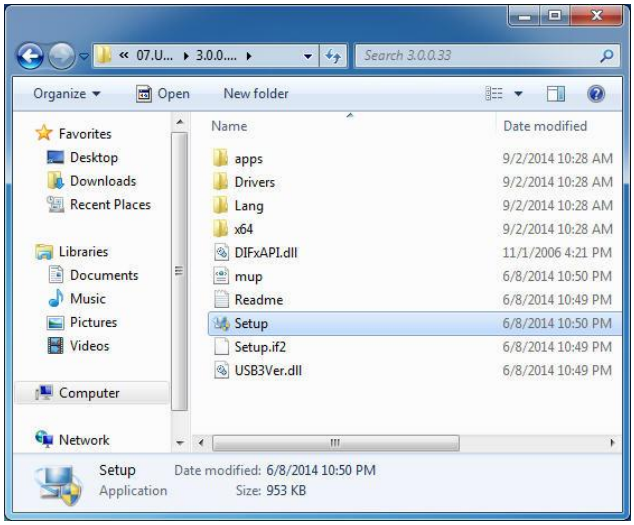
3. restart PP-9635 to complete installation

USB 3.0 Driver for Windows 7

1. download drivers from www.fecpos.com/en-global/ams/Download
2. run **Steup.exe**





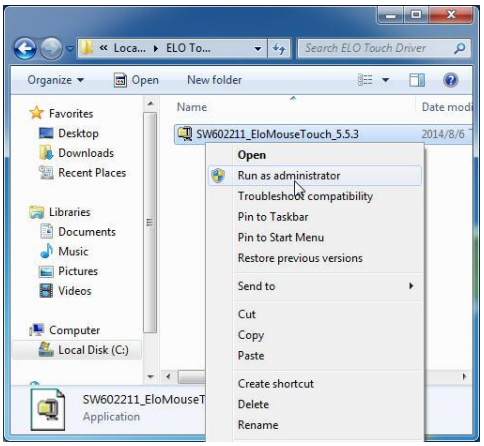


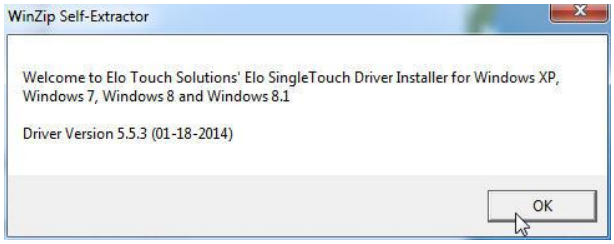
3. restart PP-9635 to complete installation

ELO TouchKit Tools Installation

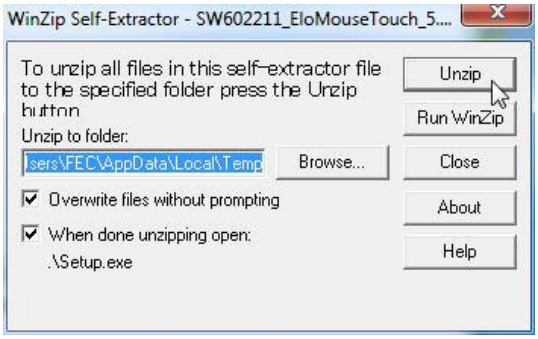
ELO TouchKit Installation for Windows 7

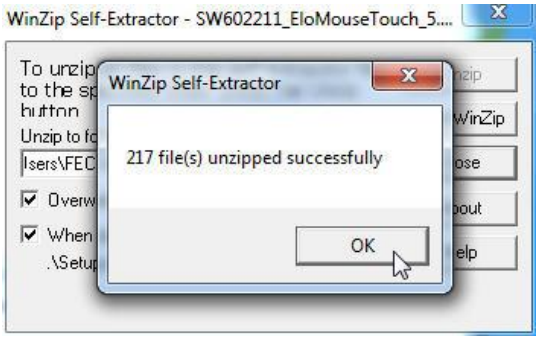
1. ELO Touch (SW602211_ELOMouseTouch_5.5.3.exe)
2. Run as administrator

