User Manual

NINÔ II

TRADEMARK

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Safety
IMPORTANT SAFETY INSTRUCTIONS

1. To disconnect the machine from the electrical Power Supply, turn off the power switch and remove the power cord plug from the wall socket. The wall socket must be easily accessible and in close proximity to the machine.
2. Read these instructions carefully. Save these instructions for future reference.
3. Follow all warnings and instructions marked on the product.
4. Do not use this product near water.
5. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
6. Slots and openings in the cabinet and the back or bottom are provided for ventilation; to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register, or in a built-in installation unless proper ventilation is provided.
7. This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
8. Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.
9. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

 CE MARK

This device complies with the requirements of the EEC directive 2004/108/EC with regard to "Electromagnetic compatibility" and 2006/95/EC "Low Voltage Directive"

 FCC

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference.
(2) This device must accept any interference received, including interference that may cause undesired operation

CAUTION ON LITHIUM BATTERIES

There is a danger of explosion if the battery is replaced incorrectly. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

⚠ Battery Caution

Risk of explosion if battery is replaced by an incorrectly type.
Dispose of used battery according to the local disposal instructions.

⚠ Safety Caution

Note: To comply with IEC60950-1 Clause 2.5 (limited power sources, L.P.S) related legislation, peripherals shall be 4.7.3.2 "Materials for fire enclosure" compliant.

4.7.3.2 Materials for fire enclosures

For MOVABLE EQUIPMENT having a total mass not exceeding 18kg.the material of a FIRE ENCLOSURE, in the thinnest significant wall thickness used, shall be of V-1 CLASS MATERIAL or shall pass the test of Clause A.2.
For MOVABLE EQUIPMENT having a total mass exceeding 18kg and for all STATIONARY EQUIPMENT, the material of a FIRE ENCLOSURE, in the thinnest significant wall thickness used, shall be of 5VB CLASS MATERIAL or shall pass the test of Clause A.1

LEGISLATION AND WEEE SYMBOL

2012/19/EU Waste Electrical and Electronic Equipment Directive on the treatment, collection, recycling and disposal of electric and electronic devices and their components.

The crossed dustbin symbol on the device means that it should not be disposed of with other household wastes at the end of its working life. Instead, the device should be taken to the waste collection centers for activation of the treatment, collection, recycling and disposal procedure.
To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract.

This product should not be mixed with other commercial wastes for disposal.
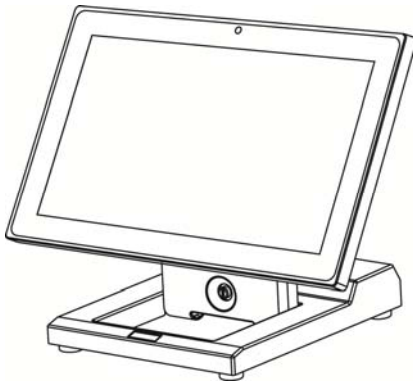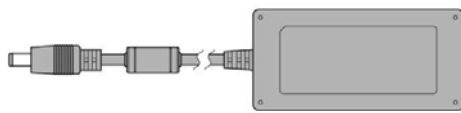
Revision History

Revision	Date	Description
V1.0	April, 2015	● Release

Table of Contents

1 Item Checklist

1-1 Standard Items

a. System	b. Power adapter (65W)
c. Power cable	d. RJ45-DB9 cable (x4)
e. Manual CD	

1-2 Optional Items

a. MSR module	b. iButton module
c. Addimat reader	d. Customer display (Graphic LCM)
e. 2nd display	f. Wall Mount kit

2 System View

2-1   Front View & Rear View
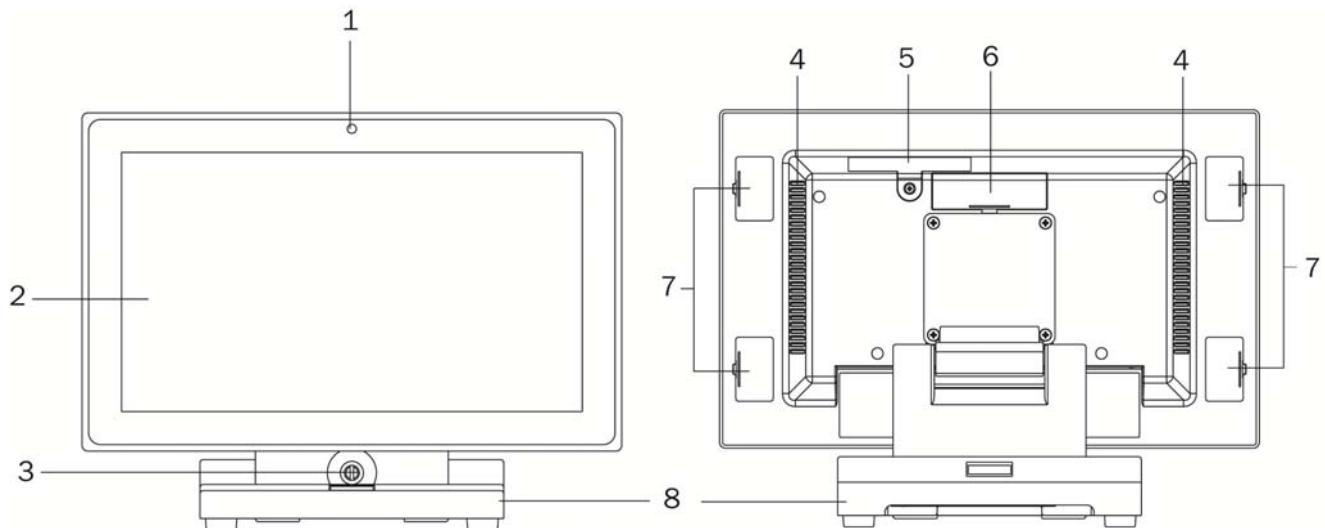
Number	Description
1	LED indicator
2	Touch screen
3	Thumb screw for the cable cover
4	Ventilation hole
5	HDD door
6	VFD/2nd display dummy cover
7	MSR/iButton/Addimat key module dummy cover
8	Swing arm base

2-2 Side View
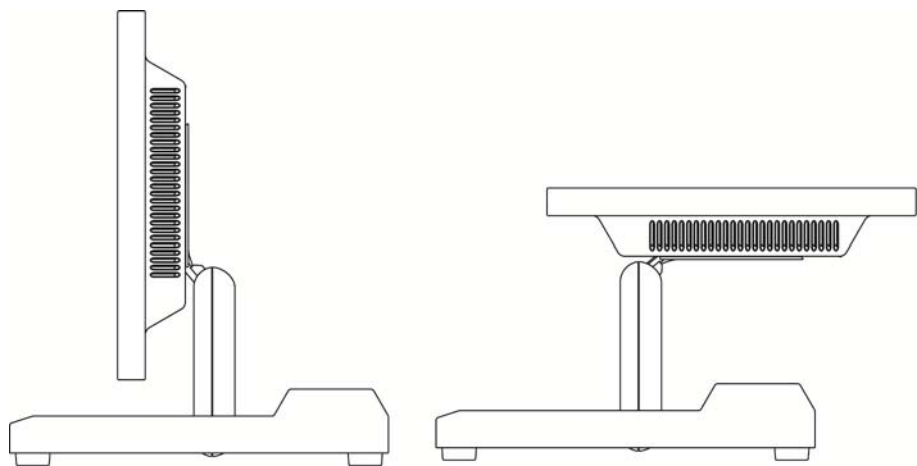
Fold down the swing arm base
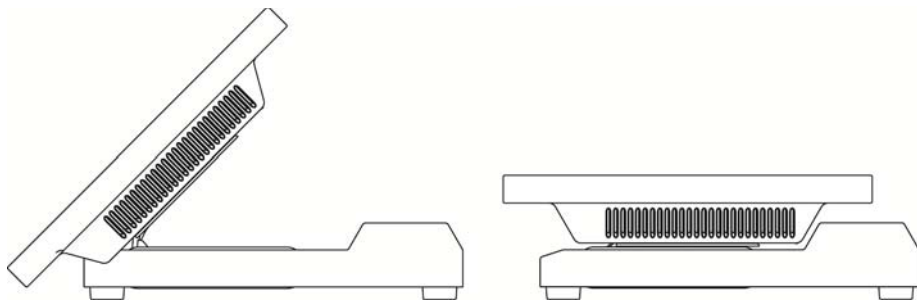
2-3 Bottom View
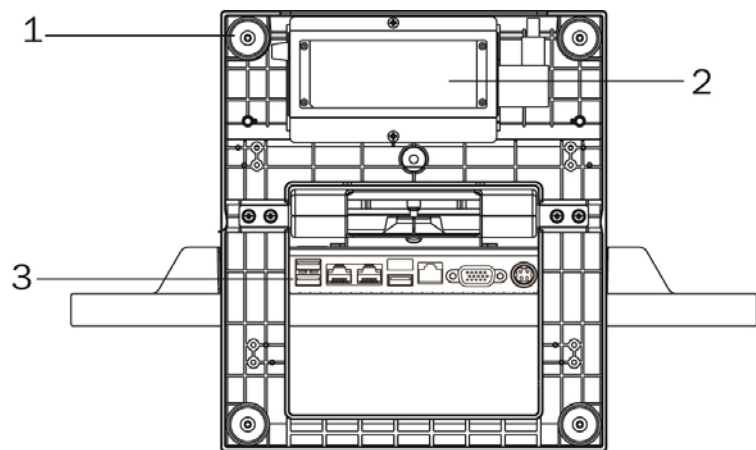
Number	Description
1	Rubber foot
2	Power adapter (with holder bracket)
3	IO ports

