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Wonder Series

W-615



User Manual
Version 1.0

About this Manual

Thank you for purchasing Wonder Series Touch Terminal. This terminal offers highly enhanced features, with easy connection to various optional devices for optimal performance. This user manual describes how to setup and connect your terminal.

Copyright

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Safety Information



Before you Proceed:

- Read the safety notices and the User Manual carefully before using the product.
- Keep the box and packaging in case the product needs to be shipped in the future.
- Follow the product and warning label instructions.
- Any changes or modifications that do not follow the instructions in this manual will void this product's warranty.



Power Supply Safety Notes:

- To avoid electric shocks, disconnect the power cord from the electrical outlet before relocating the system.
- Make sure the voltage of the power outlet conforms within voltage range of the terminal. Failure to comply may cause the electric shock or damage to the terminal. If you are not sure of the electricity voltage that you are using, consult your local electricity company.
- To avoid fire or electric shocks, do not overload electric power outlets.
- Protect the power cord from being walked on or pinched particularly at plug, convenience receptacles, and the point where they exit from the apparatus.

Operating Instructions

- Keep this manual for future reference.
- Keep this equipment from moisture and dust.
- Place the equipment on a stable surface before setting it up.

- If there is any of the following situation arise, notify a qualified service technician immediately:
  - ◊ The power cord or plug is damaged.
  - ◊ Liquid has been spilt on to the equipment.
  - ◊ The equipment has been dropped and damaged.
  - ◊ The equipment does not function normally.
- Do not block any ventilation openings to prevent the equipment from overheat.
- Do not leave the equipment in a non air-conditioned environment where the storage temperature may go above 70°C (158°F), as this can cause damage to the equipment.

Maintenance

- Gently wipe screen with a clean soft hair lens brush, or a lint-free cloth.
- Do not apply pressure to the screen while cleaning.
- Do not spray any liquid directly onto the screen or the casing of the terminal.
- Chemical cleaners have been reported to cause damage on the screen of the terminal.

Warning and Attention

- The technical descriptions and specifications of the equipment are subject to change without notice.
- For safety reasons, wear gloves when assembling the product.
- Risk of explosion if battery is replaced by an incorrect type.
- Dispose of used batteries according to the instructions.

Patent

Patent pending.

CE Statement

- A Class III equipment with an enclosure made of HB material and using a non-special connector for the a.c./d.c. input has to have a marking stating the following: “Use only power supplies listed in the user instructions” or “For applicable power supplies see user instructions”. This statement shall also be in the user-instructions.
- If product with laser module, the class of laser should be mentioned. The warning as attachment.

Federal Communications (FCC Statement)

This device complies with FCC Rules Part 15. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received including interference that may cause undesirable operation.

This equipment has been tested and found to comply within the limit of a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by switching the equipment on and off, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the interference receiving antenna.
- Increase the distance of separation between the equipment and interference receiver.
- Connect the equipment to a power outlet on a circuit different from that to which the interference receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning

The use of shielded cables for connection of the monitor to the graphics card is required to assure compliance with FCC regulations. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

CE

FC Tested To Comply With FCC Standards
FOR HOME OR OFFICE USE

RoHS

CB/LVD Statement

- A Class III equipment with an enclosure made of HB material and using a non-special connector for the a.c./d.c. input has to have a marking stating the following: “Use only power supplies listed in the user instructions” or “For applicable power supplies see user instructions”. This statement shall also be in the user-instructions.
- If product with laser module, the class of laser should be mentioned. The warning as attachment.

CCC Statement

此为A级产品，在生活环境中，该产品可能会造成无线电干扰。在这种情况下，可能需要用户对干扰采取切实可行的措施。

BSMI Statement

- 接螢幕與顯示卡所使用的防磁纜線必須確實遵守FCC規範。未獲廠商明確同意而擅自變更或修改本裝置，可能導致使用者的使用權限失效，而無法繼續操作本設備。
- 警告使用者：這是甲類的資訊產品，在居住的環境中使用時，可能成射頻干擾，在這種情況使用者會被要求採取某些適當的對策。

WEEE Notice

The WEEE logo (shown at the left) on the product or on its box indicates that this product must not be disposed of or dumped with your other household waste. You are liable to dispose of all your electronic or electrical waste equipment by relocating over to the specified collection point for recycling of such hazardous waste. Isolated collection and proper recovery of your electronic and electrical waste equipment at the time of disposal will allow us to help conserving natural resources. Moreover, proper recycling of the electronic and electrical waste equipment will ensure safety of human health and environment. For more information about electronic and electrical waste equipment disposal, recovery, and collection points, please contact your local city center, household waste disposal service, shop from where you purchased the equipment, or manufacturer of the equipment.

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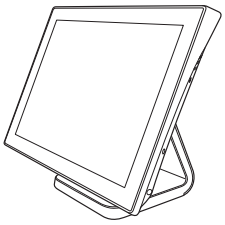
Chapter 1

Introduction

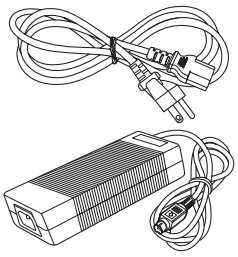
Congratulations on your purchase of this Touch Terminal. Your easy-to-use POS terminal is designed to help you enhance your business flexibility by offering superior customer experience.

Package Contents

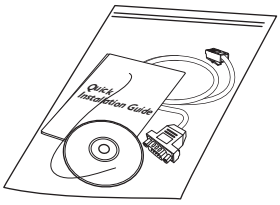
Before setting up your Touch Terminal, check that the package contains the following items. If any of the items is missing or damaged, contact your vendor immediately.



Touch Terminal

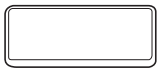


Power Cord & Adapter

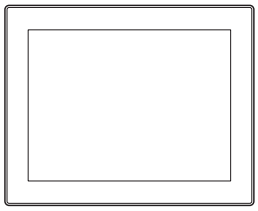


Accessory Kit

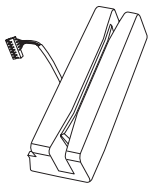
Optional Accessories



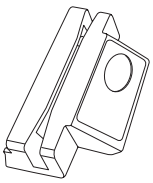
Customer Display (VFD)



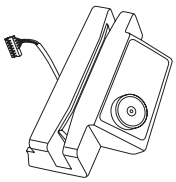
Secondary LCD Display (10"/15")



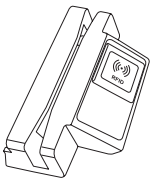
MSR Reader



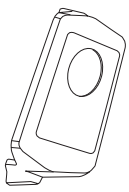
MSR + Fingerprint Identification Reader



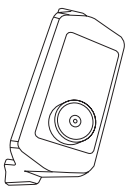
MSR + iButton Identification Reader



MSR + RFID Identification Reader



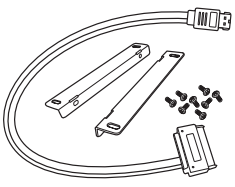
Fingerprint Identification Reader



iButton Identification Reader



RFID Identification Reader

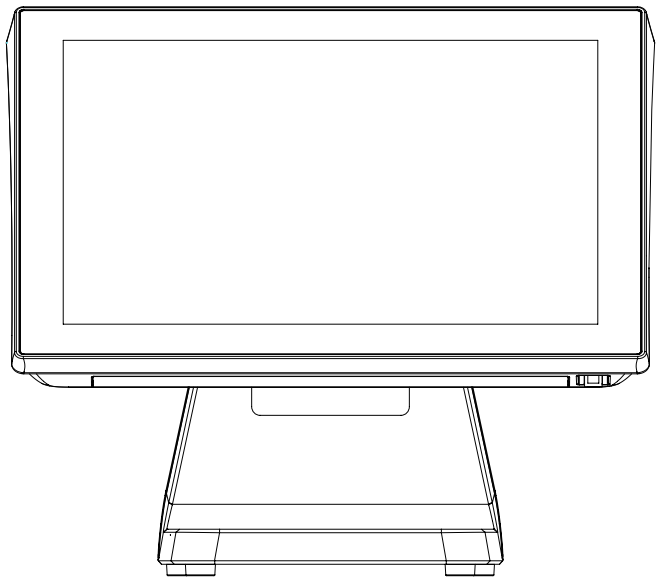


Secondary Hard Disk Drive Installation Kit

Overview of Wonder Series

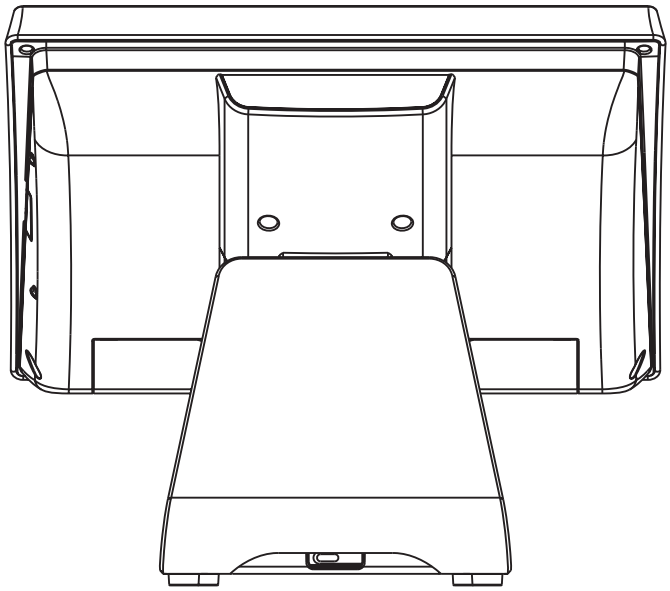
The figures in this section illustrate the components (including input and output ports) located at the front and rear of your Touch Terminal.