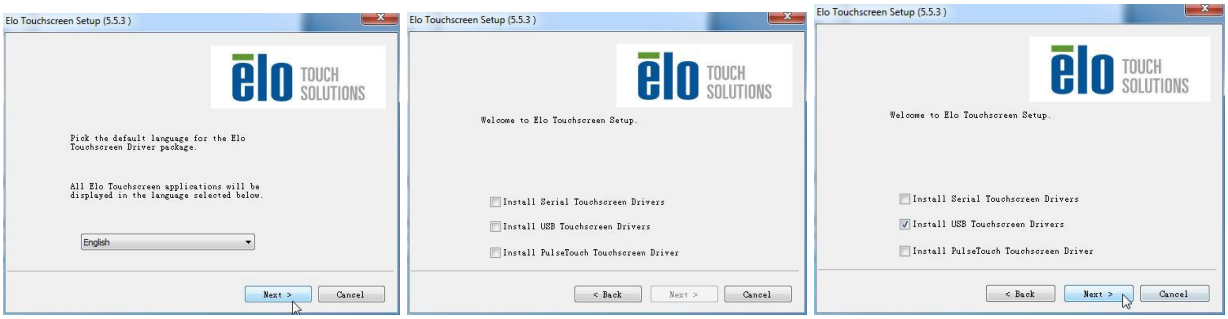




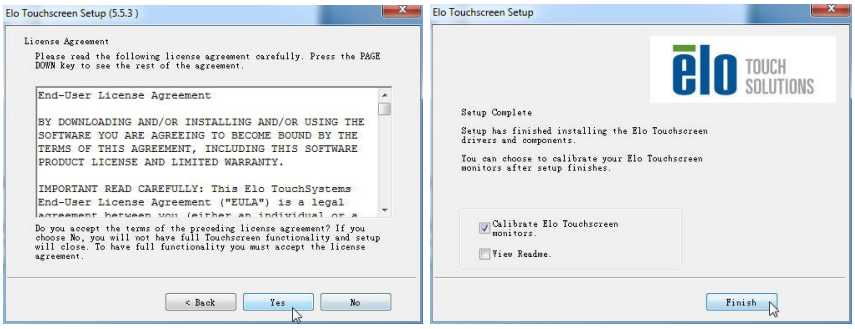
3. Unzip file and start to Install USB Touch Screen Driver



