

Rev.1,00,0528.E



POS System Electronic Manuals



Safety Notices Before Installation or Use

- Read these cautions to avoid damage or injury.

Cautions!

Keep rated voltage.

The product can be damaged or burned by overvoltage.

Do not use damaged components.

The product may be damaged unless it is repaired at service center.

Install the product in a clean and dry place.

The product may not work properly in moist or dusty environments.

Always copy important files.

Always copy important files because data loss cannot be guaranteed by manufacturer.

Turn off the system and Remove the power cable before the product is removed.

You may get an electric shock.

Do not use loose or damaged power cables.

There may be electric shock or fire.

Always connect power cable to a grounded 3-wire outlet.

It prevents electric shock from electrical short.

Install the product at a place with good ventilation.

The product may be transformed or burned by overheating if air vent is blocked.

Use power strips designed for computers.

There may be fire caused by overvoltage.

Use the cleaner which is only for computer.

Do not use benzene, thinner and alcohol or the product may be damaged.

Keep the product away from heaters.

The product may be damaged, overheated or burned.

Turn on the system after turning on peripheral device. Turn off peripheral device after turn off the system.

The product may be damaged.

Install the product in a safe, stable place.

The product may be damaged or you may get injured if the product is dropped.

Keep the product away from magnetic materials.

The contents of HDD may be erased or the electronic components may be damaged.

Carefully store or dispose of plastic packing material.

It is dangerous if children put their head on it.

Do not touch the power plug with a wet hand.

You may get an electric shock.

Do not touch modem, telephone line or exposed terminal during electrical storms.

There may be electric shock or fire.

Upgrade the system after shutting off the power of system and its peripheral device.

The product may be damaged.



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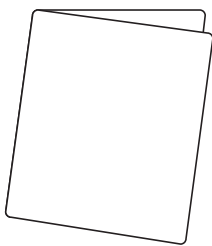
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1. System Introduction

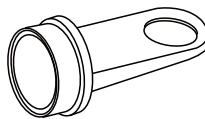
※ The exterior design and specifications of product can be changed without prior notice in order to improve quality.



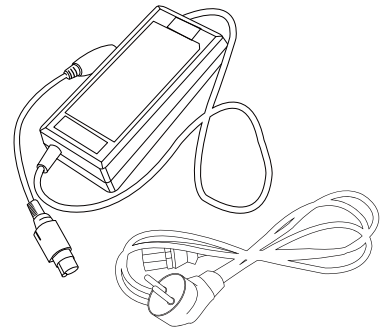
〈Main Body〉



〈Quick Manuals〉



〈Magnetic DALLAS (option)〉



〈Power Cable/Adaptor〉



2. System Specification

2-1. General Specifications

Processor	Intel Atom Cedarview D2550 1.86GHZ Without FAN
Chip sets	Intel NM10
Graphic	Intel Embedded Graphics
Data storage device	SATA-II (3.0Gb/s) 2.5" HDD / SSD / Cfast
Memory	DDR III SODIMM 2 Slot (Up to 4GB)
BIOS	AMI (America Megatrends Inc.) UEFI BIOS
Display	Size: 15 (38.1cm) 1024 X 768 resolution TFT LCD Support Colors : 32 bit Color Contrast Ratio : 700 : 1 Viewing Angle : Left-Right 150 / Up-Down 130 Backlight : 250 cd/m ² , 50,000 hours of product life (CCFL type)
Touch Panel	15.5 – Wire Resistive Type Interface : Serial COM5 Transparency : 80% Surface Hardness : 3H Hitting Life : 35 million times
OS	Windows XP / WEPOS / POSReady 2009 / POSReady 7 Etc.
I/O Interface	COM (Serial) port : D-SUB 9P x 3 Ports / RJ – 45 x 1P ort 5V / 12V or RI outputs through COM 1. 2. 3. 4 (BIOS setup) PARALLEL port : D-SUB 25P x 1port USB port : USB 2.0 side x 2 Ports / back x 4 Ports Ethernet port : 10M / 100M / 1GB LAN RJ-45 x 1Port VGA Port : D-SUB 15P x 1 DC-OUTPUT port : 12V DC-OUT 2.5 Φ x 1Port Audio port : Line-in x 1 / Line-out x 1 / Mik e-in x 1Port
Booting device	HDD, SSD, Cfast memory, external CD / DVD-ROM, USB memory etc.
Power supply	AC INPUT : AC 100~240V / 50~60Hz, 1.5A DC OUTPUT : 12V / 5.0A(60W)



2. System Specification

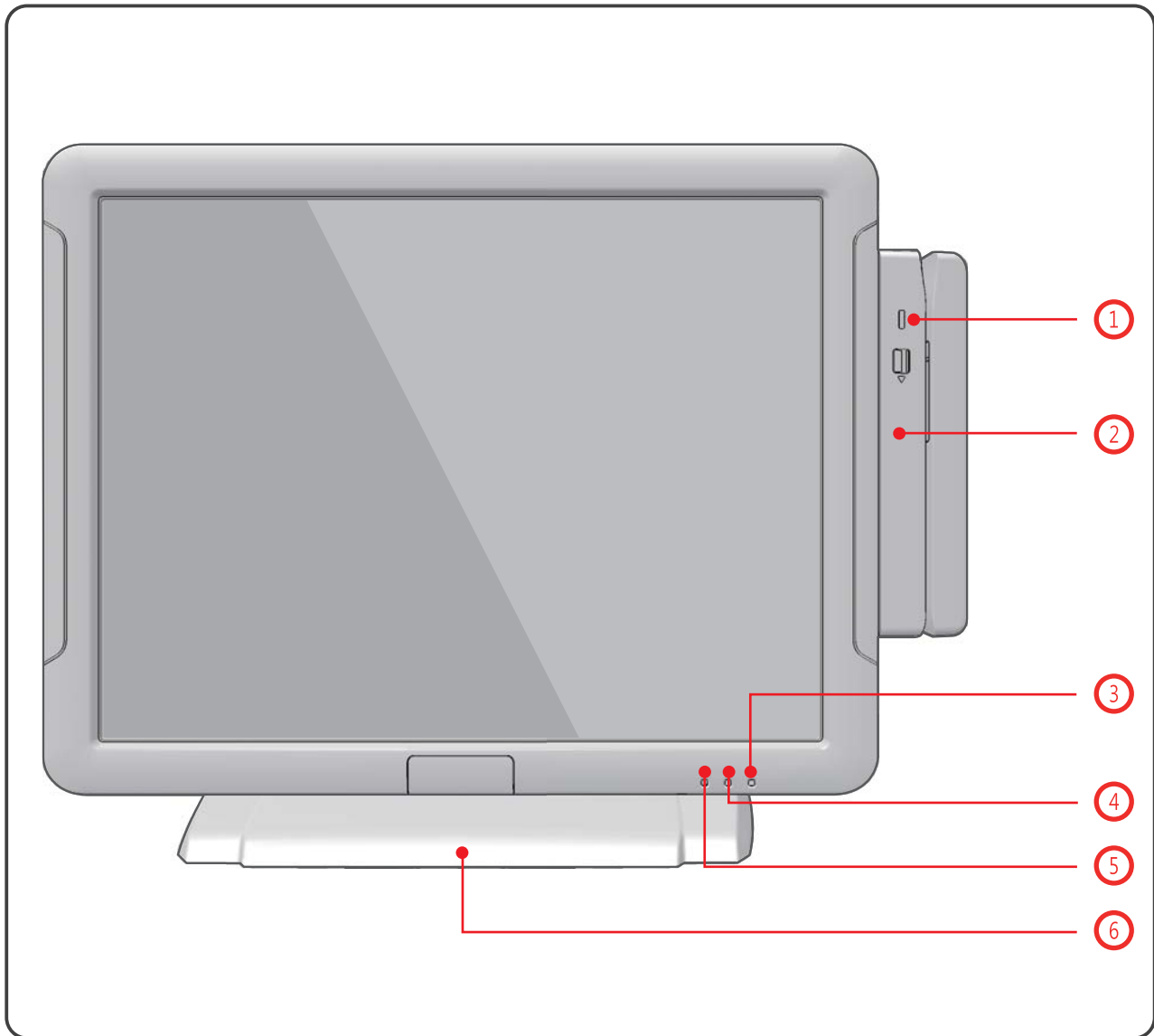
2-2. Optional Specifications

Magnetic Swipe Reader (MSR)	Read Track : ISO track 1, 2, 3 Interface : Internal USB Performance : 10~150 cm/sec Head Reliability : 500,000 times Error rate : Less than 0,5%
Wall Mount	The device for attaching POS system on the wall
DALLAS KEY	Magnet type
Customer Display	VFD : 5 x 7 Dot 20 x 2 Character type Graphic type 256 x 32 LCD : 7"(17,78cm) 800 x 480 16:9 type 15"(38,1cm) 1024 x 768 4:3 type
CASH DRAWER	RJ11 Port 1 (6 Pin), 12 V or 24 V can be used
Finger Printer Reader	Biometric fingerprint reader, USB connection
Cfast Socket	Cfast memory card can be used
RAISER CARD	XV 400 PCI DVR can be mounted



3. Name And Function Of Each Component

3-1. Front View

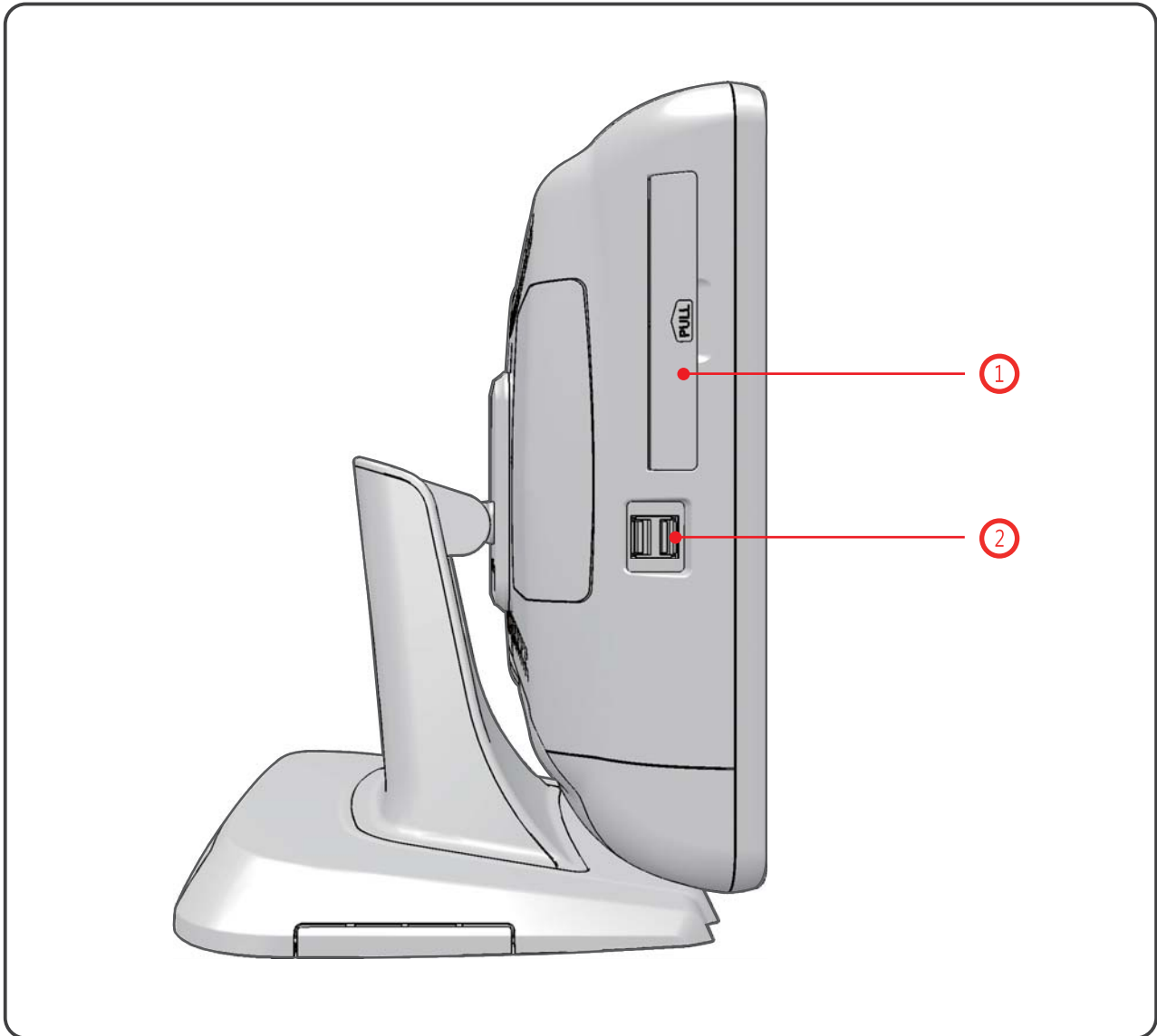


① Credit card recognition lamp	When the card reader recognizes a credit card, the light is on.
② Payment/ Security module (option)	MSR/ SCR/ Fingerprint reader/ Dallas key can be used
③ Indicating lamp for power supply	The light is on when the system is on.
④ Indicating lamp for HDD	The light is on when data in HDD is being used or read.
⑤ Indicating lamp for LAN connection	The light is on when internet is connected.
⑥ Stand	



3. Name And Function Of Each Component

3-2. Side View



① Cfast SLOT (Option)

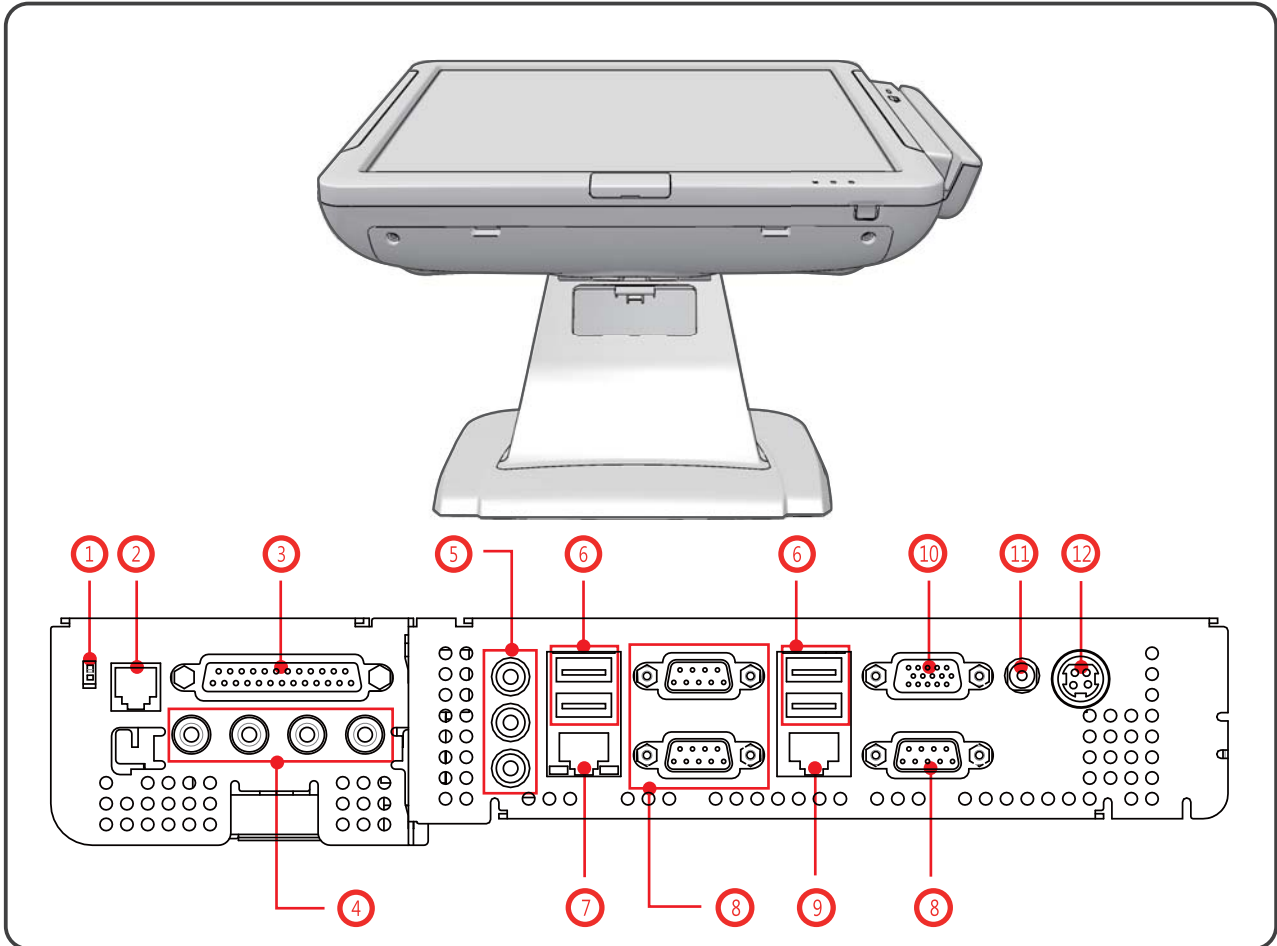
Cfast memory can be used.

② USB Port

USB Devices can be used through this port, i.e.
USB scanner, USB Keyboard, USB Printer, etc.

3. Name And Function Of Each Component

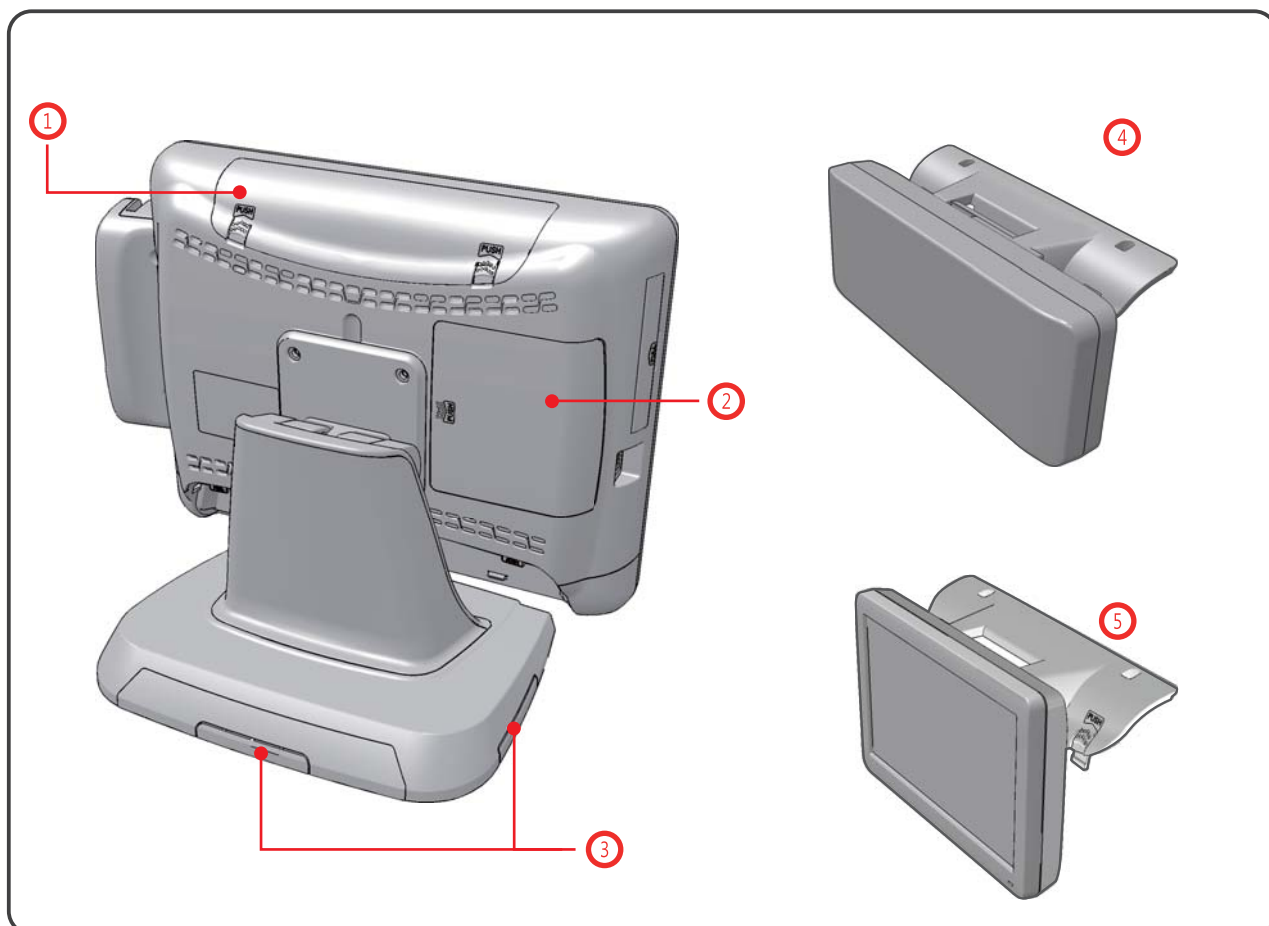
3-3. I/O



① Setting switch of Cash drawer voltage (Option)	You can switch the power (12V/24V) for a cash drawer.
② RJ-11 6pin Cash Drawer port (Option)	Can connect the cash drawer.
③ D-SUB 25pin printer (Parallel) port	Can connect parallel device such as a printer.
④ DVR card port (Option)	
⑤ Audio port (Line-in / Line-out/ Mike-in)	Can connect the external speakers.
⑥ USB 2.0 port	Can be used to connect devices such as the USB scanner, USB keyboard, USB printer.
⑦ RJ-45 LAN (ETHERNET) port	Can connect RJ45 cable for 100/1000 Mbps Ethernet connection.
⑧ D-SUB 9pin COM (Serial) port	You can connect serial devices such as barcode scanners, printers.
⑨ RJ-45 8pin Serial Port	You can connect parallels device, such as a printer.
⑩ D-SUB 15pin VGA port	You can connect an external monitor.
⑪ 2.5 ϕ 12V DC Output (for Rear display)	System connected to an external DC power cable to the power that can be an output jack.
⑫ DIN 4pin 12V DC Input (Input power connection)	Jack is connected to the adapter to supply power to the system.