2-4   Dimension & View Angle

361.4

170.76

45º

278.48

361.4 mm

67.88 mm

254.67
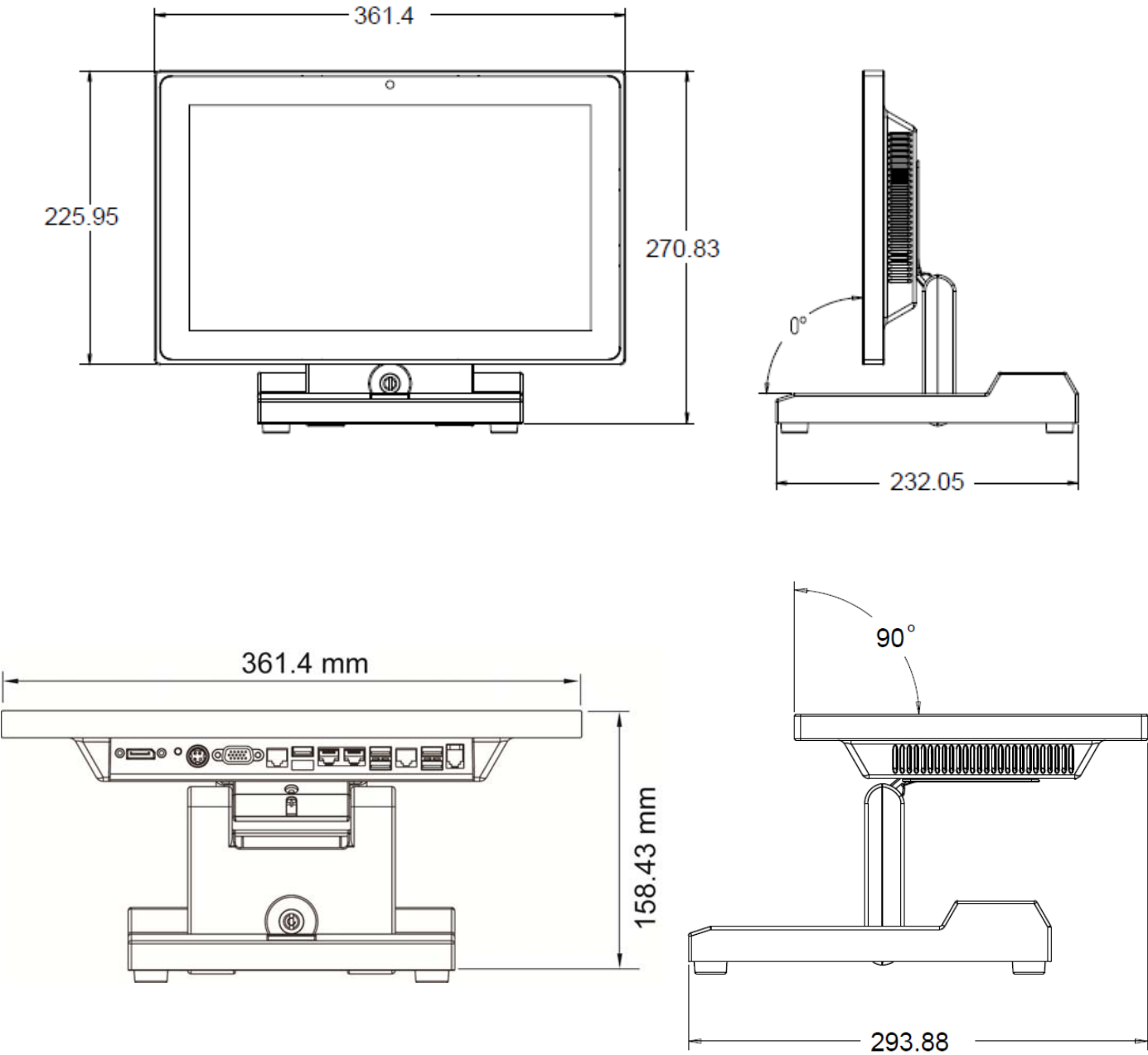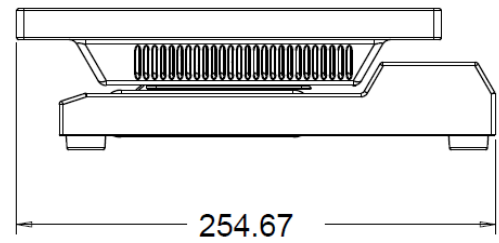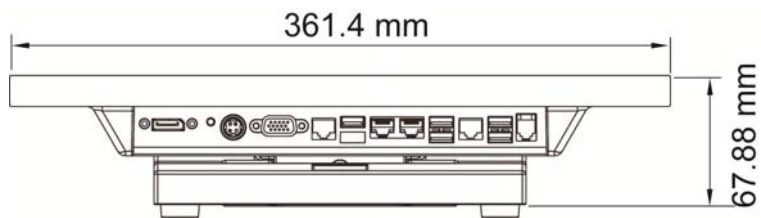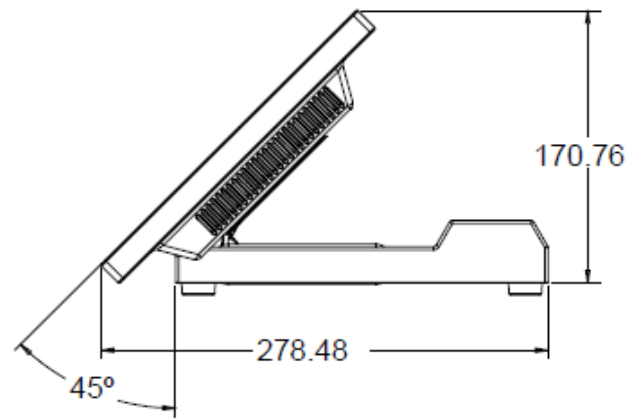
2-5 I/O View
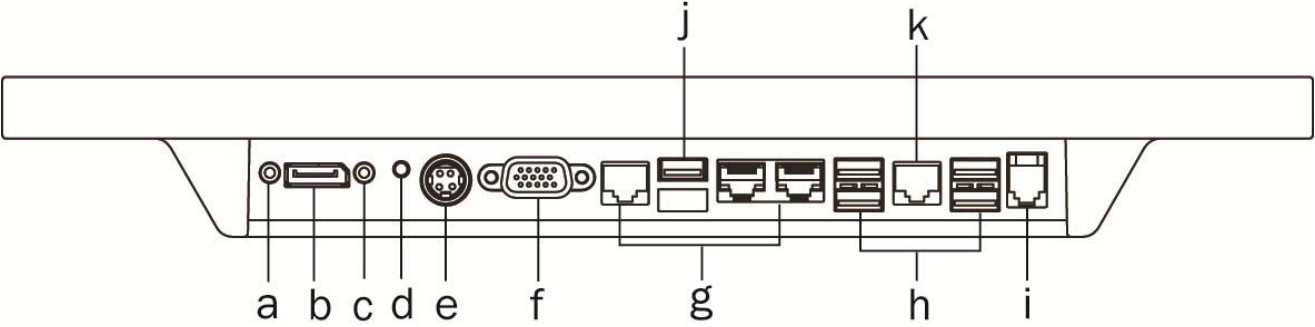
Number	Description
a	Line out
b	Display port
c	Mic in
d	Power button
e	19V DC in
f	VGA
g	COM1~3 (from right to left)
h	USB x 4 (USB2.0)
i	Cash drawer
j	USB x 2 (USB3.0)
k	LAN

3 System Assembly & Disassembly

3-1 Install the Power Adapter

The system is equipped with a 65W power adapter.　Please follow the steps below to install the power adapter.

1. The swing arm base is designed to allow for clean cable management. There is a cable channel through the swing arm base, which has a quick access cover.　Please loosen the thumb screw (x1) of the cable cover first.

2. Lay down system to access the bottom of the base.　Remove the screws (x2) of the holder bracket.

3. Attach the power adapter and then replace the holder bracket.
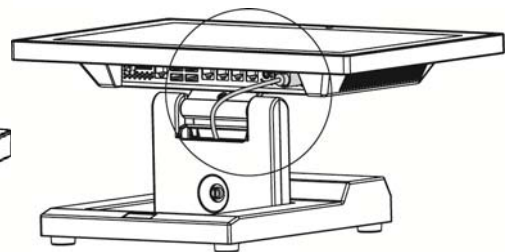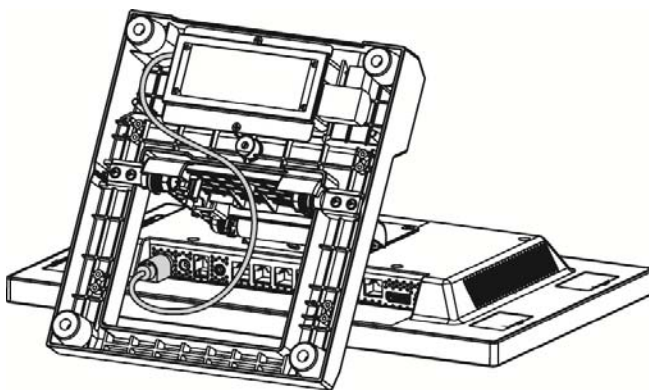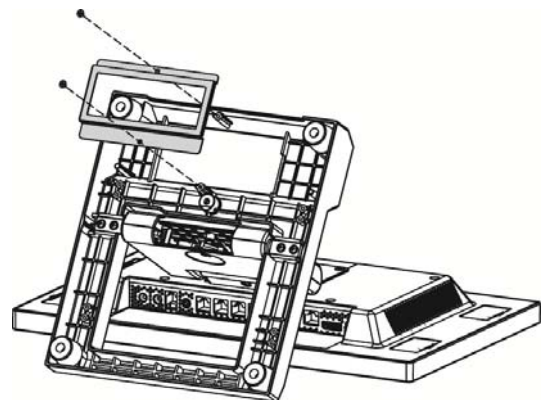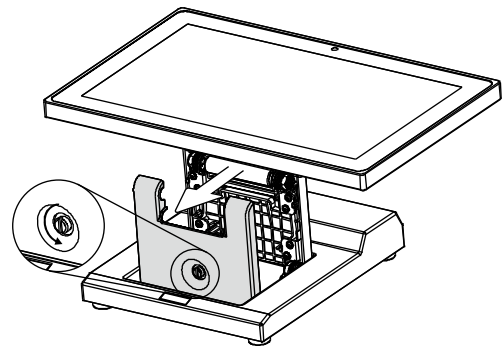
4. Route the cable as shown in the picture.
5. Connect the power adapter to the 19V DC IN port.
6. Replace the cable cover.