Front View



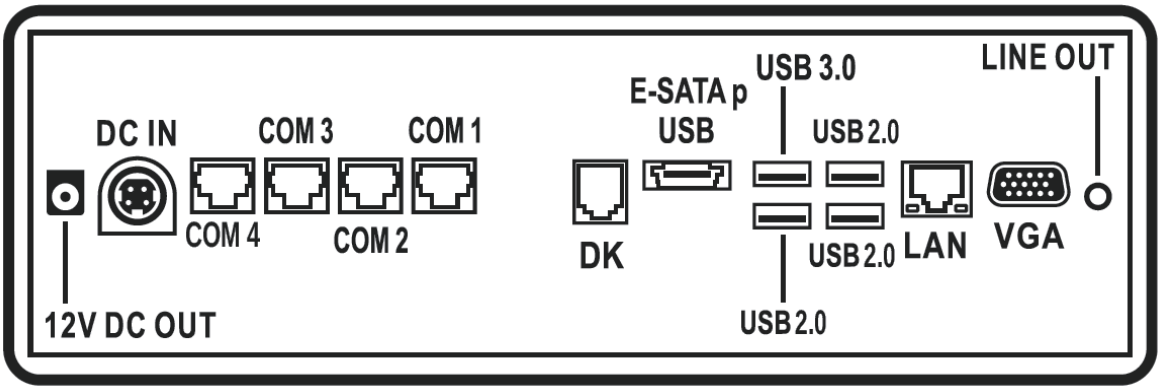
Standard Type

Rear View



Standard Type

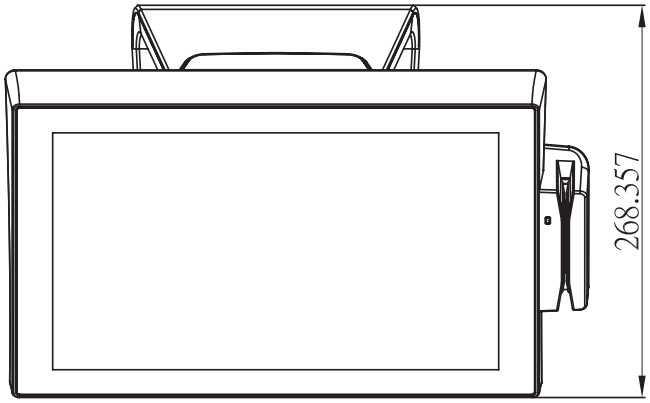
I/O Ports

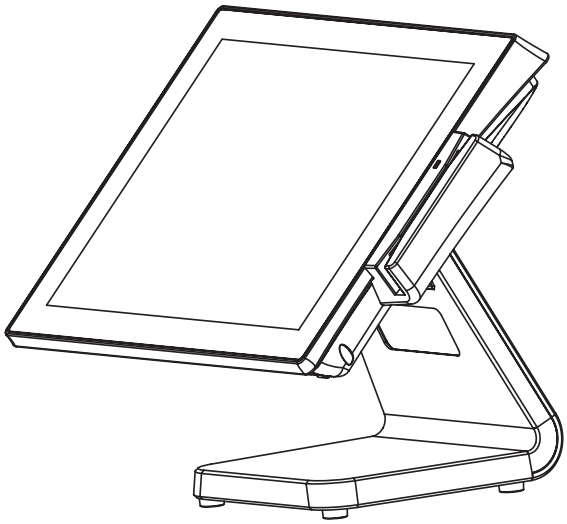


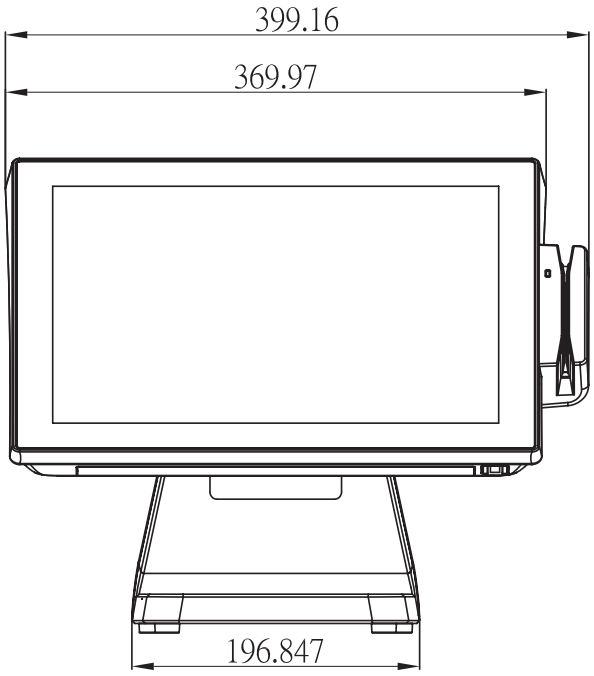
Item	Description
DC OUT jack	12V DC power output
DC IN jack	24V DC power input
COM ports	COM1/2/3/4 connectors
DK port	Cash Drawer output
E-SATAp port	E-SATA + USB connector
USB2.0 ports	USB2.0 connectors
USB3.0 ports	USB3.0 connectors
LAN port	Gigabit LAN connector
VGA port	VGA output connector
Line Out port	Audio line output connector

