



User's Manual

PP-8643

Aer PPC

User Manual

ver. 0.1



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Revision Record

[illegible]



User's Manual

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



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Chapter 1

Introduction

PP-8643 (Aer PPC)

PP-8643 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-8643 is a performance system in die-cast aluminum chassis that withstands harsh environments. It is equipped with the Intel 4th Generation Core Processor i3-4330TE, i5-4570TE and Intel Celeron G1820TE those are both powerful and energy efficient.

Key Features

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



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Overview



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32" Touch Display

HDD Indicator (orange color)
Power Switch (OFF / Red ;
ON / Blue)
Kiosk customer w/o LED

PP-8643(bezel free)

SATA Storage

Speaker

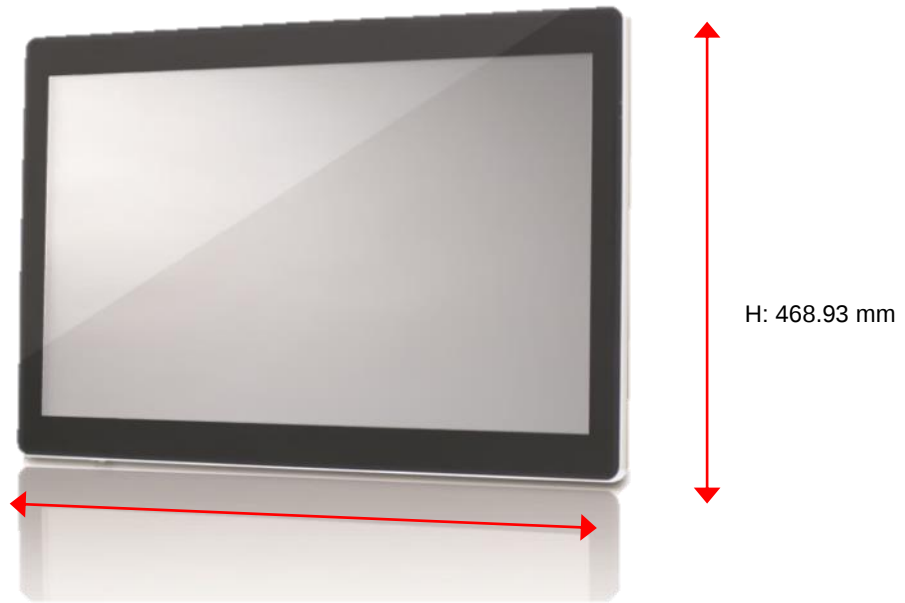
Rear I/O
USB 2.0





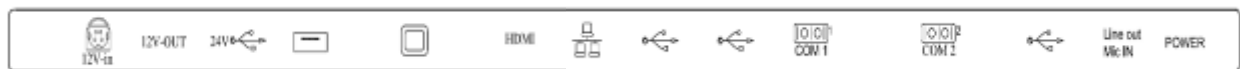
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Dimension



W: 774.48 mm

I/O Connectivity



I/O – Default



I/O – Type C



I/O – Type G



I/O – Type J



I/O – Type K





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I/O Port	Connector Type	Description
12v DC- in	DC-in (4 pin)	12V Power Adapter
12V DC-out	DC-out	12V DC Jack 2.5 mm
24v PUSB 2.0	24v USB	24v USB device
Cash Drawer	RJ11	12v / 24v Cash Drawer
VGA	D-Sub 15	2 nd LCD
HDMI	HDM Type A	Type A HDMI
Ethernet	RJ-45	Gigabit LAN
USB	USB Type A	USB 3.0
USB	USB Type A	USB 2.0
COM1	RJ45	RI / 5v / 12v (select in BIOS) 5v : Green / 12v : Orange
Option Type C		
12v PUSB 2.0	12v USB	12v USB device
COM 3	D-Sub 9	RI / 5V / 12V (select in BIOS)
COM 2	D-Sub 9	RI / 5V / 12V (select in BIOS)
Option G		
12v USB 2.0	12v USB	12v USB device
12v USB 2.0	12v USB	12v USB device
12v USB 2.0	12v USB	12v USB device
Option J		
COM 2	D-Sub 9	RI / 5V / 12V (select in BIOS)
12v USB 2.0	12v USB	12v USB device
Line Out Mic In		
Power		
Option K		
12v USB 2.0	12v USB	12v USB device
12v USB 2.0	12v USB	12v USB device
COM 2	D-Sub 9	RI / 5V / 12V (select in BIOS)



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Packing List

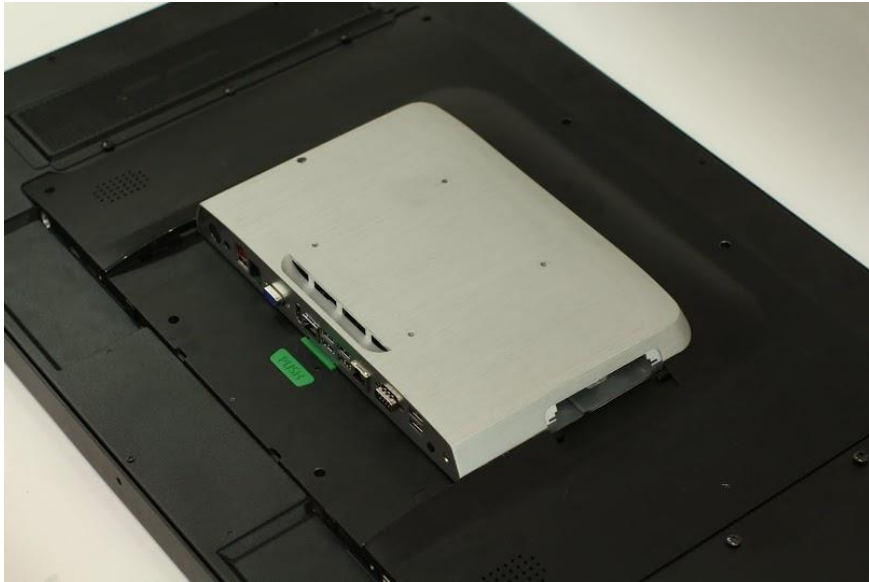
Standard		Optional	
1	PP-8643	1	2nd I/O
2	Power Adapter (150w)		
3	AC Power Cord		
4	RJ45-DB9 Cable		
5	Y Cable		



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Assembly the Box system

1. Locate the button that is at the bottom of the machine.



2. Push up the Box system.



3. Move out the Box system.



4. Separate the box system and monitor.



Chapter 2

Hardware Installation and Upgrade

Warning!



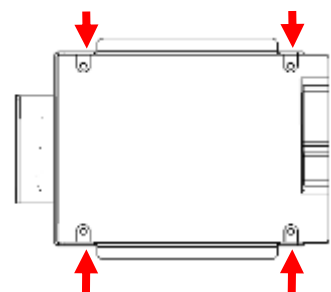
**SWITCH OFF POWER AND UNPLUG POWER CORD BEFORE
SATA STORAGE IS REMOVED**

2.5" SATA Storage (HDD / SSD)

1. Power off and unplug power cord from PP-8643

2. Remove SATA storage cover

3. fix SATA storage to metal bracket
via 4 screws



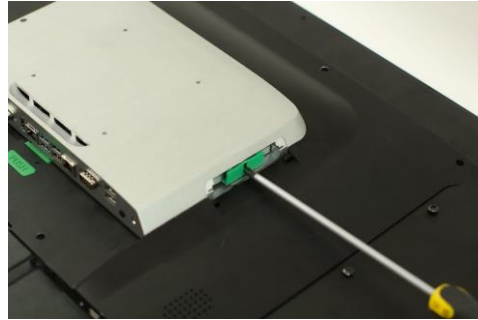
2.5" HDD

4. install SATA storage with bracket

5. fix the bracket via 1 x M3 screw



6. replace SATA storage cover



7. plug hosiden 4 pin 12V male of Y Cable in the box system



8. plug DC 12V male of Y Cable in the monitor





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9. plug hosiden 4 pin 12V female to power adaptor.