3-2 Replace the HDD

1. Remove the HDD/SSD cover retaining a screw and sliding the drive out.
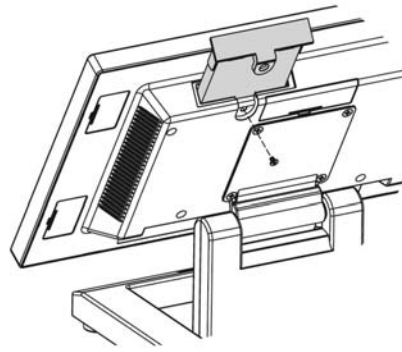
2. Unclip the HDD cover from the drive as shown in the picture.
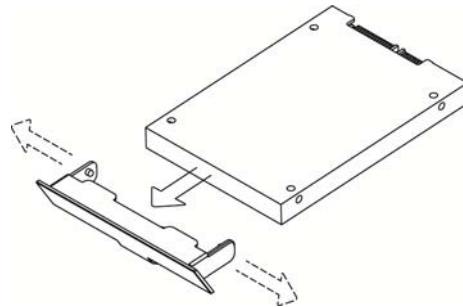
3-3 Replace the SSD Card

1. Remove the HDD/SSD cover retaining a screw and sliding the drive out.
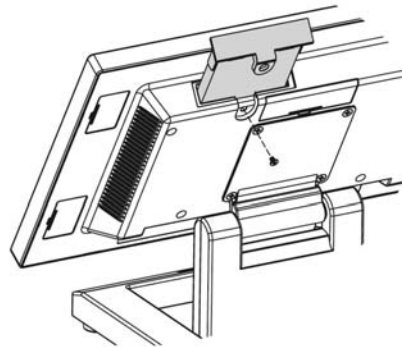
2. Remove the screws (x4) that fix the SSD card to the bracket.
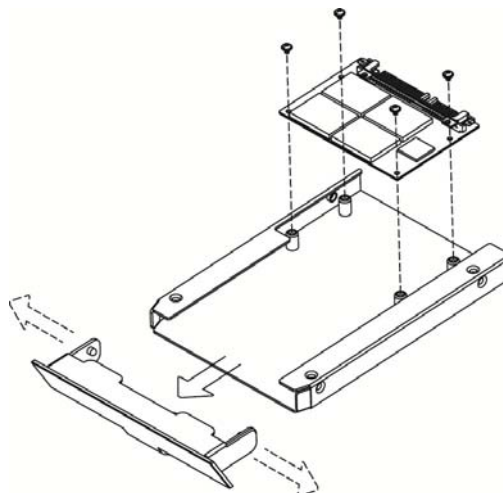
4 Peripherals Installation

4-1 Install the MSR Module

MSR is installed on the right side of the system. Please make sure the unit is powered down before starting.

1. Remove the dummy cover first.
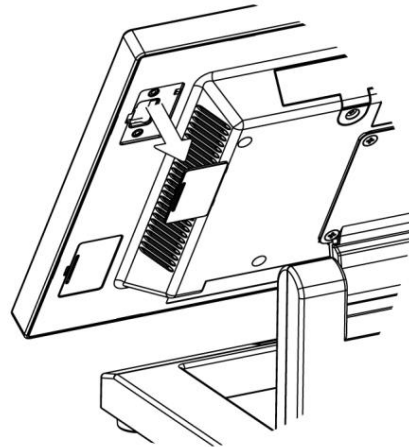
2. Connect the MSR cable (x1) to the connector on the system side.

3. Insert the MSR module in place and fasten the screws (x2) on the back to secure the module.
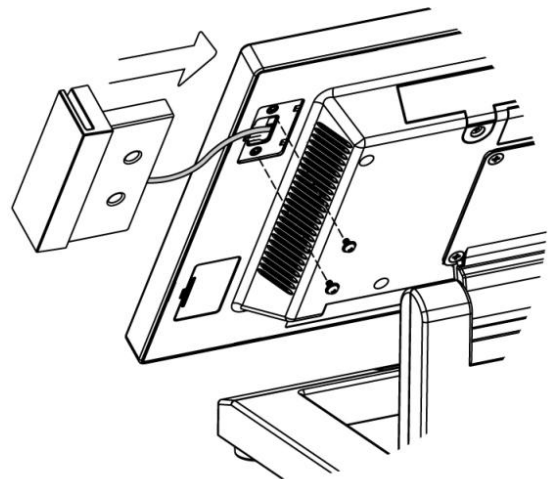
4-2　Install the iButton Module

iButton is installed on the left side of the system.　Please make sure the unit is powered down before starting.

1.　Remove the dummy cover first and then unfasten the screws (x2).
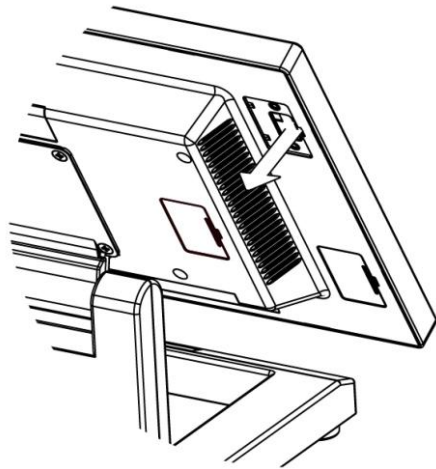
2.　Connect the iButton cable to the connector on the system side.

3.　Insert the iButton module in place and fasten the screws (x2) on the back to secure the module.
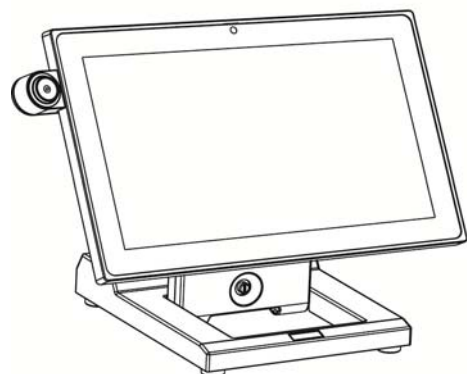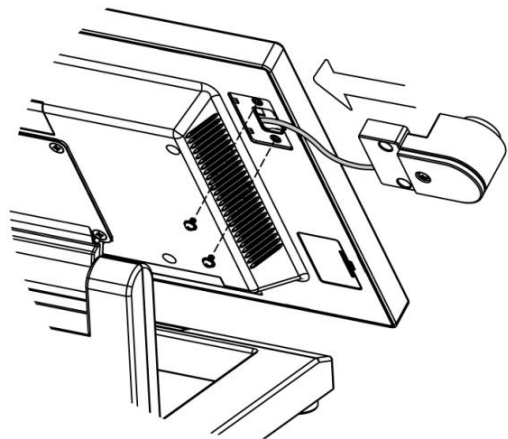
4-3   Install the Addimat Key Reader

Addimat key reader is an option instead of iButton module.   It is also installed on the left side of the system.   Please make sure the unit is powered down before starting.

1. Remove the dummy cover first and then unfasten the screws (x2).
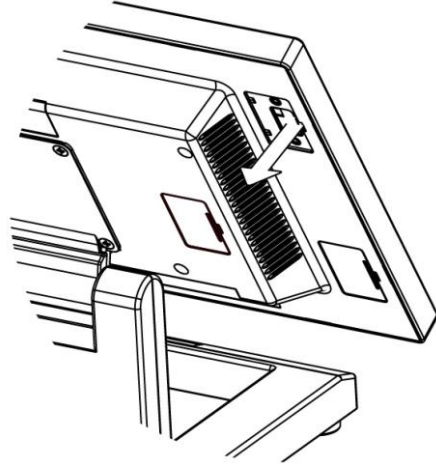
2. Connect the addimat key reader cable to the connector on the system side.

3. Insert the addimat key reader in place and fasten the screws (x2) on the back to secure the module.
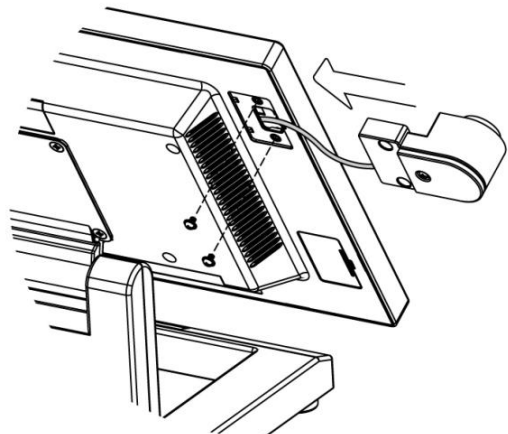
4-4 Install the Customer Display (Graphic LCM)

1. Remove the dummy cover first.
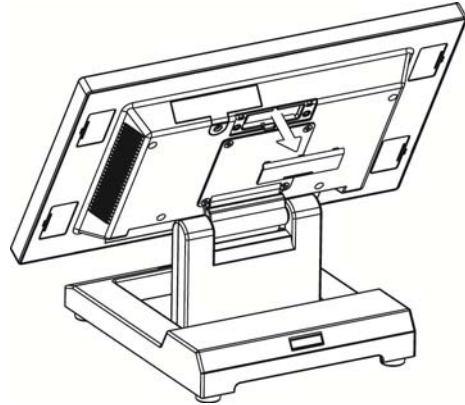
2. After the dummy cover is removed, plug the 8-pin LCM cable into the **CN8 / LCM** connector on the system board.

3. Fasten the screws (x2) to secure the LCM display to the system.
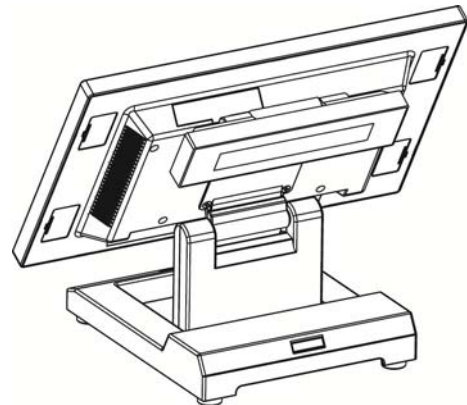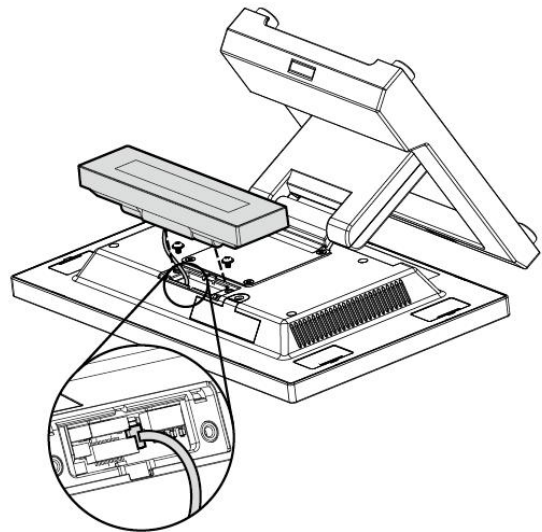
The Customer Display is directly connected to COM6 and uses the following communication parameters: 9600, N, 8, 1.