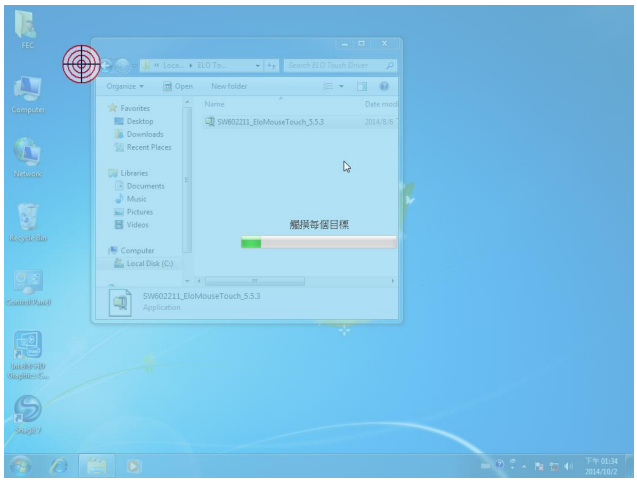




4. Start installation and choose “Calibrate ELO TouchScreen” as finished



5. Four Corners Calibration



6. ELO Touchscreen Control Panel → General Page → can choose calibration mode for “Normal Mode” or “Enhance Mode”

7. Mode Page:

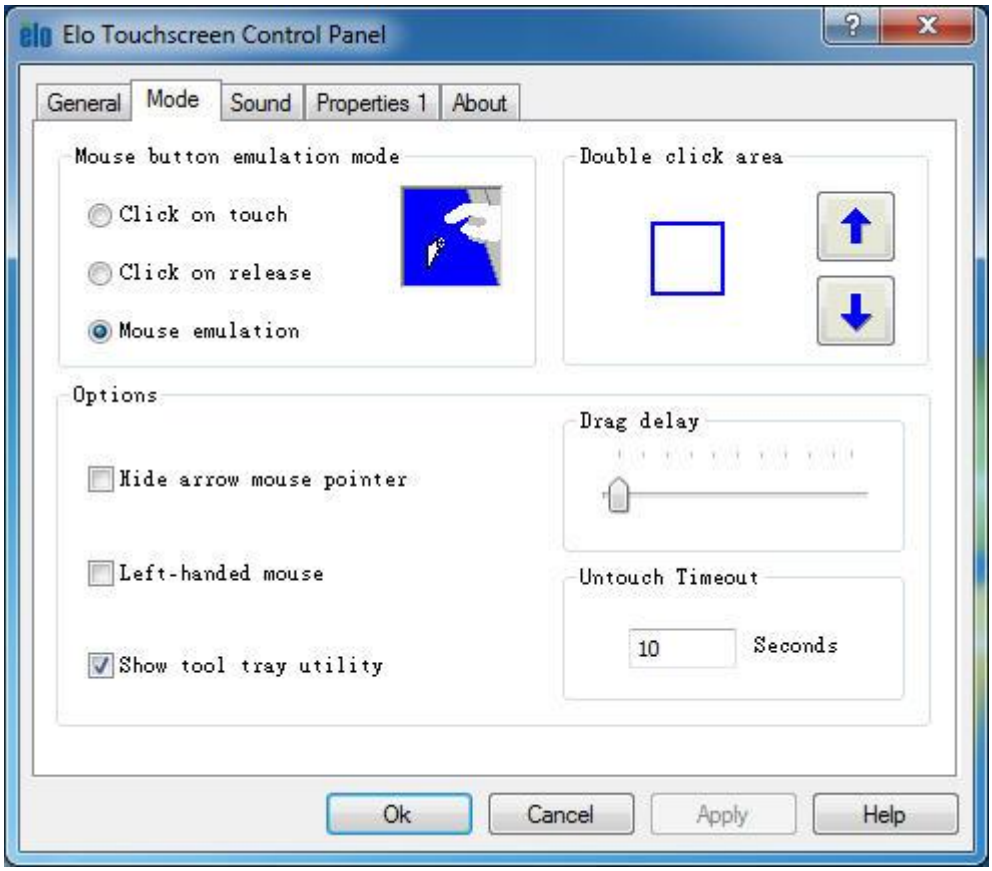
Mouse Button emulation mode →Click on touch, Click on release, Mouse emulation