10. plug in power cord and power on



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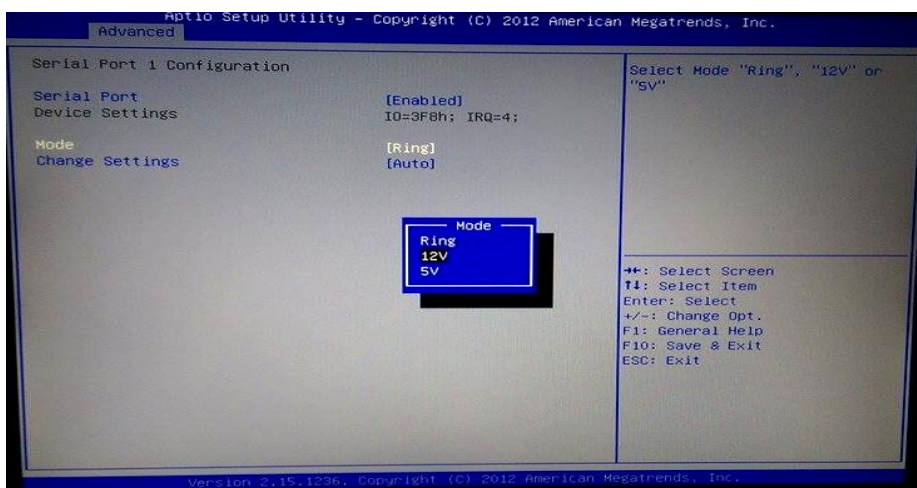
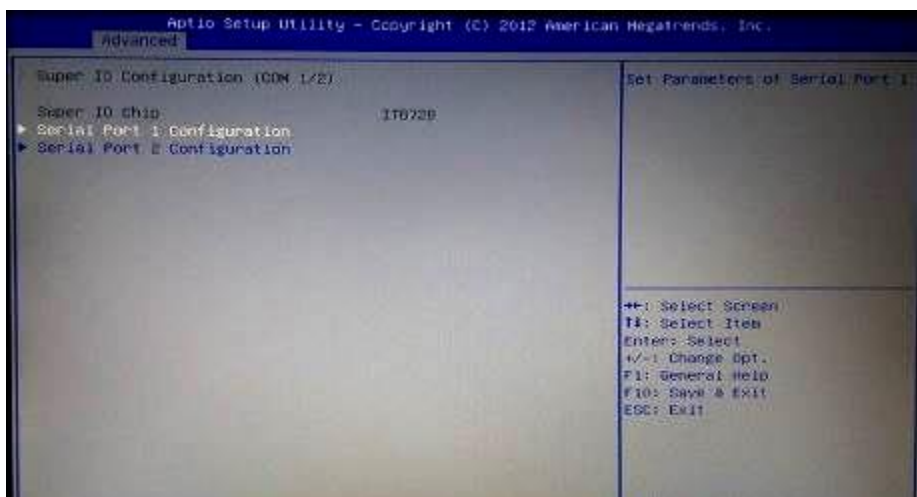
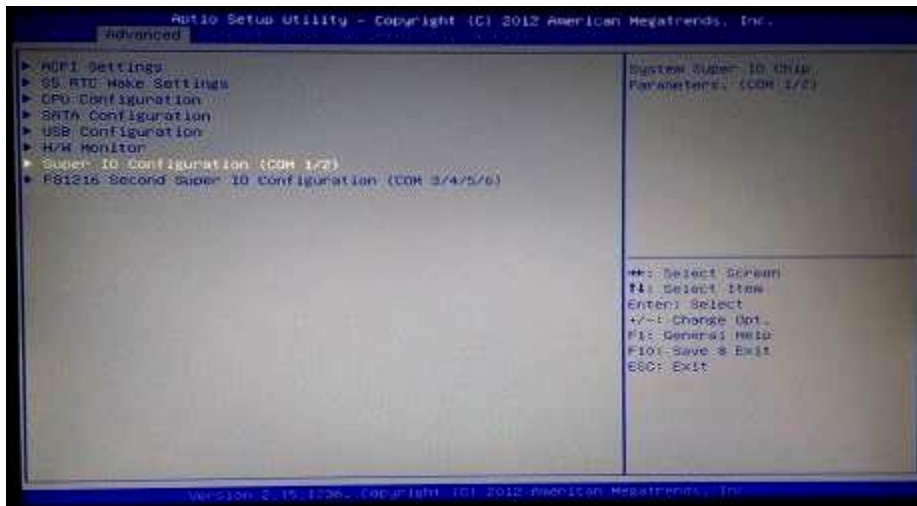
Power Setting (COM / Cash Drawer Port)



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

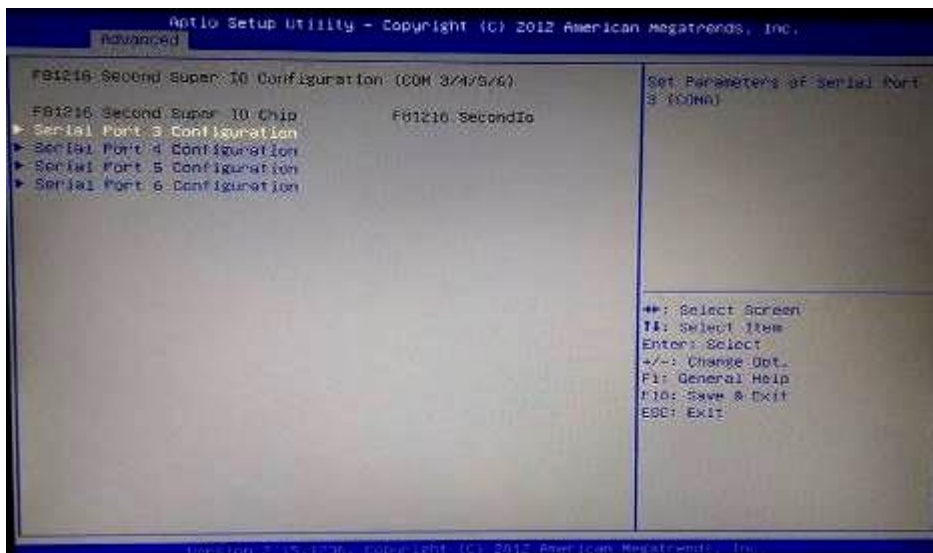
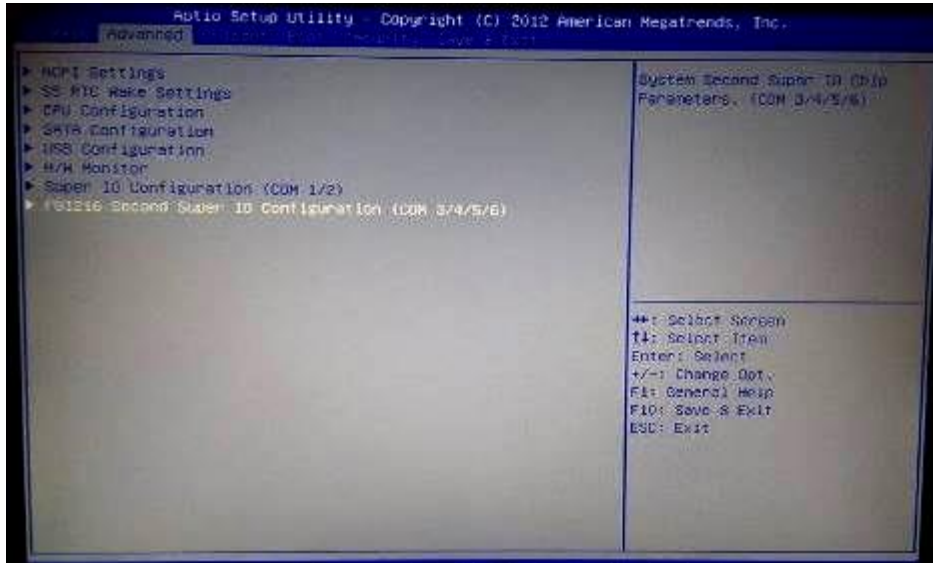
<COM1/2>





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<COM3/4/5>



***Make sure the device voltage matches the power setting before connection.**



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LED Backlight Brightness

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





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Cash Drawer

Please make sure the voltage and cable pin assignment of your cash drawer matches the cash drawer port on **PP-8643**.

You may find the jumper setting and pin definition in M/B H81 user manual.