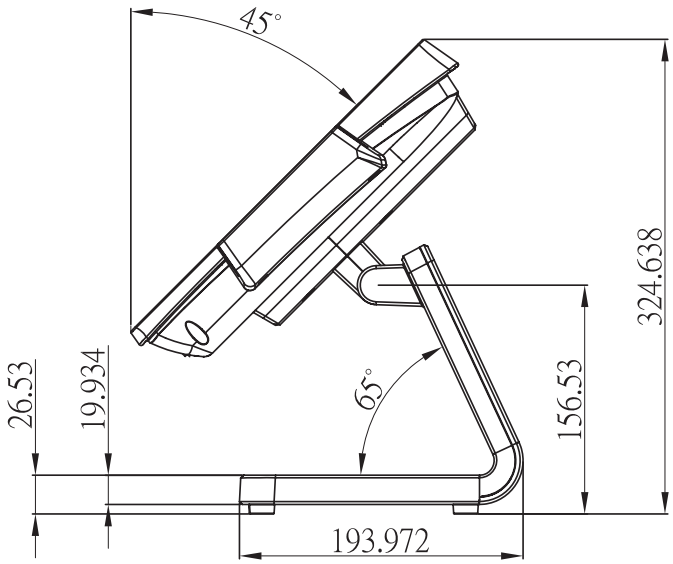
Physical Dimensions

Standard Display

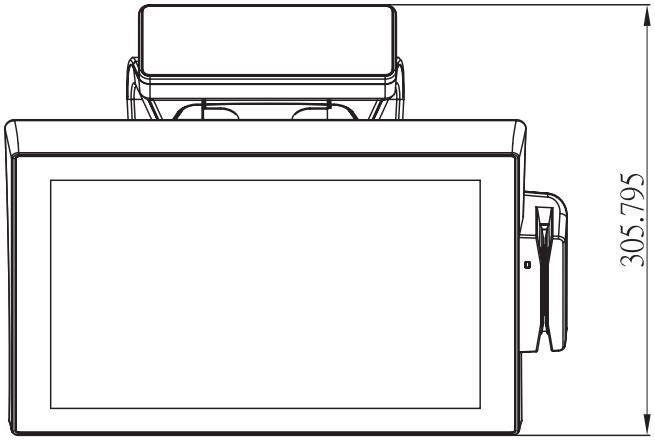


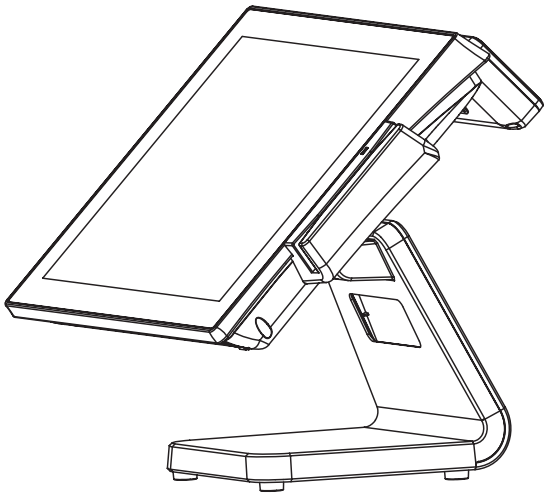


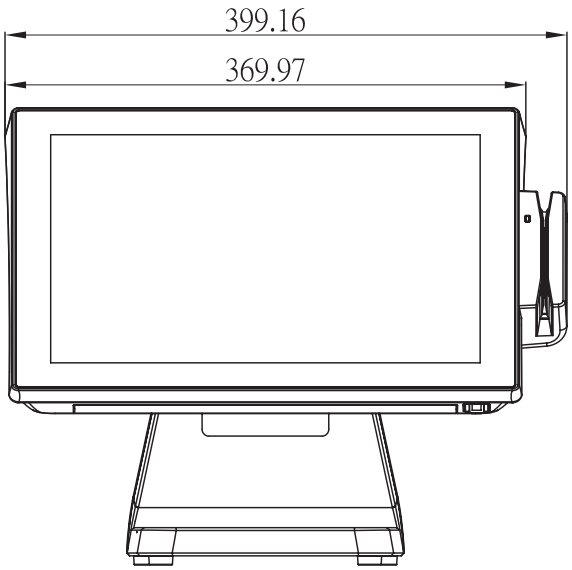


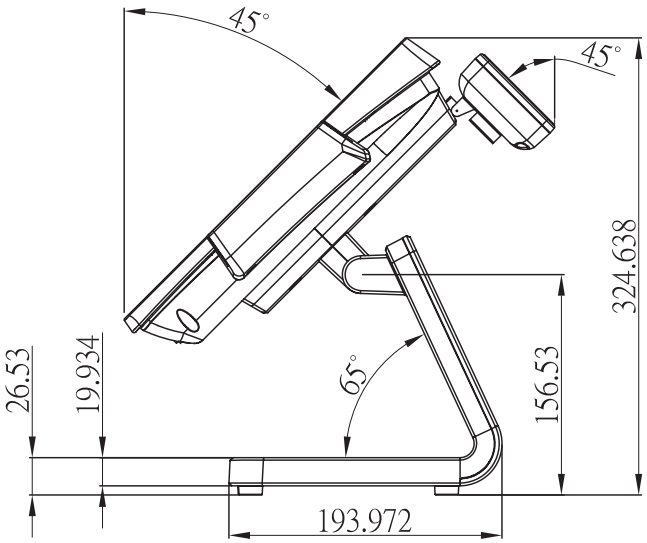


VFD Customer Display

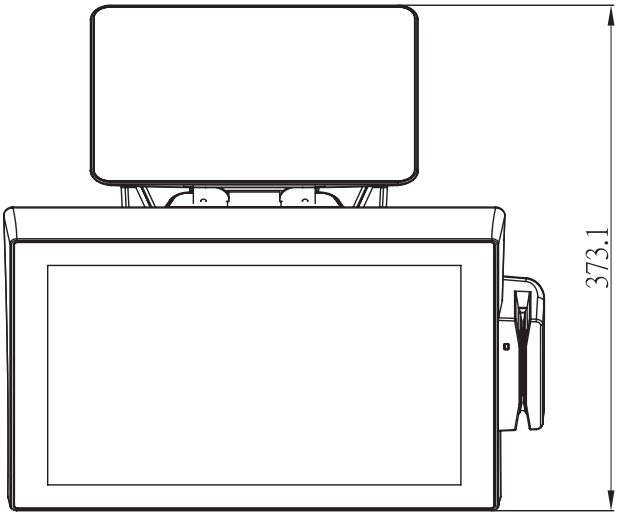


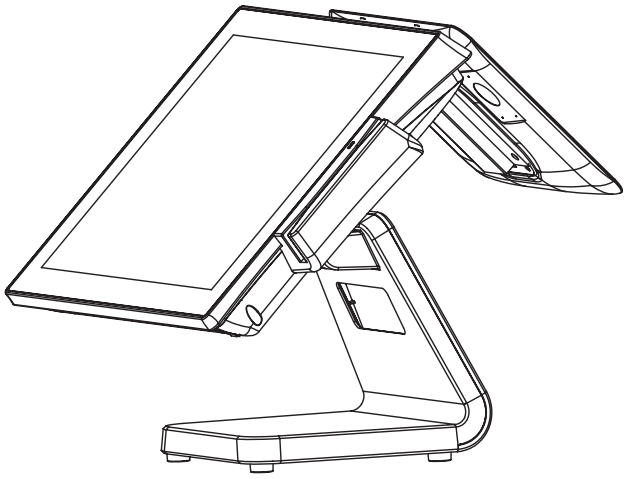


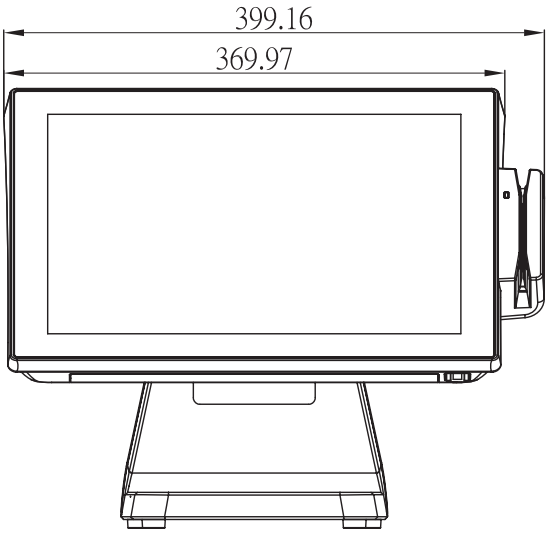


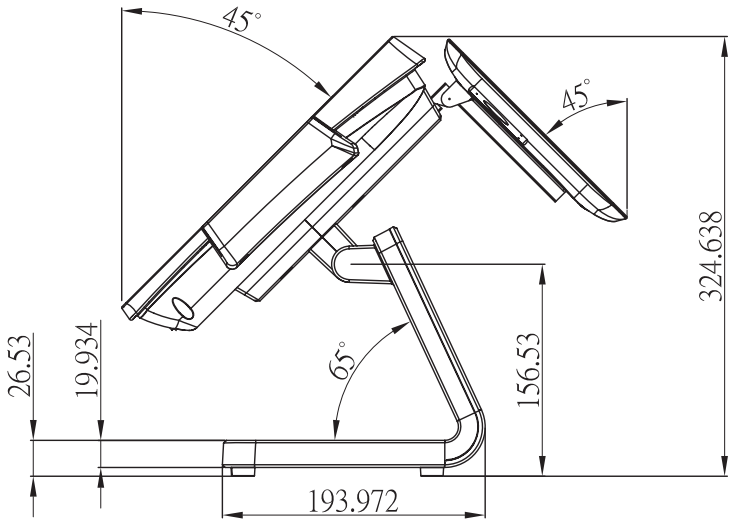


10” Secondary LCD Display

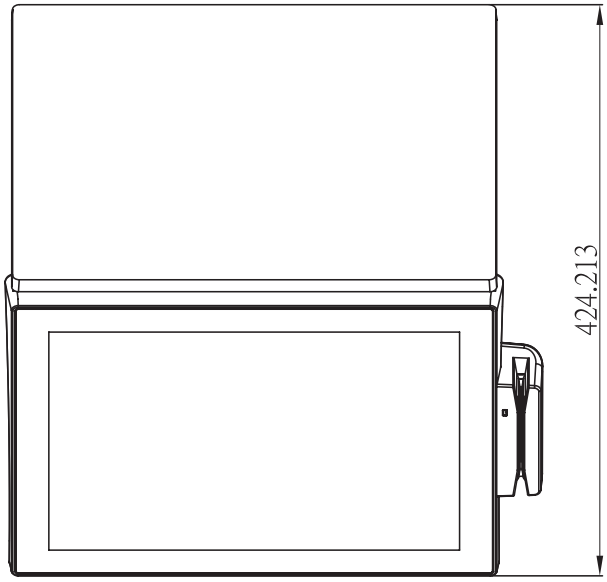


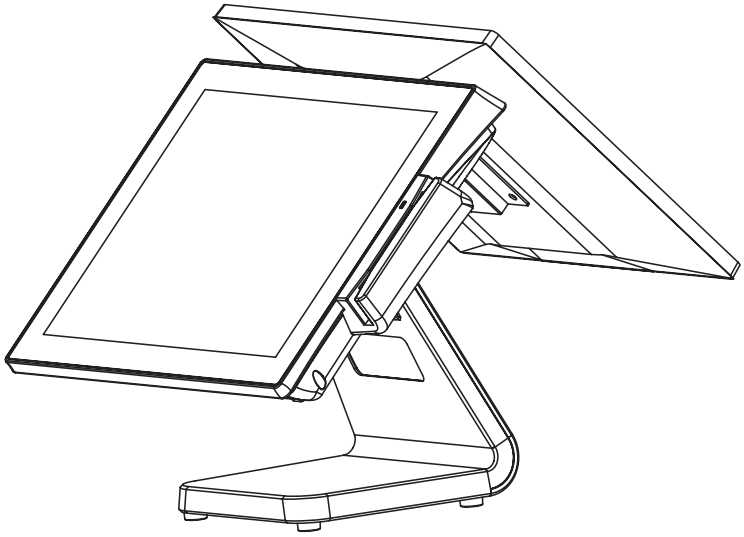


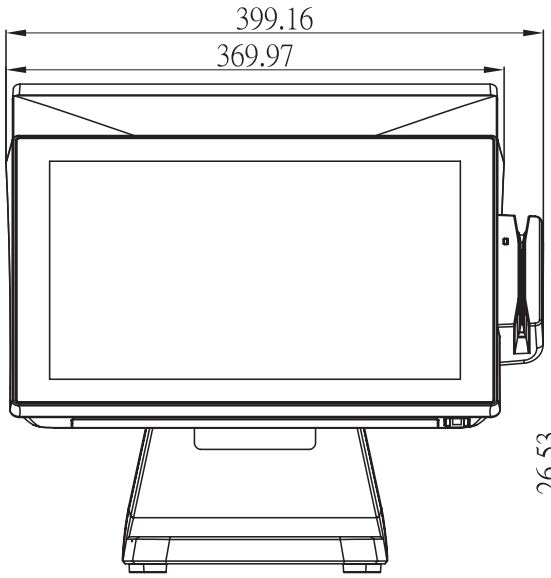


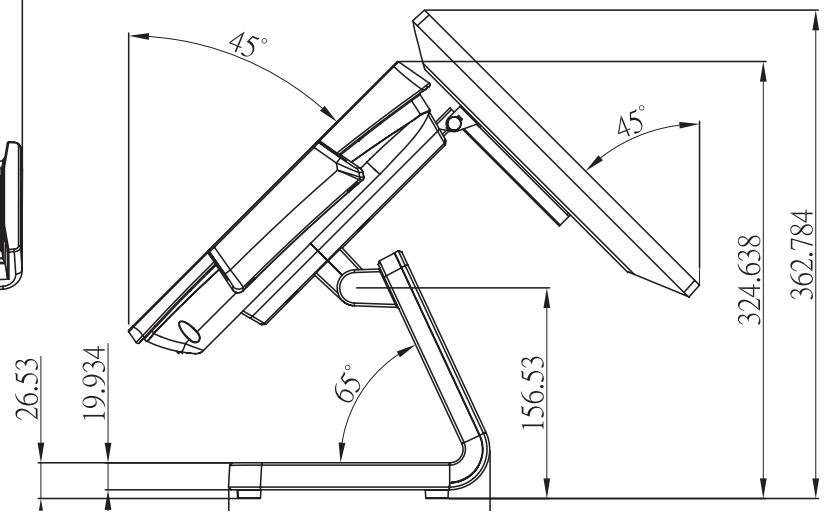


15” Secondary LCD Display









Specifications

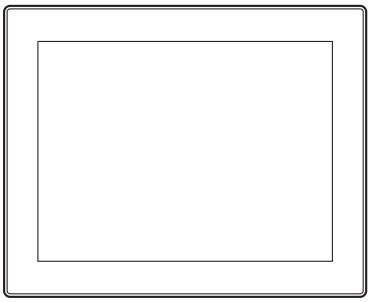
Touch Terminal Specifications

Model number	Wonder 615
LCD & Touch Panel	
LCD Panel	15” LED-backlit display
Resolution	1024 x 768 (default)
Brightness	250 cd/m^2
Touch Screen	Flat Projected Capacitive Touch (USB)
System Configuration	
Intel® CPU	Celeron® J1900 2.0GHz/2.4GHz (burst) (Quad-core)
Chipset	SoC
Main Memory	204Pin DDR3L RAM *1 slots, up to 8GB
Storage	1 x 2.5” SATA HDD or 1 x 2.5" SSD
I/O Ports	
USB2.0	3
USB3.0	1
eSATAp/USB2.0 combo	1
RJ45 COM	4
Gigabit Ethernet	1
Line out	1
Speaker	1
VGA	1
RJ12 cash drawer	1 (Dual cash drawer support, 12V/24V selectable, OPOS driver support)
DC12V out	1
DC24V in	1
Powering System	
Power Supply	External DC power adapter. AC100 to 240V full range. (DC19V / 65W)
Power Button	1 x System on/off trigger
Physical Dimensions	
Dimension (L x W x D)	323*370*200mm

Model number	Wonder 615
Safety & Environment	
Product Certification	CE / FCC / CB / LVD certificated
Operation Temperature	0°C to 40°C
Storage Temperature	-25°C to 70°C
O/S Compatibility	Windows 7/ POSReady 7 / Windows 10/ Linux Kernel 3.0 or above

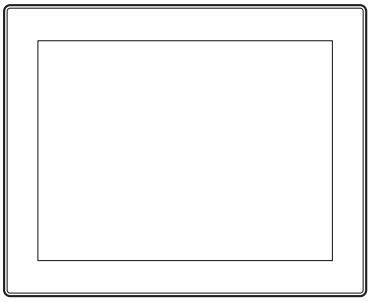
Peripherals Specifications

2nd LCD Display



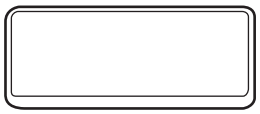
Model no.	KEKLC-3314A
LCD Panel	10” LED backlight
Touch	N/A
Resolution	1024x768
Aspect Ratio	4:3
Viewing Angle	85° (H) / 85° (V)
Response Time	25ms (typical)
Contrast Ratio	500:1 (typical)
Brightness	350 nits
Interface	USB
Power Supply	2-port USB Power Cable

15" LCD Display



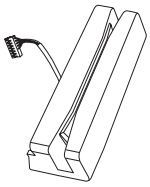
Model no.	KEKLC-3316A
LCD Panel	15"
Touch	N/A
Resolution	1024x768
Aspect Ratio	4:3
Viewing Angle	80° (H) / 80° (V)
Response Time	8ms (typical)
Contrast Ratio	600:1
Brightness	250 cd/m2
Interface	VGA
Power Supply	12V DC / 1.5A

