



AerPOS PP-9635

User Manual

Ver. 0.2

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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

AERPOS PP-9635

PP-9635 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-9635AV (bezel)



PP-9635BV (bezel free)

OVERVIEW



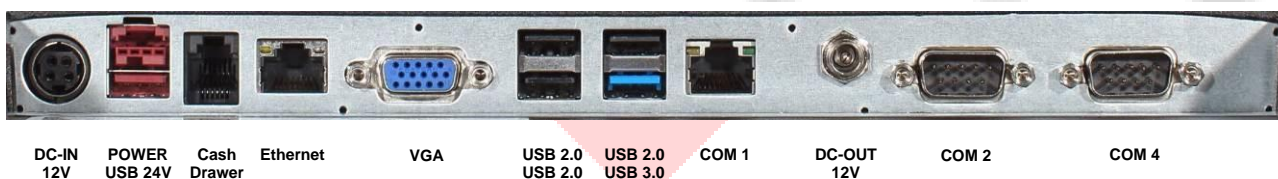
VIRTUOS



DIMENSION



I/O CONNECTIVITY



I/O Port	Connector Type	Description
12V DC-IN	DC-in (4 pin)	12V Power Adapter
24V POWER USB	24V USB 2.0	24V USB 2.0 device with power
Cash Drawer	RJ11	12V / 24V Cash Drawer (select in BIOS)
Ethernet	RJ45	Gigabit LAN
VGA	D-Sub 15	2 nd 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 LED / 12V: Orange LED
12V DC-OUT	DC Jack (2,5 mm)	2 nd LCD or others
COM 2	RS-232 (D-Sub 9)	RI / 5V / 12V (select in BIOS)
COM 4	RS-232 (D-Sub 9)	RI / 5V / 12V (select in BIOS)

PACKING LIST

Standard		Optional		Part number
1	AerPOS PP-9635	1	MSR Reader	KBB9803
2	Power Supply (150W)	2	iButton Reader + 5 keys	KBB9806
3	AC Power Cord	3	RFID Card Reader	KBB9881
4	RJ45-DB9 Cable	4	Finger Print Reader	KBB9807
		5	1D/2D Barcode Reader	KBB9813
		6	MSR & iButton Reader + 5 keys	KBB9804
		7	MSR & RFID Reader	KBB9808
		8	MSR & Finger Print Reader	KBB9805
		9	iButton key	EAPOSA9203
		10	SSD ADATA SU800 128GB 2.5" SATA III	CHM2013
		11	Windows 10 IoT Enterprise 2016 Entry	JNA0004
		12	SO-DIMM 4GB DDR3L-1600MHz Kingston CL11	IBX2002
		13	Custom Display Holder	KBB9810
		14	LCD Custom Display LCM 20x2	KBB9884
		15	2 nd LCD LED 13,3", not touched + AerARM holder	KBB9886
		16	AerPole, LCD holder, VESA compatible	KBB9812
		17	Power Supply 150W	KBB9603

CHAPTER 2

HARDWARE INSTALLATION AND UPGRADE



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

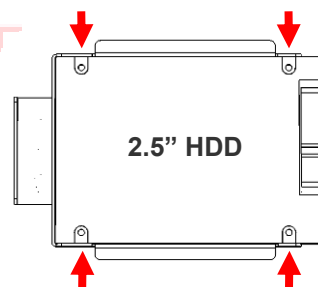
2,5" SATA STORAGE (HDD / SSD)

1. Power off and unplug power cord from AerPOS 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.



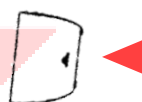
6. Replace SATA storage cover.
7. Plug in power cord and power on.