Please refer to **trouble shooting** if the cash drawer cannot be detected by PP-8643



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=A05  
status=A05  
sleep=200  
open1=40  
open1=80  
close=1  
statusmask=10
```

Chapter 3

Software Installation and Setup

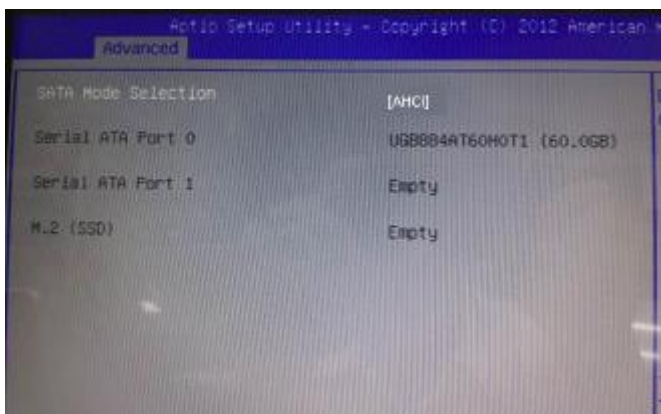
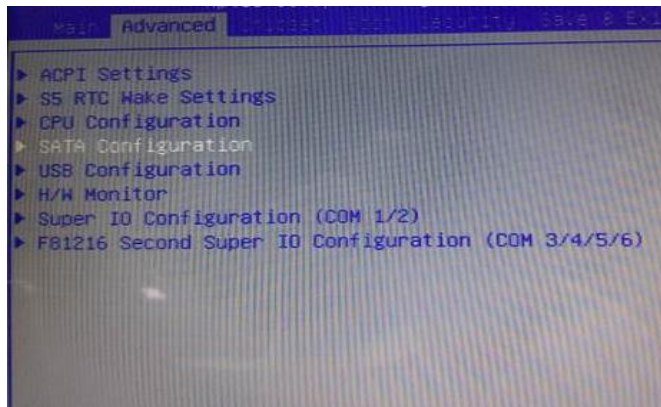
Please download drivers and utilities from www.fecpos.com/en-global/ams/Download

OS Installation Sequence

Install Windows system (Windows7 , Windows system, Windows 8 , Windows 8.1 , Window10)
32bit/64bit ,

Please press Del into BIOS when you login the system.

1 、 **Manu:** Advance → SATA configuration→ IDE/AHCI Mode select **AHCI** Mode



2 、 **Manu:** Boot

→Boot Mode →CSM/UEFI Boot select **CSM** Boot

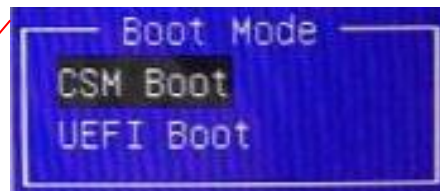
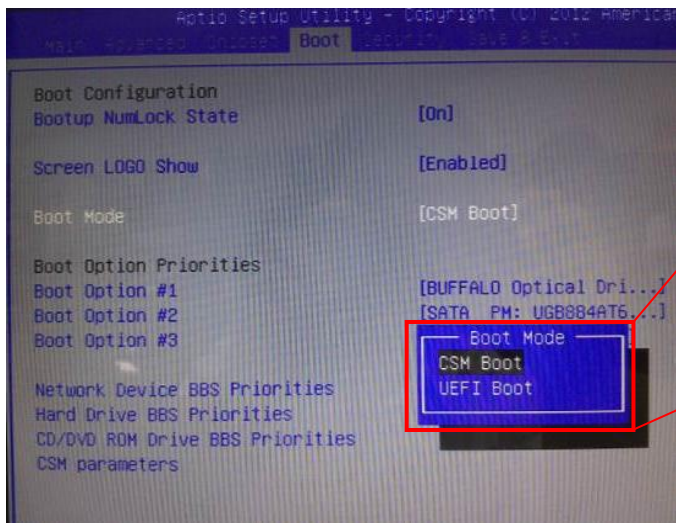


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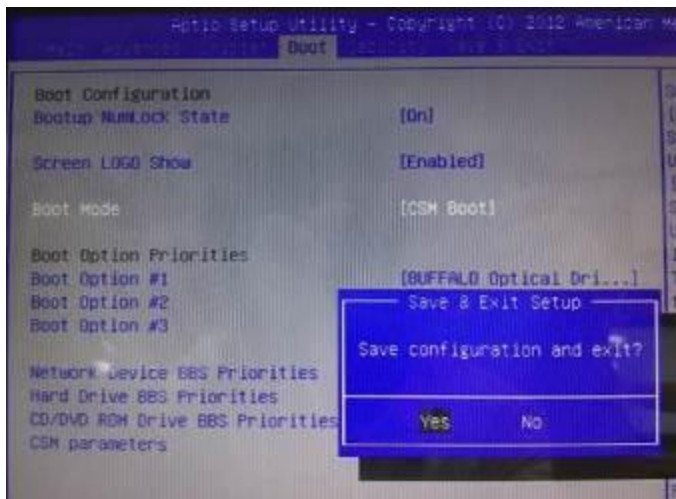
→Boot Option Priorities

→Option #1 DVD device (Model name, type), Windows system in DVDROM

→Option #2 Hard Driver device (Model name, type)