Vacuum Fluorescent Display (VFD)



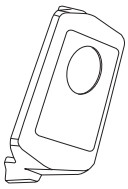
Model no.	KMOTK-0091A
Display Method	Vacuum Fluorescent Display (VFD)
Brightness	500-1000 cd/m2
Number of characters	40(20 columns x 2 lines)
Character size	6.75 (H) X 3.75 (W) mm
Character format	5 x 7 dot matrix, cursor
Character type	95 Alphanumeric, 32 International characters
Dot size	0.55 (W) X 0.75 (H) mm
Viewing Angle	Max. 90°
Horizontal Rotation	Max.355°
Interface	RS232

Single Identification Reader

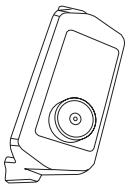


MSR Reader

Model no.	IE-10L
MSR	ISO Track 1/2/3 single/dual/ triple tracks of magnetic card, support ANSI/ ISO Standards7810, 7811 1/5, 7812 & 7813. USB HID Keyboard mode interface



Fingerprint Identification Reader



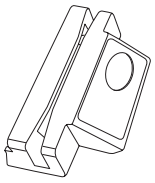
iButton Identification Reader



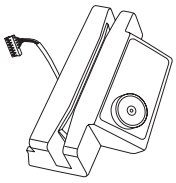
RFID Identification Reader

Model no.	IE-10
Biometric Fingerprint Recognizer	Digital Personal U. are .U 4500B (Optical Type / Blue Light) Module. Size: Approx. 57.7mm * 35.8mm*11.0mm. Compatible with USB 1.1 / 2.0 (Full Speed). USB HID Keyboard mode interface.
iButton Detector	Dallas DS1990A compliment / With leading / ending programming function. USB HID Keyboard mode interface.
RFID Reader	Frequency 13.56MHz. ISO14443A card type MIFARE® 1K/4K/8K card type. Read only. USB HID Keyboard mode interface.
NFC Reader	Frequency 13.56MHz. ISO14443A, ISO1443B, ISO15693, PicoTag read UID and data, Felica read UID. MIFARE®:1-3cm, IS15693:2-4cm. USB HID Keyboard mode interface.

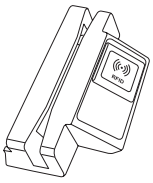
2-in-1 Identification Reader



MSR + Fingerprint Identification Reader



MSR + iButton Identification Reader



MSR + Fingerprint Identification Reader

Model no.	IE-20
MSR	ISO Track 1/2/3 single/dual/ triple tracks of magnetic card, support ANSI/ ISO Standards7810, 7811 1/5, 7812 & 7813. USB HID Keyboard mode interface
Biometric Fingerprint Recognizer	Digital Personal U. are .U 4500B (Optical Type / Blue Light) Module Size: Approx. 57.7mm * 35.8mm*11.0mm Compatible with USB 1.1 / 2.0 (Full Speed). USB HID Keyboard mode interface
RFID reader	Frequency 13.56MHz. ISO14443A card type MIFARE® 1K/4K/8K card type. Read only. USB HID Keyboard mode interface
iButton Detector	Dallas DS1990A compliment / With leading / ending programming function. USB HID Keyboard mode interface

Chapter 2

Preparing For the Installation

Before you start installing Touch Terminal, read the following instructions.