3. Name And Function Of Each Component

3-4. Rear View



① Integrated customer display cover	Can be equipped with integrated customer display and enhance this cover.
② Hard disk cover	
③ Dummy for cable arrangement	
④ VFD (all-in-one customer display) – option	
⑤ 7inch Display (all-in-one customer display) – option	

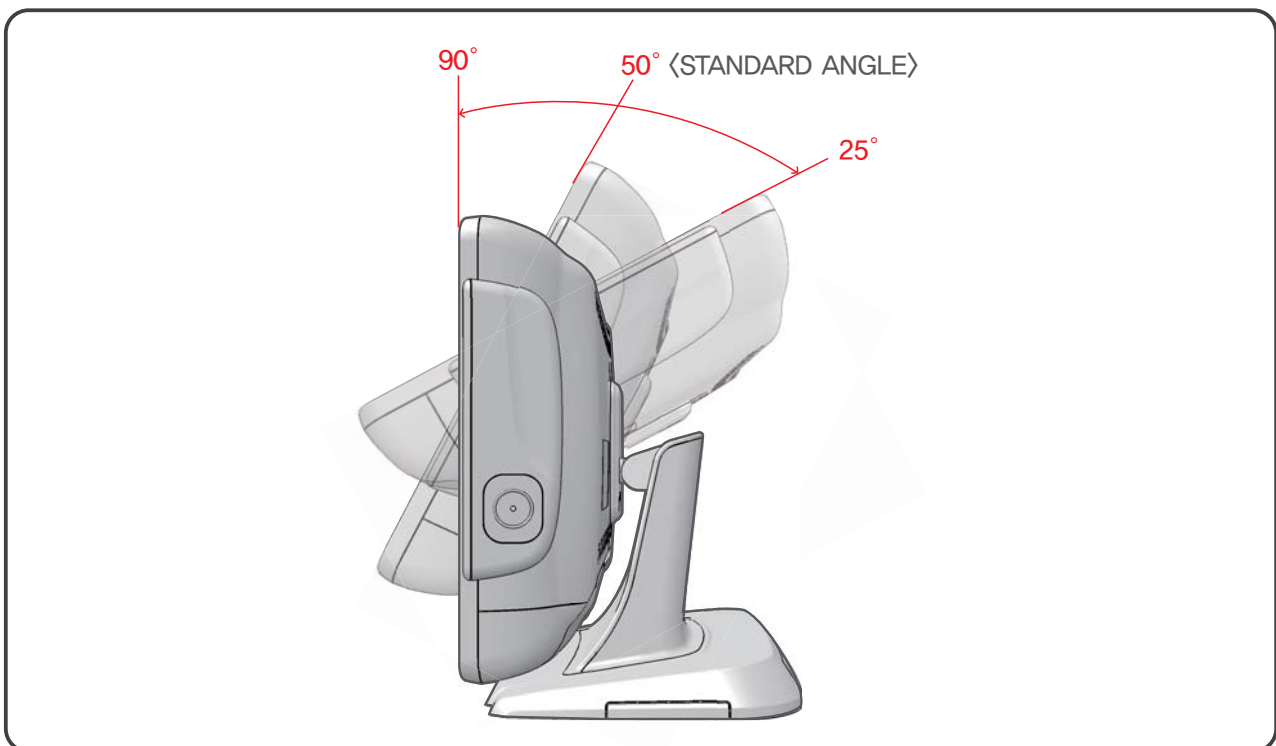


4. System Installation

4-1. Checking The Location For Installation

It is important to choose a safe and secure place to install the terminal.

- Choose a desk or table big and strong enough to support the weight of the system and peripherals.
- Choose a flat, hard surface. Carpeted area can generate static electricity that can alter memory or damage system components.
- Make sure a system installed in a well-ventilated place and keep the space free around the system.
- Choose appropriate environmental conditions such as cool and dry places. Avoid humid and dusty places. Also avoid direct sunlight, rapidly changing temperatures, or placing the system near heat sources.
- Select the appropriate voltage. Connect all the equipment into an isolated outlet to prevent static electricity and short circuit.
- where sufficient power outlets are available for printers and other peripheral devices.
- Do not install near electromagnetic and electrical devices, such as phones and electric motors, that can cause system damage.



Note!

Adjust the system depending on the condition and use it with the exact angle. Adjustable angle shown in the figure.



Cautions!

- ▶ Use the same battery for the product (motherboard) to prevent a risk of explosion.
- ▶ Dispose of used battery according to the separate instruction.



4. System Installation

4-2. Before Connecting Peripherals

To connect peripherals first remove the Interface cover , which is in the bottom of the system, after that remove the Velcro cable cover which is in the rear of the system.

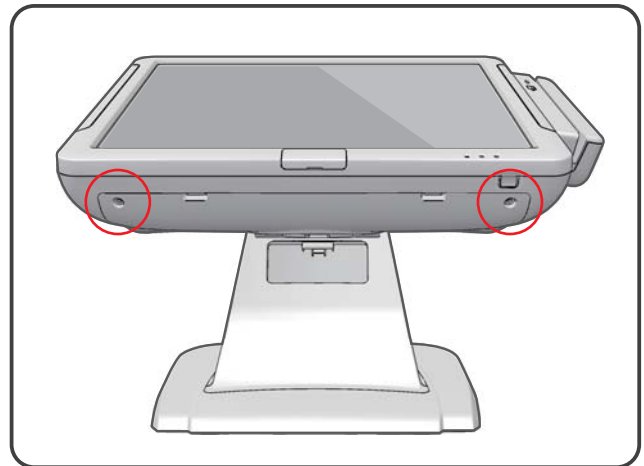
1. Interface cover release

- ① Make sure that the interface cover is screwed.
If it is screwed separate the screw first.

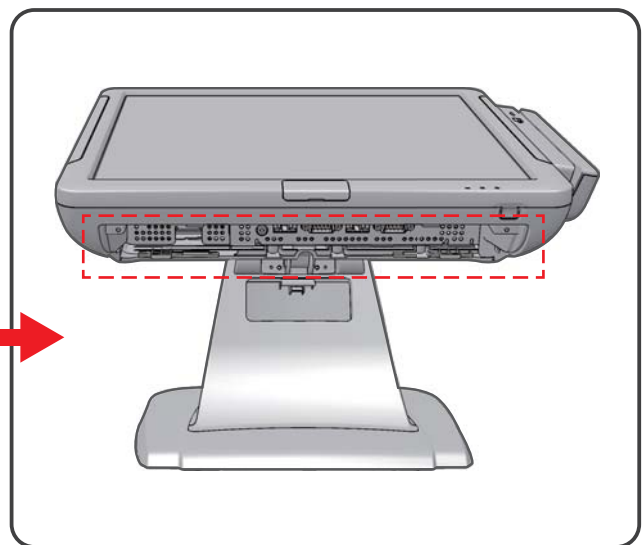
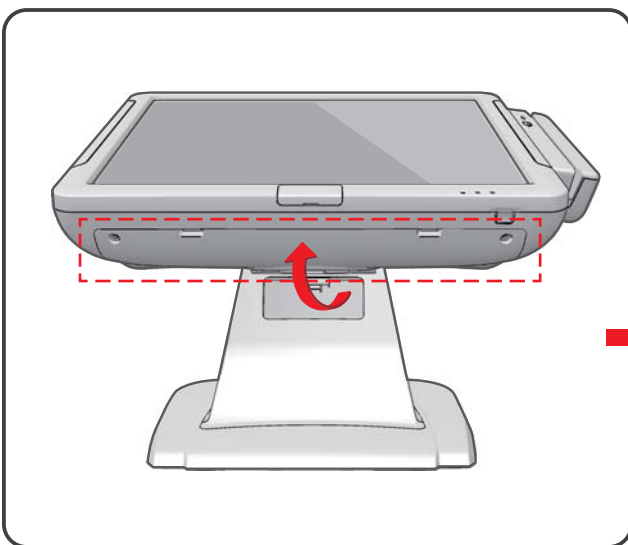


Cautions!

- ▶ Turn off the power of the body and connect peripherals.
- ▶ Connecting peripherals to the corners parts of the system can cause hands injury.
For your safety use the gloves.



- ② After the screw removed, remove the cover. As it shown in the picture pull the cover in the direction of the arrow.





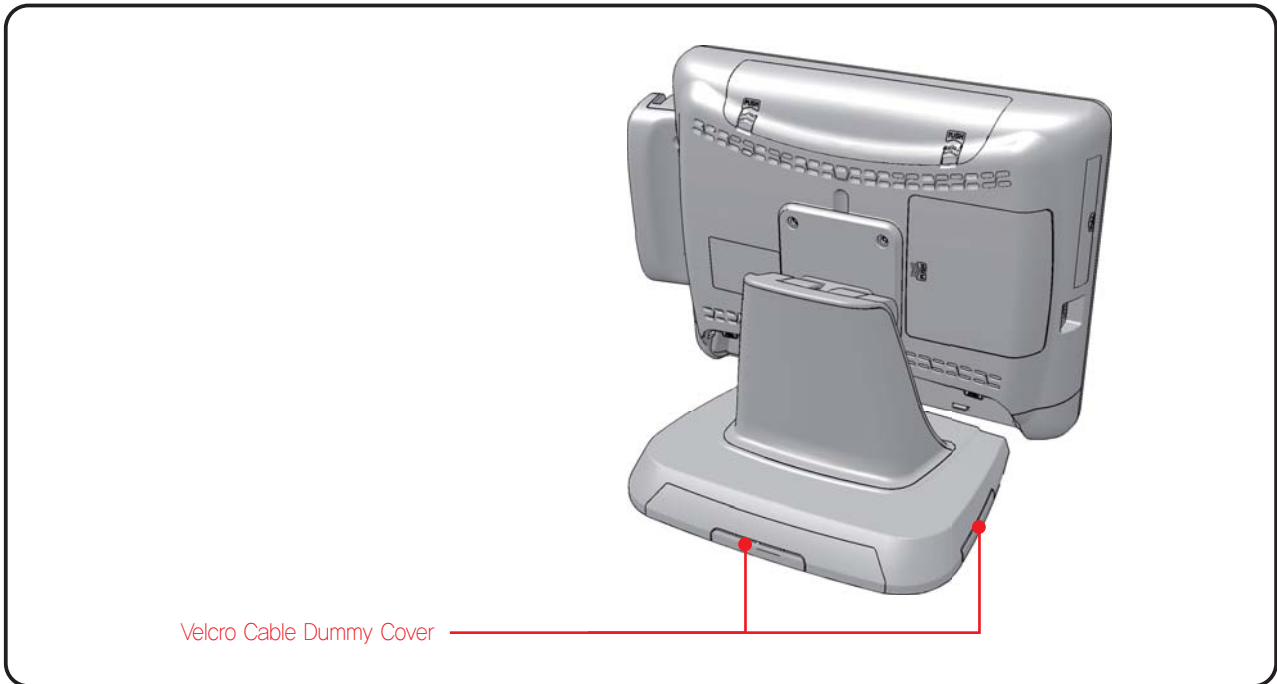
4. System Installation

4-2. Before Connecting Peripherals

2. Removing the dummy cover for cable arrangement

① Remove the dummy cover before start using drivers.

Remove the dummy cover and install the system according to the place condition.





4. System Installation

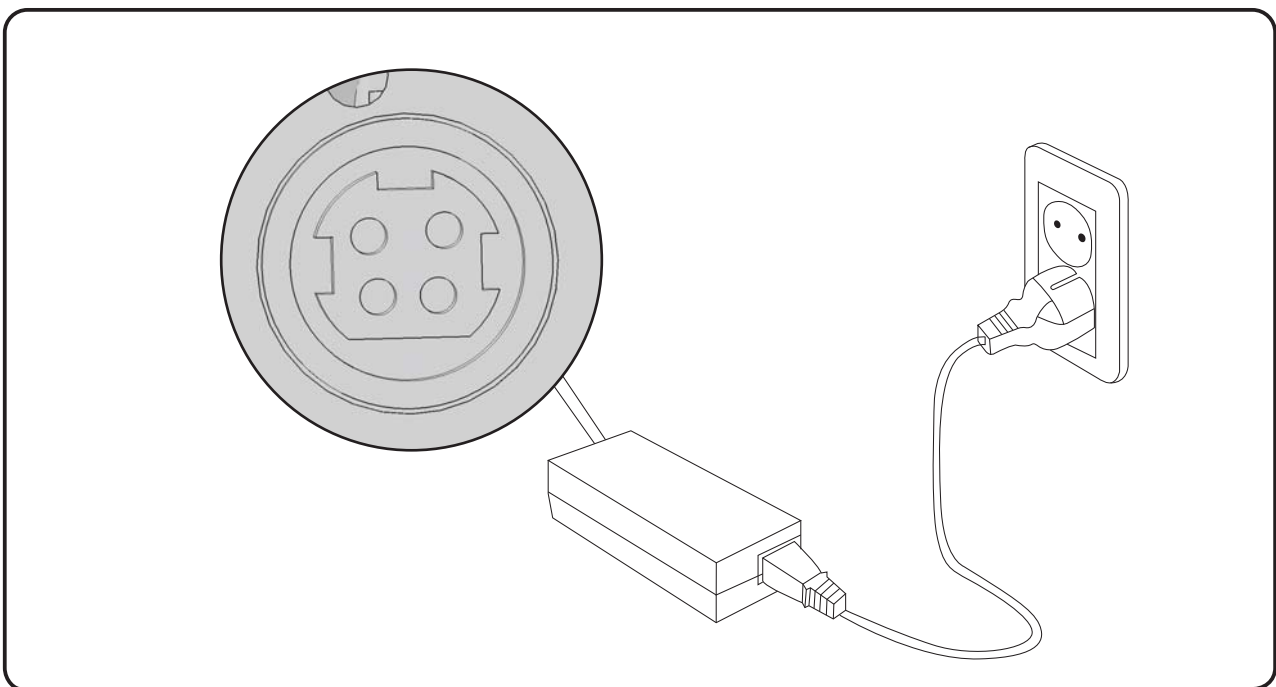
4-3. Connecting DC power supply cable

Connect the DC power cable to the DC power input connector at the bottom of the system.
(Adapter 100V - 220V free voltage of the system can be used.)



Cautions !

- ▶ Only manufacturer adapter should be used for this system.
- ▶ Manufacturer wont take responsibility for damages caused by using products which not made by manufacturer.

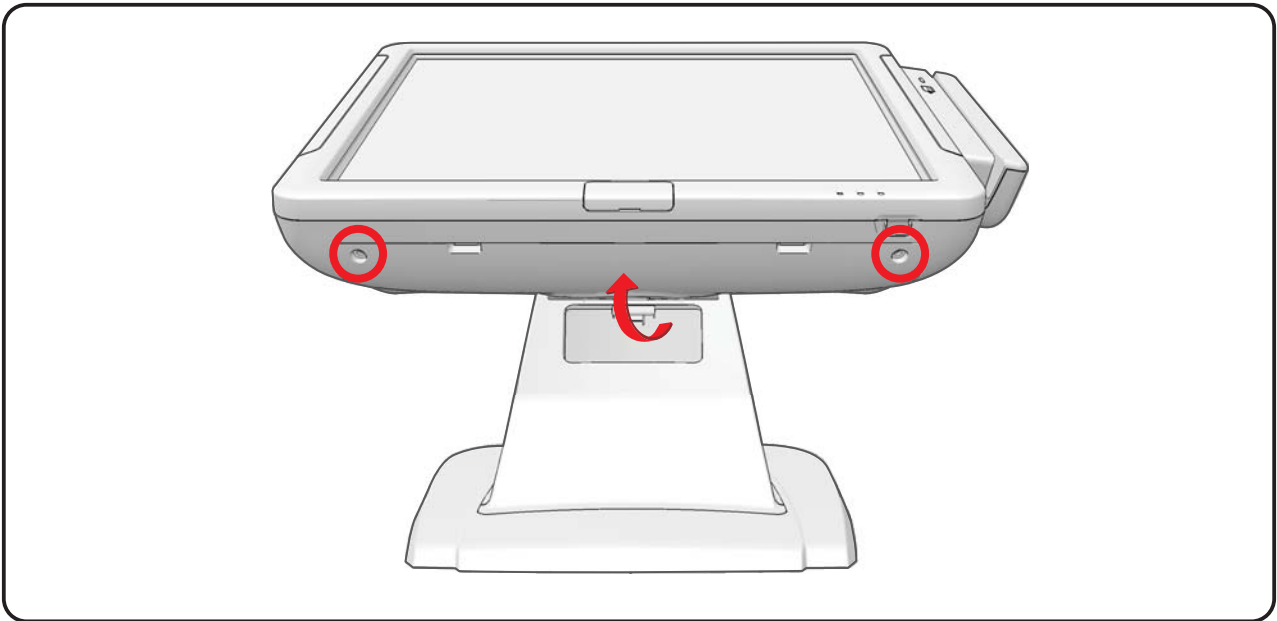




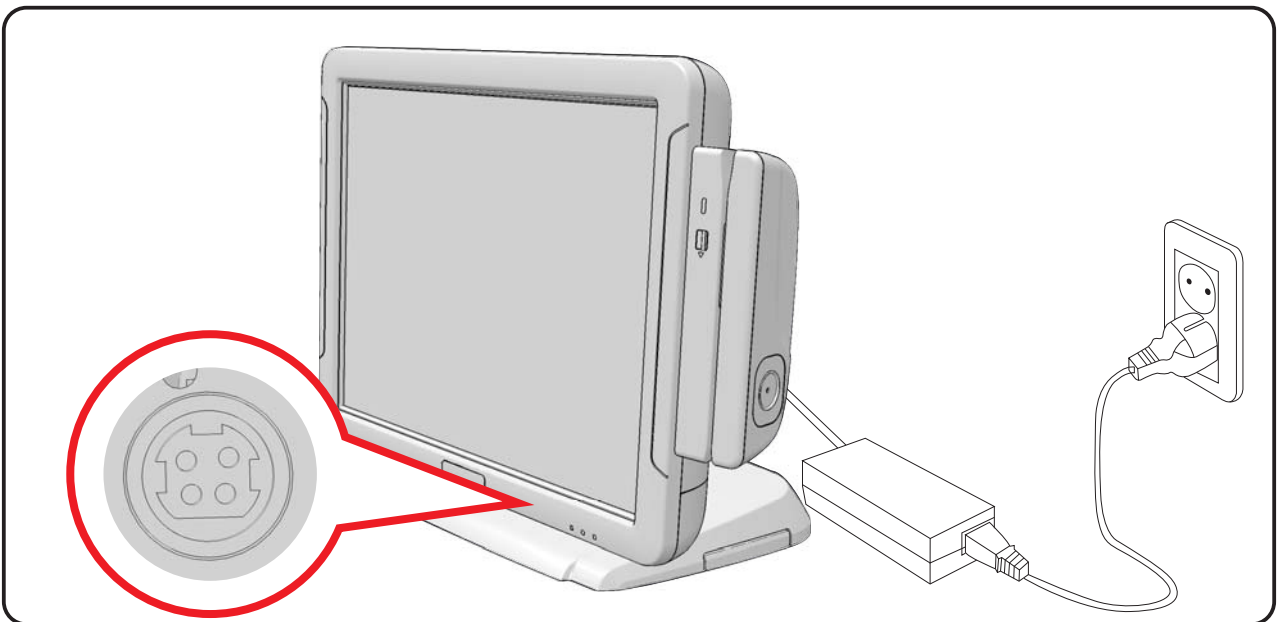
5. System assembly & Disassembly

5-1. Power Adaptor

- ① Make sure the system & peripherals power are off.
- ② Take off the screws first in case the Interface cover is fixed at the bottom of system.
- ③ As it shown in the picture pull the cover in the direction of the arrow.



- ④ Disconnect cables for peripherals & DC power supply jack from the system.



Cautions !

When disconnecting DC power supply jack, the neck point of it should gently be pulled out before fully disconnected.



5. System assembly & Disassembly

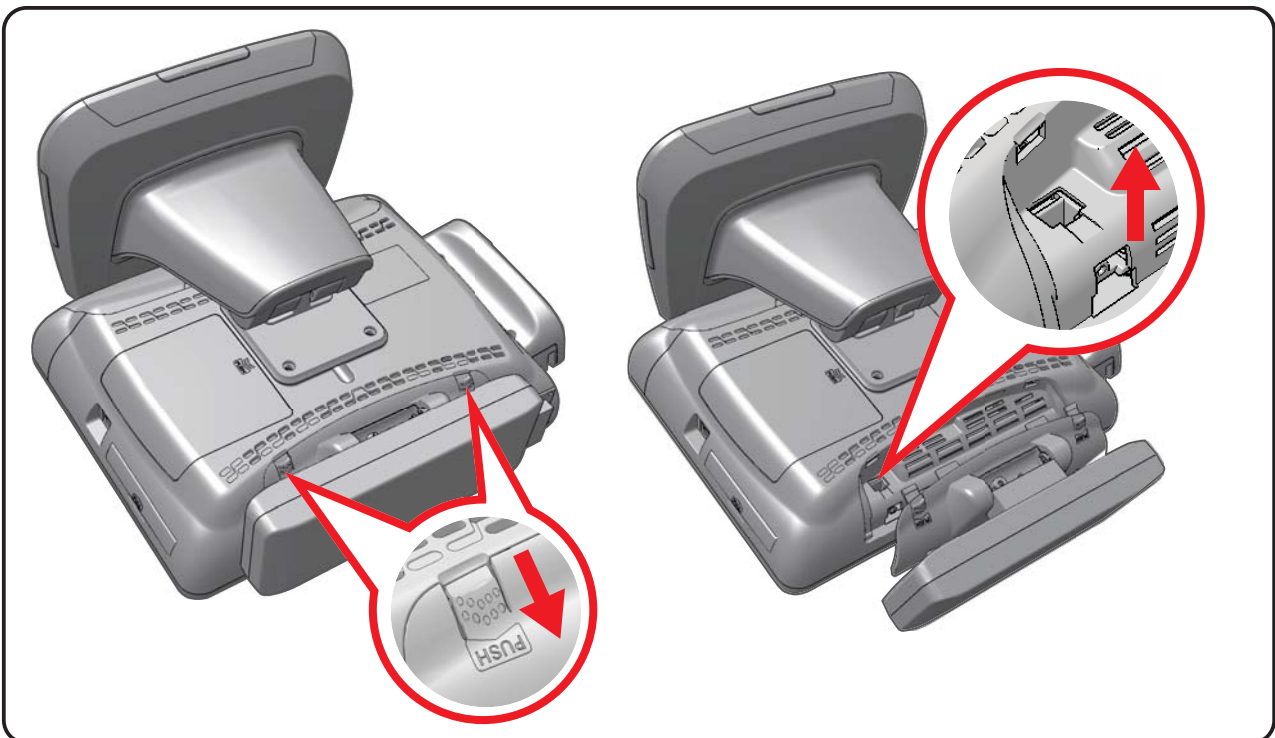
5-2. VFD

① Lay down the system on the side with care as shown in the picture not to damage LCD panel.



② Press the PUSH button at the bottom of customer display to separate in case it is fixed.

③ Lift up the customer display first and disconnect the connector.