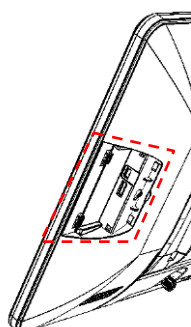
MSR / IButton / RFID / FINGERPRINT (ID DEVICE)



1. Remove plastic cover.

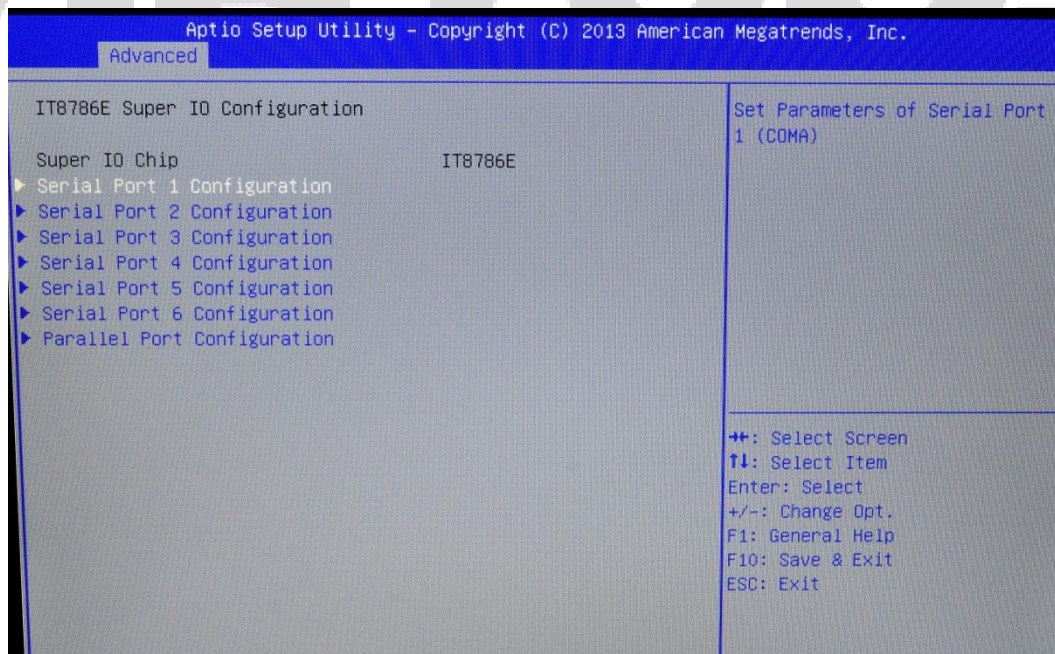
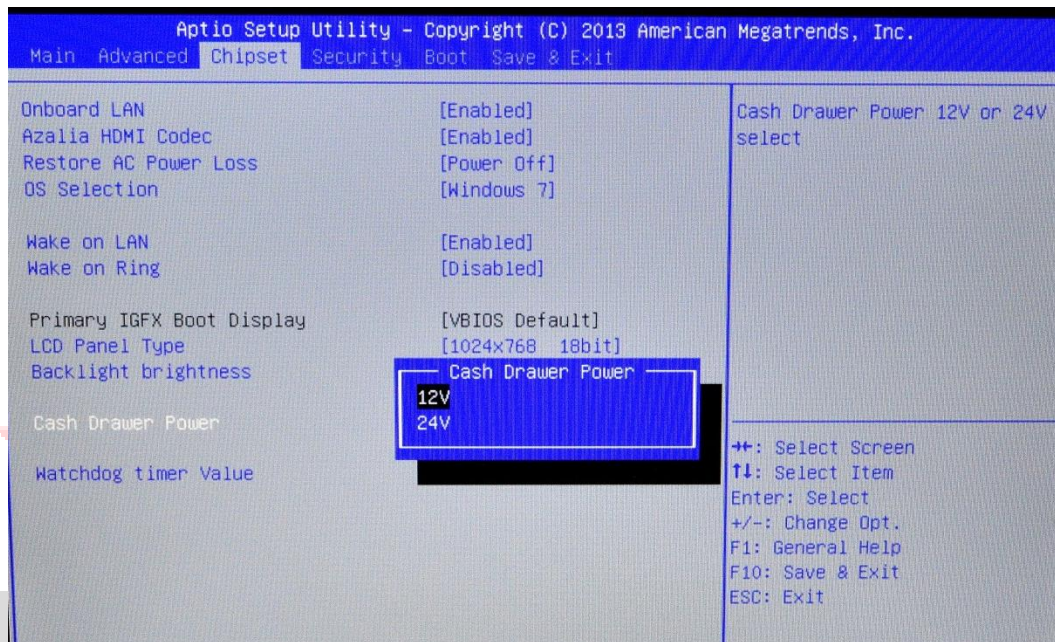