4-5   Install the 2ⁿᵈ Display

1.   Loosen the thumb screw (x1) of the cable cover first.
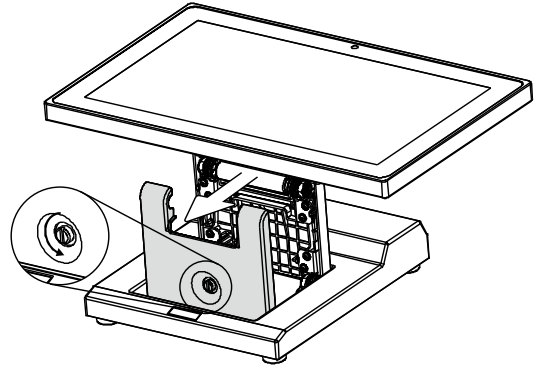
2.   Attach the 2ⁿᵈ display on to the swing arm base and fasten the screws(x2) to fix the 2ⁿᵈ display.
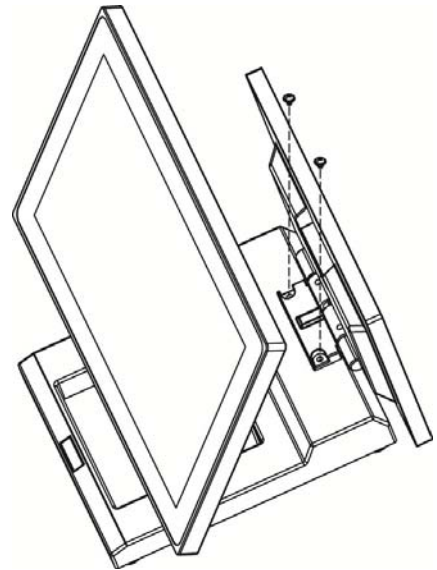
3.   Lay down system to access the bottom of the base.   Loosen the screws (x2) of the holder bracket to release the power adapter.
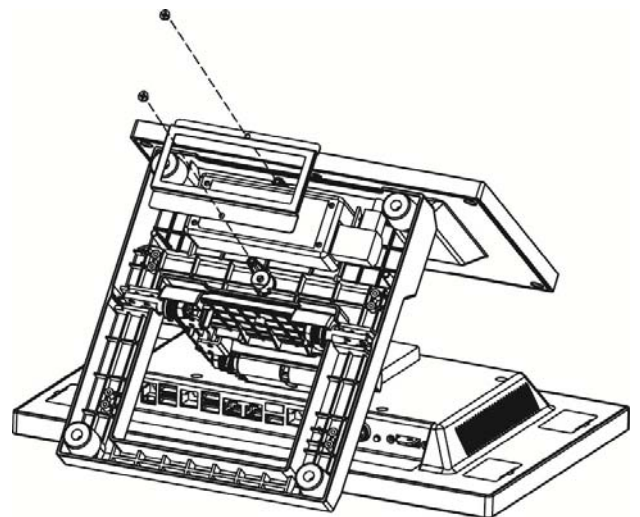
4. After the power adapter is released, a nameplate is attached to the edge of the swing arm base.   Remove this nameplate as shown in the picture.
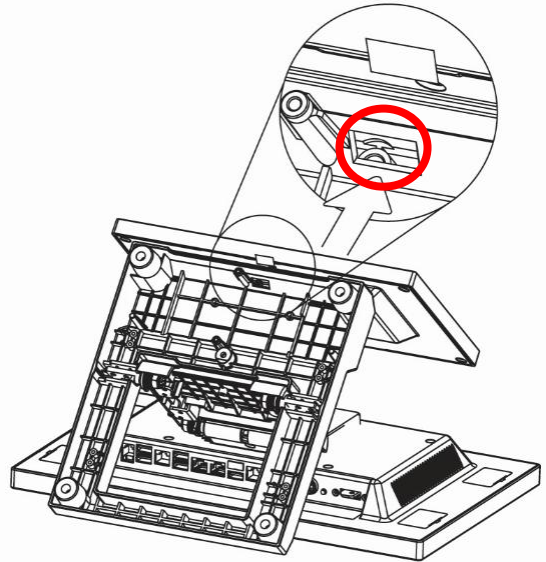
5. After the nameplate is removed, a small hole is revealed.   Thread the cable of 2nd display through the hole and then route the cable as shown in the picture.
6. Attach the power adapter and screw the holder bracket.
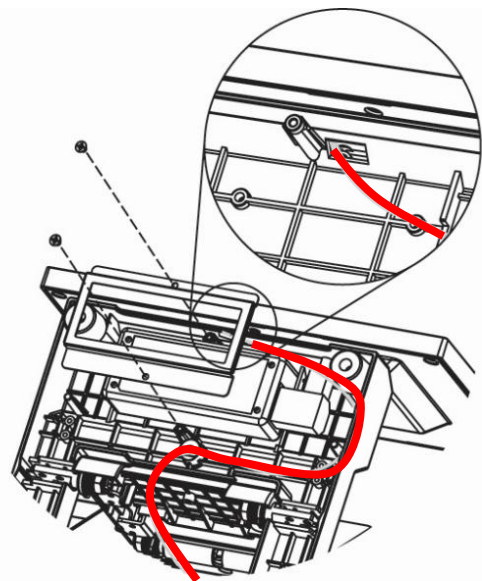
7. Plug the 2nd display cable to the USB port on the IO panel.
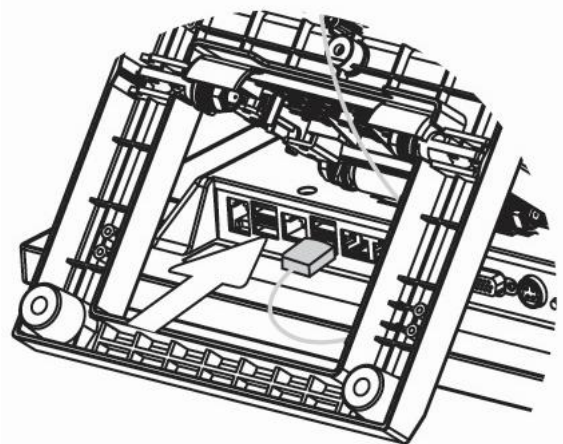
8. Finally put the cable cover back and fasten the thumb screw.
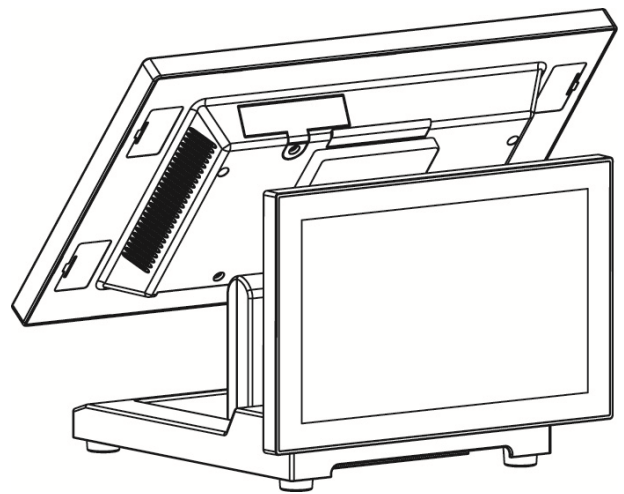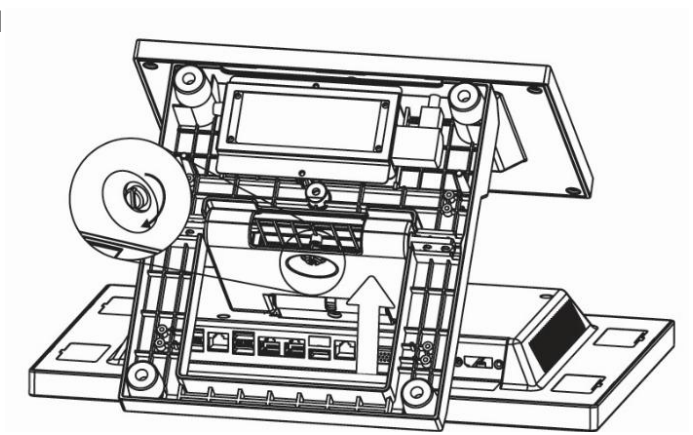
4-5-1 How to activate the 2nd display Under Windows