Double Click Area

Options → Hide arrow mouse pointer, left-hand mouse, show tool tray utility

Drag delay

Untouch Timeout

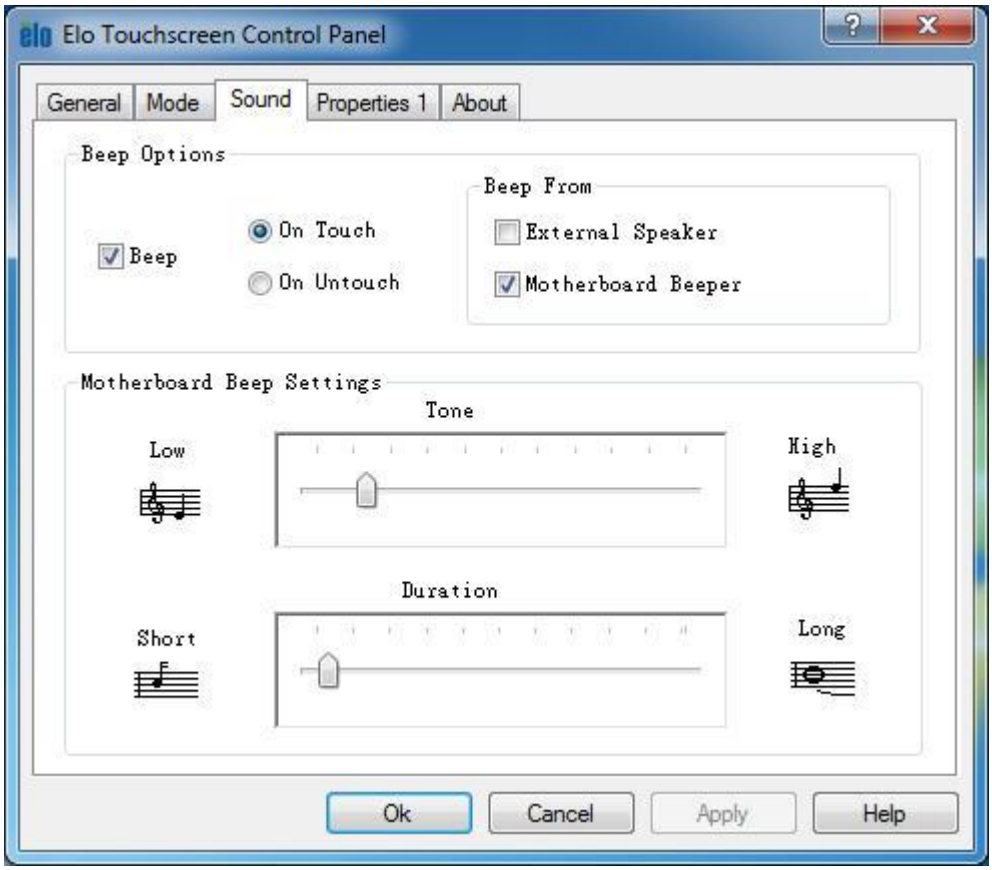


8. Sound Page:

Beep options→ without Beep, Beep on touch, Beep on untouch

Beep from→ External Speaker, Motherboard Beeper

Motherboard Beep settings → Tone and Duration

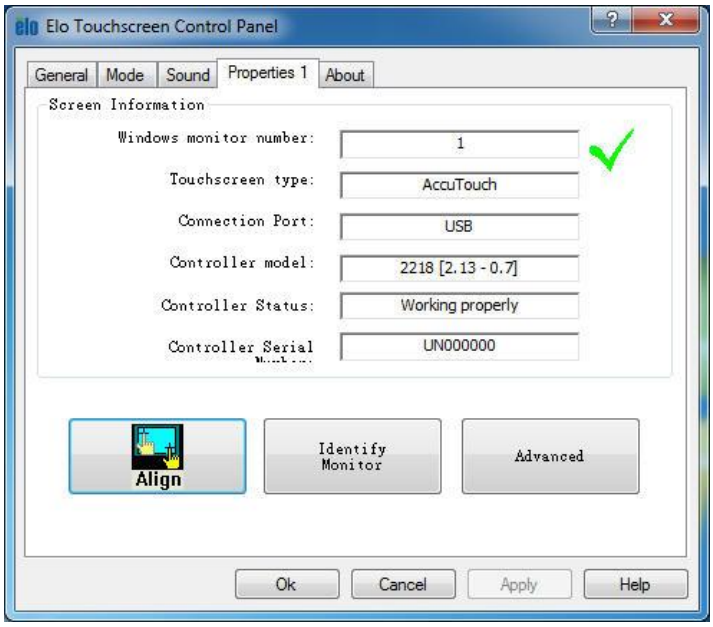


9. Properties 1:

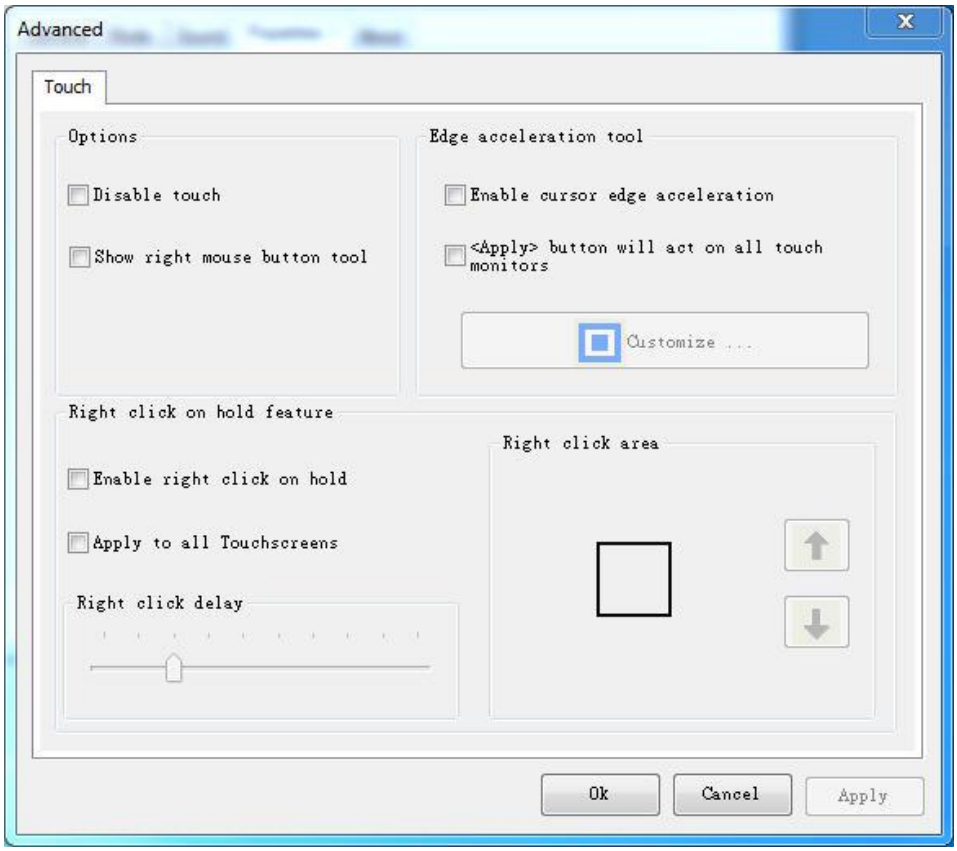