2. Plug in ID device (USB) and fix it via 1 x M3 screw.



POWER SETTING (COM / CASH DRAWER PORT)

You may select Cash Drawer Port (12V / 24V) and the power (5V / 12V) of COM 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

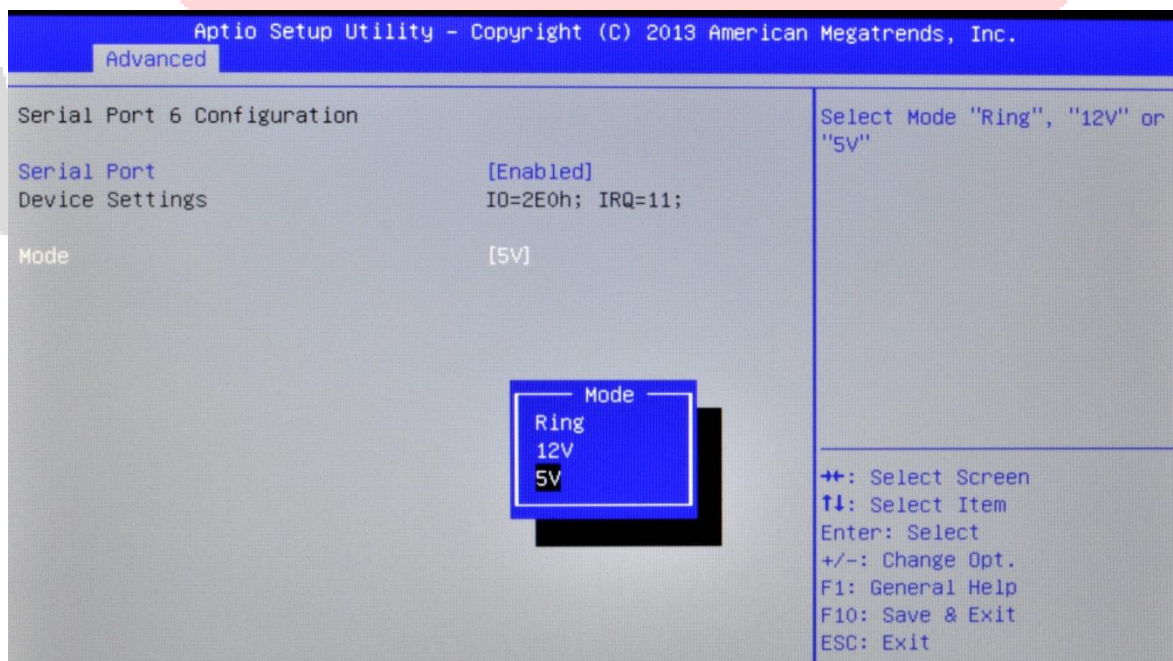
1. Loosen 1 x M3 screw and remove the back cover.
2. Connect customer display via serial cable and tighten 3 x M3 screw.



3. Customer display (integrated type) is connected to **COM6**. LCD Display LCM 20x2 (KBB9884) is **5V**.

Make sure the power setting of COM6 is 5V before connecting the display!