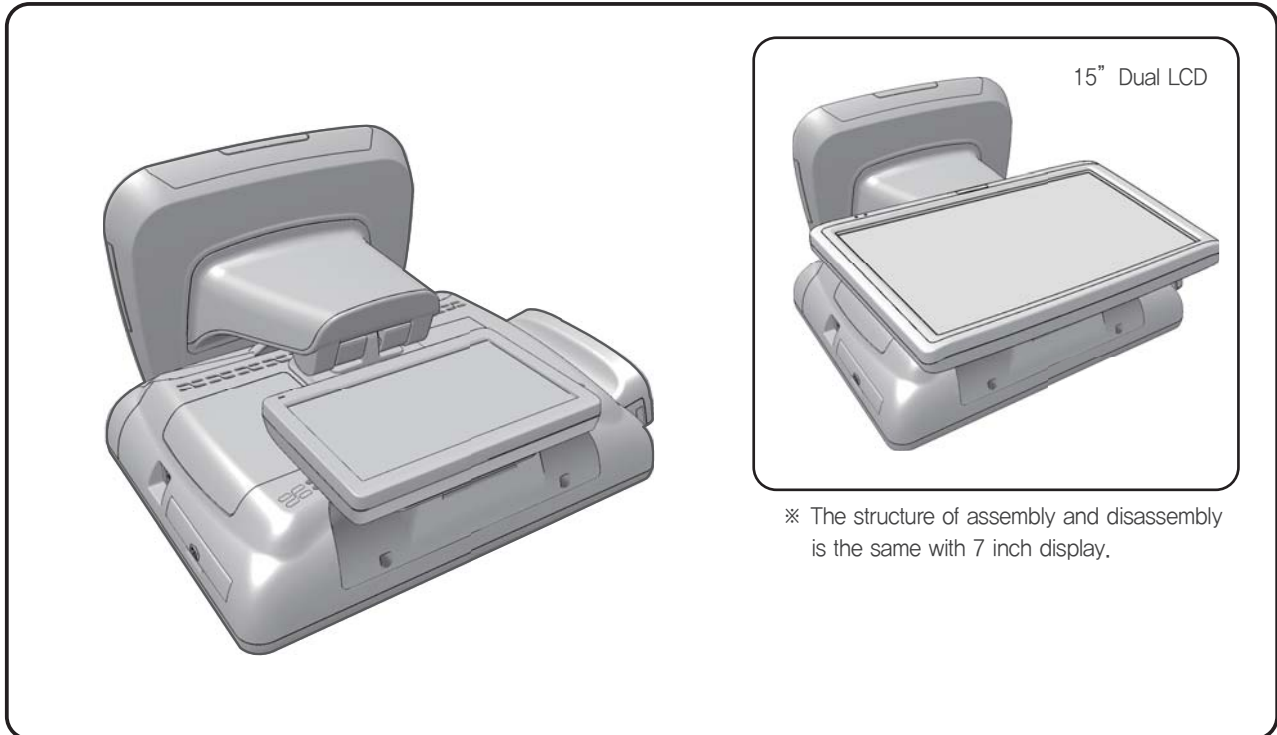




5. System assembly & Disassembly

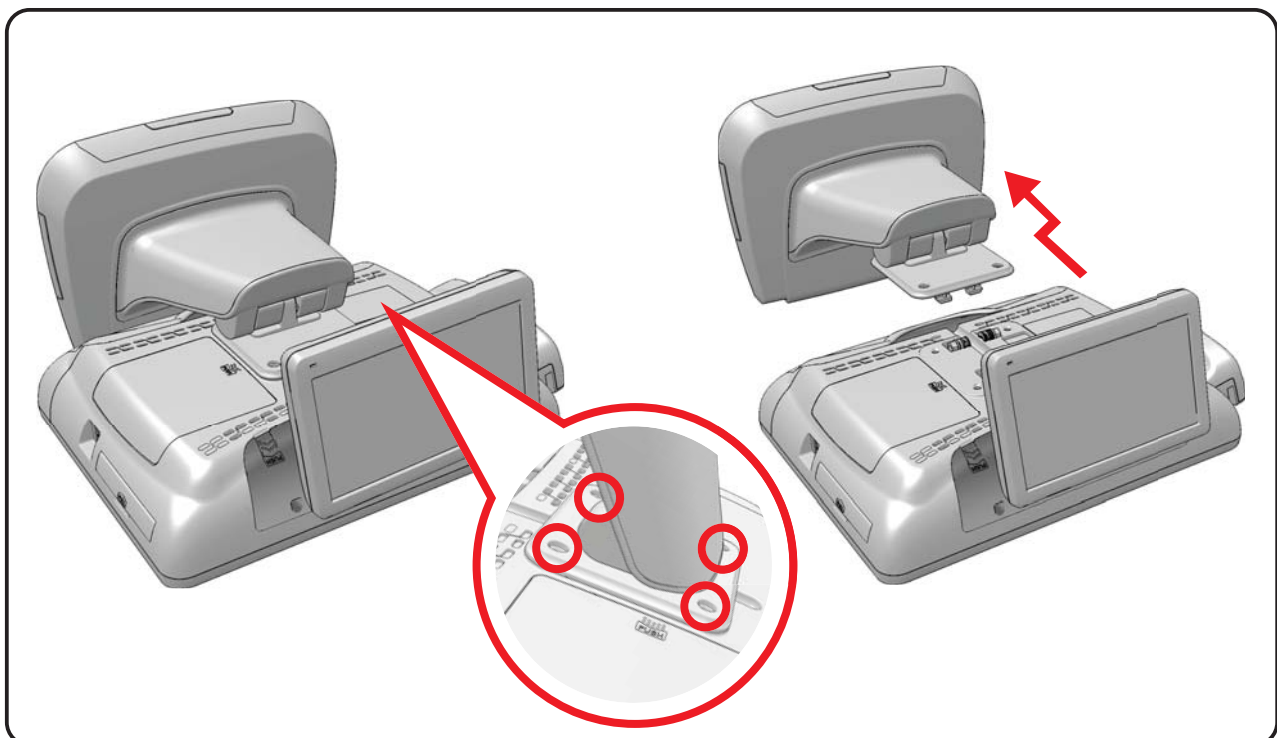
5-3. 7", 15" Dual LCD

① Lay down the system on the side with care as shown in the picture not to damage LCD panel.



② Remove four screws which are fixing the base.

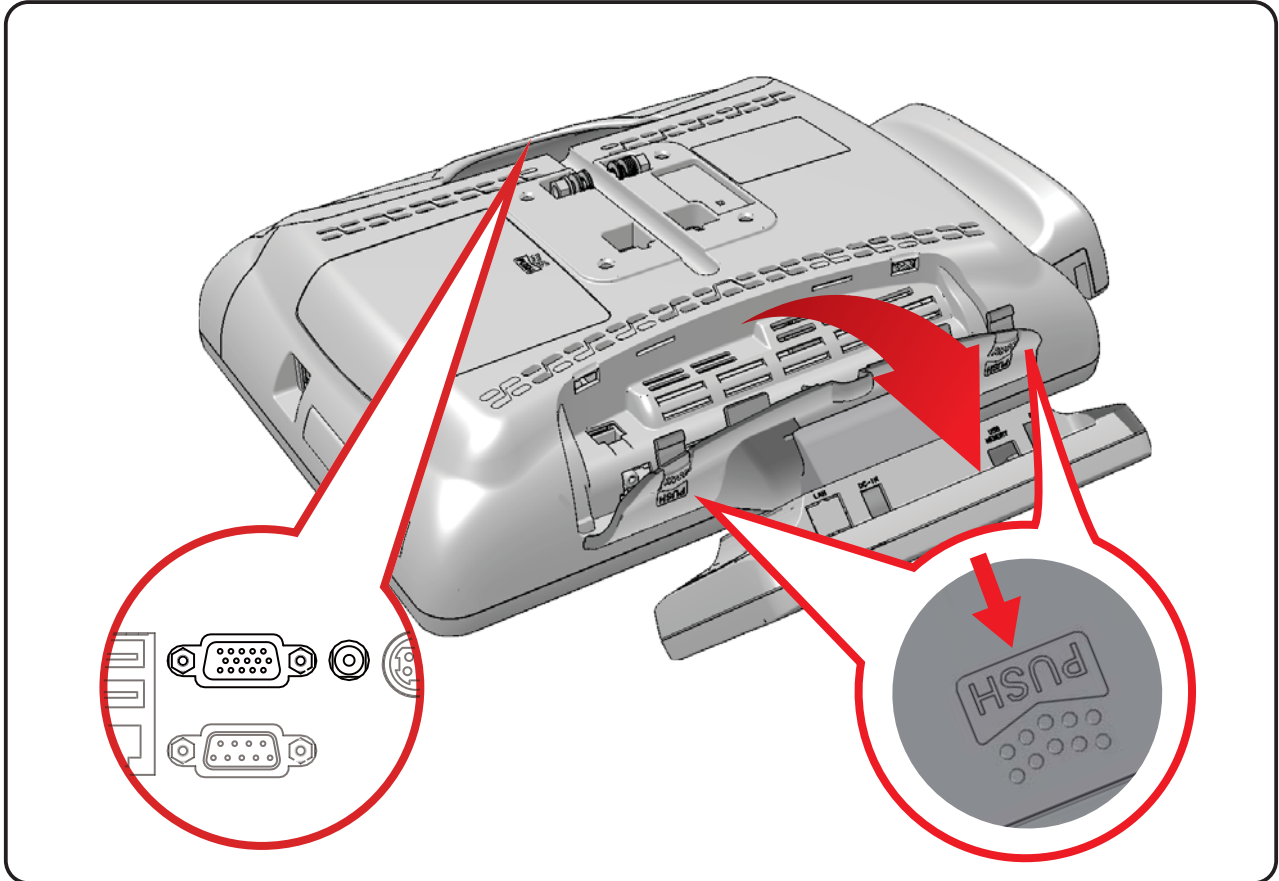
③ To disassemble the base, push it down and lift it up as shown in the picture.



5. System assembly & Disassembly

5-3. 7", 15" Dual LCD

- ④ Disconnect VGA and Power cables of 7-inch display in the interface part.
- ⑤ Disassembly 7-inch display by pushing two arrow points like picture.

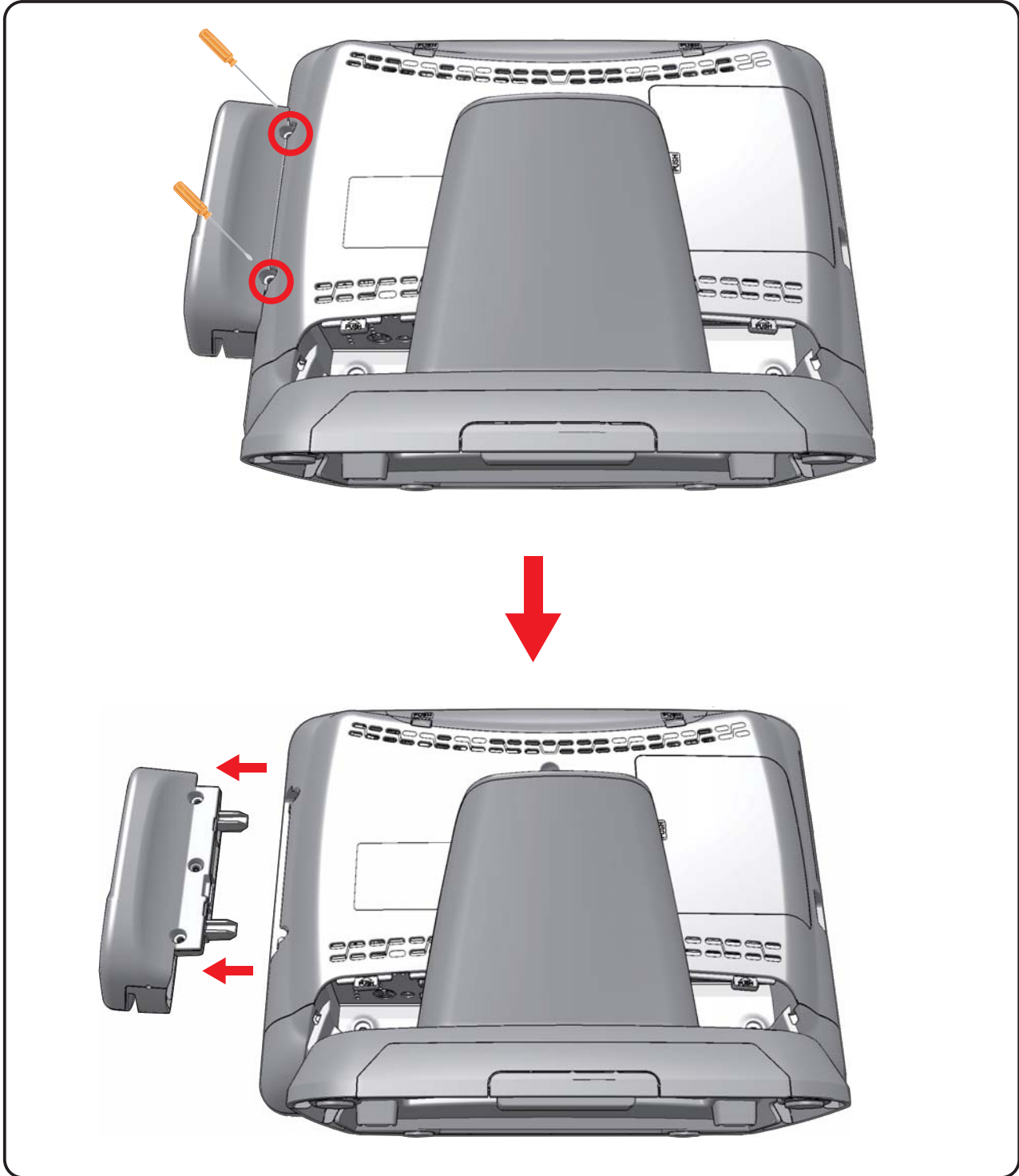




5. System assembly & Disassembly

5-4. MSR

① After unwinding the MSR rear two screws, remove the MSR from the main body.





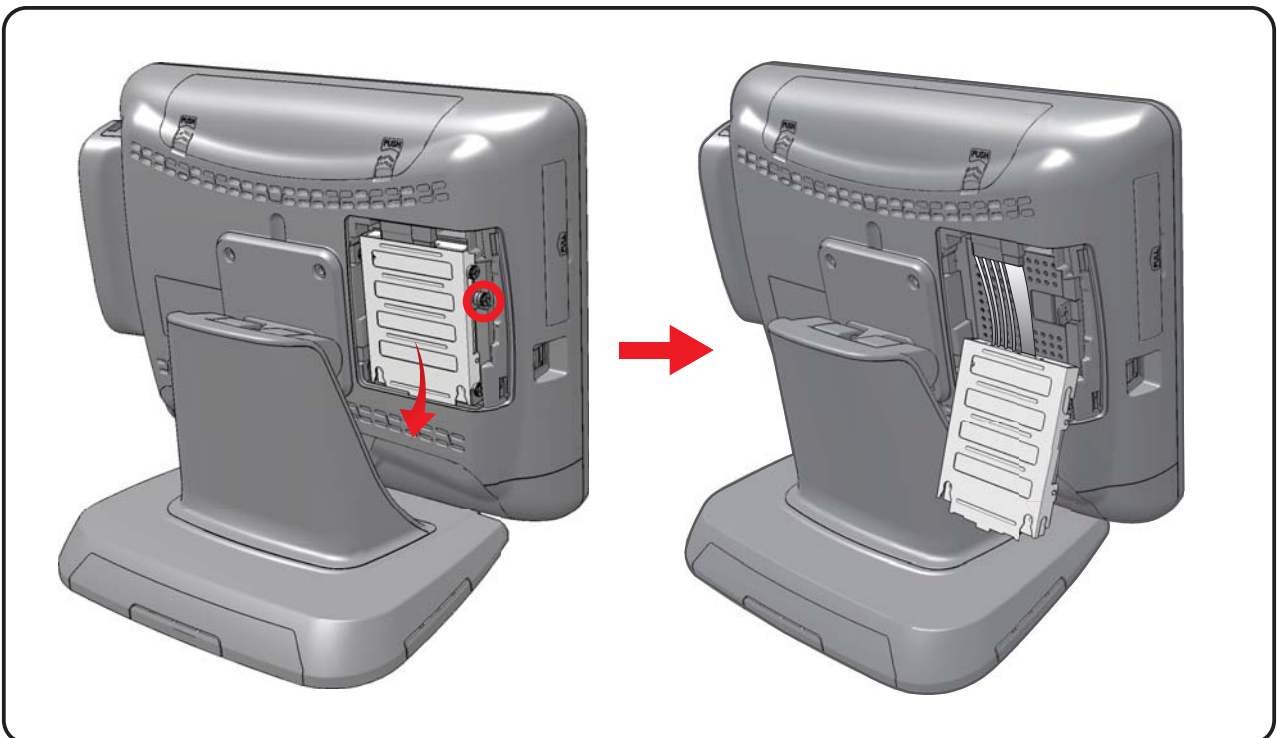
5. System assembly & Disassembly

5-5. HDD

- ① Shut down the system to replace the hard disk.
- ② Press the 'PUSH' button on the back of the system to remove the cover as shown in the picture.



- ③ After unwinding the screw and pulling out the HDD upward, disconnect the power supply and data cables.

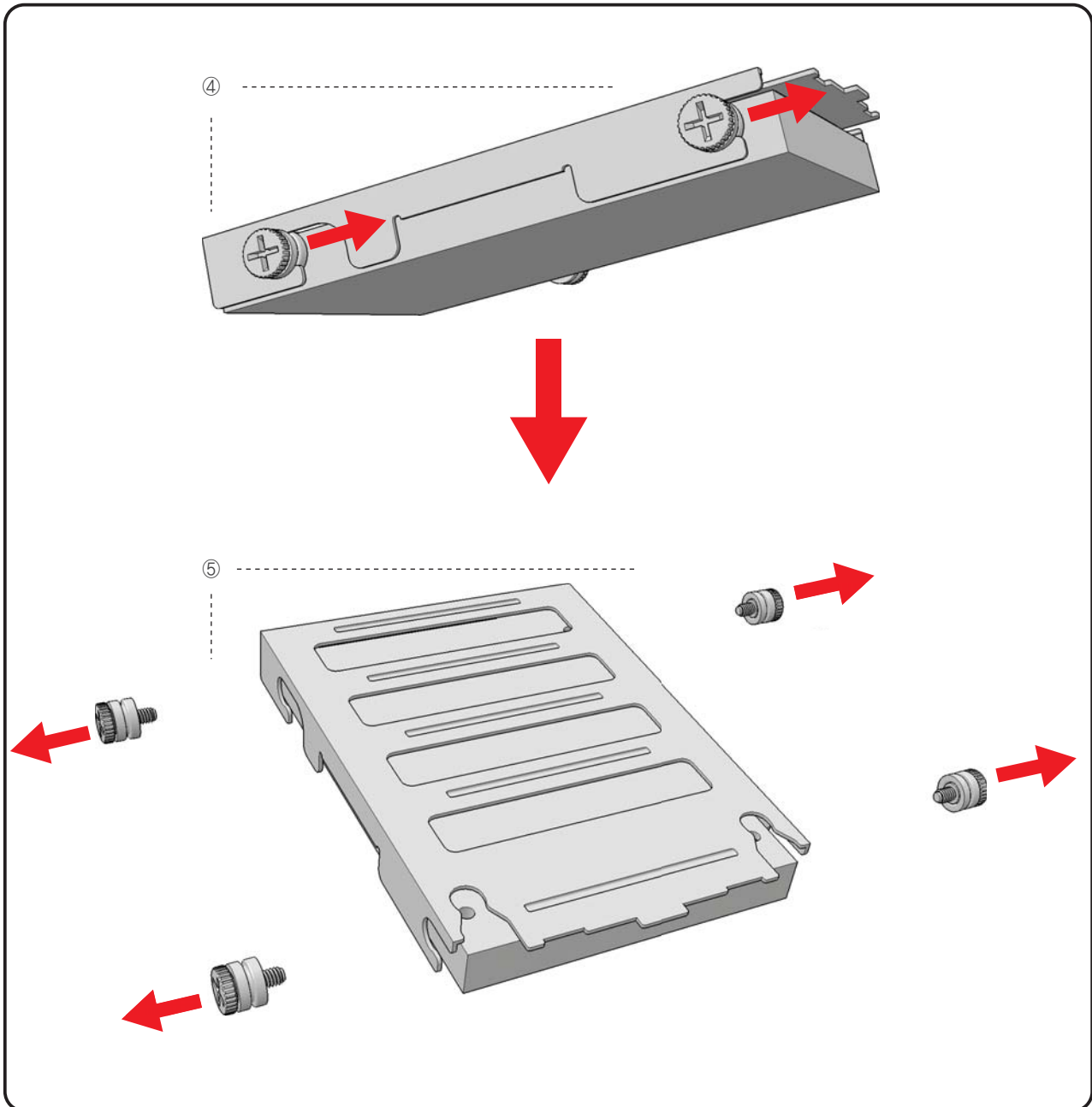




5. System assembly & Disassembly

5-5. HDD

- ④ Separate the bracket from the HDD.
- ⑤ Remove four screws from the HDD.



HDD Assembly & Verify

- ⑥ After assembling in reverse order, connect the peripheral cables and DC power supply jack.
- ⑦ After starting the system by pressing the power button, verify if the new HDD is connected properly referring to system setup (see Appendix A).



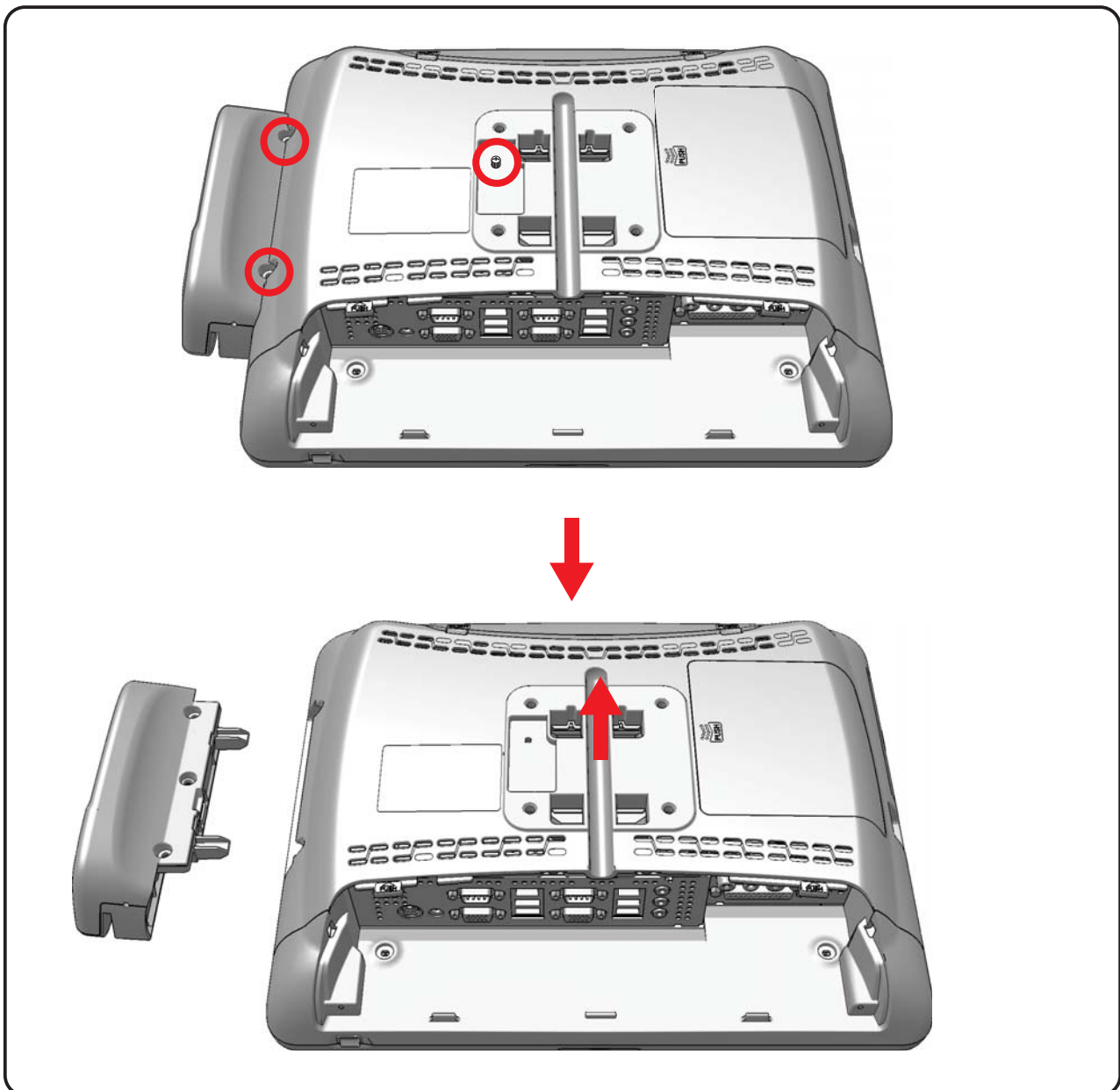
5. System assembly & Disassembly

5-6. Memory

You might need to expand the capacity of the main memory while using the system. If you want to extend the main memory capacity, you should check the sizes of currently installed and additionally installed main memory.