Screen Information

Align → touch calibration

Identify Monitor → identification of 1st screen touch or 2nd screen touch

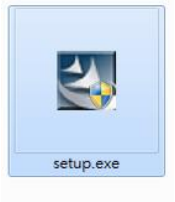


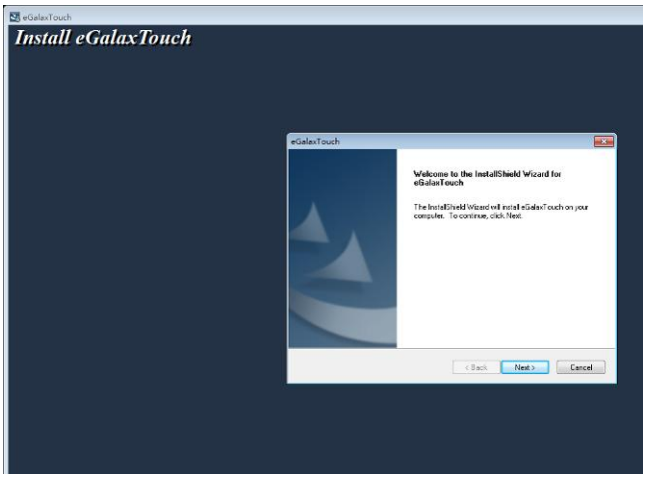
Advanced:

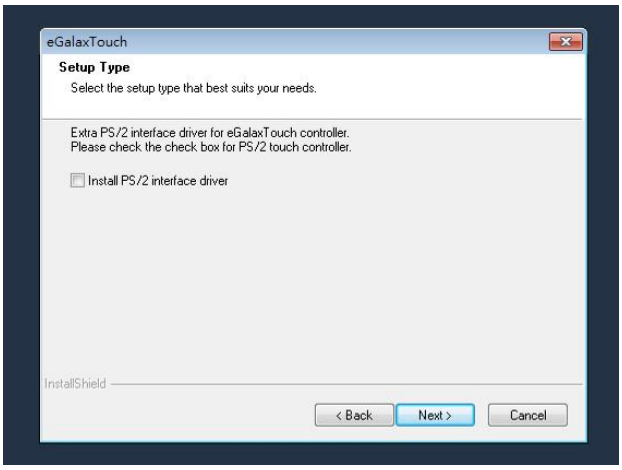


EETI TouchKit for Windows 7

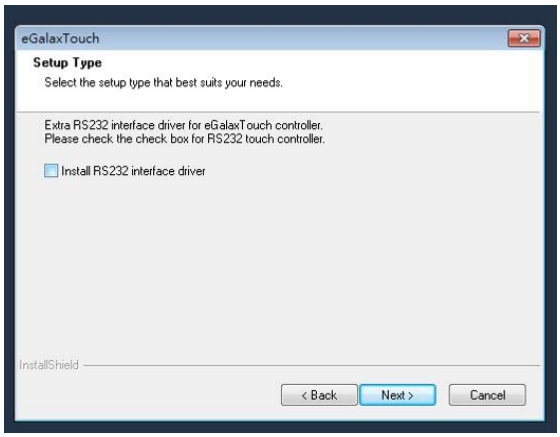
1. download drivers from www.fecpos.com/en-global/ams/Download
2. run **Steup.exe**