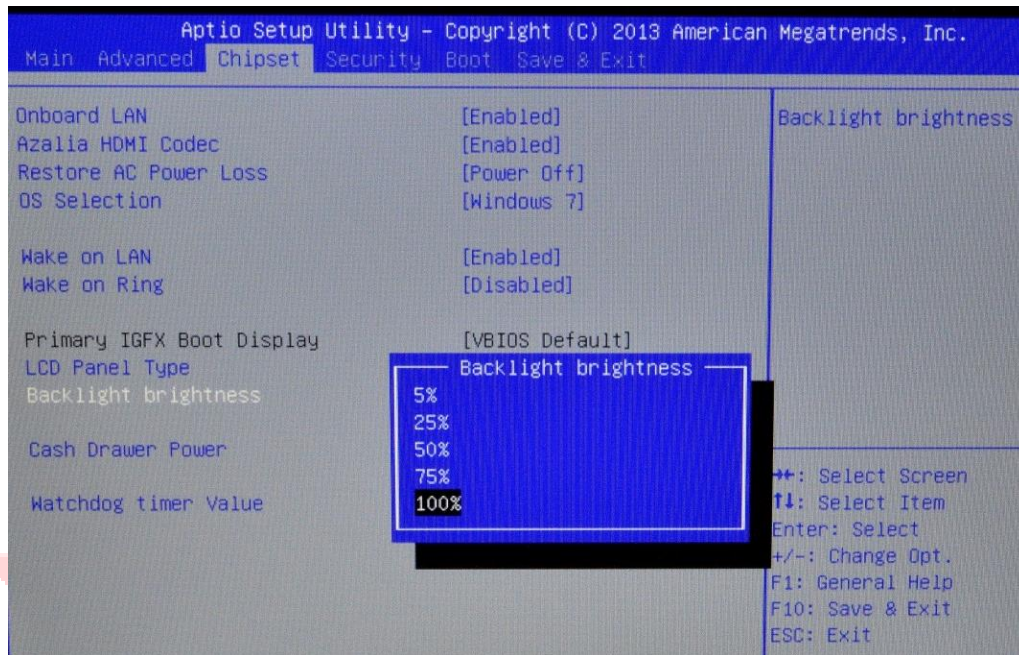
The 12V setting destroys the display!



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.

CUSTOM DISPLAY HOLDER

The holder allows direct installation of Virtuos customer displays to AerPOS POS systems of the PP-9635xV and PP-9645xV series or to AerMonitors. There are two special 90 cm connection cables included for connecting both LCD (blue) and VFD (red). The display is mounted without a base only by placing the display tubes on the holder and replacing the existing cable with a new one, that is connected to the RJ45 serial port of the AerPOS system (there you only need to enable power directly on the serial port - usually 12V).



Connection of customer display to the AerPOS PP-9635 with 2 x M5 screws.

2nd 13.3" LCD LED (AERARM EXTERNAL MONITOR HOLDER)



2nd MONITOR (15" POLE TYPE)



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



2. Connect VGA cable.



3. Connect the DC 12V cable (optional) - Plug one end into the monitor's power connector, plug the other end into the AerPOS power connector.

CASH DRAWER

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

Connection of RJ11 connector pins:



Pin number	Description	Direction
1	Connecting to chassis	-
2	Drawer - Open 1	Output
3	Drawer sensor open / closed	Input
4	12V / 24V	-
5	Drawer - Open 2	Output
6	Earthing	-

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 <http://www.virtuos.cz/download>.

Driver installation is intended for advanced users. If you do not dare to install yourself, entrust this activity to professional service. For each type of AerPOS cash register system, we have both a product and a variant with an operating system and drivers already installed and configured.

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) – touch screen ABON

QUICK RE-INSTALLATION OF OS – RETURN TO DEFAULT

The below method for quick OS reinstallation (to return to default) applies to AerPOS shipped with the preinstalled Windows OS, where the **Virtuos® Rescue USB Flash Disc** was included.

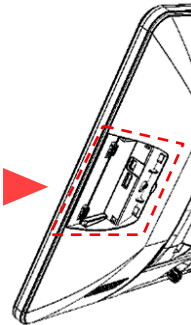
All data will be deleted during the process of re-installation!