POS system can be equipped with up to 4GB memory. As you insert the memory, the BIOS automatically detects the memory type, capacity, and speed.

- ① Shut down the system in order to extend the main memory.
 - ※ Make sure to disconnect the power supply and peripheral cables in advance before disassembling the system.
- ② After unwinding the rear cover screw of the system and MSR rear two screws, remove the MSR from the main body and slide the cover upward to disassemble.

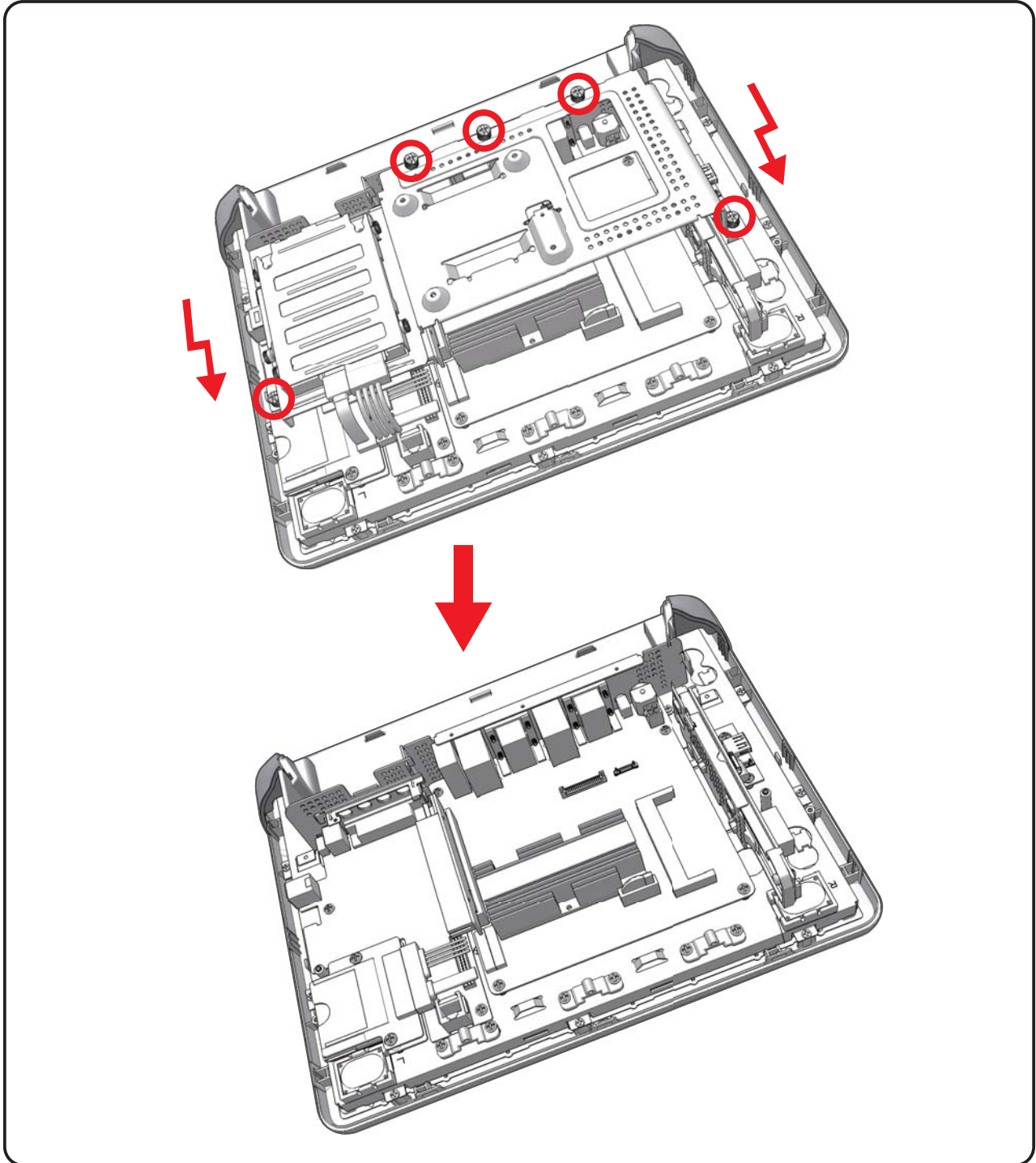




5. System assembly & Disassembly

5-6. Memory

③ Remove five screws from the cover's bracket and then disassemble the bracket cover as shown in the picture.

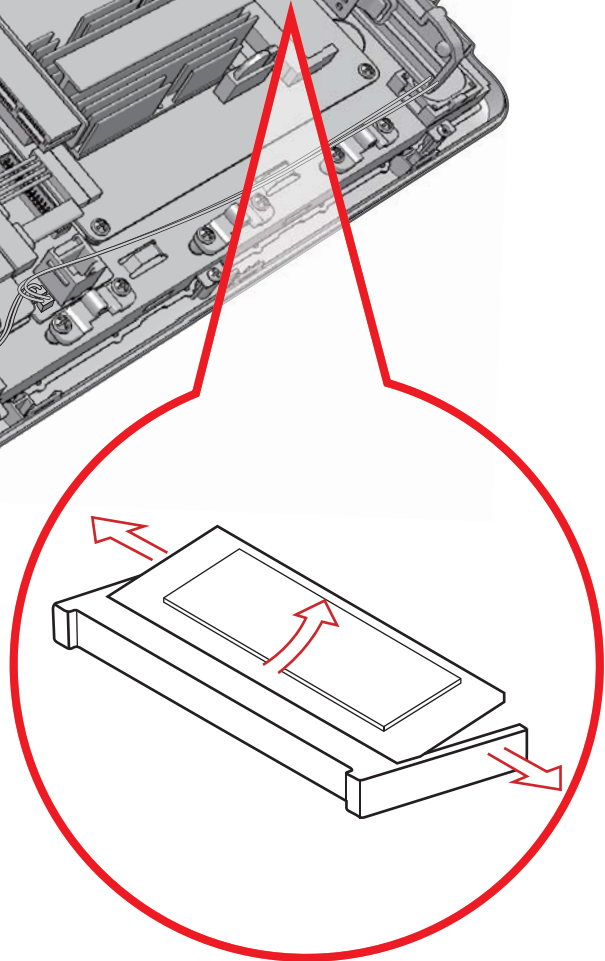
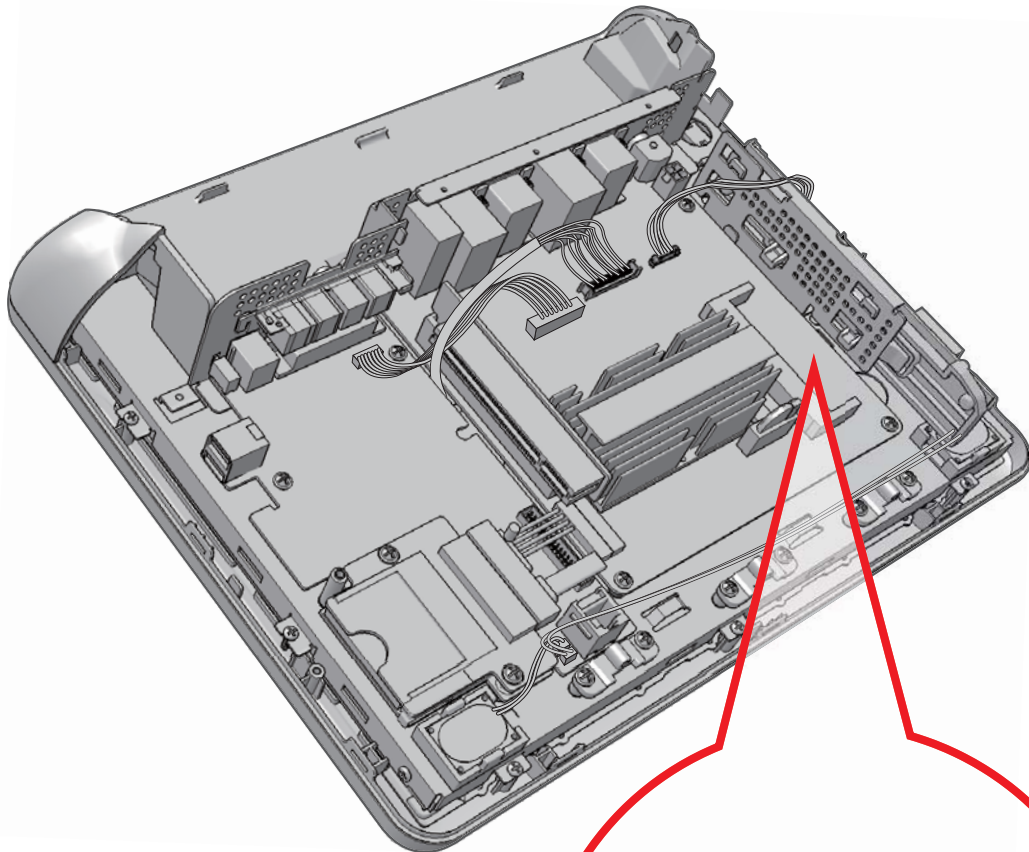




5. System assembly & Disassembly

5-6. Memory

④ Pull both lever in the direction of the arrow as shown in the picture and take out the memory upward.





5. System assembly & Disassembly

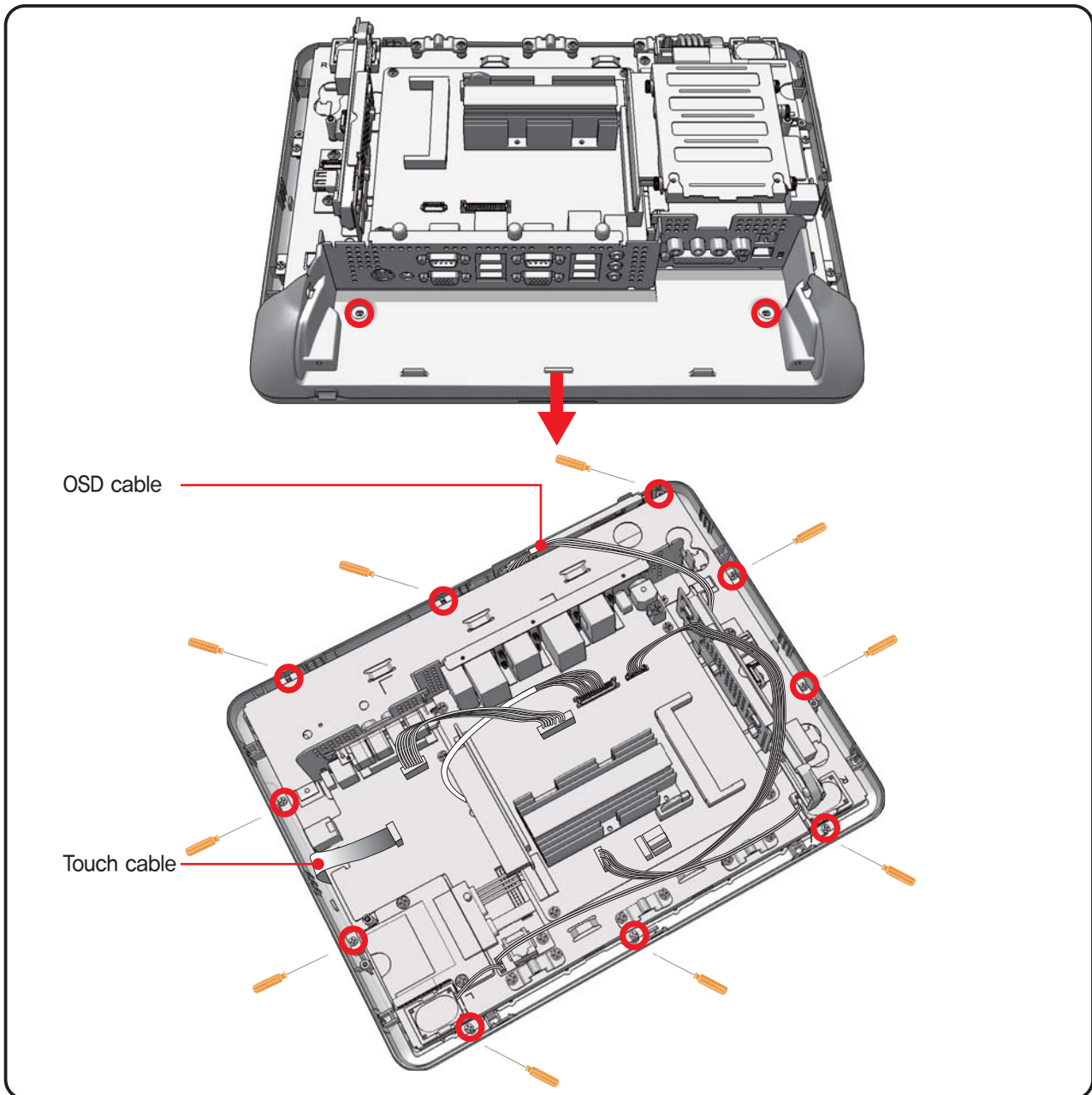
5-7. Touch Panel And LCD Disassembly



Caution!

- ▶ The touch panel is easily damaged from dust or mishandling while disconnecting the LCD and touch panel.
Please use an authorized service center for touch panel removal and replacement.

- ① Remove the rear cover of the system and the bracket referring to 5-6Page of this manual.
 - ② Remove fixed screws.(refer to Touch cable and OSD removal)
- ※Be careful in case of any damage occurred to touch cables.



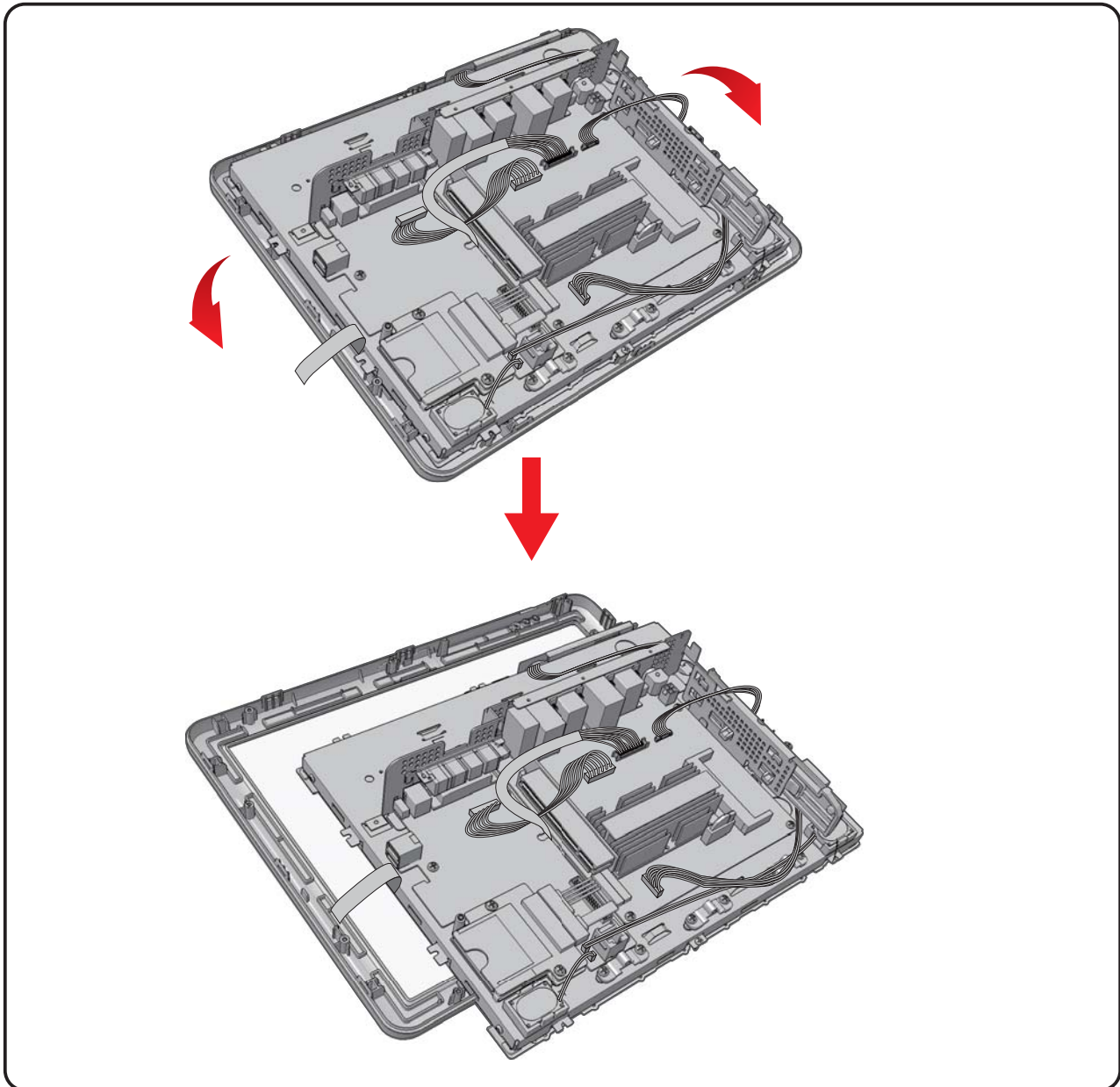
- ③ Remove fixed screws.(Remove Touch cable and OSD cable)
- ※Be careful in case of any damage occurred to touch cables.



5. System assembly & Disassembly

5-7. Touch Panel And LCD Disassembly

④ Hold the front bracket and open the down part in both directions Then remove the display assembly.



Cautions!

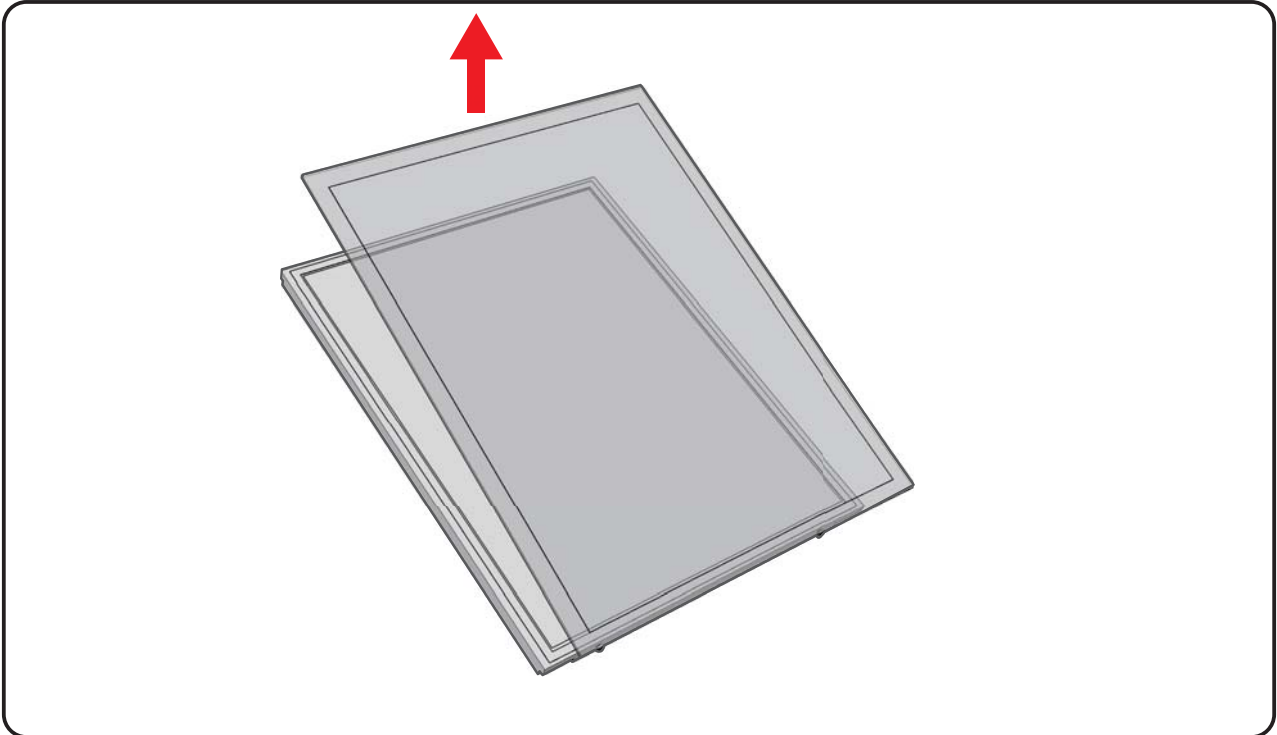
- ▶ Be careful not to damage the cable while operating.
- ▶ The touch panel may separate suddenly from the LCD panel due to a vacuum condition between the touch panel and LCD.
- ▶ Be careful not to damage components.
- ▶ Work in a clean environment. Dust can adhere to the surface of the LCD or touch panel and cause scratches.
- ▶ Touch panel and cables are made of sensitive materials. Take care to avoid damage.