3、 Press **F10** to install OS



Please notice, while the PC is in UEFI mode, the Windows PE version must match the PC architecture. A PC in 64-bit UEFI firmware mode can only boot 64-bit versions of Windows PE. A PC in 32-bit UEFI firmware mode can only boot 32-bit versions of Windows PE. On PCs that support both UEFI mode and legacy BIOS mode, you may be able to run 32-bit Windows PE on a 64-bit PC by changing BIOS menu settings from “UEFI mode” to “BIOS mode”, assuming the manufacturer supports legacy BIOS mode.

If you need more information about the UEFI Mode, you can check following website :

<https://msdn.microsoft.com/en-au/library/hh824898.aspx>



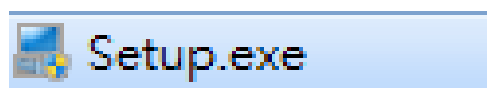
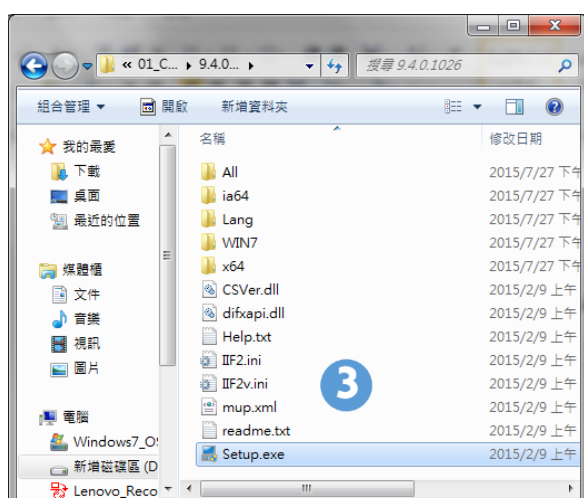
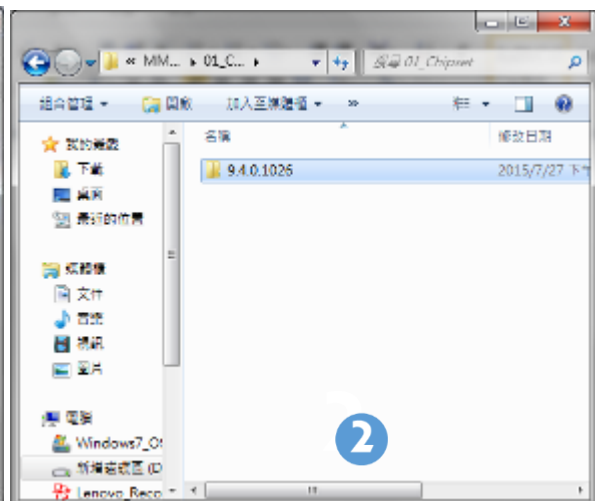
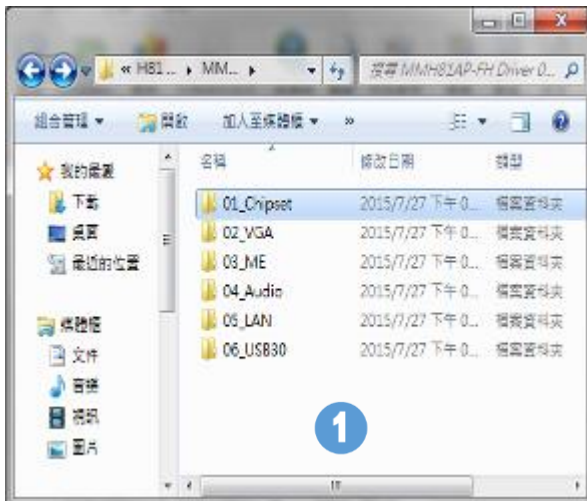
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Device Installation Sequence

1. Chipset Driver
2. ME Driver
3. VGA Driver
4. Audio Driver
5. LAN Driver
6. USB 3.0 Driver
7. Touch Tools (Touch Utility)