REINSTALLING PROCESS

1. Turn the device off and remove the right plastic cover.

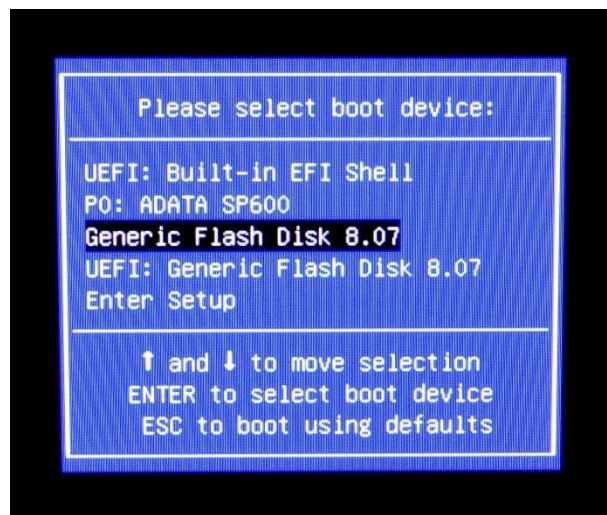


2. Insert the Virtuos® Rescue USB Flash Disc into the USB port.

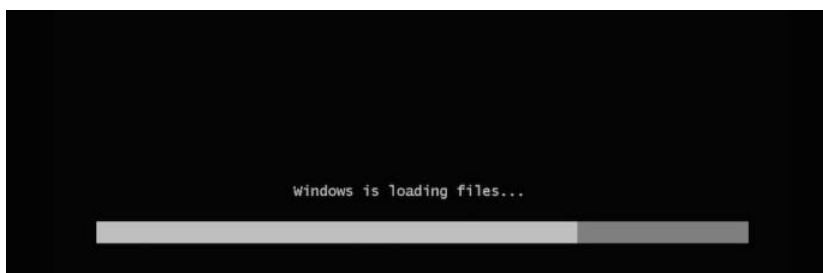


3. Turn the AerPOS on and press (and hold) the F12 key until the boot menu with the discs found is displayed.

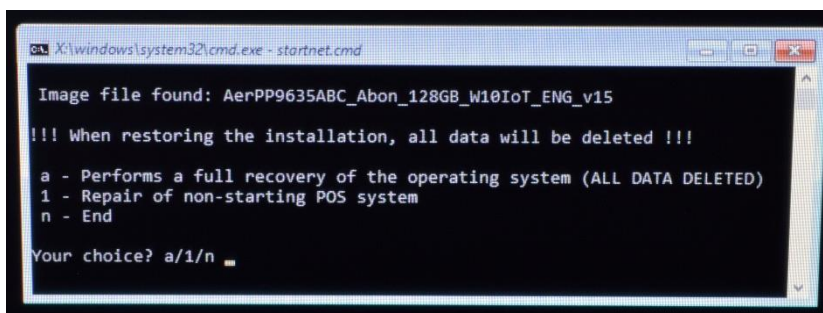
4. Select Generic Flash Disk.



5. The Windows installer starts.



6. To restore the system to its default state (all data deleted) press the A key. To repair system press 1 key.



7. The installer will set the AerPOS to the factory default settings.

VIRTUOS

CHAPTER 4

SPECIFICATIONS

AerPOS		PP-9635		
System	Processor	Intel Celeron J1900 (up to 2.42 GHz)		
	Memory	DDR3L 4 GB (standard), 8 GB (max)		
	Power Supply	150W		
	Thermal	fan-less		
	Storage Device	1 x 2,5" SATA Drive		
	Speakers	2 x 2W		
Display	Display	15" (4:3)		
	Touch	Resistive (bezel)	Resistive (bezel free)	Projected Capacitive
	Backlight	LED		
	Brightness	350 nits (cd/m ²)		
	Backlight MTBF	30,000 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)		
	LCM	20 x 2 (5V / character mode)		
	LCD LED 13,3"	2 nd LCD LED 13,3", not touched + AerARM holder		
	2 nd Display	15" touch LCD, AerPole		

CHAPTER 5

TROUBLE SHOOTING

This guide is for people with strong knowledge in computing hardware.

- A) Check HID USB touch device is detected by O/S.
- B) Check EETI driver or ELO TouchKit driver is properly installed or try reinstallation.

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

- C) Make sure SATA storage device is properly installed.
- D) Check CMOS setup and set SATA HDD to Auto Detect.

MSR DOES NOT FUNCTION PROPERLY

- A) Make sure MSR (USB Hid keyboard) is properly connected.
- B) Make sure MSR LED is blue (color).

LAN DOES NOT FUNCTION PROPERLY

- A) Make sure LAN driver is installed properly.
- B) Make sure 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) Make sure pin assignment of cash drawer matches that of RJ11 cash drawer port.
- B) Check I/O port address.