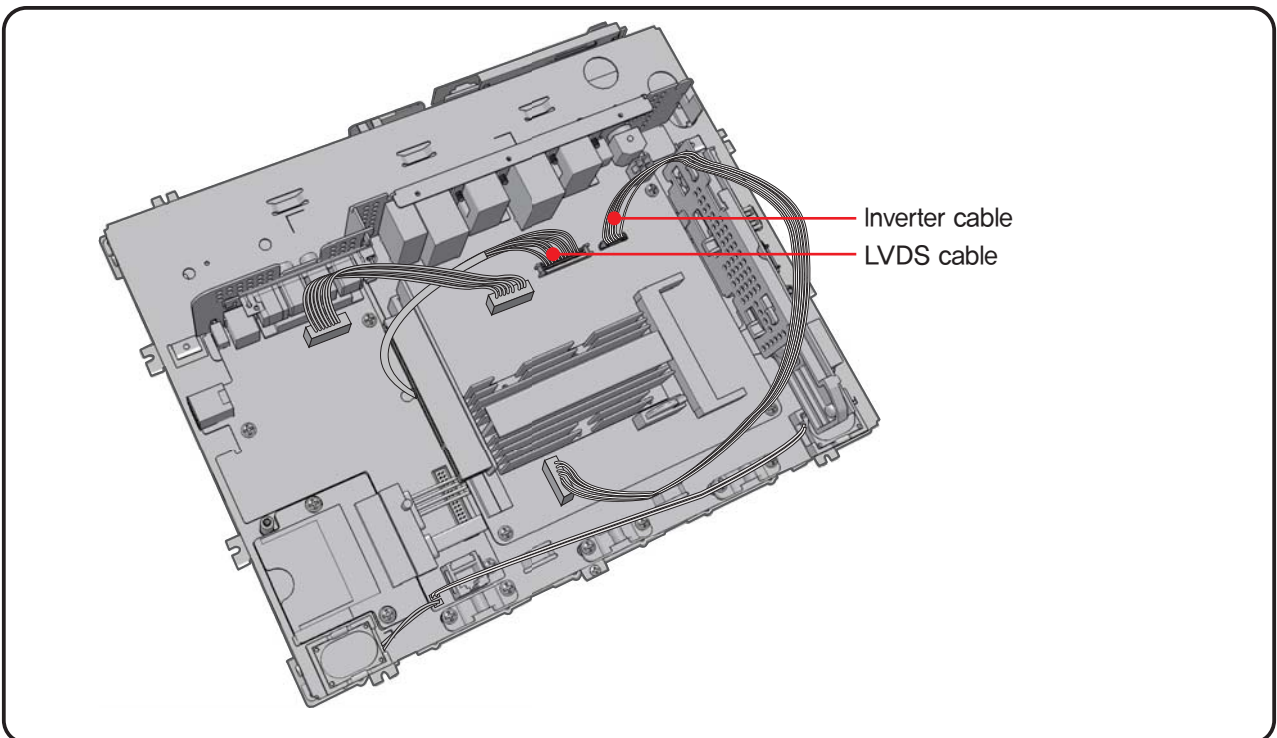
5. System assembly & Disassembly

5-7. Touch Panel And LCD Disassembly

⑤ Separate touch glass from LCD panel as shown in the picture.



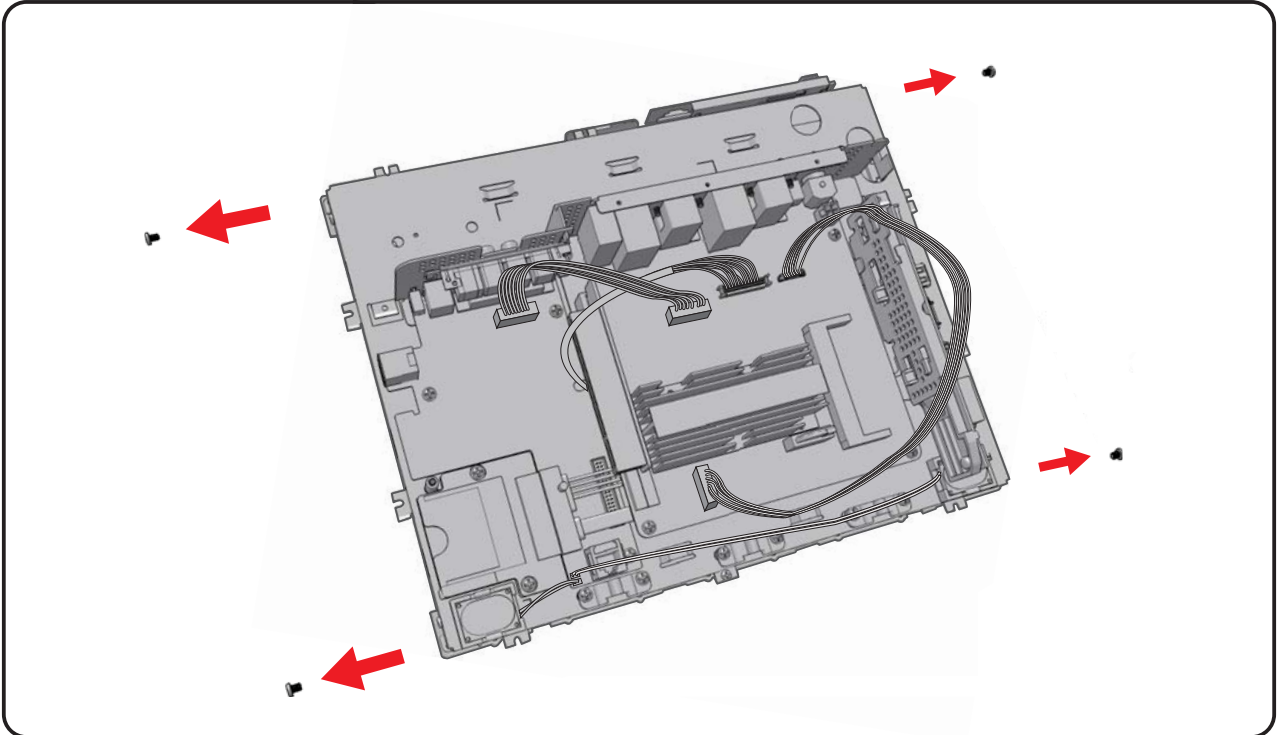
⑥ Disconnect the LVDS and inverter cables. To prevent tangling, lay out the cables.



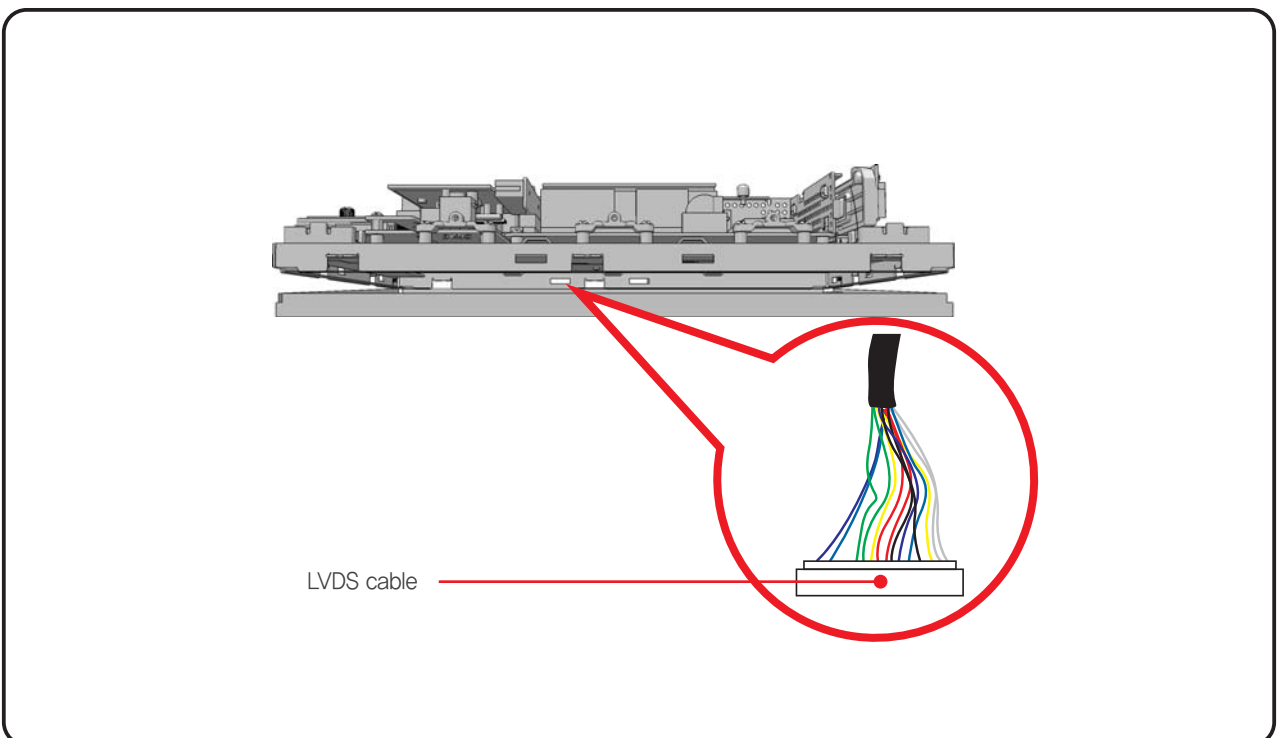
5. System assembly & Disassembly

5-7. Touch Panel And LCD Disassembly

⑦ Remove four screws from the sides of display's bracket.



⑧ To prevent pinching the LVDS cable, hold the front display bracket and after lifting it disconnect the LVDS cable from LCD.

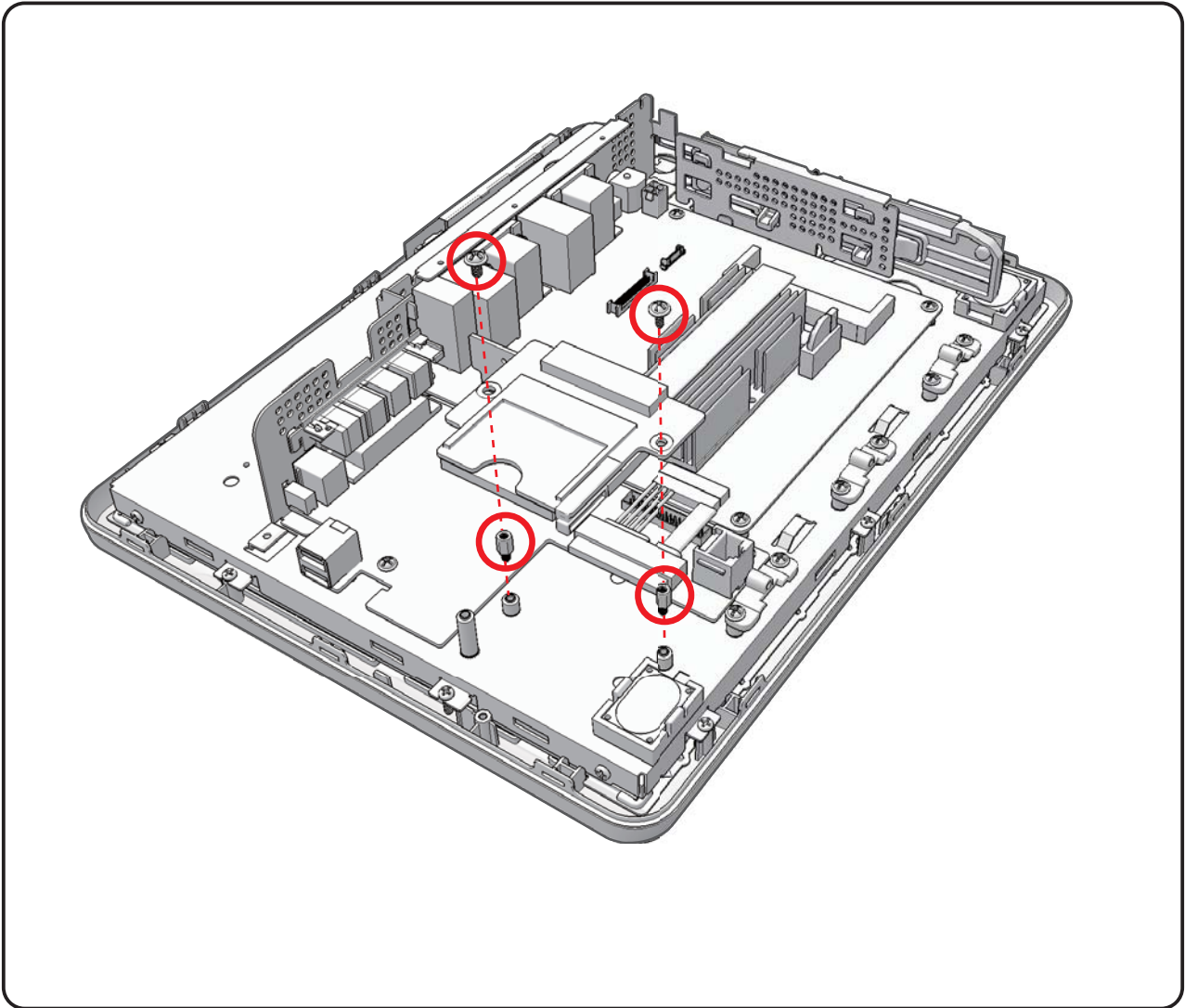




5. System assembly & Disassembly

5-8. Cfast

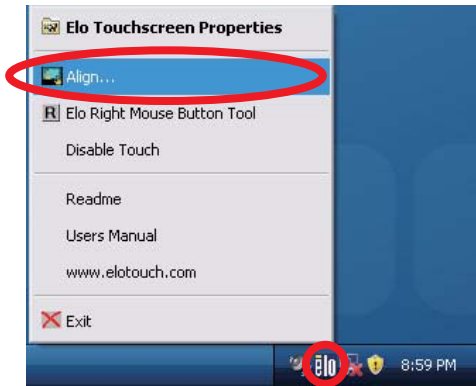
- ① Assemble HEXA-SCREW to 2 points like picture
- ② Take Cfast module's position like picture, then tighten 2 screws
- ③ Connect 2 cables of Cfast module to Main board like the point of picture




6. System Utilization

6-1. ELO Normal touch

- ① In the right corner bottom of the Window click on 'elo' icon (right button of mouse) and select 'Align...' item,



- ② If the following screen appears, touch the center of the red circle for 2 seconds and then remove your finger. Repeat the procedure if the red circle appears again.

 **Caution!** | Ball point pens or sharp tools may damage the surface of the touch screen.



- ③ If the recalibration is finished, click the green check button and shut down the recalibration program.



 **Note!**

Recalibration is not needed when setting up Extended Screen Mode after connecting a dual monitor.
is also not needed when changing to Single Screen Mode (LVDS only) while using Extended Screen Mode.

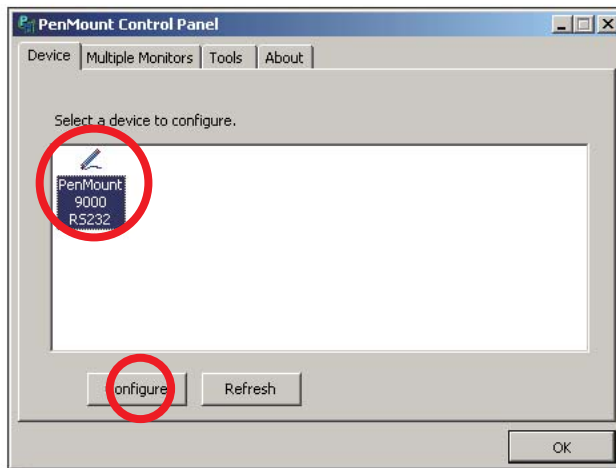
6. System Utilization

6-2. AMT Touch Screen

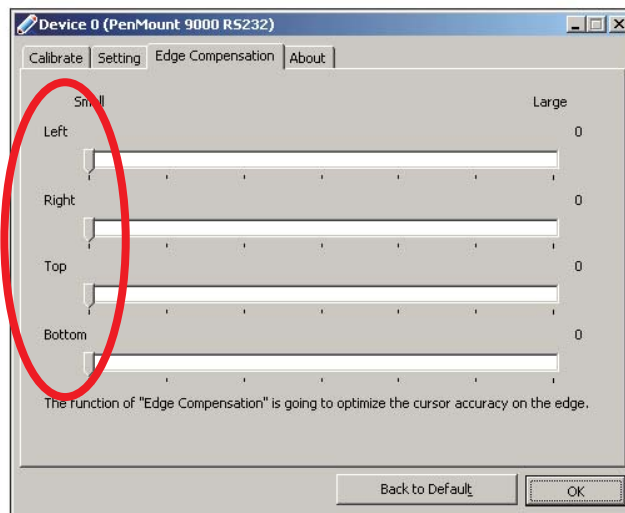
① Click the right button of mouse on 'PM' icon of Windows tray icons. And select 'Control Panel' on popup menu.



② If 'PenMount Control Panel' dialog appears, double-click the selected icon or 'Configure' button.



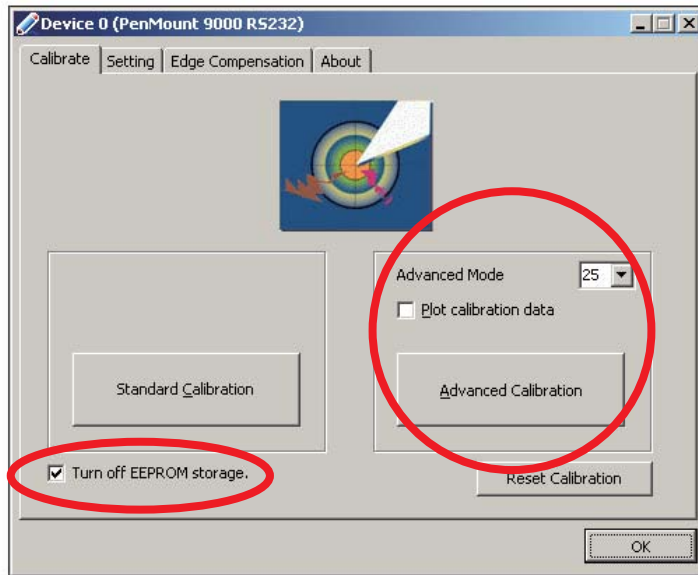
③ Click 'Edge Compensation' tab, move all four scroll bars(Left, Right, Top, Bottom) to the Left side(Small).



6. System Utilization

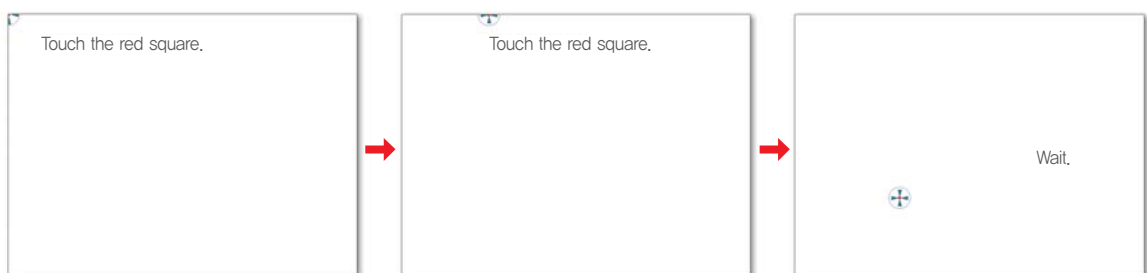
6-2. AMT Touch Screen

- ④ On the 'Calibrate' tab, Check 'Turn off EEPROM storage' .
Select the number '25' of the Advanced Mode combo-box list, Press the 'Advanced Calibration' button.



- ⑤ Click the red point about 2 seconds on a calibration procedure will be proceeded with following messages.

 **Caution!** | Ball point pen or sharpness tools may damage to surface of touch screen.

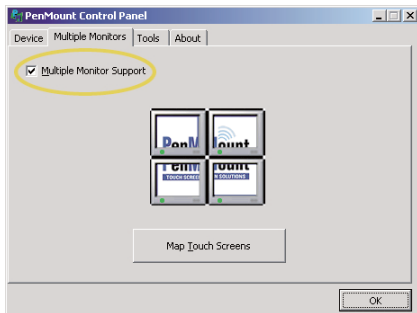


6. System Utilization

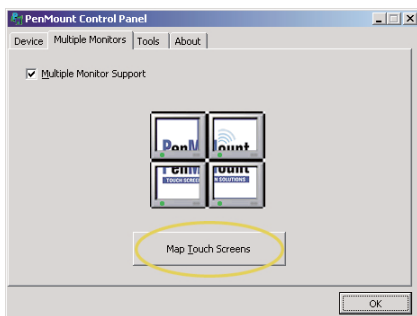
Note!

► For using the Touch Screen on Multi-monitor. (You need keyboard for this setting)

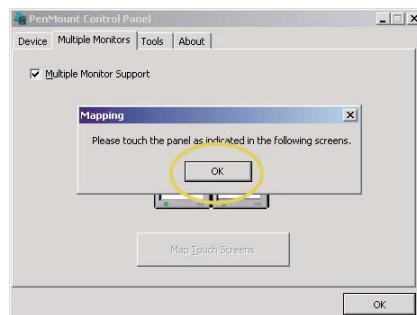
① Check 'Multiple Monitor Support' box on 'Multiple Monitors' tab.



② Click (Map Touch Screen) button.



③ Click (OK) button on 'Mapping' message box.



④ If you want to use touchable screen of current monitors, you should touch the screen. If or not, press 'S' to skip.

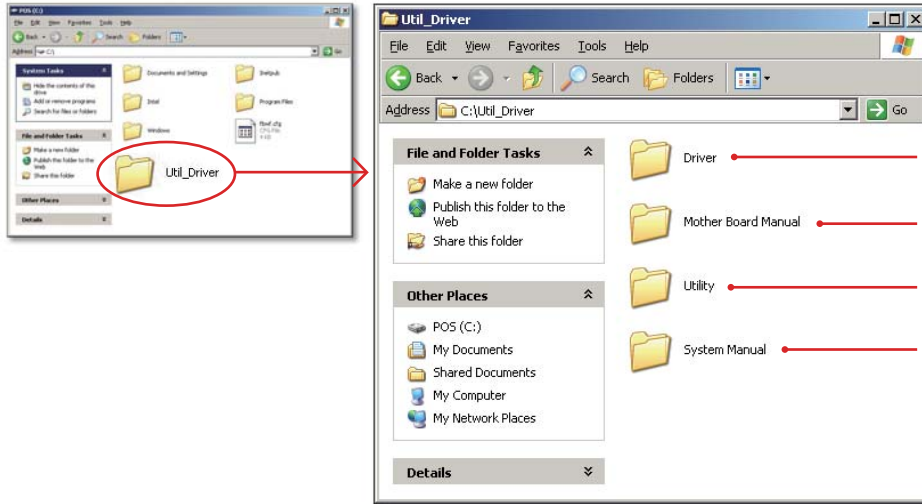


6. System Utilization

6-3. POS Driver and Utility Introduction

1. POS Driver and Utility introduction

- POS Driver & Other utilities are located in hard disk drive C: Util_Driver folder.