Intel H81 Chipset Utilities for Windows system

1. Download drivers from www.fecpos.com/en-global/ams/Download
2. Run Setup.exe

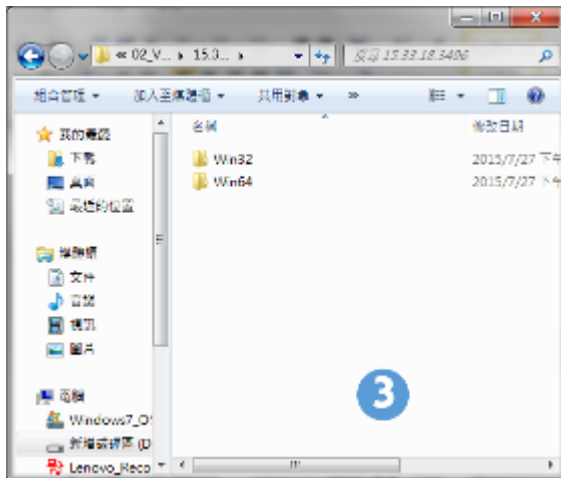
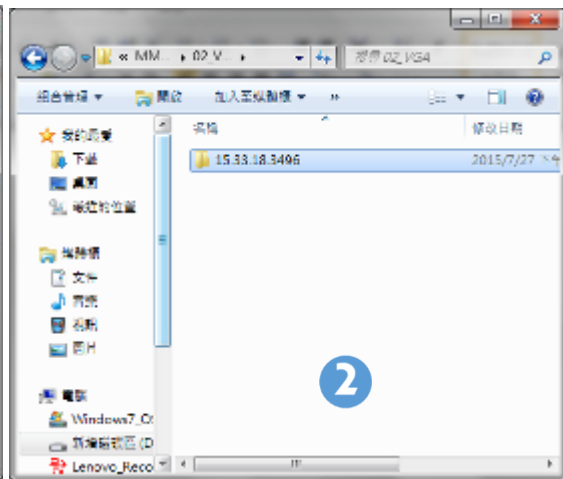
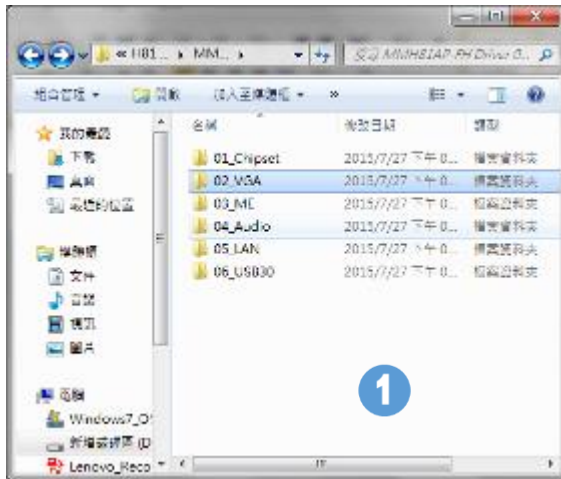




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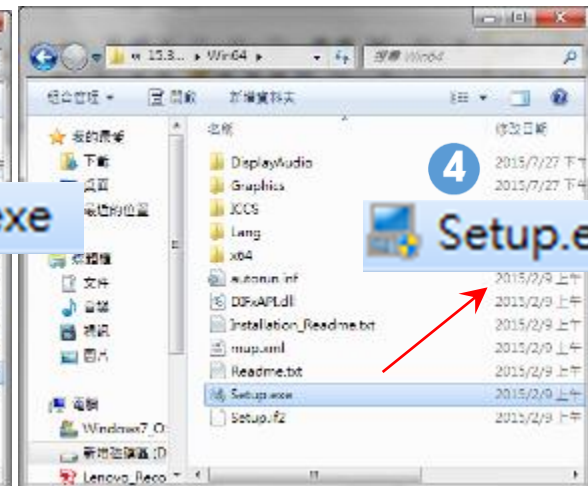
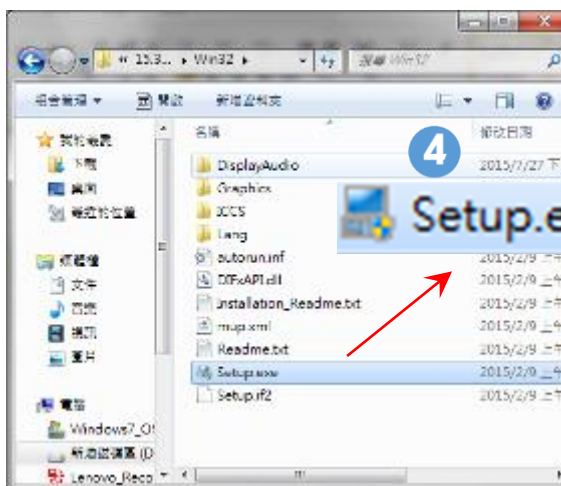
Intel VGA Driver for Windows system

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



Win32(32bit)

Win64(64bit)



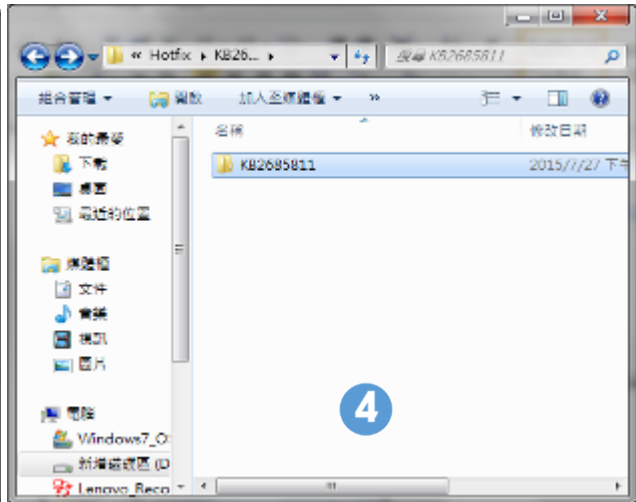
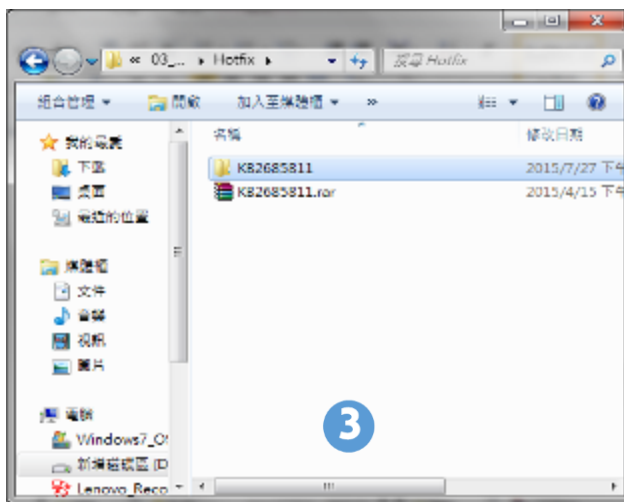
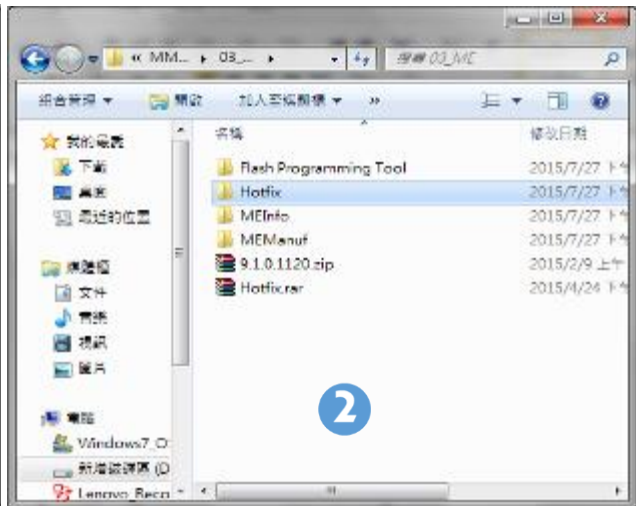
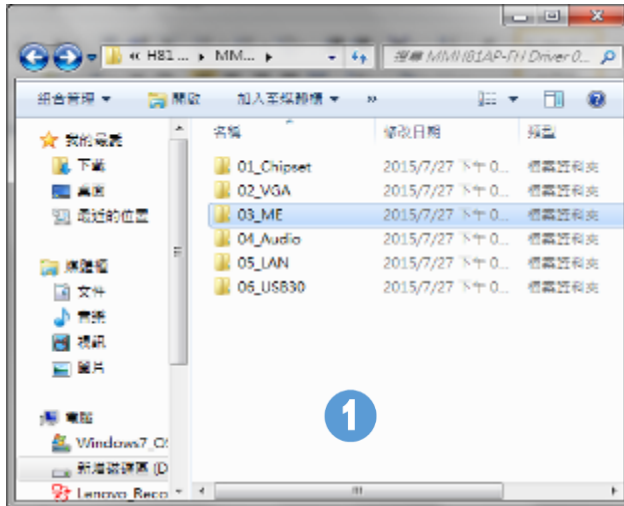
2. Run **Steup.exe**
3. Restart PP-8643 to complete installation



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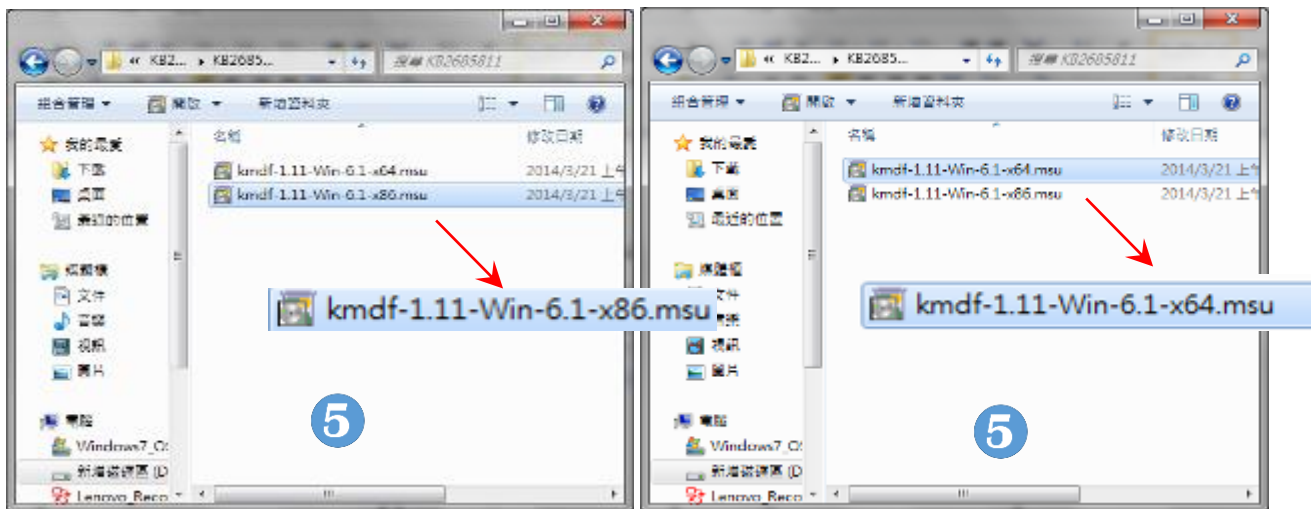
ME Update (Hotfix) for Windows system

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



32 bit

64bit



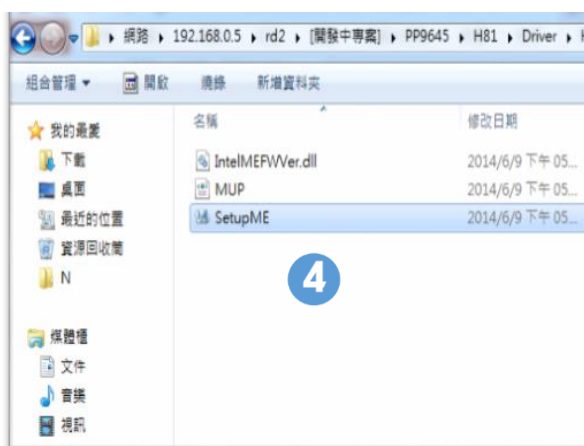
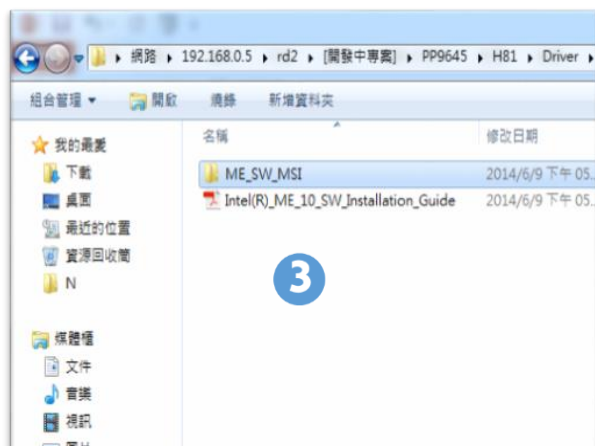
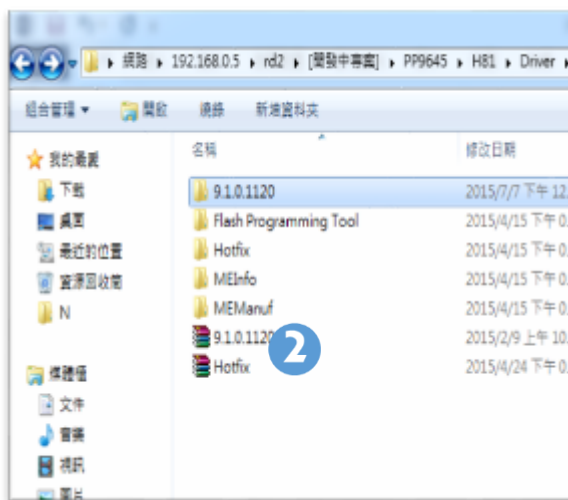