- Wonder Series do not support PCI slot.
- Do not insert or remove any device or component from the Wonder Series while the power is turned on.
- If using Wonder Series in a dusty environment, clean the Touch Terminal regularly.
- Only USB devices are Hot Swap capable. Be sure to turn off the power of the touch terminal and the device before making any connection or disconnection.
- The spill proof design of Wonder Series conforms to IP65 standard (Front panel only).
- A bug may be found when installing Windows 2000 from a USB CDROM. When this occurs, please go to the Microsoft website at http://support.microsoft.com/kb/838921 and find the solution.
- Always seek the help of authorized service personnel in disassembling the terminal. The manufacturer will not be held responsible in the event of damage caused by an unauthorized person.
- Before installation or disassembling of the terminal, ensure that the power is turned off. Otherwise, electric shock may occur and may void the warranty.
- For systems preloaded with WEPOS/POSReady/Windows Embedded on the HDD (O/S pre-installed as an option), the manufacturer provides an optional recovery DVD with the preloaded operating system delivered with the Touch Terminal. The System Integrator shall take care of software restoration after an OS recovery. A manufacturer-supplied USB interface COMBO drive will be required for such action. Other brands of COMBO drive may require a specific driver different from what is supported in the recovery DVD. **Please use the recovery DVD for rescue operation only. Using it otherwise may wipe out whatever is stored in the HDD**. All upgrade device drivers needed for manual installation are available in the subfolder “\drivers” in the OS recovered HDD. Then follow the instructions from your system integrator for software recovery.
- For SoC limitation, the W-615 is required to install at least one DDR3 memory module before booting up the operating system. Be sure to install it in the DDR3 channel 1 socket.

System Default Settings

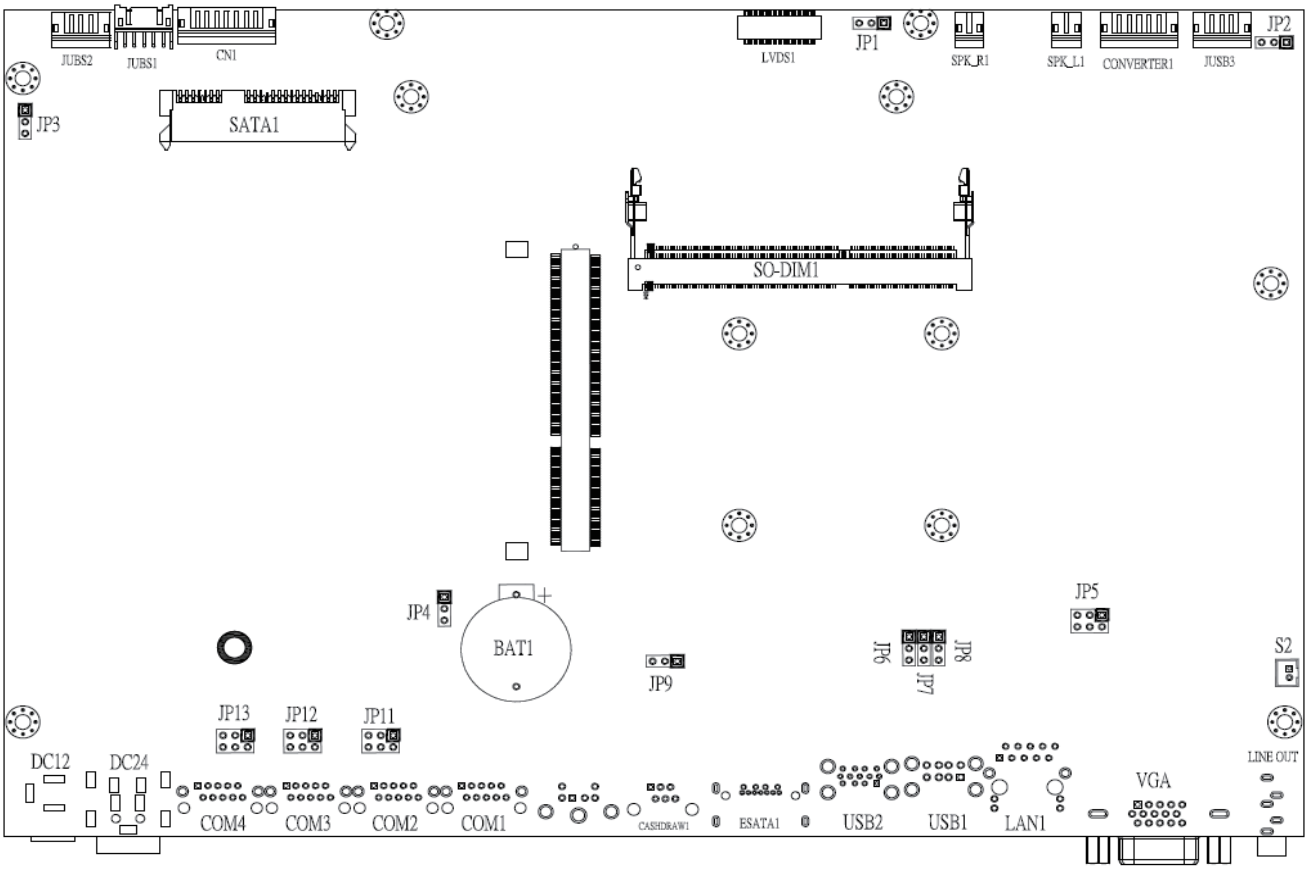
The following is the information on default settings for Touch Terminal serial ports.

W-615

COM1	COM2	COM3	COM4	COM5	COM6
3F8	2F8	3E8	2E8	2F0	2E0
IRQ4	IRQ3	IRQ5	IRQ10	IRQ5	IRQ10

Main Board Jumper Setting and Connector Definition

W-615



Connector/Jumper	Description
LINE OUT	Audio line output connector
VGA	VGA output
LAN1	LAN connector
USB1	USB2.0 *2 connector
USB2	USB3.0 *1 connector USB2.0 *1 connector
ESATA1	E-SATA + USB connector
CASHDRAW1	Cash Drawer output
COM1	COM1 connector
COM2	COM2 connector
COM3	COM3 connector
COM4	COM4 connector
DC24	24V DC power input
DC12	12V DC power output
JUSB1	USB port for USB Touch
JUSB2	USB port for POS input device
JUSB3	USB port for POS input device

CN1	COM6 connector for RS-232 POS input device
LVDS1	2x15 LVDS connector
SPK_R1	Speaker connector
SPK_L1	Speaker connector
CONVERTER1	LED backlight inverter connector
SATA1	SATA Connector
SO-DIMM1	DDR3/DDR3L SO-DIMM
S2	Power Button Connector

JP1 LCD Panel Power Selection

	Pin 1-2 Short/Closed Pin 2-3 Short/Closed	3.3V 5V

JP2/ JP3/ JP6/ JP7/ JP8 : USB Power Selection

	Pin 1-2 Short/Closed Pin 2-3 Short/Closed	5VSB 5V

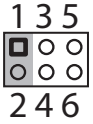
JP4: Clear CMOS Contents

	Pin 1-2 Short/Closed Pin 2-3 Short/Closed	Normal Clear CMOS

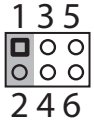
JP9: Cash Drawer Power Selection

	Pin 1-2 Short/Closed Pin 2-3 Short/Closed	24V 12V

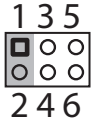
JP11 : COM 2 D-SUB PIN9 VOLTAGE SELECT

	1-2=0V / R1 3-4=+5V 5-6=+12V	Default = 0V

JP12: COM 3 D-SUB PIN9 VOLTAGE SELECT

	1-2=0V / R1 3-4=+5V 5-6=+12V	Default = 0V

JP13: COM 4 D-SUB PIN9 VOLTAGE SELECT

	1-2=0V / R1 3-4=+5V 5-6=+12V	Default = 0V

Voltage Output Definition

W-615

Connector with Voltage Output	Location	Power Support
COM 1 for extension interface (9th PIN of DB-9)	Main Board	DC5V/DC12V Select by BIOS
COM 2 for extension interface (9th PIN of DB-9)	Main Board	DC5V/DC12V Select by jumper
COM 3 for extension interface (9th PIN of DB-9)	Main Board	DC5V/DC12V Select by jumper
COM 4 for extension interface (9th PIN of DB-9)	Main Board	DC5V/DC12V Select by jumper
Standard USB2.0 Ports	Main Board, Signal Convergence Board; Power Switch Board	DC5V / 500mA