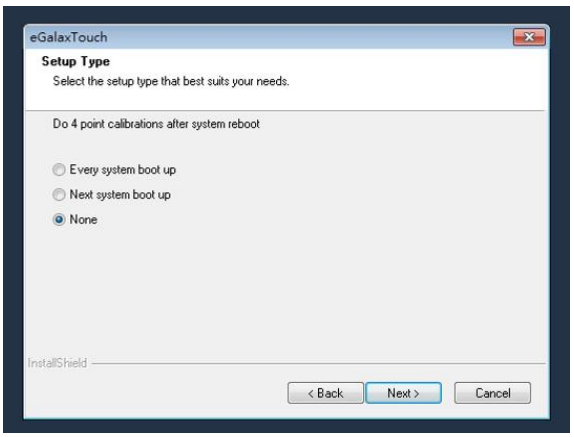






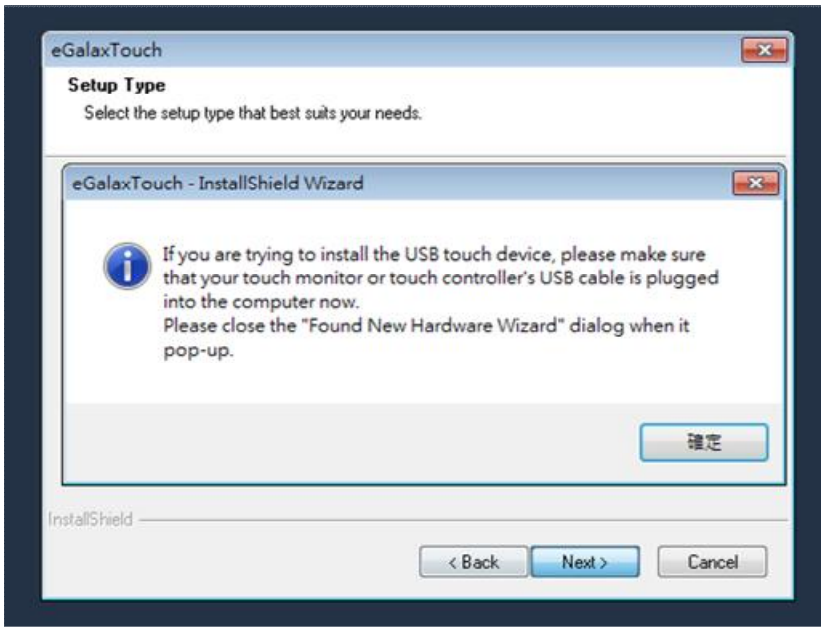
3. do **NOT** check **Install PS/2 interface driver** and continue