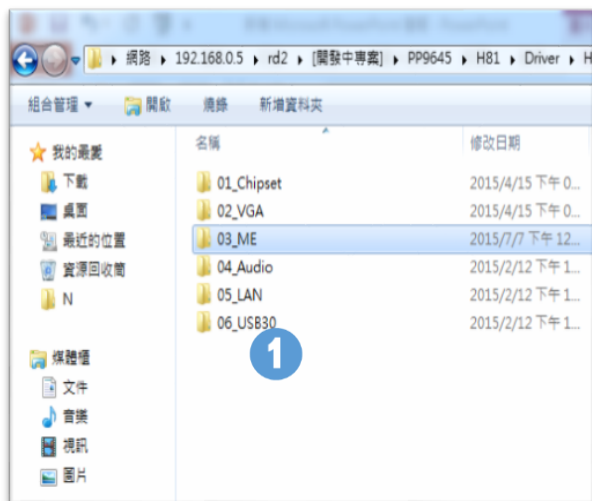
2. Run **kmdf1.11-win-6.1-x86/64.msu**
3. Restart PP-8643 to complete installation



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ME Driver for Windows system

1. Download drivers from www.fecpos.com/en-global/ams/Download
2. Run SetupME.exe



3. Restart PP-8643 to complete installation

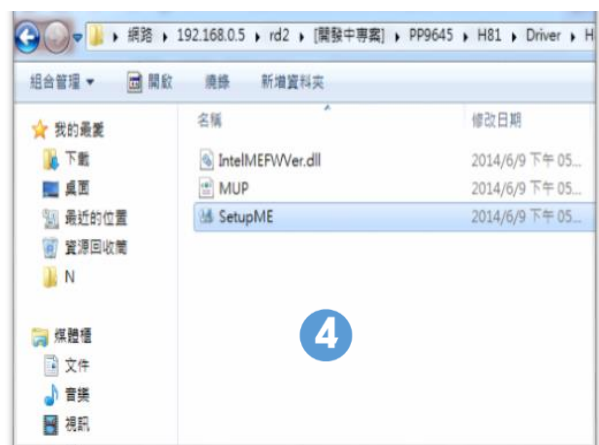
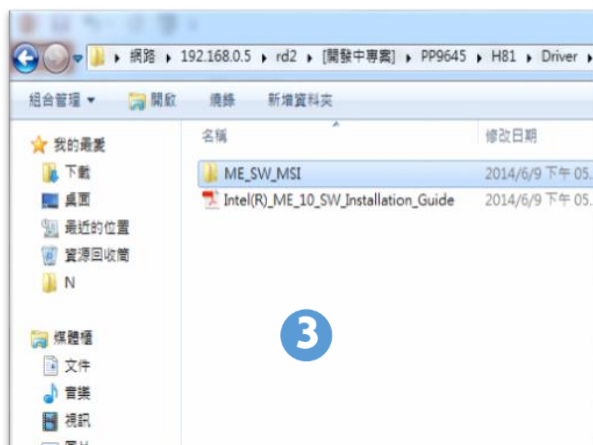
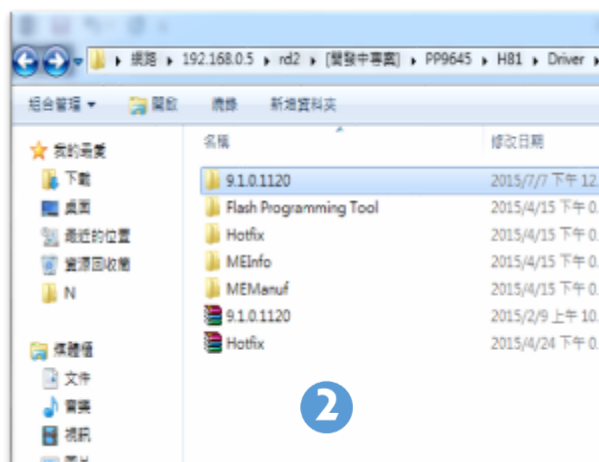
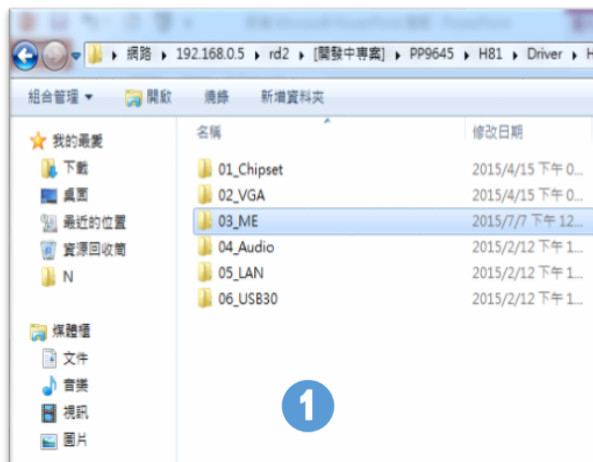
***When the system is POSReady7 or Windows 7, you needs to install Hotfix derive extra, but you don't need to install this derive that the system is Window 8 or Windows 8.1.**



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ME Driver for Windows 8.

1. Download drivers from www.fecpos.com/en-global/ams/Download
2. Run SetupME.exe



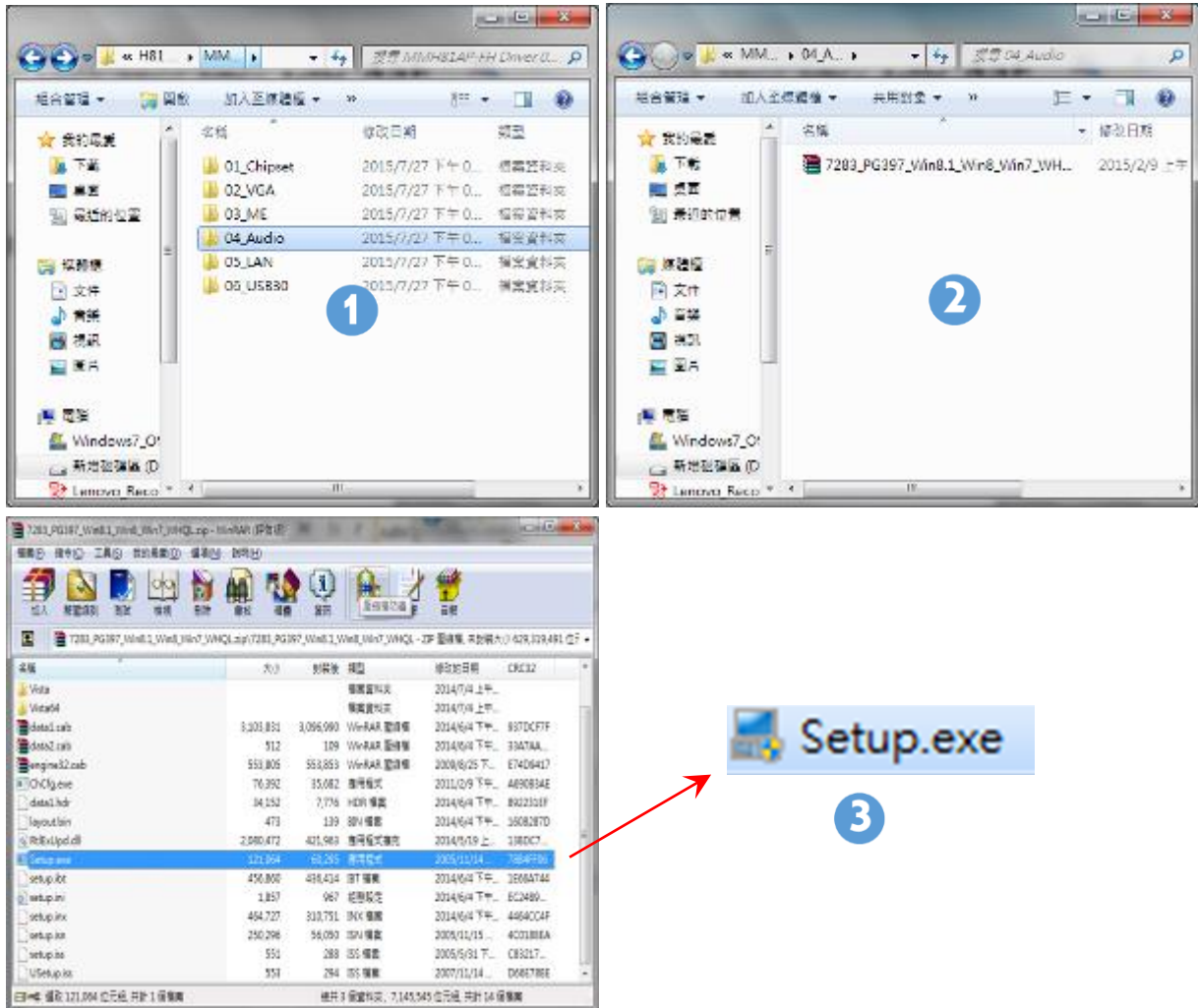
3. Restart PP-8643 to complete installation



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Audio Driver for Windows system

1. Download drivers from