- Make sure to connect the 2nd display cable and begin the installation after your system has booted.
- The Setup program requires about one minute for the installation. If you turn the power off or remove the 2nd display cable while the Setup program is running, it may cause an error with the Windows operating system.
- The optimal resolution for this USB monitor is 1024 x 600.
- When the installation is completed, configure the following settings to activate the 2nd display.
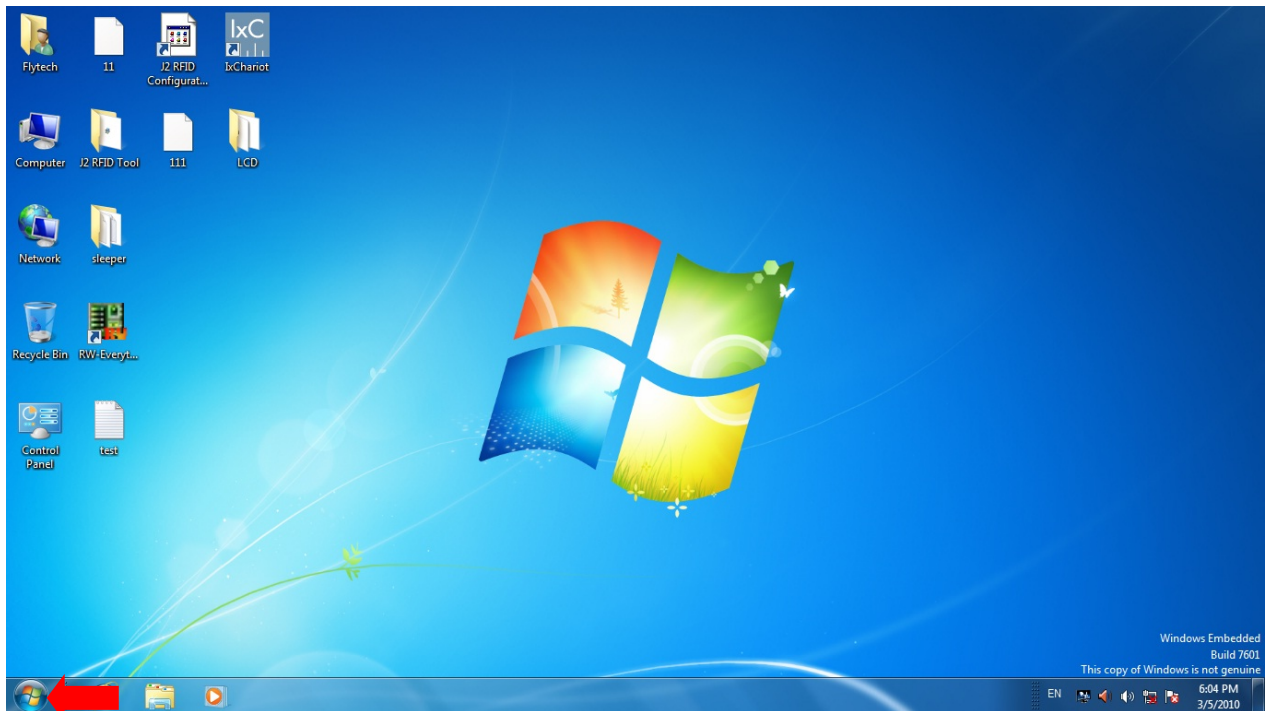
1. Click the **Start button Picture** of the Start button in the lower-left corner of the screen.
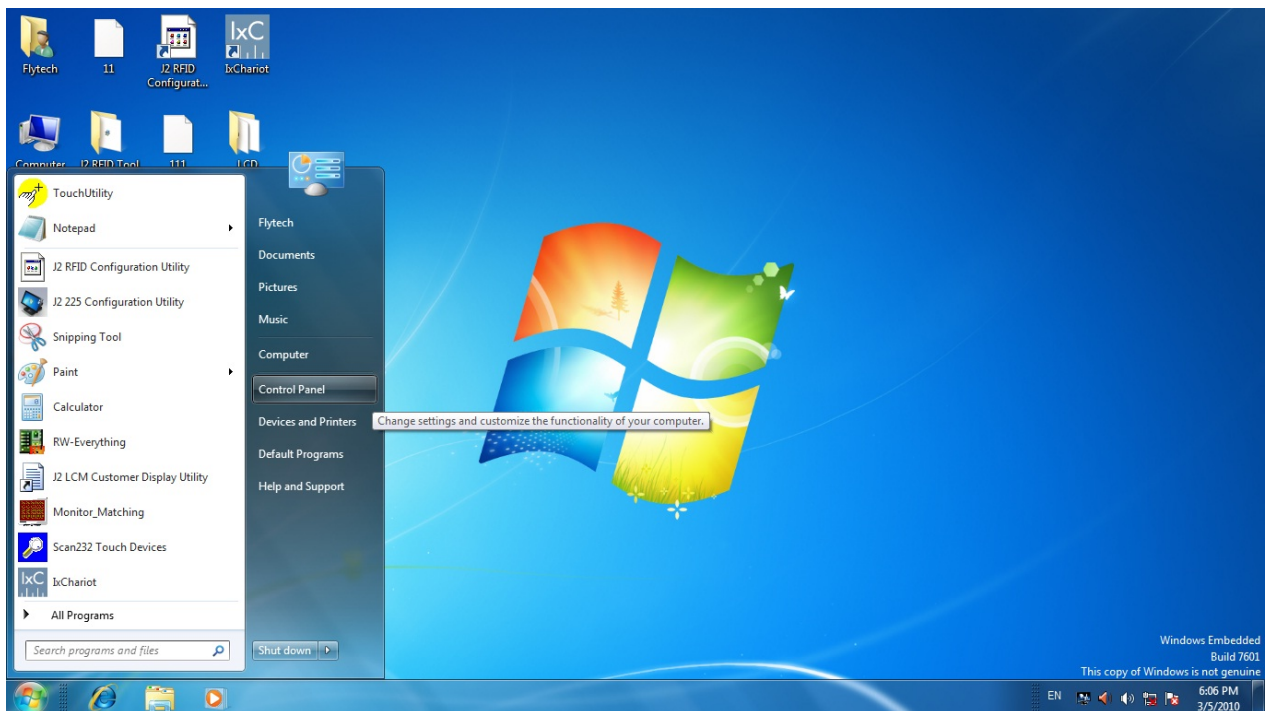
2. Click the **Control Panel** to change the setting and customize the functionality of the system.
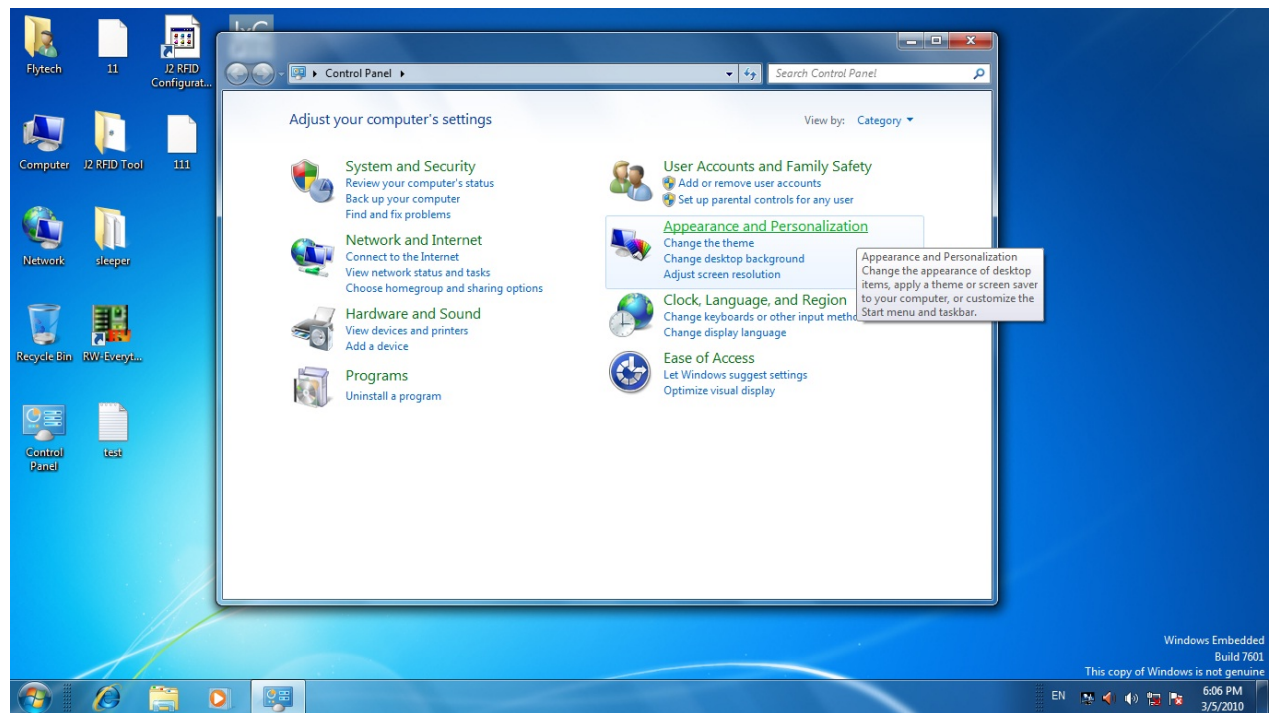
3. Click the **Appearance and Personalization** to enter the menu.
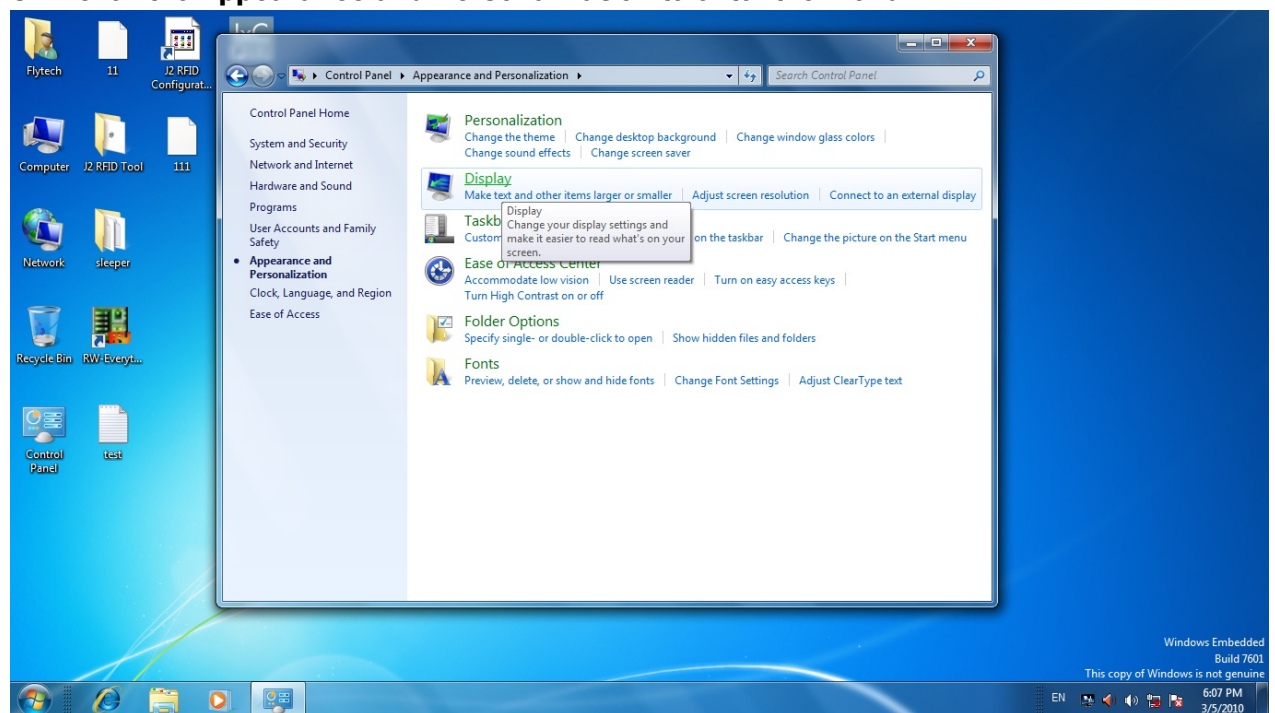
4. Select **Display** from the menu and the display properties windows appears.
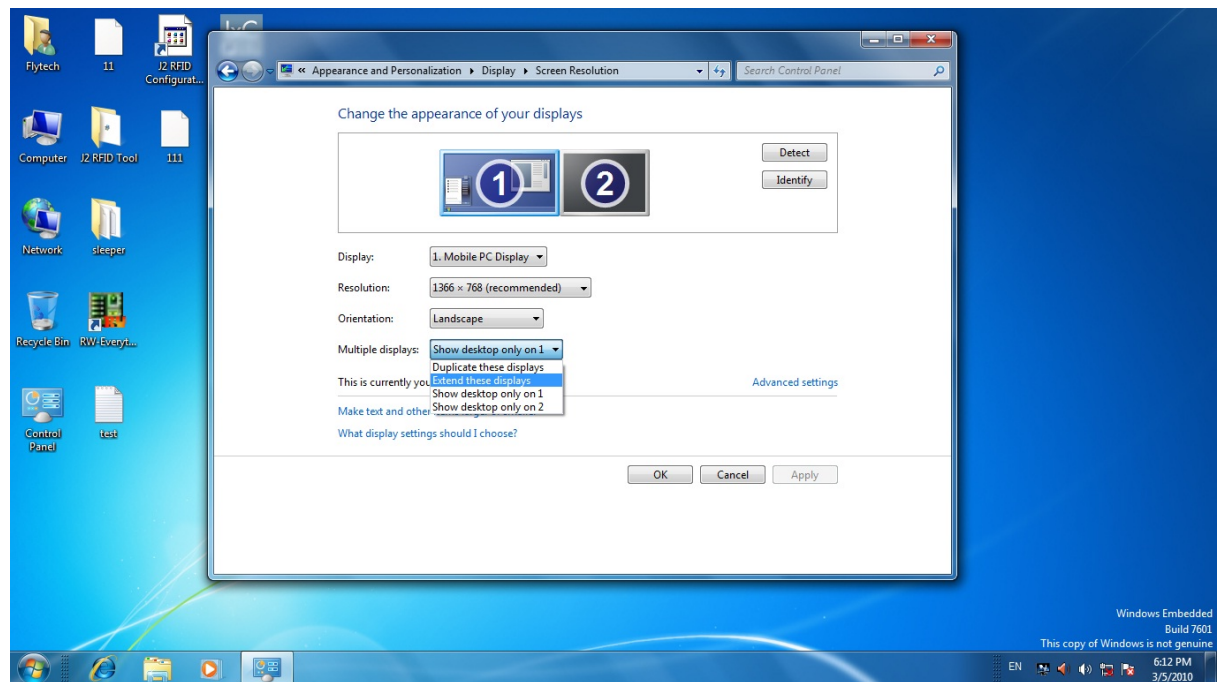
5.   Arrange the monitors displayed in the order they are actually used.
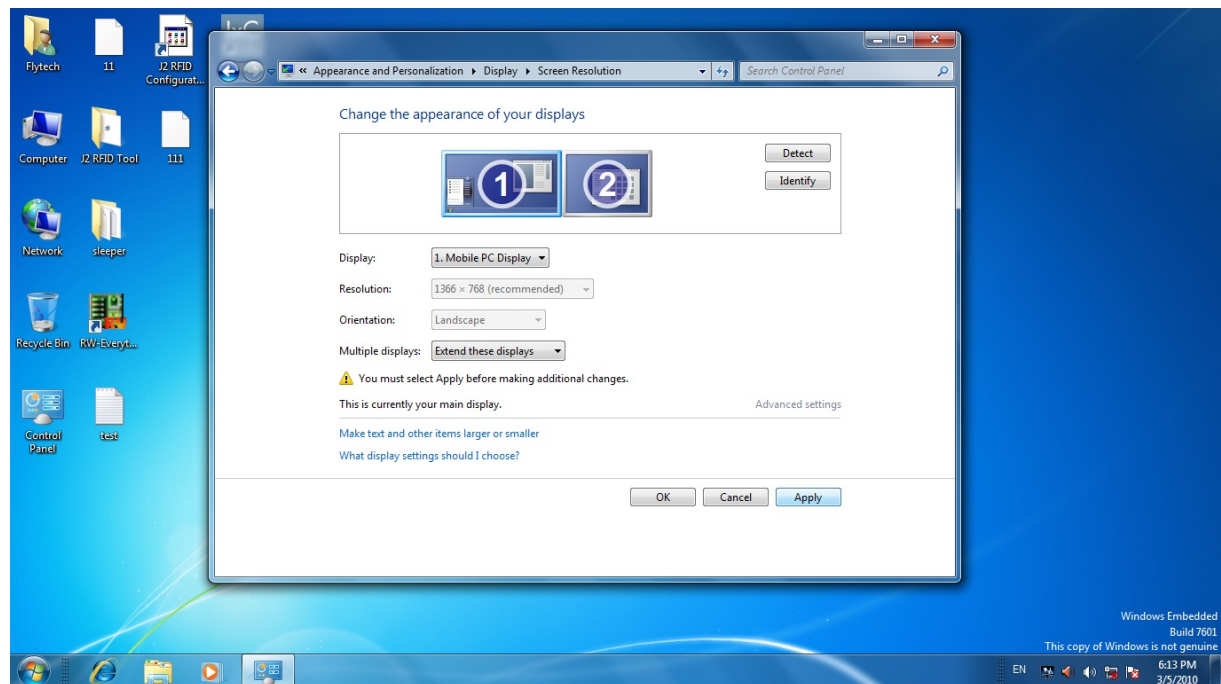
6.   Remember to click **Apply** before exiting the menu.
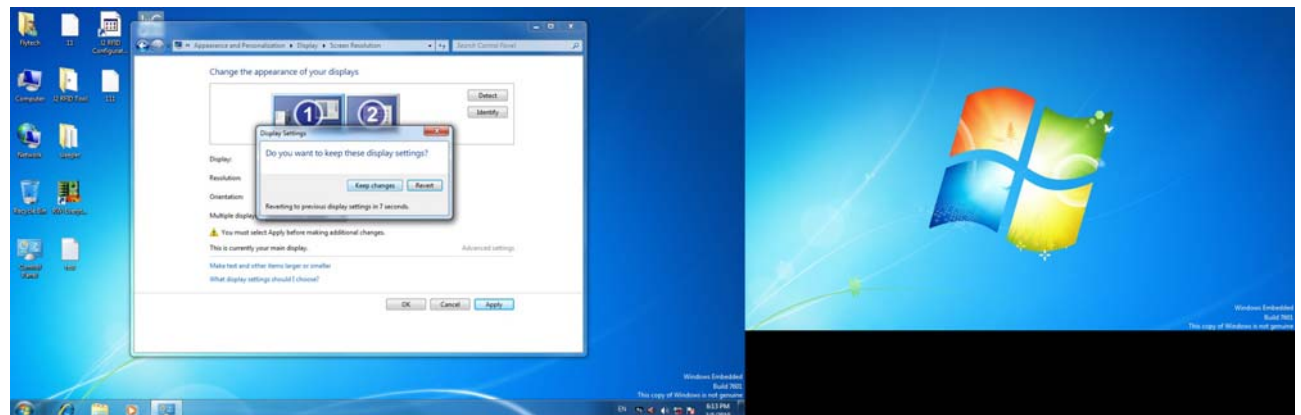
7.   Click **Keep Changes** and then click **OK** to save the setting.