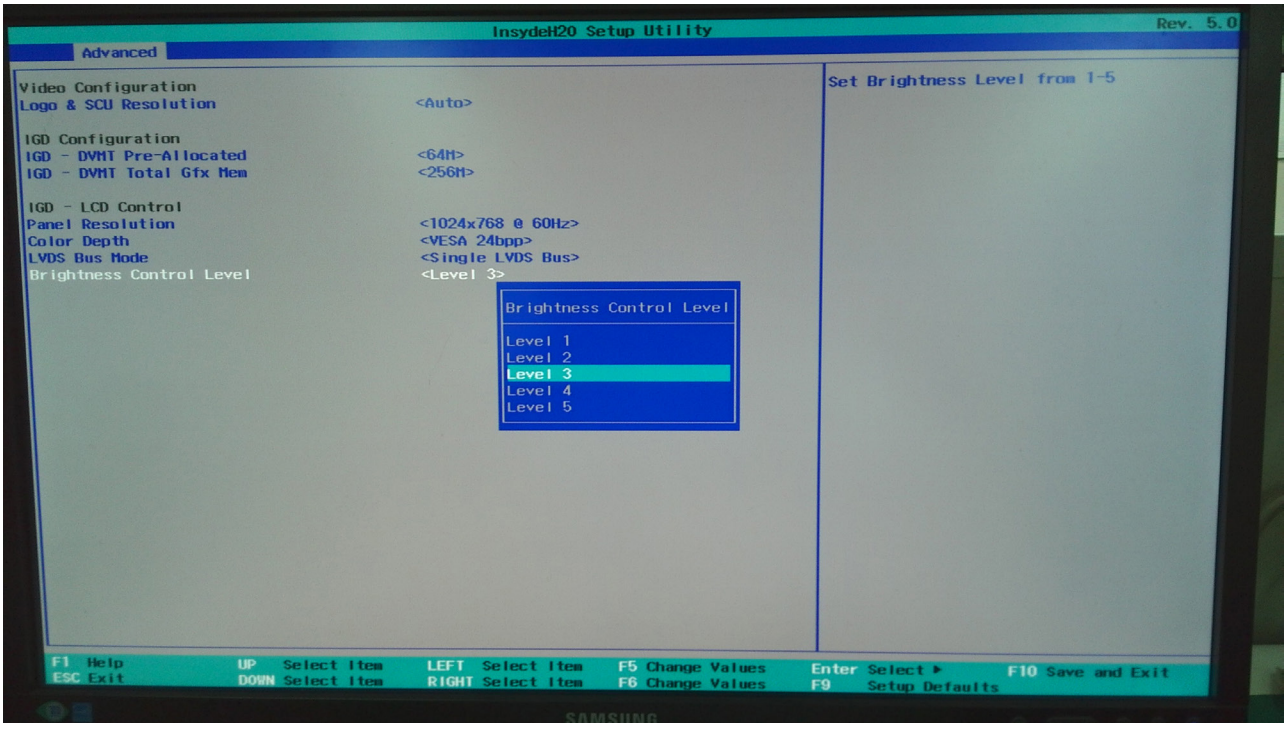
Setting the LCD Brightness

W-615

1.Press <F2> when system boot. Select <Advanced> tab, then select <Video configuration>.



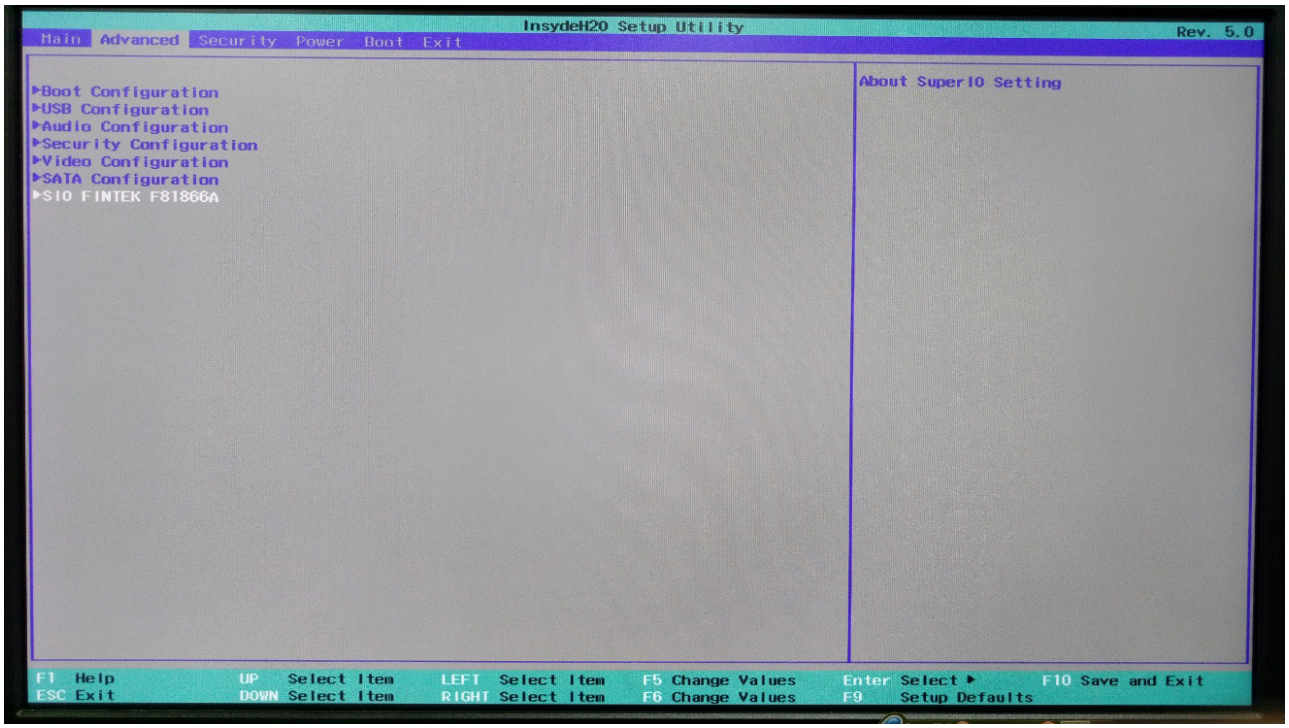
2.Select <Brightness Control Level> to adjust LCD brightess level.



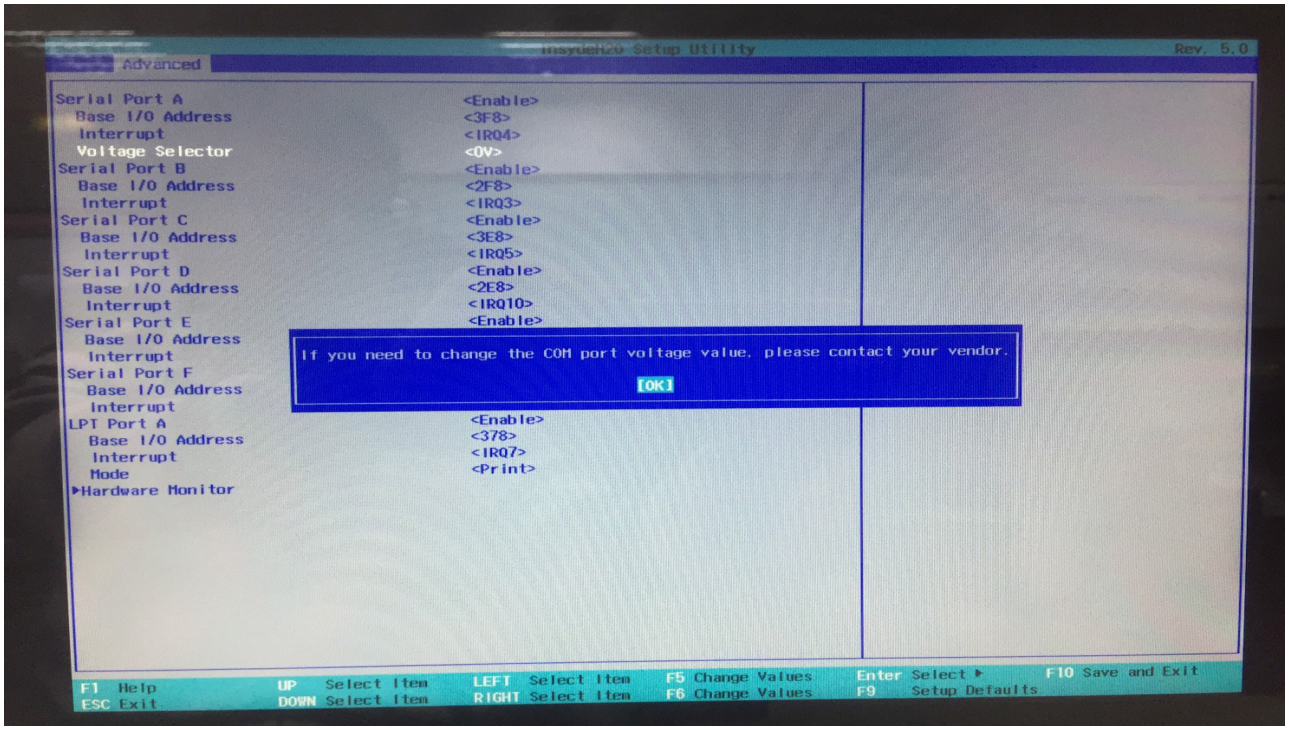
Setting the Serial Port (COM 1) Voltage

1. Press <F2> when system boot. Select <Advanced>

tab, then select <S10 FINTEK F81866A>.