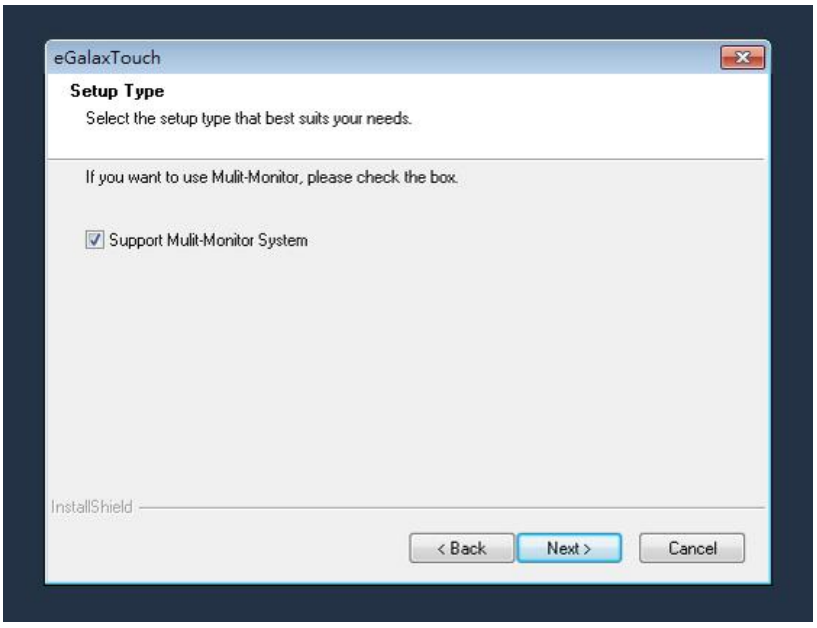


4. do **NOT** check **Install RS232 interface driver** and continue

5. confirm USB touch device is in use



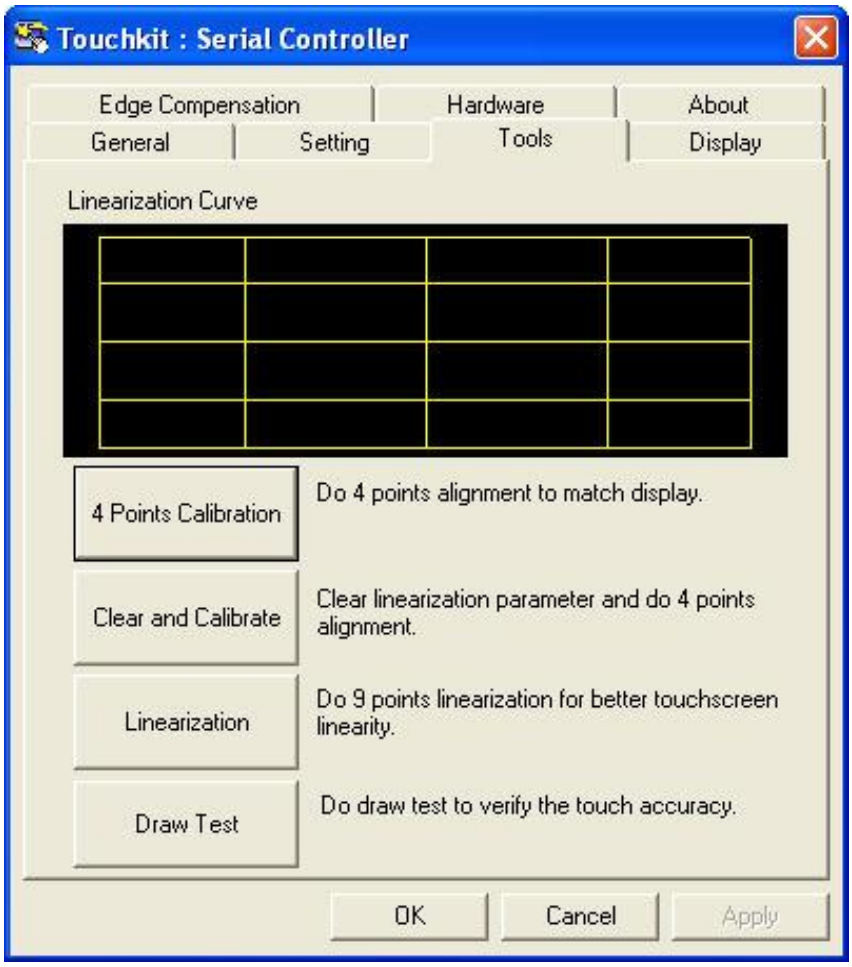
6. check **Support Multi-Monitor System"** and continue