Drivers

Driver files are in this folder

Moter Board Manual

Mother board manual is in this folder

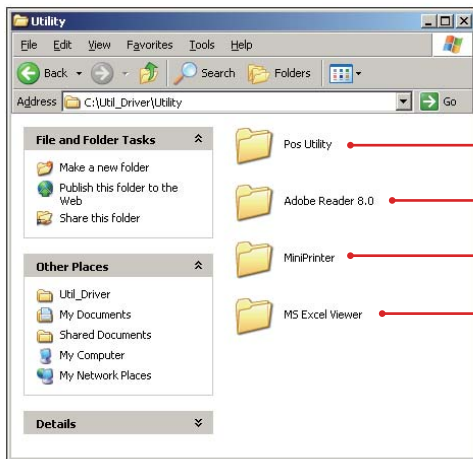
Utility

System manual is in this folder

System Manual

Utility are in this folder

- C:\Util_Driver\Utility

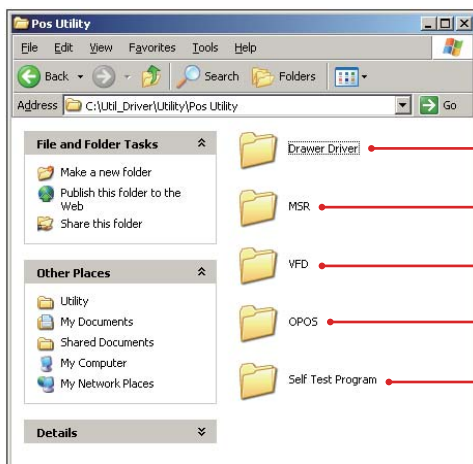


POS Utility

Adobe Reader

MiniPrinter

MS Excel Viewer



Drawer Drivers

MSR

MSR Setup Utility

VFD

Customer Display Utility

OPOS

OPOS driver file

Self Test Program

Test utility for peripherals of POS



6. System Utilization

6-3. POS Driver and Utility Introduction

1. POS Driver and Utility introduction

- OPOS or OLE Retail POS consists of an architecture for win32-based POS device access. The current OPOS driver has been developed in accordance with OPOS Specification Version 1.10 and continues to support the OPOS version.
- Support OS : WEPOS, Win XP Pro, POSReady 2009, POSReady 7, Win 7 Pro, Win 7 Ult
- Support Peripherals (The model name written on the bottom of the product)
 - LineDisplay (Customer Display) : Q202LD
 - Cash Drawer (Cash Drawer) : S4700CD
 - POSPrinter (Printer) : ELLIX Series
- The location of installation file
 - The file is located on the hard disk
(C:\Util_Driver\Utility\Pos Utility\OPOS)
- The installation method
 - ① Execute 'XXXXOPOSSET_RVx.xx.exe' file in OPOS folder.
 - ② All components will be automatically registered & set up according to the system configuration.

6. System Utilization

6-4. Dual Monitor Usage

Additional monitor can be connected to the VGA connector.

This contents is written based on Windows 7 OS.

1. Dual Monitor usage

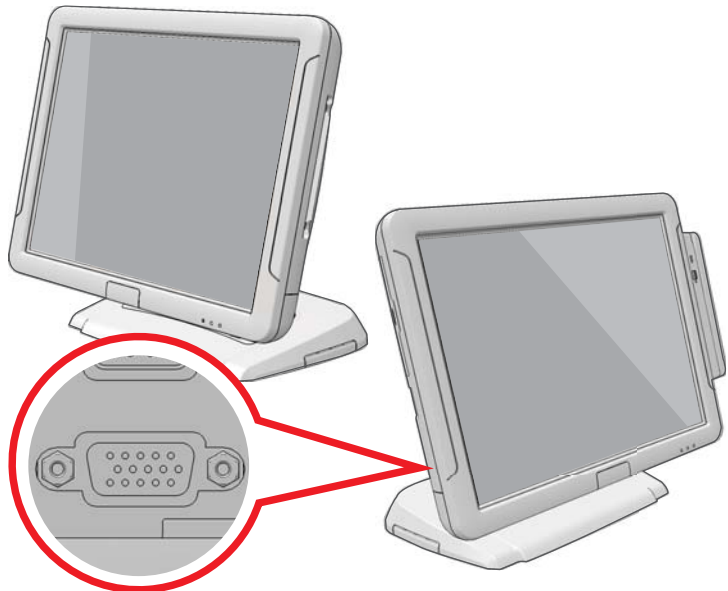
The system supports dual monitor system, which is using two monitors for one system. Sub-monitor's screen can be displayed as a copy from the main monitor (Windows desktop) or as an extended screen (Windows desktop).

1. Connect the external monitor when the system is off.

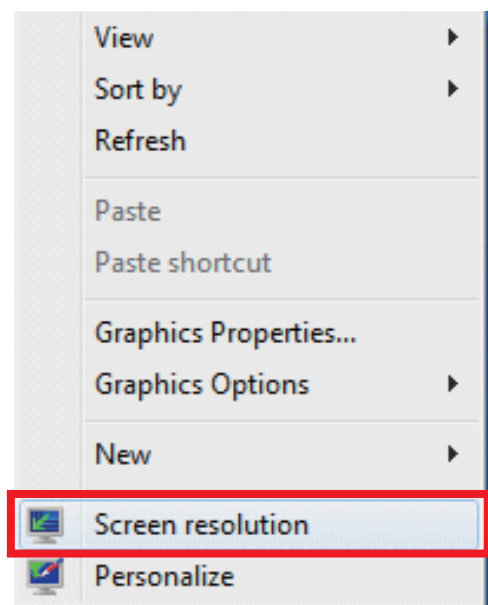
(Remove the 'Interface cover' at the rear bottom of the system and you will see a VGA connector.)

- ① Connect the external monitor when the system is off.
- ② Connect a power cable to external monitor.

2. Press a power button of the system and the external monitor.



3. Click the right button of mouse on Windows desktop screen and select 'Screen resolution' from a popup menu.



6. System Utilization

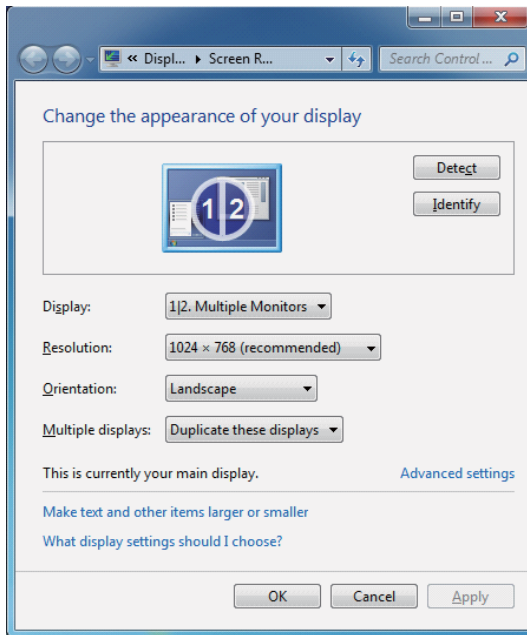
6-4. Dual Monitor Usage

Additional monitor can be connected to the VGA connector.

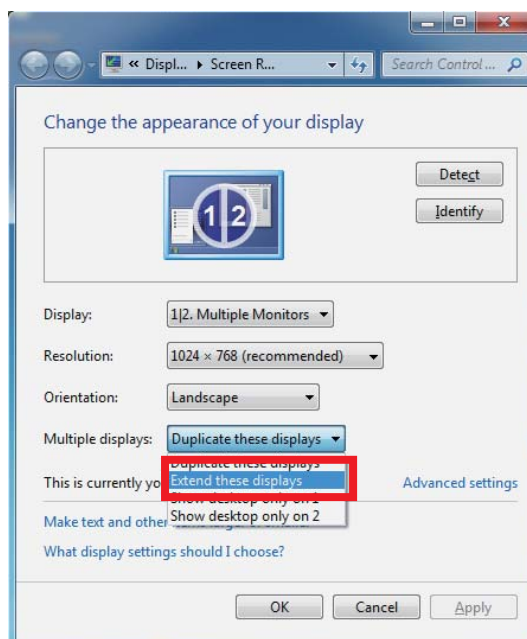
This contents is written based on Windows 7 OS.

1. Dual Monitor usage

4. The following dialog window 'Change display appearance' display option are set us 1|2 Multiple Monitor (S) and Multiple display (M) option is set as duplicate these displays. (In this case, the dual monitor shows a duplicated screen.)



5. If you want to change to an extended screen, set Multiple displays option as Extend these displays on 'Change the appearance' of your display dialog. (In this case, two different extended screen monitors are shown.)



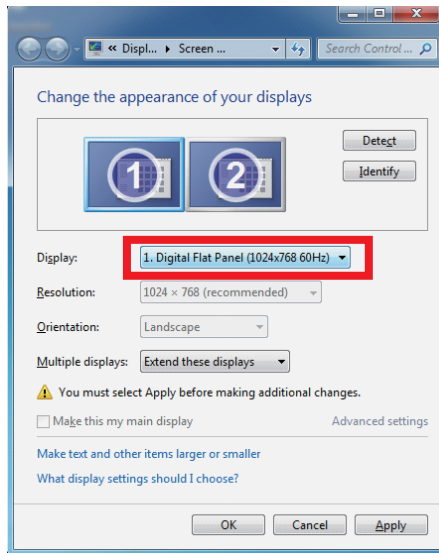
6. System Utilization

6-4. Dual Monitor Usage

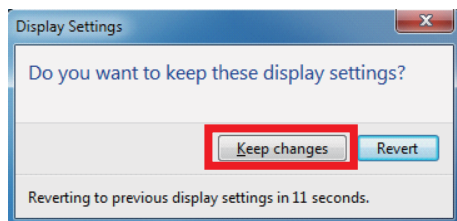
Additional monitor can be connected to the VGA connector.
This contents is written based on Windows 7 OS.

1. Dual Monitor Usage

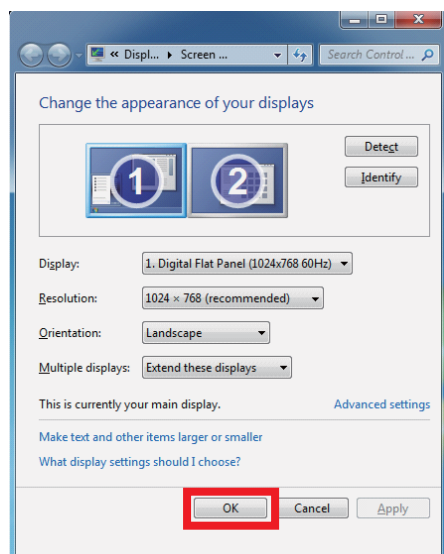
6. Set Display option as 1. Digital Flat Panel (1024x768 60 Hz) and click <Apply> button.



7. Select <Keep changes> button on 'Display Settings' dialog to keep the current settings.



8. If the configuration is finished, click <OK> button to close the 'Change the appearance' dialog window.



6. System Utilization

6-4. Dual Monitor Usage

Additional monitor can be connected to the VGA connector.

This contents is written based on Windows 7 OS.

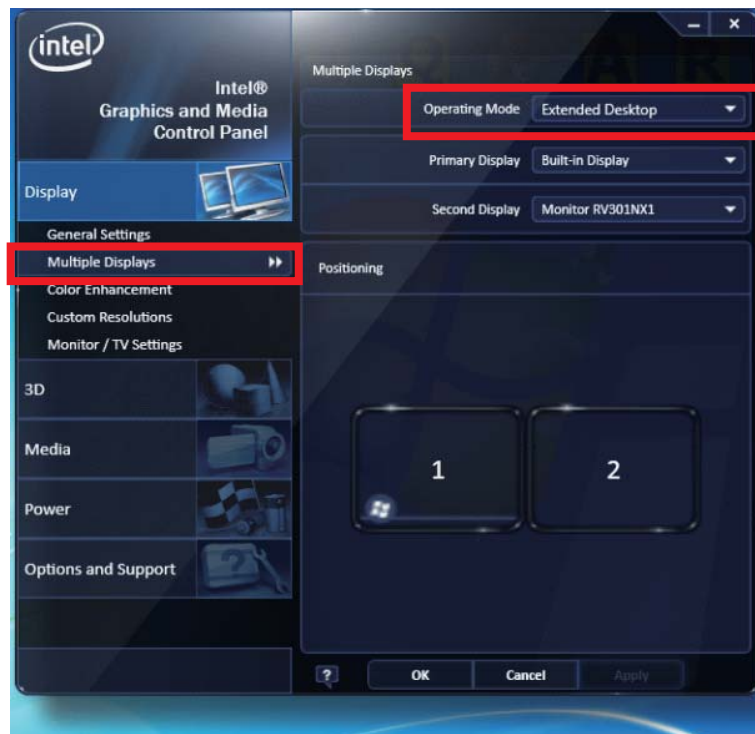
1. Dual Monitor usage



Note!

How to check dual monitor's settings
If dual monitors don't work properly, refer to the following procedure.

- Method 1 – Check the BIOS setup(Appendix A)
Make sure that 'Chipset > Host Bridge > Intel IGD Configuration > Boot Display Device' menu is selected as 'D-SUB + LVDS'
- Method 2 – Click the right button of mouse on 'Intel Graphic icon' of Windows tray area and select 'Graphic Properties' menu.
Make sure that 'Operating Mode' of 'Multiple Displays' is set as 'Extended Desktop'.





6. System Utilization

6-5. How to control Direct I/O in order to use drawer

Hardware I/O Port Numver to Open/close Drawer : "0x50D"

Value (byte) needed to 'Open the drawer 1' . : "0xDF"

Value (byte) needed to 'Open the drawer 2' . : "0xFB"

Value (byte) needed to 'Open the drawer' . : "0xE4"



7. BIOS Set up

7-1. Understanding BIOS

1. Understanding BIOS Set up

- BIOS provides configuration and set-up information for driving the main board. BIOS values are saved in CMOS ROM on the main board.

BIOS (Basic Input and Output System) Set-Up is a menu-oriented software utility which enables a user to configure the system's environmental set-up, system hardware, power saving functions, etc. BIOS Set-Up values can seriously affect how the system works. Therefore, users should determine all options regarding BIOS Set-Up and configure the system accordingly.

Entering the Setup

- Turn on the system and the system will show Press to enter SETUP message.
When this message show up, press or <Delete> key to enter SETUP screen.

Cases of BIOS Setup

- When checking HDD type and capacity after HDD replacement
- When changing booting sequence
- When reflecting user s need on the setup
- When setting or changing a password

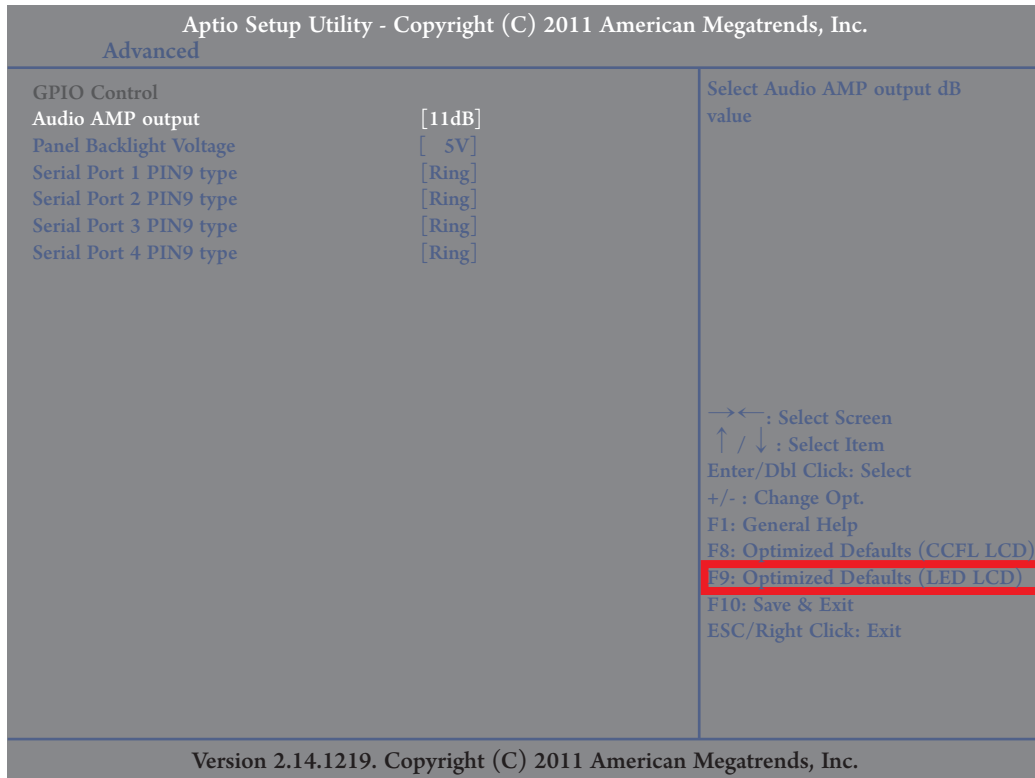


7. BIOS Set up

7-2. Inner speaker output & LCD brightness & Serial voltage change

1. Advanced Menu

- Use this menu to set up for system performance.



Advancede > GPIO Control

- Audio AMP output This item allows you to set Audio AMP output dB value.
- Panel Backlight Voltage This item allows you to set Panel Backlight voltage.
- Serial Port 1/2/4 PIN9 type This item allows you to set the output voltage value of Serial port 1/2/4 PIN9 type.
- Serial Port 3 PIN9 type This item allows you to set the output voltage value of Serial port 3 PIN2 type.

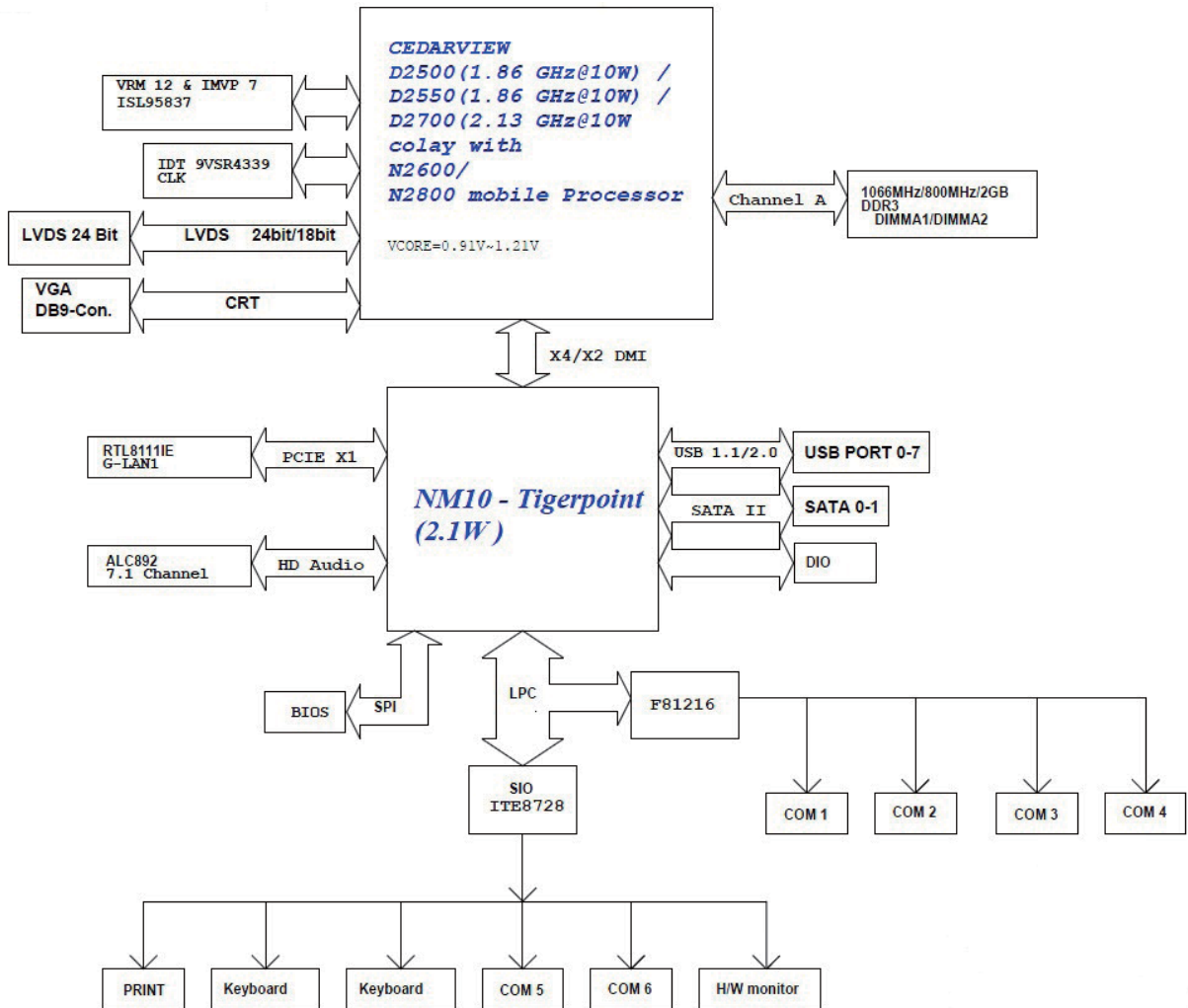
2. Using keyboard shortcut

- Press key 'F9' on the keyboard, it is initialized.