2. Select <Voltage Selectore, then click <OK>

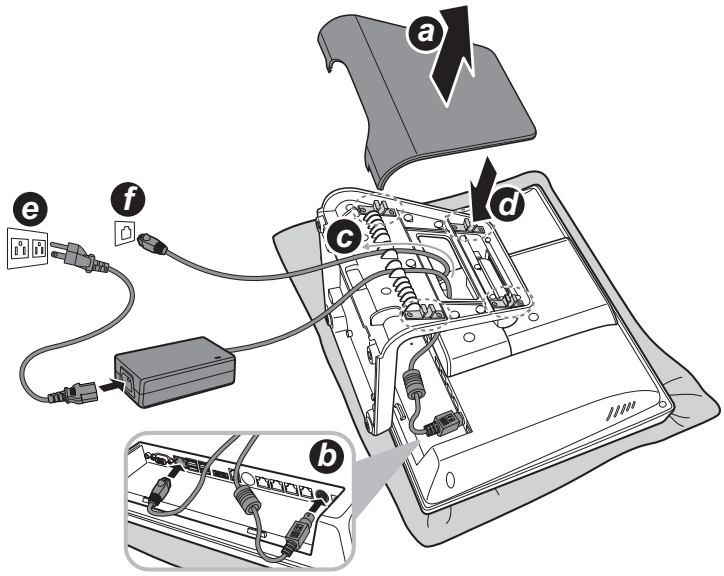


Chapter 3

Hardware Installation

Installing the Power Cord, Power Adapter, and Network Cable

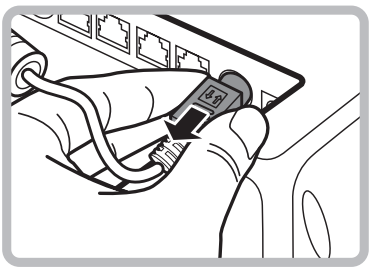
1. Place the Touch Terminal on a soft and flat surface, with the LCD panel facing down. Remove the cable compartment cover. **(a)**
2. Connect the network cable to the LAN port. Then connect the power adapter to the DC IN jack. **(b)**
3. Route the power adapter and the network cable through the cable compartment. **(c)**
4. Align and install the cable compartment. **(d)**
5. Connect the power adapter to the power cord. Then plug the other end of the power cord to an electrical outlet. **(e)**
6. Connect the network cable to a hub or switch. **(f)**



WARNING:

Be sure to turn off the power of the Touch Terminal before making any connection or disconnection.

- When removing the power adapter, be sure to hold the end of power adapter firmly and pull it out.



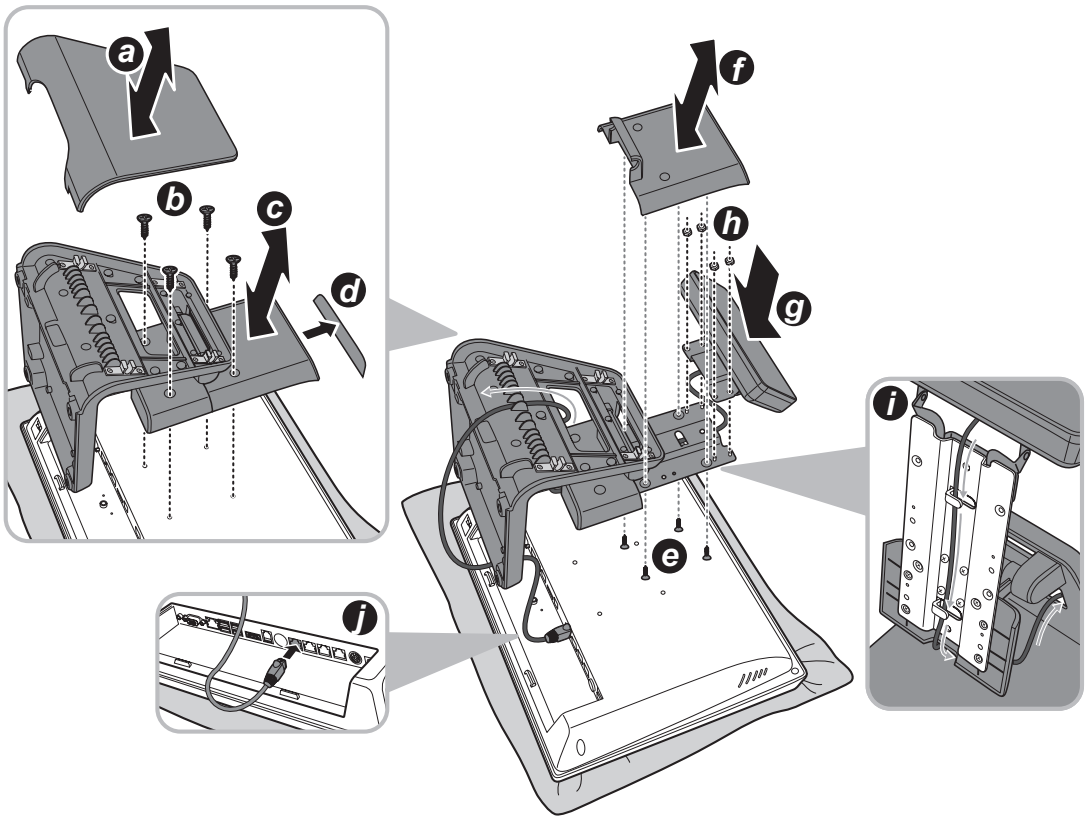
Installing the Customer Display (Optional)

WARNING:

Be sure to turn off the power of the Touch Terminal before making any connection or disconnection.

To configure the COM port voltage setting to +5V, refer to "Main Board Jumper Setting and Connector Definition" on page 23

1. Place the Touch Terminal on a soft and flat surface, with the LCD panel facing down. Remove the cable compartment cover. **(a)**
2. Remove the four screws on the stand. **(b)**
3. Remove the stand. **(C)**
4. Remove the supportive tape from the stand. **(d)**
5. Remove the four screws on the stand cover. **(e)**
6. Remove the stand cover. **(f)**
7. Align and install the customer display into the four threaded standoffs on the stand. **(g)**
8. Secure the customer display to the stand with the four screw nuts. **(h)**
9. Route the customer display's interface cable through the cable guides on the stand and through the cable compartment as illustrated. **(i)**
10. Connect the customer display's interface cable to the RJ-45 COM port on Touch Terminal. **(j)**



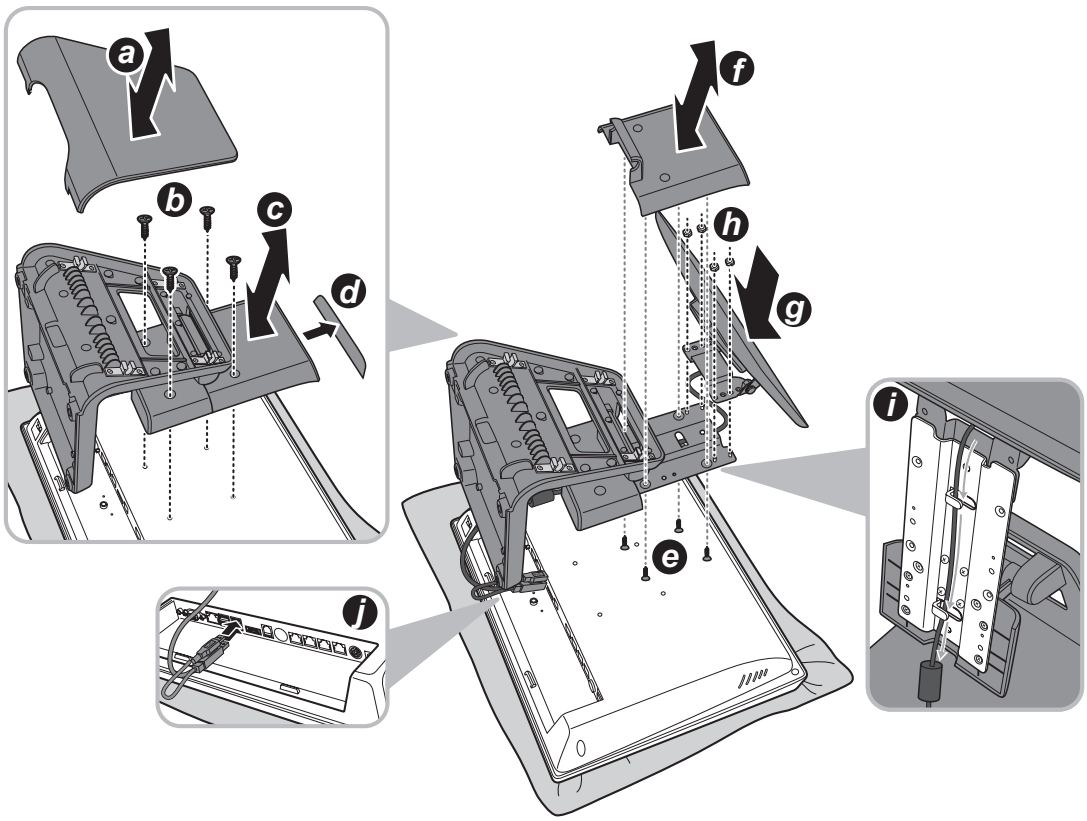
11. Reverse steps 6 through 1 to complete installing the customer display.

Installing the Secondary LCD Display (Optional)

WARNING:

Be sure to turn off the power of the Touch Terminal before making any connection or disconnection.