2. Run **Steup.exe**



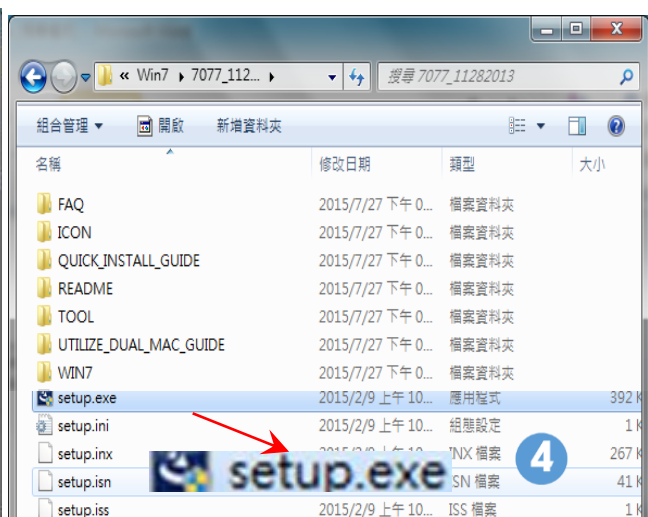
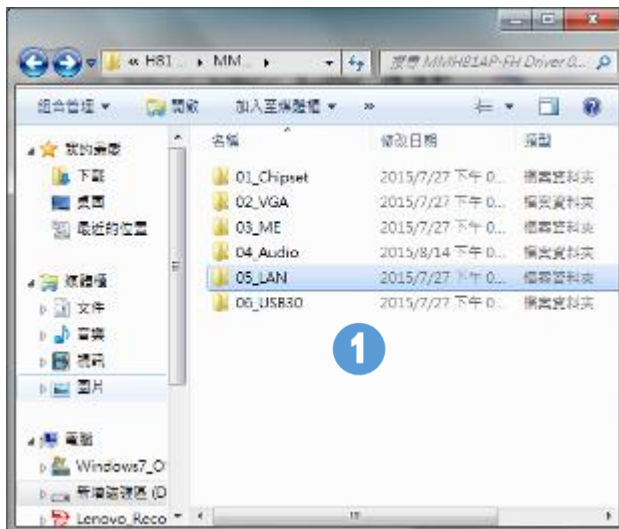
3. Restart PP-8643 to complete installation



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LAN Driver for Windows system

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

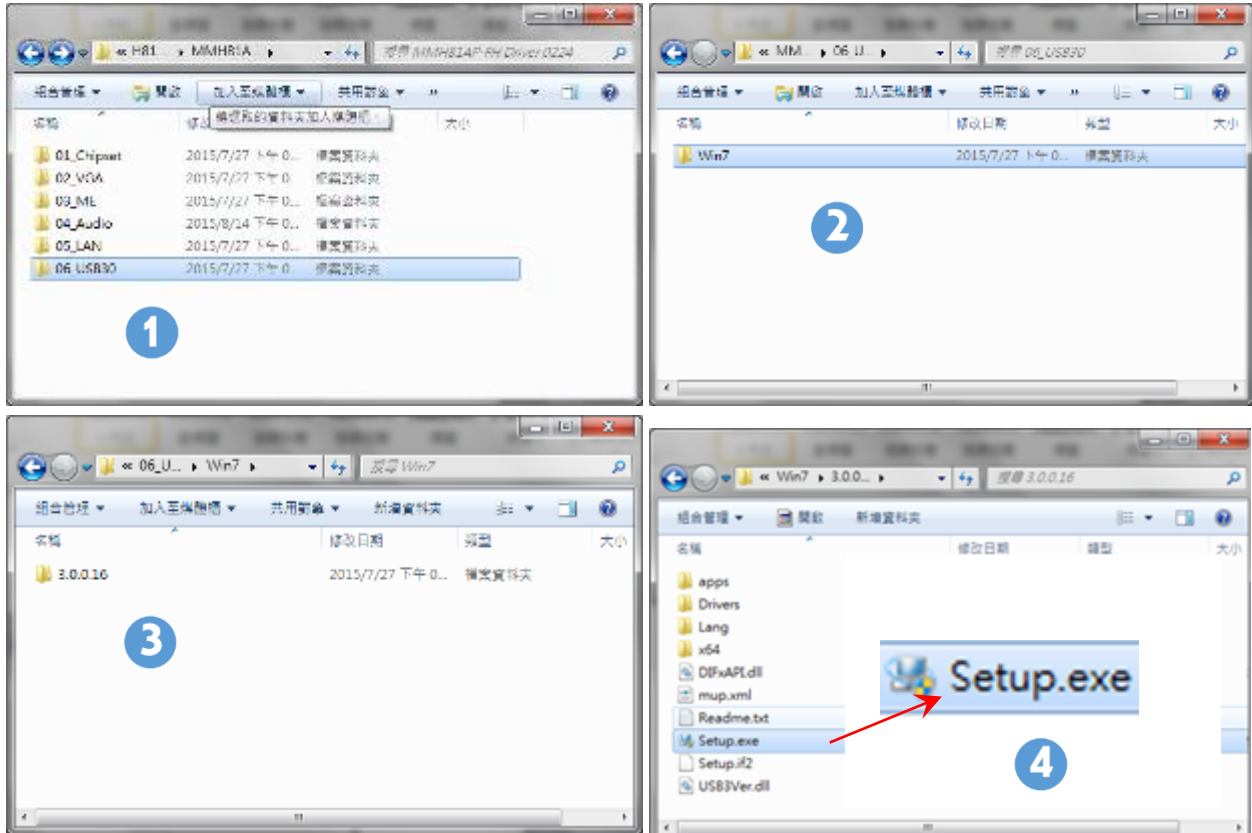




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USB 3.0 Driver for Windows system

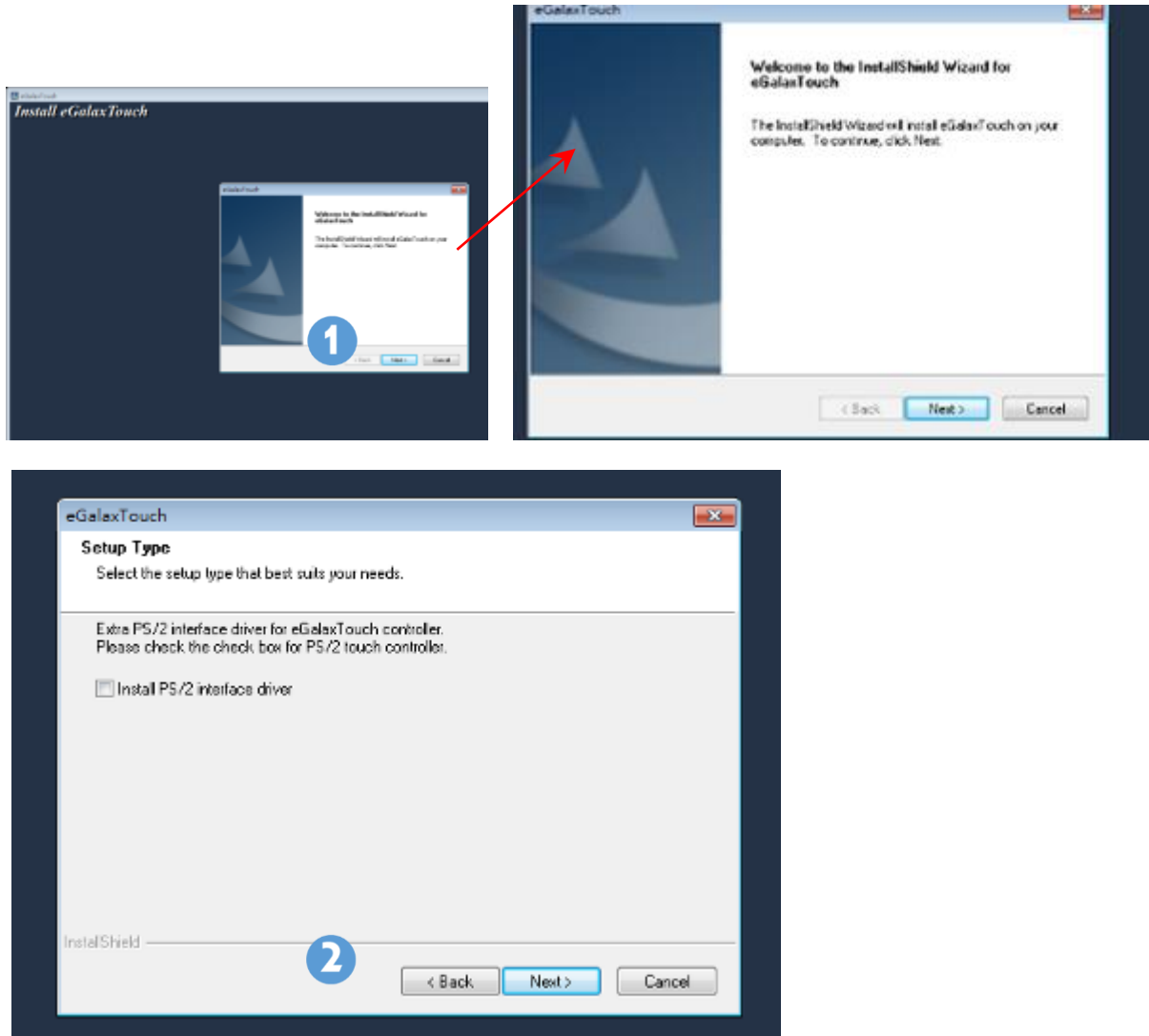
1. Download drivers from www.fecpos.com/en-global/ams/Download
2. Run **Steup.exe**



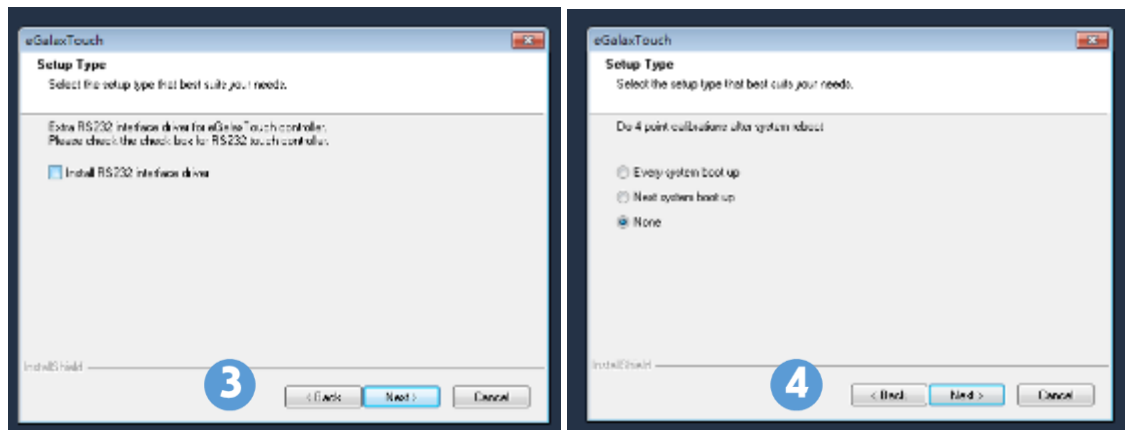
3. Restart PP-8643 to complete installation

EETI TouchKit for Windows system

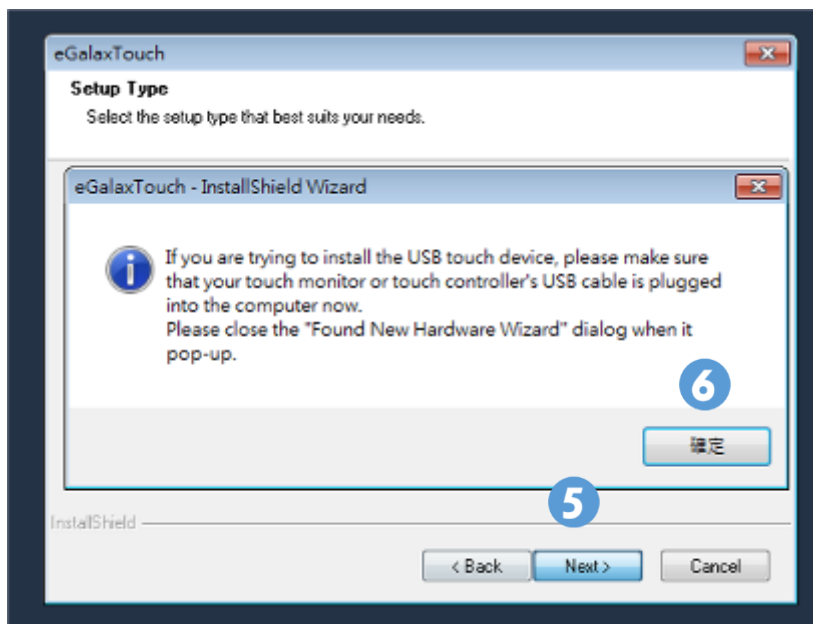
1. Download drivers from www.fecpos.com/en-global/ams/Download
2. Run **Steup.exe**



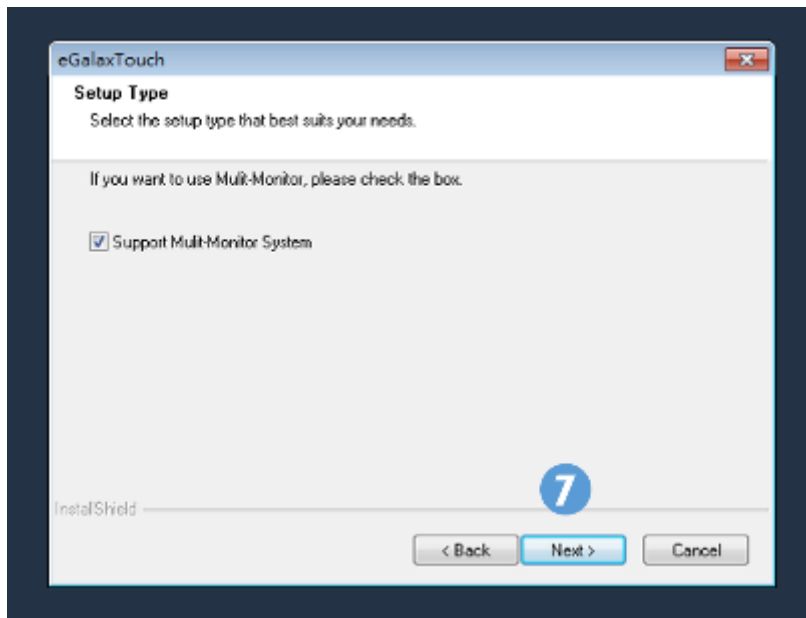
3. Do **NOT** check **Install PS/2 interface driver** and continue



4. Do **NOT** check **Install RS232 interface driver** and continue
5. Confirm USB touch device is in use



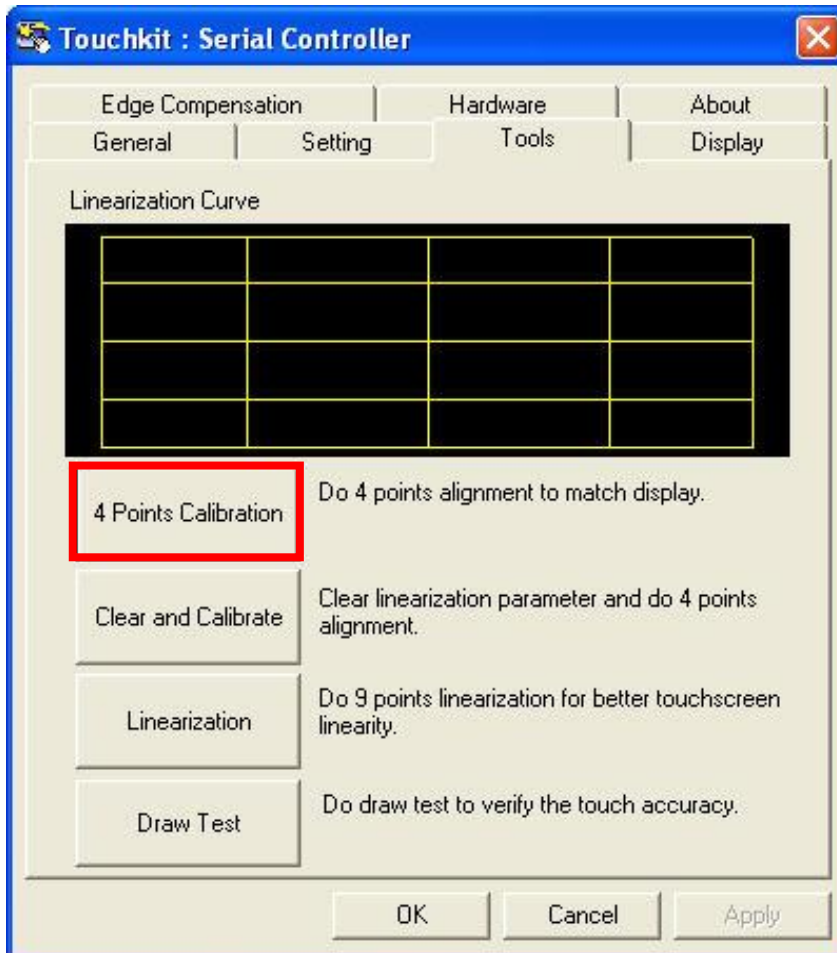