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4-6 Install the Wall Mount Kit

The wall mount come with the following parts:

8mm screw x 8

Mounting Clip x 4

4 mm screw x 1
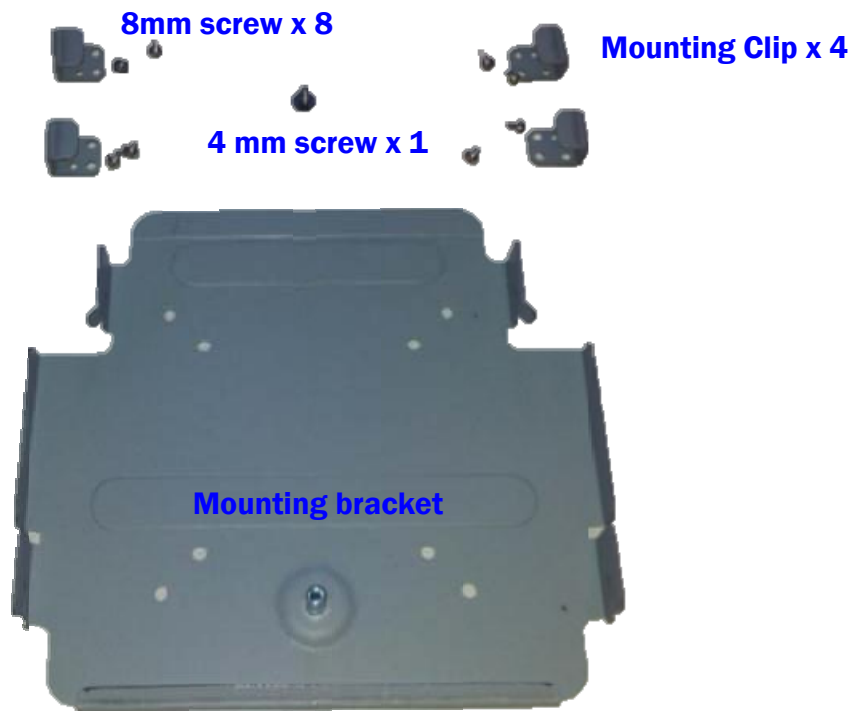
Mounting bracket

1. First attach the four mounting clips using the 3 mm screws as shown in the picture.

2. Next attach the mounting bracket to the wall or other surface using at least four of the bracket mounting holes.   Please note that the bracket has both a 100mm and 75mm hole pattern, so that the bracket can be used with the VESA bracket as well as being directly mounted to a wall.
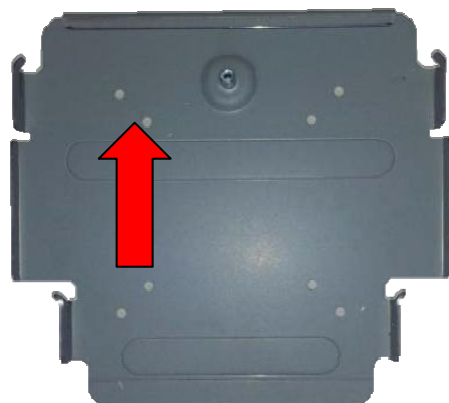
3. Next step is to route any cables you need to go to the system as required. A space is provided just by the power supply for the cable to exit cleanly, assuming they are routed via the swing arm cable channel as in a normal install. Cables can also be routed down as well. Be sure cables are clear or protected of any sharp surfaces. You can remove the system on and off the wall mount bracket as needed to route the cables.