8. System Configuration

8-1. System Block Diagram

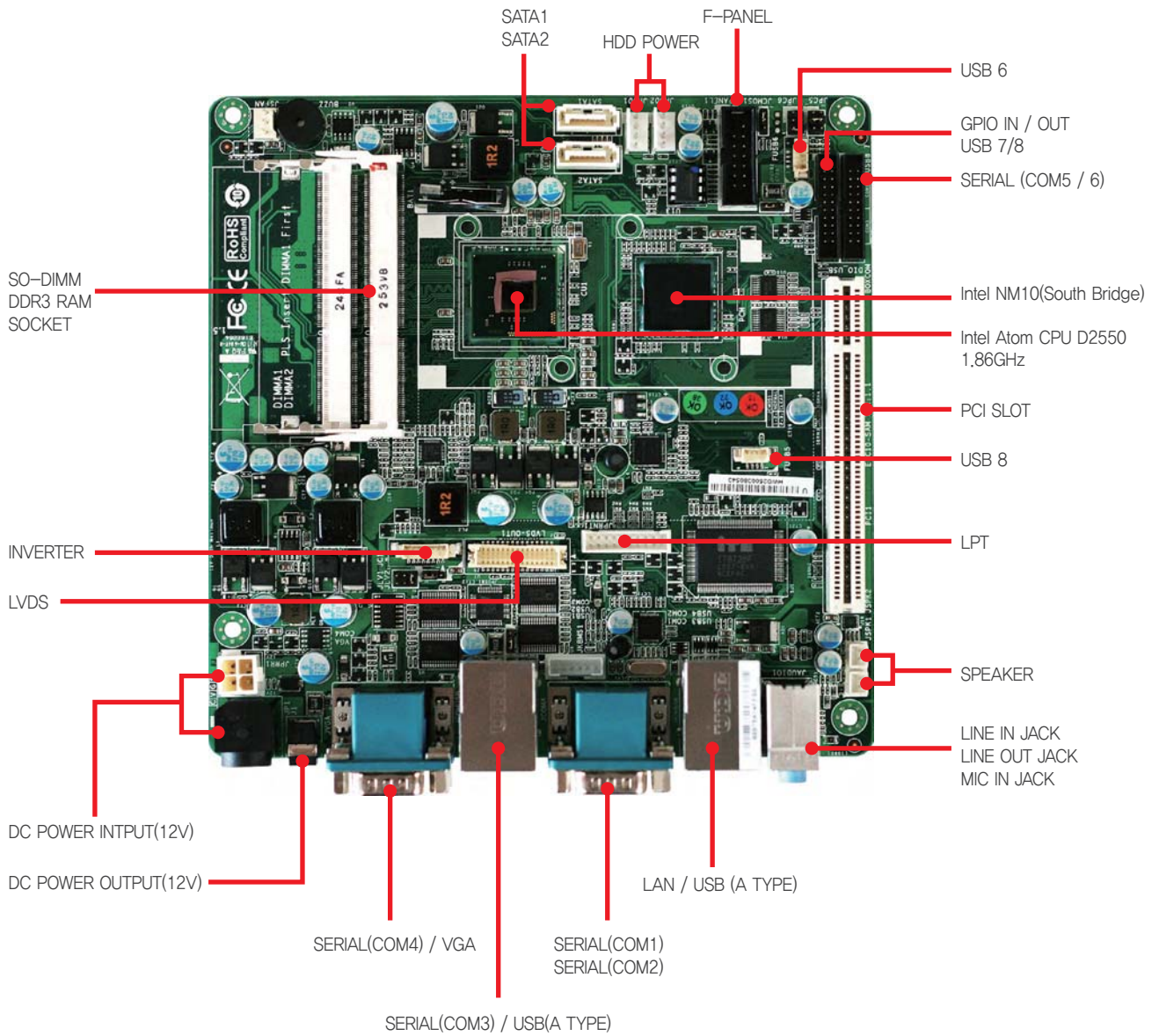
- System Block Diagram
EIC10-SAM(D2550)



8. System Configuration

8-2. Main Chipset & Connector

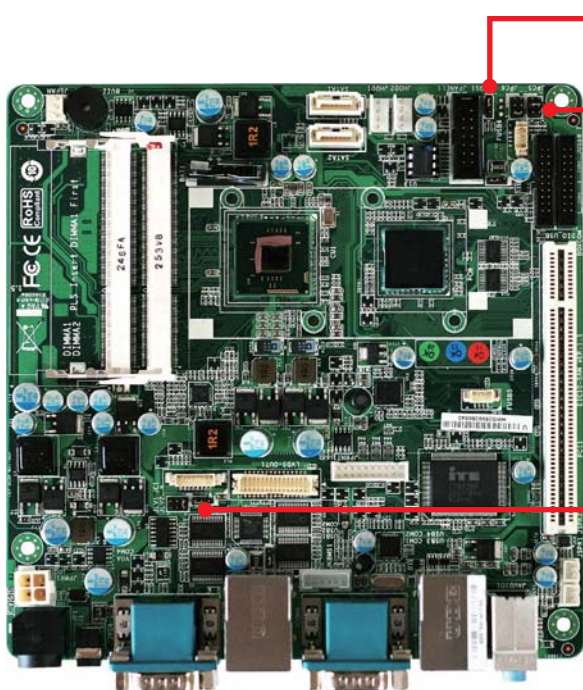
· Main Chipset & Connector



8. System Configuration

8-3. Main Jumper Setting

· Main Jumper Setting



BIOS Clear Jumper(JCOMS1)



Jumper Setting	Voltage
1 – 2 Short	Normal Operation(Default)
2 – 3 Short	CMOS Clear

Serial(JPC5/6) Voltage Jumper
-Serial5(JPC5)



Jumper Setting	Voltage
1 – 2 Short	RI
3 – 4 Short	5V (Default)
5 – 6 Short	12V

Serial6(JPC6)

Jumper Setting	Voltage
1 – 2 Short	RI
3 – 4 Short	5V
5 – 6 Short	12V(Default)

Inverter Voltage Jumper(JLV2)



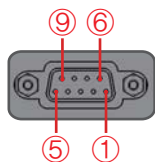
Jumper Setting	Voltage
1 – 2 Short	5V
2 – 3 Short	12V(Default)

8. System Configuration

8-4. IO Pin map

· IO Pin map

Serial Communication Port (D-SUB9 MALE/RJ45)



· COM1/2/4(DSUB9 MALE)

Pin Num	Description
1	DCD
2	RXD
3	TXD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	Ring / +5V / +12V



· COM3(RJ45)

Pin Num	Description
1	Ring / +5V / +12V
2	DSR
3	TXD
4	RXD
5	RTS
6	CTS
7	GND
8	DTR

USB & LAN Ports



· USB Port(TYPE A)

Pin Num	Description
1	VSUB(+5V)
2	D-
3	D+
4	GND



· LAN Port(RJ45)

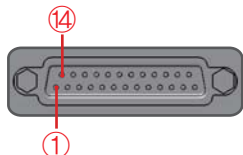
Pin Num	Description
1	MDI [0] +
2	MDI [0] -
3	MDI [1] +
4	MDI [1] -
5	MDI [2] +
6	MDI [2] -
7	MDI [3] +
8	MDI [3] -

8. System Configuration

8-4. IO Pin map

· IO Pin map

Printer Port (D-SUB25 FEMALE)



· PARALLEL PORT (D-SUB25 FEMALE)

Pin Num	SPP	ECP	EPP	In/Out
1	/STROBE	/STROBE	/WRITE	I/O
2	PD0	PD0	PD0	I/O
3	PD1	PD1	PD1	I/O
4	PD2	PD2	PD2	I/O
5	PD3	PD3	PD3	I/O
6	PD4	PD4	PD4	I/O
7	PD5	PD5	PD5	I/O
8	PD6	PD6	PD6	I/O
9	PD7	PD7	PD7	I/O
10	/ACK	/ACK	NTR	I
11	BUSY	BUSY,PERIPHACK	/WAIT	I
12	PERROR	PE,/ACKREVERSE	PE	I
13	SELECT	SELECT	SELECT	I
14	/AUTOFD	/AUTOFD,HOSTACK	/DATASTB	O
15	/FAULT	/FAULT,/PERIPHREQST	/FAULT	I
16	/INIT	/FAULT,/REVERSEQST	/RESET	O
17	/SLCTIN	/SLCTIN	/ADDRSTB	O
18-25	GND	GND	GND	-

Cash Drawer Port / Cash Drawer Power Selection Switch



· Cash Drawer Port(RJ11)

Pin Num	Description
1	GND
2	DRAWER#1
3	DRW_COMP
4	VDRW(+12V / +24V)
5	DRAWER#2
6	GND



· Power Selection Switch for Cash Drawer

Switch Selection	Voltage
OFF	12V (Default)
ON	24V

8. System Configuration

8-4. IO Pin map

· IO Pin map

DC Power Jack



· Adapter Input + 12V

Pin Num	Description
1	+12V
2	+12V
3	GND
4	GND

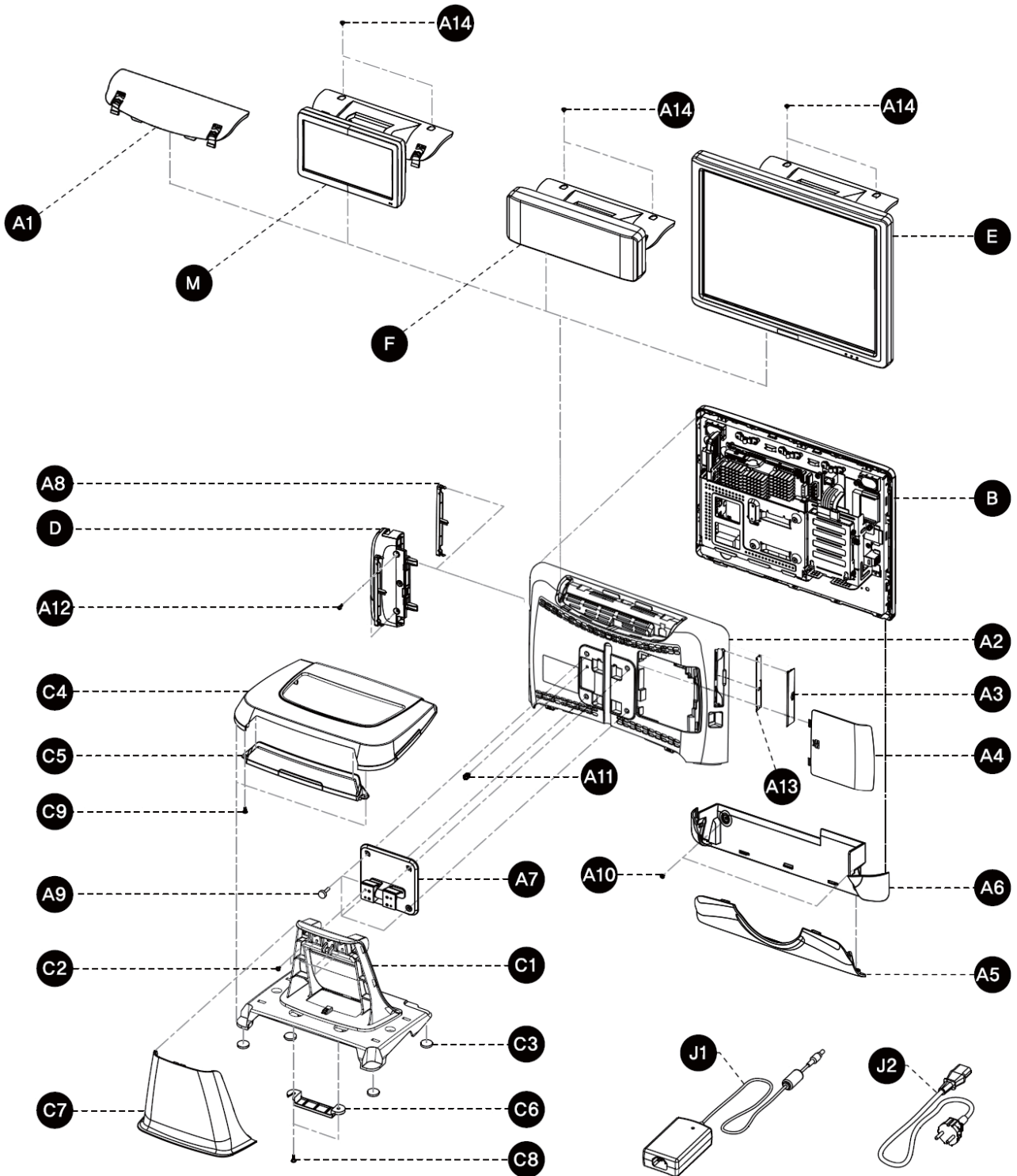


· Adapter Output + 12V

Pin Num	Description
1	NC
2	+12V
3	GND

9. System Configuration (White Color)

· MAIN





9. System Configuration (White Color)

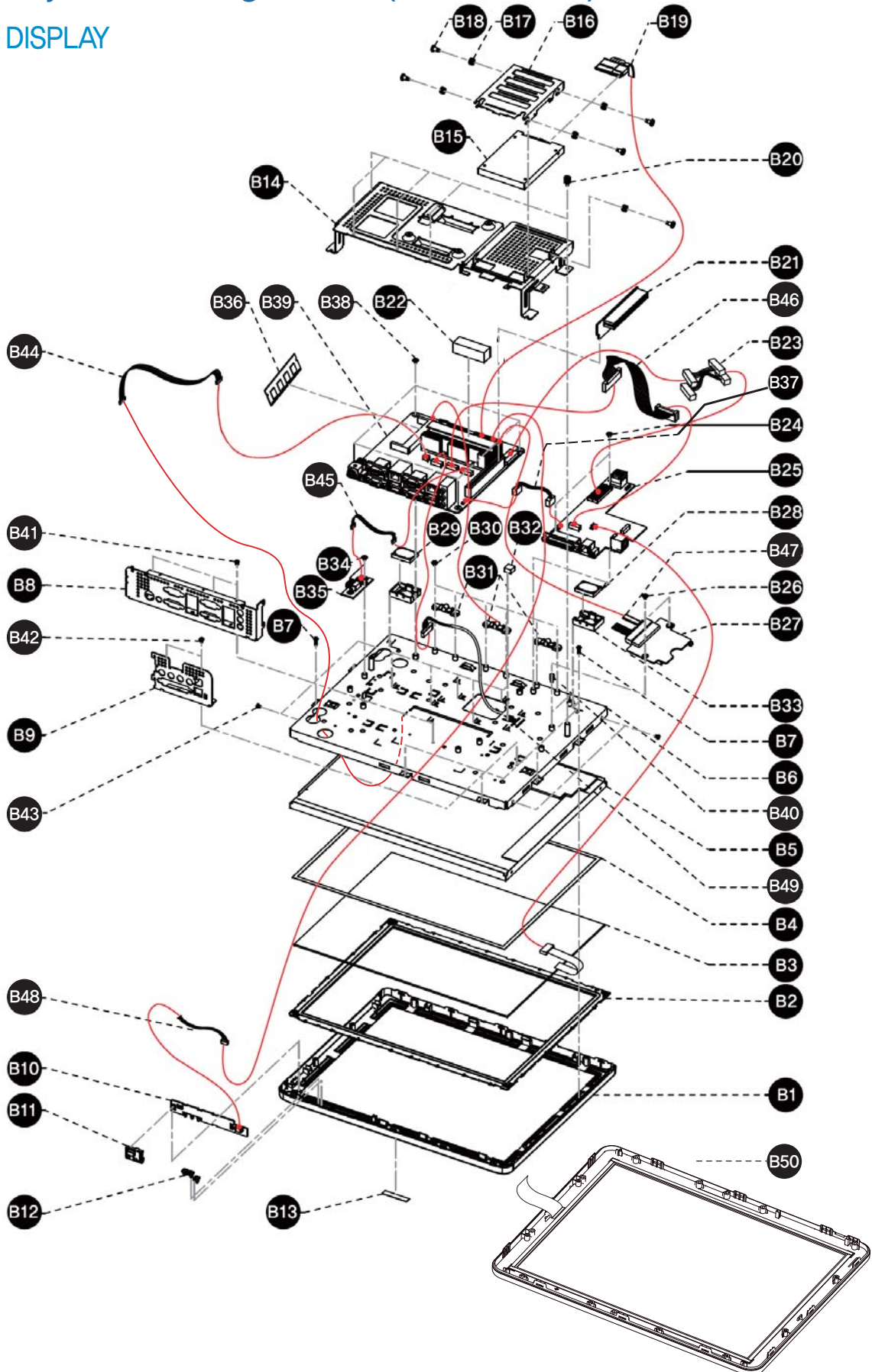
· MAIN

NO	PART CODE	PARTS NAME	Q'TY	Serviceable	REMARK
A1	JK72-20613A	PMO-DUMMY_VFD	1	Y	
A2	JK72-20609A	PMO-COVER-REAR_TOP	1	Y	
A3	JK72-20619A	PMO-COVER_CF	1	Y	
A4	JK72-20612A	PMO-COVER_HDD	1	Y	
A5	JK72-20611A	PMO-COVER_WIRE	1	Y	
A6	JK72-20610A	PMO-COVER-REAR_BOTTOM	1	Y	
A7	JK75-40011A	MEC-HINGE ASS'Y(MAIN)	1	Y	
A8	JK72-20618A	PMO-DUMMY_MSR	1	Y	
A9	S600100047A	SCREW-MACHINE COIN:M4X17	1	Y	
A10	S600100016A	SCREW-MACHINE:M3×4	2	Y	
A11	S600100038A	SCREW-MACHINE COIN:M3X6	1	Y	
A12	S600200005A	SCREW-TAPPING:M3×10	2	Y	OPTION
A13	JK68-40169A	LABEL(R)-CF	1	N	
A14	S600100057A	SCREW-MACHINE:M3×6	2	Y	OPTION
B	-	ASS'Y MAIN DISPLAY	1	N	
C1	JK70-20155B	IPR-FRAME STAND	1	Y	
C2	S600600010A	SCREW-ASSY MACH:M3X10	4	Y	
C3	JK73-11023A	PMO-FOOT RUBBER	4	Y	
C4	JK72-20406C	PMO-COVER BASE	1	Y	
C5	JK72-20407C	PMO-DUMMY STAND	1	Y	
C6	JK72-20303A	PMO-HOLDER WIRE	1	Y	
C7	JK72-20405E	PMO-COVER STAND	1	Y	
C8	S600300025A	SCREW-TAPTITE:M3X8	2	Y	
C9	S600300014A	SCREW-TAPTITE:M3X10	2	Y	
D	JK95-70568A	ASS'Y MSR, With Dallas	1	Y	OPTION
	JK95-70568B	ASS'Y MSR, None Dallas	1	Y	OPTION
E	-	ASS'Y DUAL DISPLAY	1	Y	OPTION
F	-	ASS'Y VFD DISPLAY	1	Y	OPTION
M	-	ASS'Y 7"DUAL MONITOR	1	Y	OPTION

NO	PART CODE	PARTS NAME	Q'TY	Serviceable	REMARK
J1	JK95-70581A	POWER-SMPS(12V/5.0A)	1	Y	
J2	JK39-20004A	CBF POWER CORD	1	Y	EUROPE
	JK39-20004B				USA
	JK39-20004C				UK
	JK39-20004D				AUSTRALIA
	JK39-20004E				KOREA
	JK39-20004F				SOUTHAFRICA
	JK39-20004G				ISRAEL
	JK39-20004H				INDIA
JK39-20004J	ARGENTINA				

9. System Configuration (White Color)

· DISPLAY





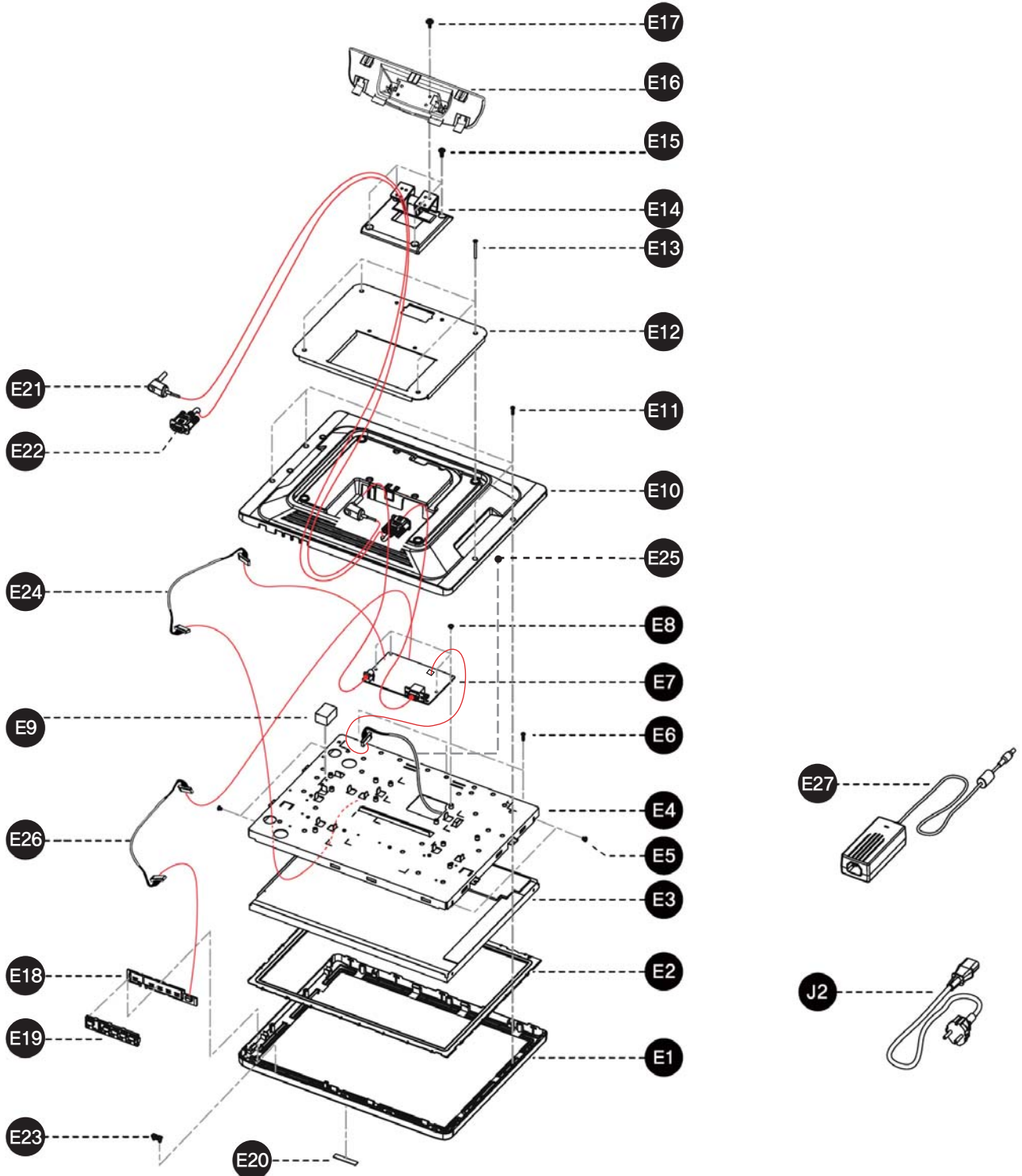
9. System Configuration (White Color)