6. Check **Support Multi-Monitor System** and continue



7. Restart PP-8643 to complete installation

EETI TouchKit Control Panel

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

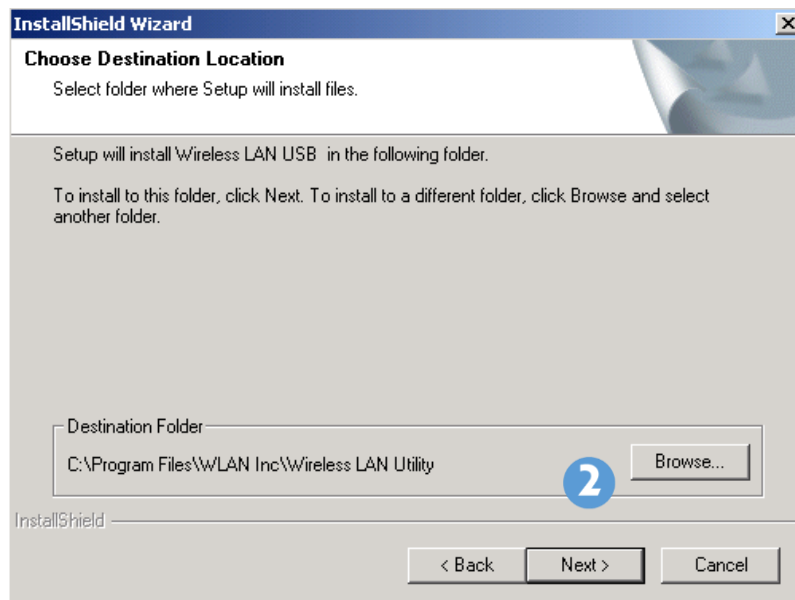
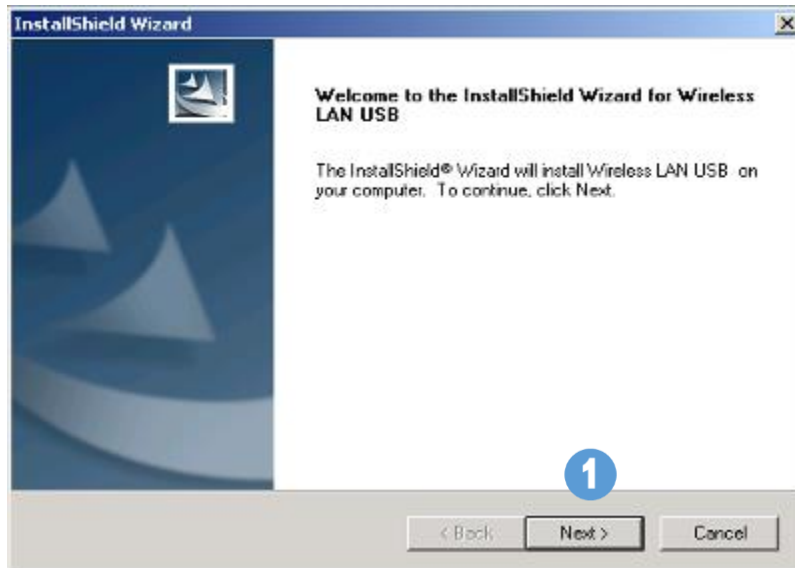




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Wireless LAN Driver for Windows

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



Chapter 4

Specifications

Aer PPC		PP-8643
System	Processor	Intel® Celeron™ G1820TE 2.20 GHz, Intel® Core™ i3-4330TE 2.40 GHz, Intel® Core™ i5-4590TE 3.30 GHz
	Memory	Dual SODIMM DDR3 L Standard 2G ; Max 16
	Power Supply	150W
	Thermal	Smart Fan
	Storage Device	1 x 2.5" SATA Drive 1 x M.2 SSD socket
	Speakers	2w x 2
Display	Display	32" (4 : 3)
	Touch	Projected Capacitive
	Backlight	LED
	Brightness	350 nits
	Backlight MTBF	50,000 hours

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

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



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- 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