4. Cables can exit the top or bottom when routed between the bracket and system. A wall hole could be used to cover the cables in the power supply area.

5. The final step is to install the locking safety screw. This screw is to insure the system is not knocked of the wall by accident . The 4 mm screw supplied is used for this propose. First remove the rubber hole plug from the system, then screw in the safety screw. The system is now secure enough and the swing base can be adjusted to the desired viewing angle.
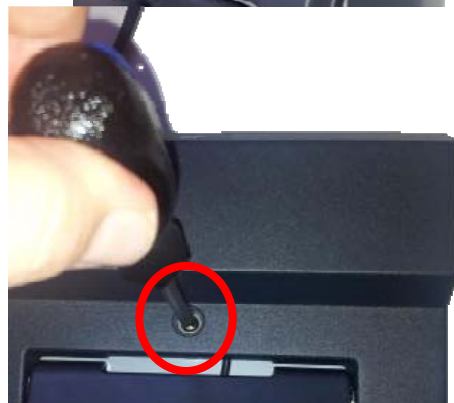
Some possible viewing angles using the wall mount bracket.
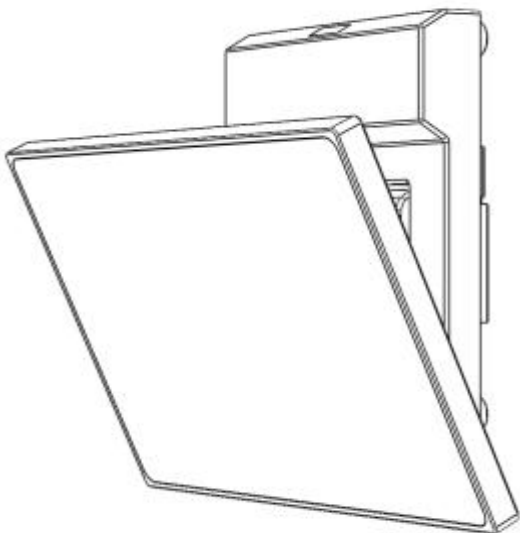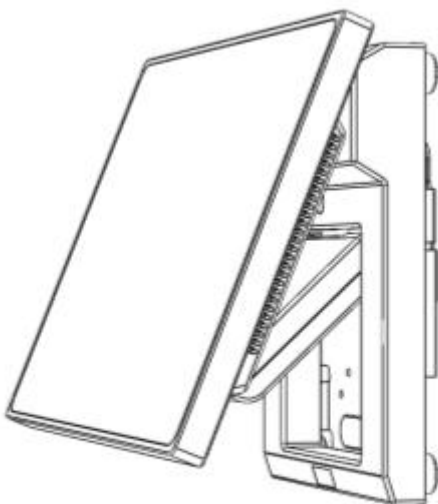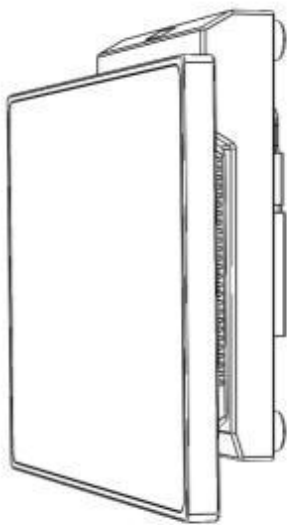
4-7   Install the Cash Drawer

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

Cash Drawer Pin Assignment
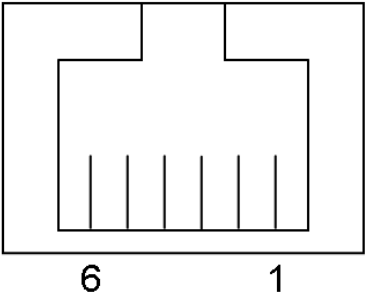
Pin	Signal
1	Cash drawer 2 In
2	Cash drawer 1 Out
3	Cash drawer 1 In
4	12V / 19V (OR 24v)
5	Cash drawer 2 Out
6	GND

Cash Drawer Controller Register

The Cash Drawer Controller use one I/O addresses to control the Cash Drawer.

Register Location: 0x482h
Attribute: Read / Write
Size: 8bit

BIT	BIT7	BIT6	BIT5	BIT4	BIT3	BIT2	BIT1	BIT0
Attribute	CD2 Out	Reserved	CD2 In	CD1 Out	CD1 In	Reserved		
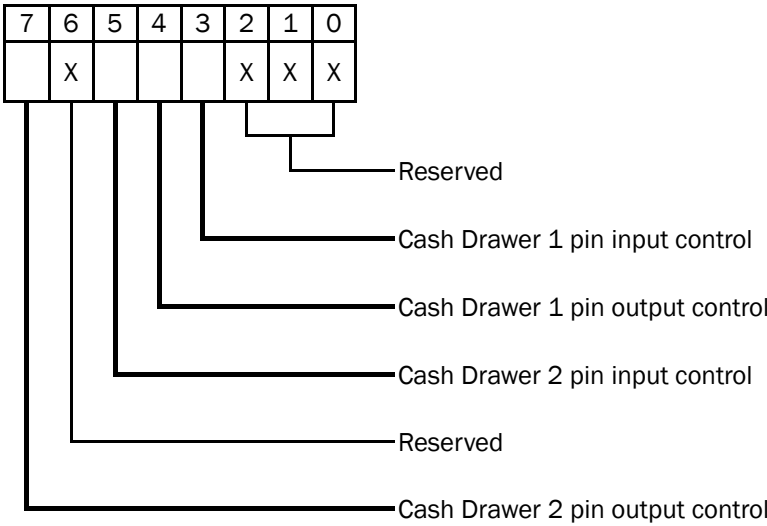
Bit 7: Cash Drawer 2 pin output control
Bit 6: Reserved
Bit 5: Cash Drawer 2 pin input control
Bit 4: Cash Drawer 1 pin output control.
= 1: Opening the Cash Drawer
= 0: Allow close the Cash Drawer
Bit 3: Cash Drawer 1 pin input control.
= 1: the Cash Drawer closed or no Cash Drawer
= 0: the Cash Drawer opened
Bit 2: Reserved
Bit 1: Reserved
Bit 0: Reserved

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

Cash Drawer Control Command Example

Use Debug.EXE program under DOS or Windows98

Command	Cash Drawer
O 482 04	Opening
O 482 00	Allow to close
➢ Set the I/O address 482h bit4 =1 for opening Cash Drawer by "DOUT bit0" pin control.	
➢ Set the I/O address 482h bit4 = 0 for allow close Cash Drawer.	

Command	Cash Drawer
I 482	Check status
➢ The I/O address 482h bit3 =1 mean the Cash Drawer is opened or not exist.	
➢ The I/O address 482h bit3 =0 mean the Cash Drawer is closed.	

5 Specification

Model Name	NINÔ II
Motherboard	**D36**
CPU support	Intel Bay Trail SoC Celeron J1900 2.0GHz, L2 2MB, TDP 10W (default)
Chipset	NA
System memory	DDR3L S.O. DIMM x1, FSB 1066/1333hz, default 2G, max. 8G
Graphic memory	Intel HD Graphic DX11.1
LAN controller	Realtek RTL8111E-VL-CG 10/100/1000 baseT LAN
Audio controller	Realtek ALC662VD0-GR
I/O controller	Winbond NCT6106D
Touch controller	to be defined major SKU with PCAP only or both PCAP/TF RES.Touch
BIOS	Phoenix UEFI code
Board dimension	185 (W) x 130 (D) mm
LCD Touch Panel	
LCD size	14" LED panel
Brightness	200 nits up
Maximal resolution	1366*768
Touch screen type	True Flat resistive touch (USB) True Flat projected capacitive touch (USB)
Tilt angle	0°~ 90°
Storage	
HDD	one 2.5" SATA HDD bay, 320 GB standard
SSD	8/16/32/64 GB option (built-in 2.5" HDD cover)
Expansion	
mini PCI-E socket	1 for 802.11 b/g/n and broadband wireless
Front I/O	
Power LED	1 Green Powered up, Amber in Standby (3-pin power LED connector)
Side I/O	
USB (2.0)	1
External Rear I/O	
USB 2.0	4
USB 3.0/2.0	1
Serial/COM	3 x RJ45 COM ports(COM1/COM2 powered COM with power enable/disable by BIOS setting; default COM1 is 5V; COM2 is 12V; COM3 is 12V)
LAN(10/100/1000)	1
DC jack	1

Model Name	NINÔ II
Motherboard	**D36**
Cash drawer	1 x RJ 11 (12V/24V cash drawer), jumper setting, default 24V
Display port	1
Power button	1
Audio jack	1 x Line-out / 1x Mic-in
Speaker	
speaker	1 x 2W
Power	
Power adapter	Ext. 65W/19V
Peripherals	
MSR module	MSR 3 track (USB, secured head)
2-in-1 Reader	MSR (USB) + RFID (125KHz USB)
Customer display	2x20 LCM (TTL for 225/NINÔ, COM for 680), Winstar WH2002L-TFH-ET#
2nd display	10.1" (16:9) LED panel, 1024x600 or above, 200~220 nits (all electronics on system BD, cable only to display), DP mode
iButton Addimat key reader	Connector read head, 2 wire connection to board, controller shared w/ MSR
Barcode scanner	1D /2D scanner module
UPS battery	4S/1P , 4S/2P battery kit (Internal, PSU external)
Communication	
Wireless LAN	Optional, mini-PCIE
Certifications	
EMC and Safety	FCC Class A, CE, LVD
Environment	
Operating temperature	$5\,^{o}C \sim 40\,^{o}C$ ($41\,^{o}F \sim 104\,^{o}F$)
Storage temperature	$-20\,^{o}C \sim 70\,^{o}C$ ($-4\,^{o}F \sim 158\,^{o}F$)
Humidity	20% ~ 80% RH non condensing
Dimension (W x D x H)	Head: 346x210x37.5mm Base: 186x170x26mm System Max. height 268mm
Weight (N.W./G.W.)	3.7kg / 4.7kg
Mounting	75mm x75mm VESA standard holes
OS support	Windows 7 ,POSReady 7 Windows® Embedded 8.1 Industrial Pro retail Windows® Embedded 8.1 Industry Pro Linux
* This specification is subject to change without prior notice.	