· DISPLAY

NO	PART CODE	PARTS NAME	Q'TY	Serviceable	REMARK
B1	JK72-20608A	PMO-FRONT DISPLAY	1	Y	
B2	JK73-20003G	RMO-WATER PROOF(D)	1	Y	ELO,D/GRAY
	JK73-20003H	RMO-WATER PROOF(D)	1	Y	ELO,GREEN
	JK73-20003M	RMO-WATER PROOF(D)	1	Y	ELO,ORANGE
B3	JK95-70378E	TOUCH PANEL 5W:ELO	1	Y	ELO
	JK95-70559B	TOUCH PANEL 5W:AMT	1	Y	AMT
B4	JK73-11019A	PMO-RUBBER TAPE(15S)	2	Y	
	JK73-11019B	PMO-RUBBER TAPE(15L)	2	Y	
B5	JK95-70567A	LCD-LED:XTN,15"	1	Y	LED PANEL
B6	JK95-70350B	MEA-BRKT DISPLAY(D)	1	Y	
B7	S600300020A	SCREW-TAPTITE:M3×10	10	Y	
B8	JK70-20246A	IPR-BRKT INTERFACE_L	1	N	
	JK68-40235A	LABEL(R)-INTERFACE_L	1	N	
B9	JK70-20162A	IPR-BRKT INTERFACE_R	1	N	
	JK68-40173A	LABEL(R)-INTERFACE_R	1	N	
B10	JK92-10035C	UNIT-OSD BOARD	1	Y	NOMAL
	JK92-10076C	UNIT-OSD BOARD(TRUE FLAT)	1	Y	TRUE FLAT
B11	JK72-20375E	PMO-BUTTON(D)	1	Y	
B12	JK72-20410A	PMO-COVER LED	1	Y	
B13	JK72-20551D	PMO-BRAND_FRONT	1	Y	
B14	JK70-20160A	IPR-BRKT COVER	1	Y	
B15	JK95-70209A	UNIT-HDD	1	Y	
B16	JK70-20090B	IPR-BRKT HDD	1	Y	
B17	S600100036A	SCREW-MACHINE HAND:M3X4	5	Y	
B18	JK73-11017A	PMO-RUBBER INSULATOR	5	Y	
B19	S39090001A	HARNESS-SATA	1	Y	
B20	S600100037A	SCREW-MACHINE COIN	5	Y	
B21	JK92-01652A	UNIT-RAISER BOARD(DVR)	1	Y	OPTION
B22	JK73-11056A	PMO-THERMAL PAD CPU	1	Y	
B23	S390800004A	HARNESS-JOINT	1	Y	
B24	S600100016A	SCREW-MACHINE:M3×4	3	Y	
B25	JK92-10035A	UNIT-TOUCH&DRAWER	1	Y	WITH DRAWER
	JK92-10035B	UNIT-TOUCH	1	Y	NONE DRAWER
	JK92-10076D	UNIT-AMT TOUCH&DRW	1	Y	WITH DRAWER
	JK92-10076E	UNIT-AMT TOUCH	1	Y	NONE DRAWER
B26	S600100016A	SCREW-MACHINE:M3X4	2	Y	OPTION
B27	JK92-10036A	UNIT-CFAST BOARD	1	Y	OPTION
B28	S3004000002	UNIT-SPEAKER:50mm	1	Y	
B29	S3004000003	UNIT-SPEAKER:250mm	1	Y	
B30	S600100016A	SCREW-MACHINE:M3X4	6	Y	
B31	JK70-20156A	IPR-LOCKER DUAL	3	Y	
B32	JK73-11026A	PMO-PAD BOARD	6	Y	
B33	JK72-20408A	PMO-HOLDER SPEAKER	2	Y	
B34	S600100016A	SCREW-MACHINE:M3X4	2	Y	
B35	JK92-10035D	UNIT-USB JOINT BOARD	1	Y	
B36	JK95-70214A	UNIT-DDR3 MEMORY:1G	1	Y	JK51-00005A
	JK95-70215A	UNIT-DDR3 MEMORY:2G	1	Y	JK51-00006A
B37	JK39-40824A	HARNESS-SPEAKER	2	Y	
B38	S600100016A	SCREW-MACHINE:M3×4	4	Y	
B39	JK95-70441A	UNIT-MOTHER BOARD	1	Y	
B40	JK70-70017A	ICT-SCREW MACHINE HEXA	2	Y	OPTION
B41	S600100031A	SCREW-MACHINE:M3X4	3	Y	
B42	S600100031A	SCREW-MACHINE:M3X4	2	Y	
B43	S600100044A	SCREW-MACHINE:M3X5	4	Y	
B44	JK39-80017A	HARNESS-INVERTER	1	Y	
B45	JK39-40874A	HARNESS-MSR USB	1	Y	
B46	JK39-40880A	HARNESS-LPT	1	Y	
B47	S39090001A	HARNESS-SATA	1	Y	OPTION
B48	JK39-40877A	HARNESS-OSD	1	Y	
B49	JK39-80004A	HARNESS-LVDS	1	Y	
B50	JK95-70559B	ASSY FRONT DISPLAY(TRUE):SPT-7500,4800,WHITE	1	Y	Only TRUE FRONT

9. System Configuration (White Color)

· DUAL





9. System Configuration (White Color)

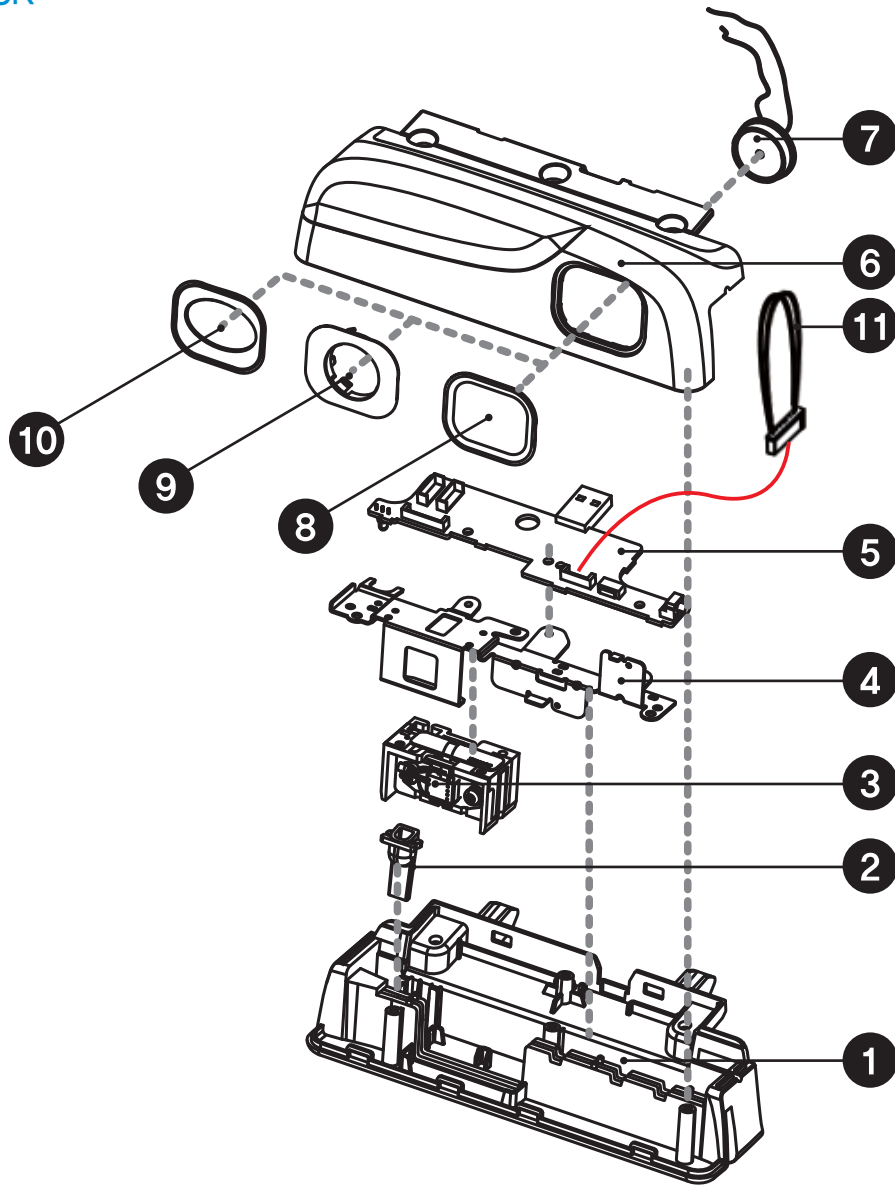
· DUAL

NO	PART CODE	PARTS NAME	Q'TY	Serviceable	REMARK
E1	JK72-20373F	PMO-FRONT DISPLAY(D)	1	Y	
E2	JK72-20003D	RMO-WATER PROOF(D)	1	Y	D/GRAY
	JK72-20003E	RMO-WATER PROOF(D)	1	Y	GREEN
	JK72-20003L	RMO-WATER PROOF(D)	1	Y	ORANGE
E3	JK95-70567A	LCD-LED:XTN,15"	1	Y	LED PANEL
E4	JK70-20148A	IPR-BRKT DISPLAY(D)	1	Y	
E5	S600100044A	SCREW-MACHINE:M3X5	4	Y	
E6	S600300020A	SCREW-TAPTITE:M3X10	3	Y	
E7	JK95-70221C	UNIT-AD B'D	1	Y	
E8	S600100016A	SCREW-MACHINE:M3×4	4	Y	
E9	JK73-11034A	PMO-PAD(D)	1	Y	
E10	JK72-20374B	PMO-REAR DISPLAY(D)	1	Y	
E11	S600100016A	SCREW-MACHINE:M3×4	4	Y	
E12	JK70-20149A	IPR-PLATE REAR(D)	1	Y	
E13	S600100045A	SCREW-MACHINE:M3X27	1	Y	
E14	JK75-40010B	MEC-HINGE ASS'Y(H)	1	Y	
E15	S600100046A	SCREW-MACHINE:M4X6	1	Y	
E16	JK72-20615A	PMO-HOLDER VFD	1	Y	
E17	S600600009A	SCREW-ASS'Y MACH:M3X8	1	Y	
E18	JK49-00004B	UNIT-OSD B'D	1	Y	
E19	JK72-20375D	PMO-BUTTON(D)	1	Y	
E20	JK68-40168K	LABEL(R)-LOGO SAM4S	1	Y	
E21	JK39-40791A	HARNESS-LCD POWER	1	Y	
E22	JK39-40792B	CABLE-VGA	1	Y	
E23	JK72-20410A	PMO-COVER LED	1	Y	
E24	JK39-80018A	HARNESS-INVERTER	1	Y	
E25	JK39-40798A	HARNESS-LVDS	1	Y	
E26	JK39-40799A	HARNESS-OSD	1	Y	

NO	PART CODE	PARTS NAME	Q'TY	Serviceable	REMARK
E27	JK95-70364B	POWER-SMPS	1	Y	
J2	JK39-20004A	CBF POWER CORD	1	Y	EUROPE
	JK39-20004B				USA
	JK39-20004C				UK
	JK39-20004D				AUSTRALIA
	JK39-20004E				KOREA
	JK39-20004F				SOUTHAFRICA
	JK39-20004G				ISRAEL
	JK39-20004H				INDIA
	JK39-20004J				ARGENTINA

9. System Configuration (White Color)

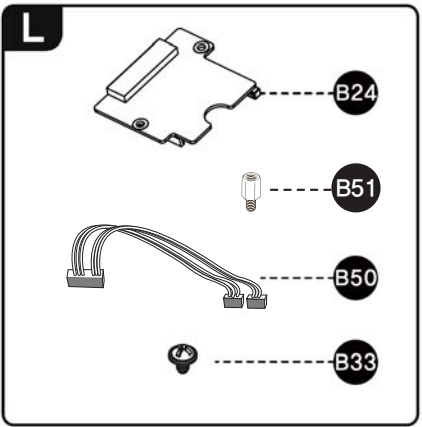
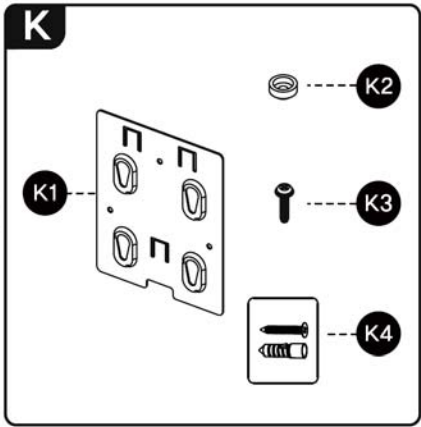
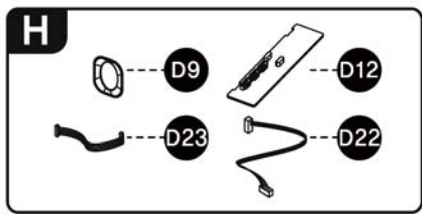
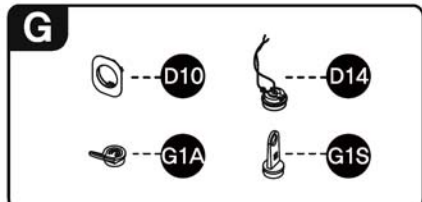
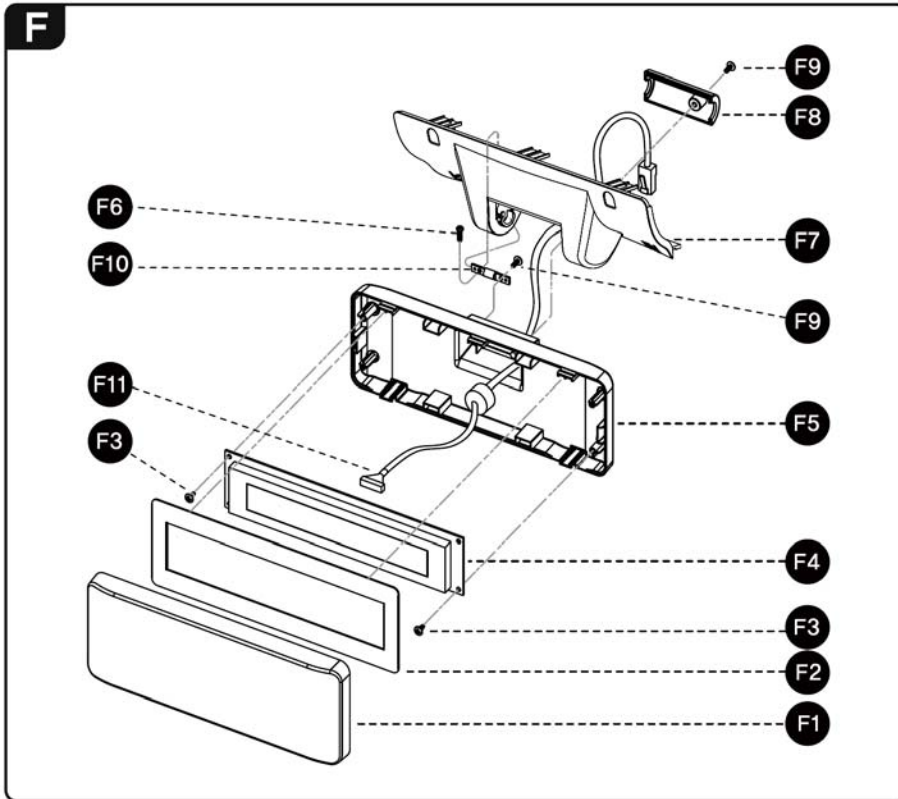
· MSR



NO	PART CODE	PARTS NAME	Q'TY	Serviceable	REMARK
1	JK72-20616A	PMO-MSR UPPER	1	Y	
2	JK72-20556B	PMO-MSR LED	1	Y	
3	JK48-10001B	UNIT-MSR MOUDLE	1	Y	
4	JK70-20220A	IPR-BRKT MSR	1	Y	
5	JK92-10076B	UNIT-MSR BOARD	1	Y	
6	JK72-20617A	PMO-MSR LOWER	1	Y	
7	JK95-70134C	UNIT-DALLAS MODULE	1	Y	
8	JK72-20404C	PMO-CAP MSR	1	Y	
9	JK72-20403C	PMO-CAP DALLAS	1	Y	
10	JK72-20402C	PMO-CAP FPR	1	Y	
11	JK39-40872A	HARNESS-USB JUMP	1	Y	

9. System Configuration (White Color)

· Option-A





9. System Configuration (White Color)

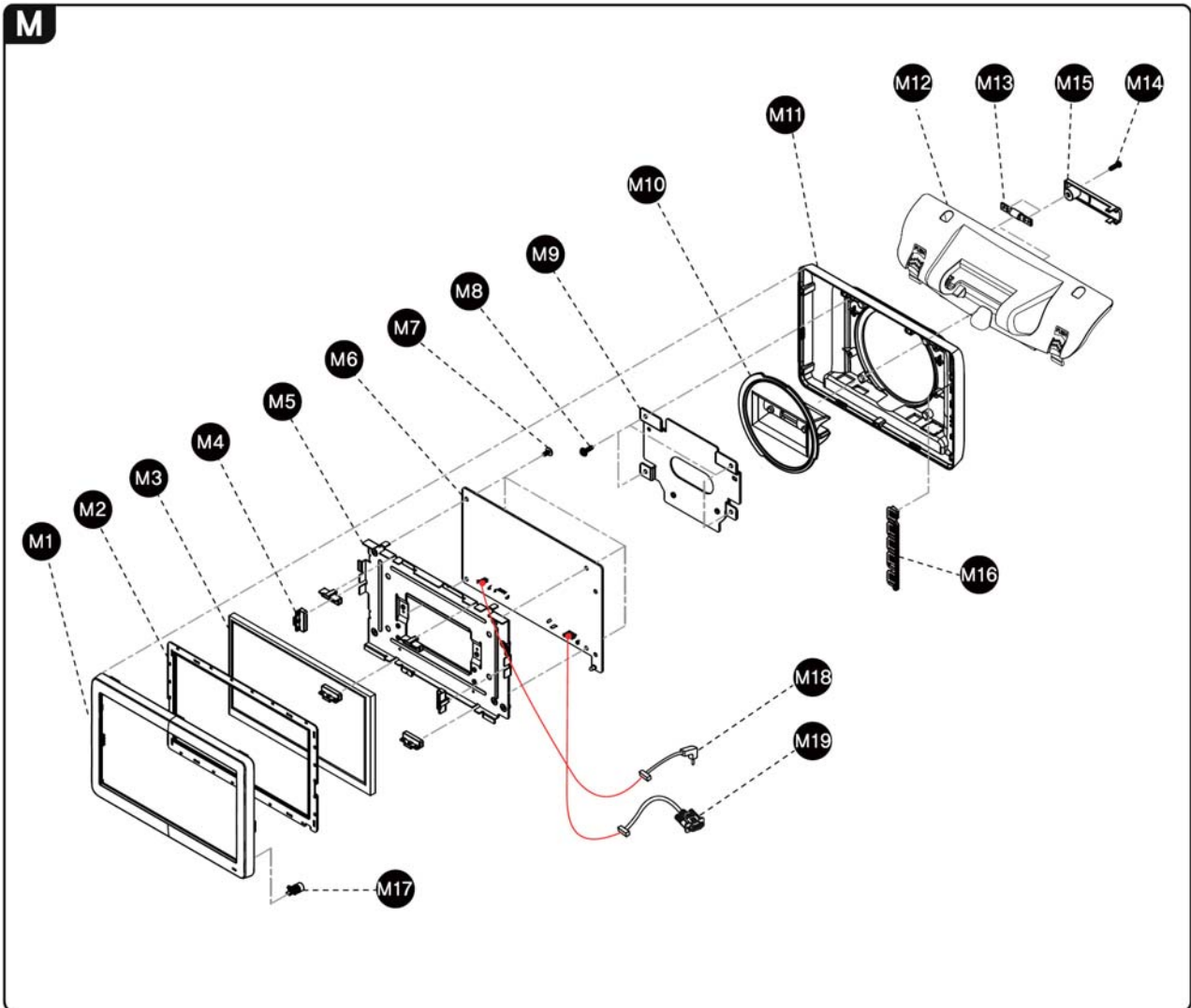
· Option-A

NO	PART CODE	PARTS NAME	Q'TY	Serviceable	REMARK
F	QCD-S48V202W	OPTION-CDP(CHARACTER)	1	N	OPTION
	QCD-S48G256W	OPTION-CDP(GRAPHIC)	1		
F1	JK72-20299A	PMO-WINDOW VFD	1	Y	
F2	JK68-40120A	LABEL(R)-VFD SHEET	1	Y	
F3	S600300020A	SCREW-TAPTITE	2	Y	
F4	JK46-00006A	UNIT-VFD MODULE(CHARACTER)	1	Y	
	JK46-00007A	UNIT-VFD MODULE(GRAPHIC)			
F5	JK72-20298B	PMO-REAR VFD(M)	1	Y	
F6	S600300020A	SCREW-TAPTITE	1	Y	
F7	JK72-20615A	PMO-HOLDER VFD	1	Y	
F8	JK72-20300B	PMO-REAR_VFD_DUMMY			
F9	S600600020A	SCREW-TAPTITE	1	Y	
F10	JK75-40004A	MEC-HINGE ASS'Y	1	Y	
F11	JK39-40727A	HARNESS-POLE	1	Y	

NO	PART CODE	PARTS NAME	Q'TY	Serviceable	REMARK
G	QDK-T305	OPTION-DALLAS	1	N	OPTION
D10	JK72-20403A	PMO-CAP DALLAS	1	Y	
D14	JK95-70134C	ELA UNIT-IBUTTON PROBE	1	Y	
G1A	JK95-70130B	ELA UNIT-HOLDER DALLAS	1	Y	ANGLE TYPE
G1S	JK95-70196A	ELA UNIT-HOLDER DALLAS	1	Y	STRAIGHT TYPE
H	QFP-T480	OPTION-FPR	1	N	OPTION
D9	JK72-20402A	PMO-CAP FPR	1	Y	
D12	JK92-10076A	UNIT-MSR FPR BORAD	1	Y	
D22	JK39-40820A	HARNESS-FINGER PRINT	1	Y	
D23	JK39-40822A	HARNESS-MSR USB EXT	1	Y	
K	EWM-Q400	OPTION-WALL MOUNT	1	N	OPTION
K1	JK70-20046A	IPR-BRKT WALL	1	Y	
K2	JK70-70050A	ICT-BUSHING HOLDER	4	Y	
K3	S600100050A	SCREW-MACHINE	4	Y	
K4	JK75-20016A	MEC-WALL ANCHOR ASS'Y	1	Y	
L	QCF-T470(STD)	OPTION-CFAST BOARD	1	N	OPTION
B24	JK92-10036A	UNIT-CFAST BOARD	1	Y	
B33	S600100016A	SCREW-MACHINE:M3X4	2	Y	
B50	S39090001A	HARNESS-SATA	1	Y	
B51	JK70-70017A	ICT-SCREW MACHINE HEXA:L6.5	2	Y	

9. System Configuration (White Color)

· Option-B-7inch





9. System Configuration (White Color)

· Option-B-7inch

NO	PART CODE	PARTS NAME	Q'TY	Serviceable	REMARK
M	QCD-S48L7NW	7" DUAL MONITOR	1	Y	
M1	JK72-20592C	PMO-LCD FRONT	1	Y	
M2	JK73-20016A	RMO-WATER PROOF(P)	1	Y	BLACK
	JK73-20016B	RMO-WATER PROOF(P)	1	Y	ORANGE
M3	JK07-00023A	HW-DISPLAY-LCD	1	Y	
M4	JK73-11043A	RMO-RUBBER LCD	6	Y	
M5	JK70-20238A	IPR-BRKT LCD	1	Y	
M6	JK49-00003C	HW-7INCH AD B'D	1	Y	
M7	S600100016A	SCREW-MACHINE	4	Y	
M8	S600200006A	SCREW-TAPPING	4	Y	
M9	JK70-20240A	IPR-PLATE REAR(P)	1	Y	
M10	JK72-20596B	PMO-HOLDER_HINGE(D)	1	Y	
M11	JK72-20593E	PMO-LCD REAR	1	Y	
M12	JK72-20614A	PMO-HOLDER_LCD	1	Y	
M13	JK75-40004A	MEC-HINGE ASS'Y	2	Y	
M14	S600300020A	SCREW-TAPTITE	4	Y	
M15	JK72-20604B	PMO-HOLDER_DUMMY	1	Y	
M16	JK72-20594B	PMO-BUTTON(P)	1	Y	
M17	JK72-20600A	PMO-COVER LED(P)	1	Y	
M18	JK39-60035A	HW-HARNESS-POWER	1	Y	
M19	JK39-60086A	HW-HARNESS-VGA CABLE	1	Y	