7. restart PP-9635 to complete installation

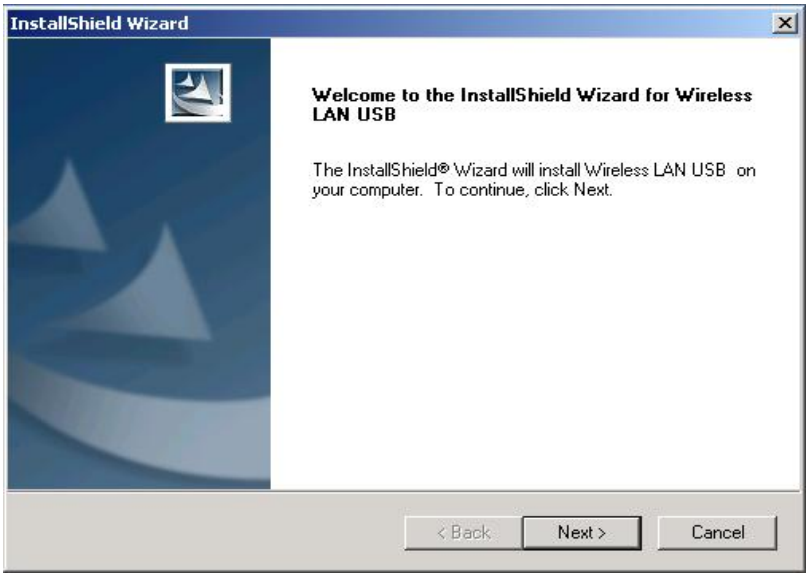
EETI TouchKit Control Panel

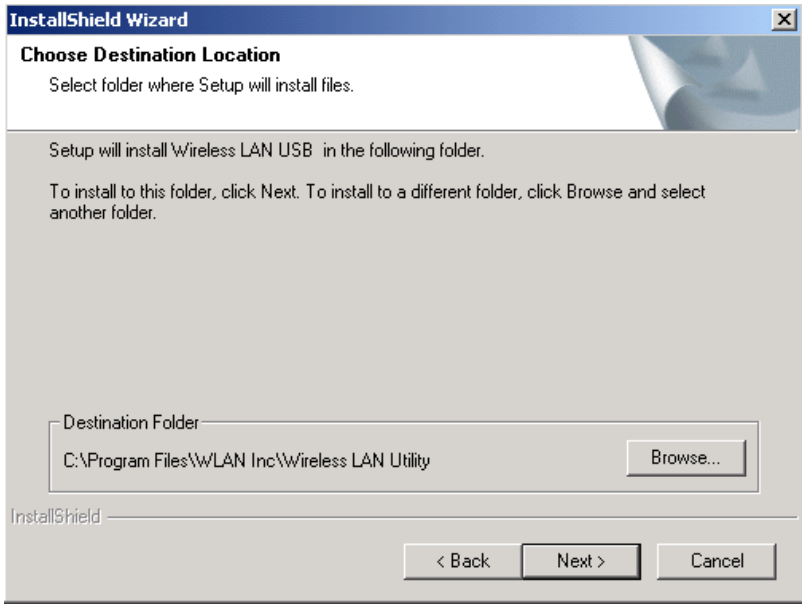
Tools allows the user to calibrate the touch panel via **4 Points Calibration**



Wireless LAN Driver for Windows

1. download drivers from www.fecpos.com/en-global/ams/Download
2. run **Steup.exe**





Chapter 4

Specifications

Aer PPC		PP-9635		
System	Processor	Intel Celeron J1900 (up to 2.42 GHz)		
	Memory	DDR3L 2GB (standard) ; 8GB (max)		
	Power Supply	90W / 150W		
	Thermal	fan-less		
	Storage Device	1 x 2.5” SATA Drive		
	Speakers	2w x 2		
Display	Display	15” (4 : 3)		
	Touch	Projected Capacitive	Resistive (bezel free)	Resistive (bezel)
	Backlight	LED		
	Brightness	350 nits		
	Backlight MTBF	50,000 hours		
Peripherals	MSR	Track 1/2/3 (USB)		
	Finger Print	Optical (USB)		
	RFID	13.56 MHz (USB)		
	iButton	USB / Virtual COM		
	WireLess LAN	802.11b/g/n (USB)		
	VFD	20 x 2 (9mm / 12v / character mode)		
	LCM	20 x 2 (9mm / 12v / character mode) 240 x 64 (9mm / 12v / graphic mode) 20 x 2 (5mm / 5v / character mode) 192 x 32 (5mm / 5v / graphic mode)		
	2nd Display	15” pole type		

Chapter 5

Troubleshooting

This guide is for people with strong knowledge in computing hardware

Touch Panel does not work

A) check the connection between touch panel and touch controller

B) HID USB touch device is detected by O/S

C) (Resistive) EETI driver (or TouchKit driver) is properly installed or try reinstallation

D) (P-Cap) P-Cap touch is detected by O/S or try reinstallation

F) (P-Cap touch calibration) reboot the system and P-Cap touch will calibrate automatically

OSD Buttons do not work

A) press each OSD button for more than two seconds to trigger its function

B) make sure one button is touched at a time

HDD / SSD is not detected

A) make sure SATA storage device is properly installed

B) HDD power cable is properly connected to the mainboard

C) check CMOS setup and set SATA HDD to Auto Detect

D) check onboard SATA port

MSR does not function properly

A) make sure MSR (USB Hid keyboard) is properly connected

B) MSR LED is blue (color)

LAN does not function properly

A) LAN driver is installed properly

B) RJ45 cable is connected properly

C) check IRQ conflict

COM does not function properly

A) check the I/O ports in CMOS

B) check IRQ conflict

C) check mainboard and I/O cable

Cash Drawer Port does not function properly

A) pin assignment of cash drawer matches that of RJ11 cash drawer port

B) check I/O port address