6 Configuration

6-1 D36 Motherboard Layout
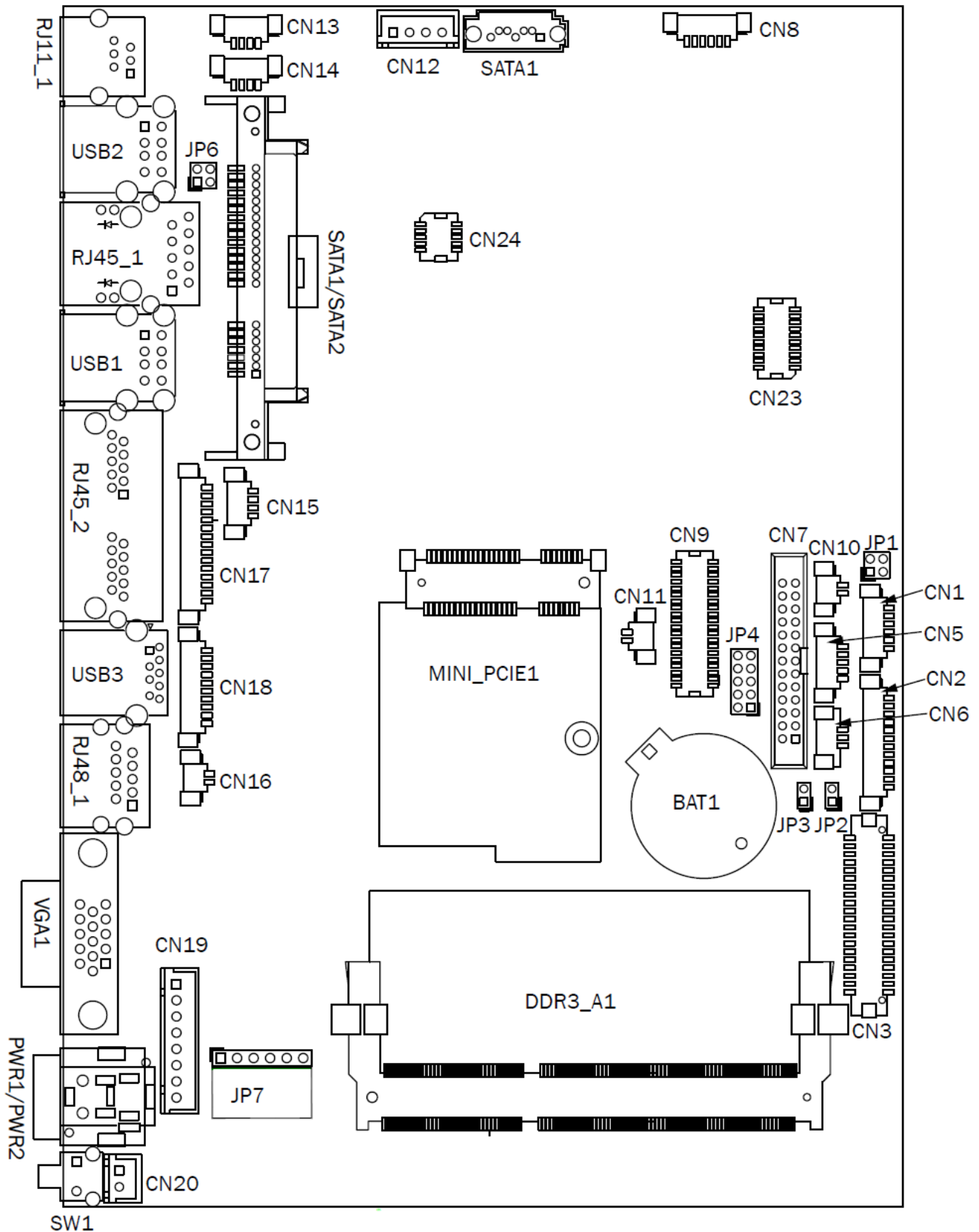
6-2   Connectors & Functions

Connector	Function
CN1	Front I/O board
CN2	Inverter connector
CN3	LVDS connector
CN6	System FAN connector
CN7	LPT port connector
CN8	Speaker & MIC connector
CN9	40pin external connector
CN10	HDD LED connector
CN11	Power LED connector
CN12	SATA power connector
CN13/14	USB port (internal)
CN15	PS2 keyboard connector
CN16	LPT touch
CN17	MSR connector
CN18	COM5 (touch) connector
CN19	Wide Range
CN20	Power button (internal)
CN21	LCM connector
CN22	POS325 51pin connector
PWR1/PWR2	DC Jack
RJ11_1	Cash drawer connector
RJ45_1	LAN connector
RJ45_2	COM1/ COM2
RJ48_1	COM3
DDR3_A1	DDR3 SO-DIMM
SATA0/SATA2	SATA
USB1/USB2	USB2.0
USB3	USB3.0
VGA1	CRT connector
SW1	Power button
MINI_PCIE1	MINI PCIE
JP1	Inverter select
JP4	LCD ID setting
JP6	Cash drawer power setting
JP7	Touch connector

6-3 Jumper Settings

Inverter Selection

Function	JP1 (1-2) (3-4)
▲ LED	1 2 / 3 4 (1-2 closed)
CCFL	1 2 / 3 4 (3-4 closed)

Cash Drawer Power Setting

Function	JP6 (1-2) (3-4)
▲ +19V	1 2 / 3 4 (1-2 closed)
+12V	1 2 / 3 4 (3-4 closed)

LCD ID Setting

Panel Number	Resolution	LVDS Bits	LVDS Channel	Output Interface	JP4 (1-2) (3-4) (5-6) (7-8) (9-10)
1	800 x 600	18	Single	LVDS Panel	(3-4) (7-8) closed
2	800 x 600	24	Single	LVDS Panel	(1-2) (5-6) (7-8) closed
3	1024 x 768	18	Single	LVDS Panel	(5-6) (7-8) closed
4	1024 x 768	24	Single	LVDS Panel	(1-2) (3-4) (7-8) closed
5	1366 x 768	18	Single	LVDS Panel	(3-4) (7-8) closed
6	1366 x 768	24	Single	LVDS Panel	(1-2) (7-8) closed

7	1024 x 600	18	Single	LVDS Panel	1 3 5 [7] 9 2 4 6 [8] 10
8	1280 x 1024	24	Dual	LVDS Panel	[1] [3] [5] 7 9 [2] [4] [6] 8 10
9	1440 x 900	24	Dual	LVDS Panel	1 [3] [5] 7 9 2 [4] [6] 8 10
15	1920 x 1080	24	Dual	LVDS Panel	1 3 5 7 9 2 4 6 8 10
				CRT	1 3 5 7 [9] 2 4 6 8 [10]

COM1/COM2/COM3 Power Setting

COM1, COM2 and COM3 can be set to provide power to your serial device.
The voltage can be set to +5V or +12V in the BIOS.

```
                        Phoenix SecureCore Technology Setup
   Main    Advanced    Security    Boot    Exit

                                                        Item Specific Help

   Setup Warning:
   Setting items on this screen to incorrect
   values may cause system to malfunction!                VGA/COM Power Configuration

 ▶ CPU Configuration
 ▶ South Configuration
 ▶ Intel(R) Smart Connect Technology

   OS Selection                    [Windows7]
 ▶ SIO Configuration
 ▶ HW Monitor
 ▶ Power Configuration
 ▶ VGA/COM Power Configuration




   F1   Help   ↑↓  Select Item  +/-    Change Values    F9   Setup Defaults
   Esc  Exit   ↔   Select Menu   Enter  Select ▶ Sub-Menu  F10  Save and Exit
```

1. Power on the system, and press the <DEL> key when the system is booting up to enter the BIOS Setup utility.
2. Select the Advanced tab.
3. Select **VGA/COM Power Configuration** Ports and press <Enter> to go to display the available options.

Advanced

VGA/COM Power Configuration	Item Specific Help
	Power Setting with COM PORT

VGA Power   [None]
COM1 Power   [None]
COM2 Power   [None]
COM3 Power   [None]
LCD Brightness Control [8]
AUDIO Volume Control   [8]

None
+5V
+12V

F1   Help   ↑↓ Select Item   +/-   Change Values   F9   Setup Defaults
Esc Exit   ↔   Select Menu   Enter Select ▶ Sub-Menu F10 Save and Exit

4.   To enable the power, select COM1 , COM2 or COM3 Power setting and press
      <Enter>.   Select Power and press <Enter>.   Save the change by pressing F10.

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Appendix: Driver Installation

To download the most recent drivers and utilities, and obtain advice regarding the installation of your equipment, please visit the AURES Technical Support Website:

www.aures-support.fr (French)
www.aures-support.fr/UK (English)
www.aures-support.fr/GE (German)