1. Place the Touch Terminal on a soft and flat surface, with the LCD panel facing down. Remove the cable compartment cover. **(a)**
2. Remove the four screws on the stand. **(b)**
3. Remove the stand. **(C)**
4. Remove the supportive tape from the stand. **(d)**
5. Remove the four screws on the stand cover. **(e)**
6. Remove the stand cover. **(f)**
7. Align and install the secondary LCD display into the four threaded standoffs on the stand. **(g)**
8. Secure the secondary LCD display to the stand with the four screw nuts. **(h)**
9. Route the secondary LCD display's power cable and USB cable through the cable guides on the stand as illustrated. **(i)**
10. Connect the secondary LCD display's power cable and USB cable to the corresponding ports on Touch Terminal. **(j)**



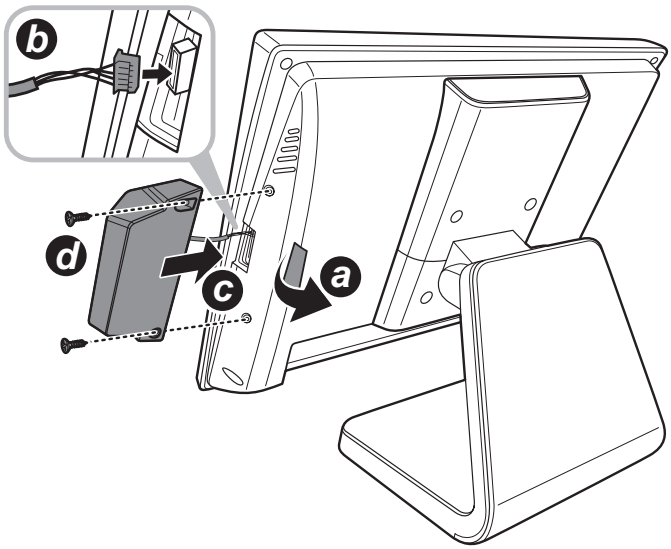
11. Reverse steps 6 through 1 to complete installing the secondary LCD display.

Installing the Identification Reader (Optional)

WARNING:

Be sure to turn off the power of the Touch Terminal before making any connection or disconnection.

1. Remove the identification reader compartment cover. **(a)**
2. Firmly connect the identification reader connector into the slot inside the compartment. **(b)**
3. Align and install the identification reader onto its compartment. **(c)**
4. Secure the identification reader to the Touch Terminal using the two screws. **(d)**

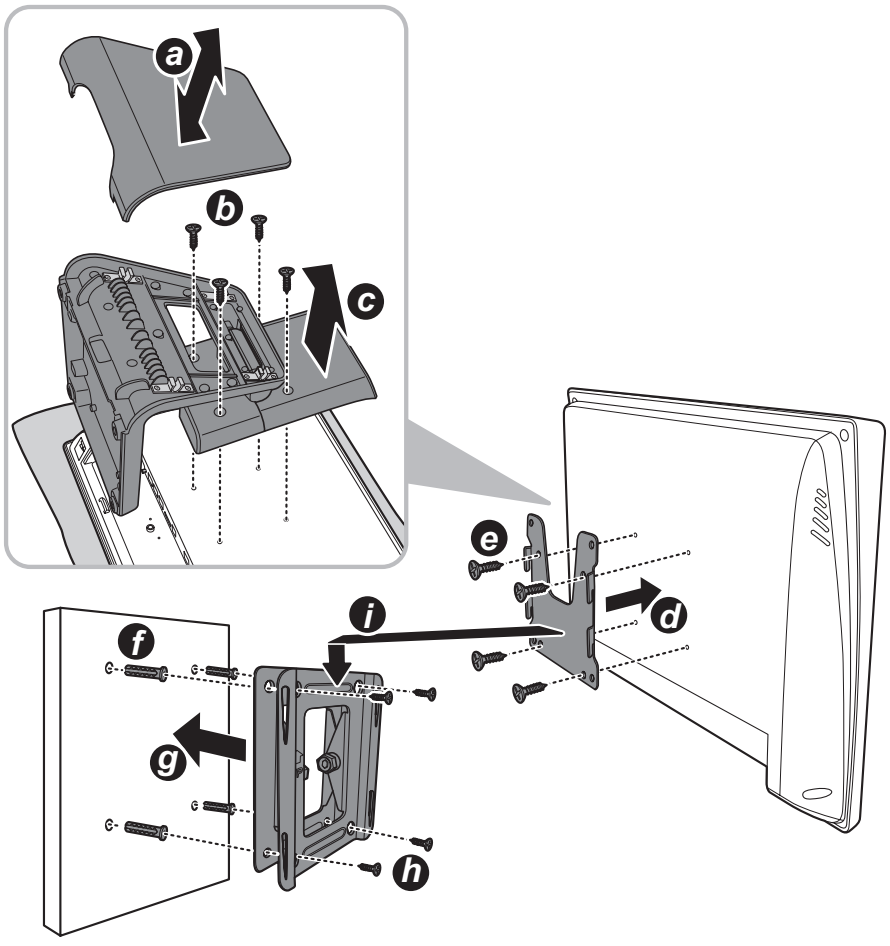


Installing the VESA Mount (Optional)

NOTE:

- *Use only wall mount kits approved by the manufacturer. Wall mount kits are sold separately.*
- *The Touch Terminal device is compatible with a VESA mounting hole pattern of 75x75mm.*

1. Place the Touch Terminal on a soft and flat surface, with the LCD panel facing down. Remove the cable compartment cover. **(a)**
2. Remove the four screws on the stand. **(b)**
3. Remove the stand. **(c)**
4. Align and install the mount bracket on the back of the Touch Terminal. **(d)**
5. Secure the mount bracket to the Touch Terminal with the four screws. **(e)**
6. Drill four small holes on the mounting location and insert the plastic washers into the holes. **(f)**
7. Align by the screw holes and then install the wall bracket on the wall. **(g)**
8. Secure the wall bracket to the wall with the four supplied screws. **(h)**
9. Align and hook the Touch Terminal to the wall bracket, and then push down to secure it into place. **(i)**



10. Replace the cable compartment cover for storing the stand assembly. **(a)**

Chapter 4

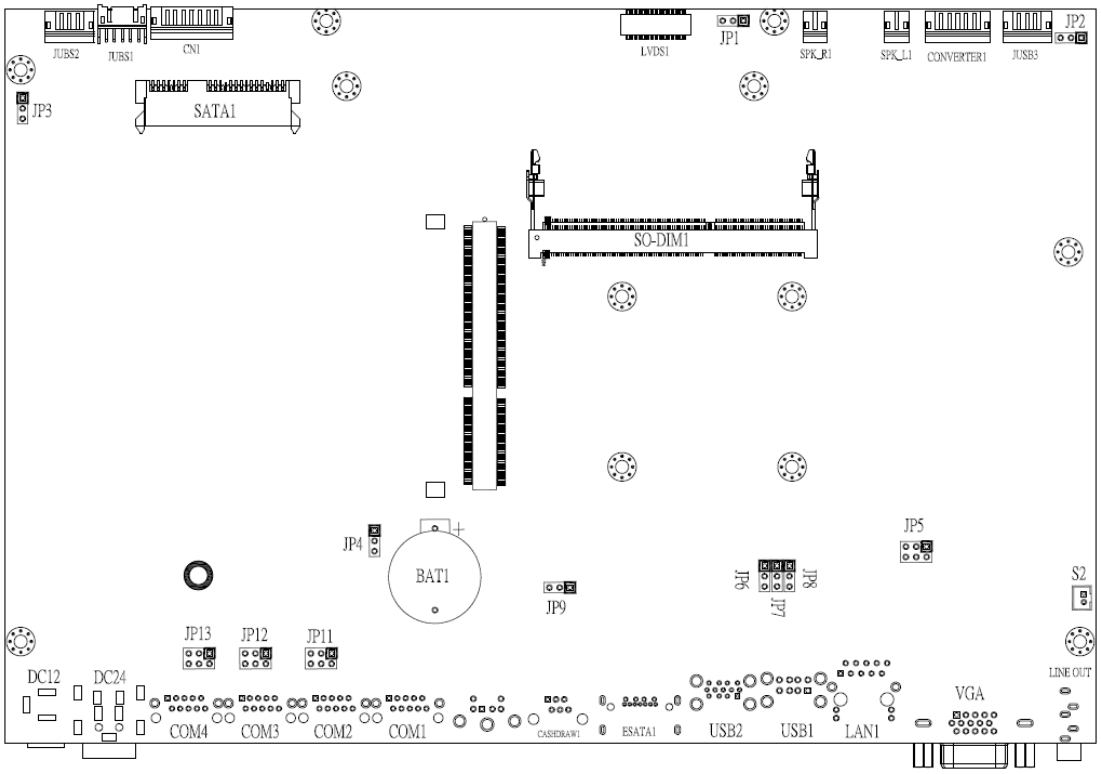
Frequently Asked Questions (FAQ)

Question 1: How do I clear CMOS?

W-615

Answer: To clear CMOS, do the following:

1. Turn off power and pull out the power cord.
2. Insert the jumper cap to clear CMOS PIN and remove the jumper cap from clear CMOS PIN. (Remark)
3. Switch on the power again.
4. Press **F2** to enter CMOS setting and load optimized defaults.
5. Save changes and reboot the system.



Remark:

JP4: Clear CMOS Contents

1 2 3	Pin 1-2 Short/Closed Pin 2-3 Short/Closed	Normal Clear CMOS