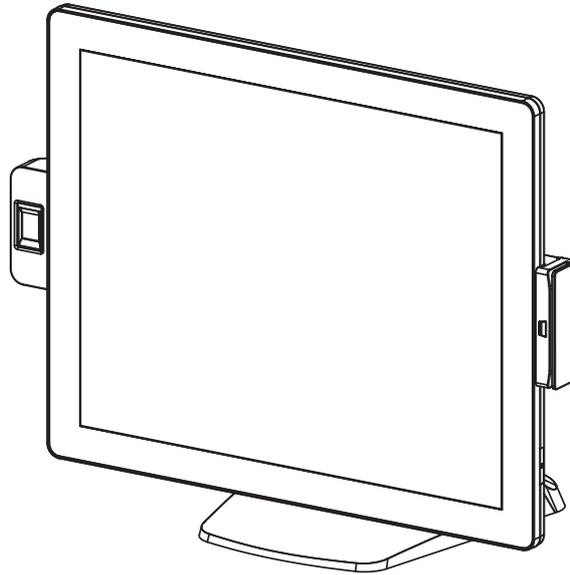


USER MANUAL

VERSION 1.0 October 2019

Pulse Ultra Touch Monitor 17



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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.



This device complies with the requirements of the EEC directive 2014/30/EU with regard to "Electromagnetic compatibility" and 2014/35/EU "Low Voltage Directive".



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.

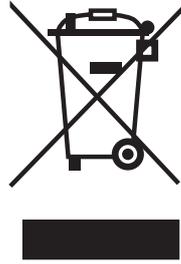
4.7.3.2 Materials for fire enclosures

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 dust bin 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

Changes to the original user manual are listed below:

Revision	Description	Date
1.0	• Initial release	October 2019

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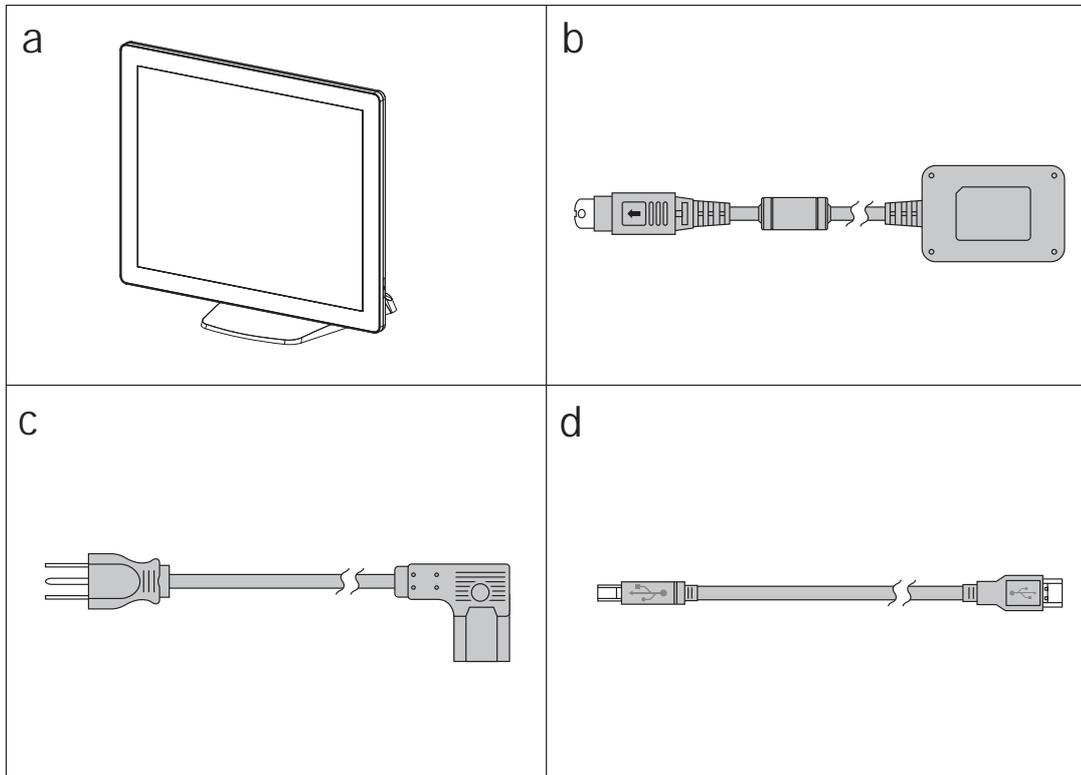
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1. Packing List

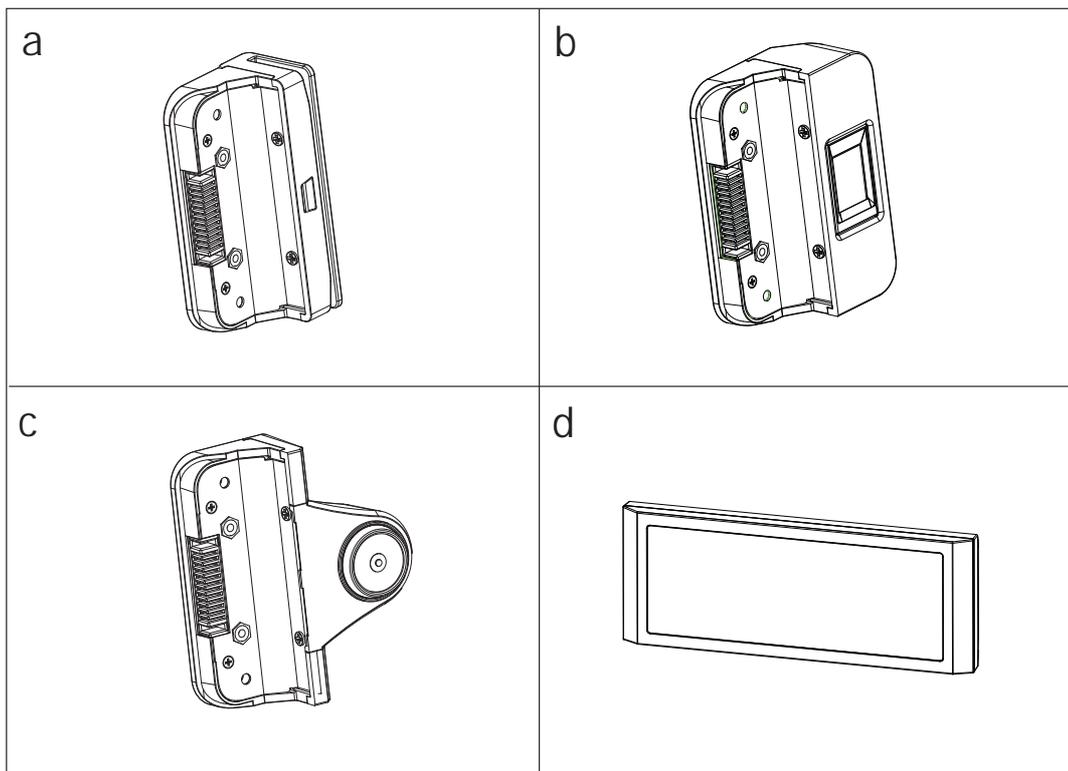
1-1. Standard Accessories



- a. System
- b. Power adapter
- c. Power cord
- d. USB cable (x2)

Note: Power cord will be supplied differently according to various region or country.

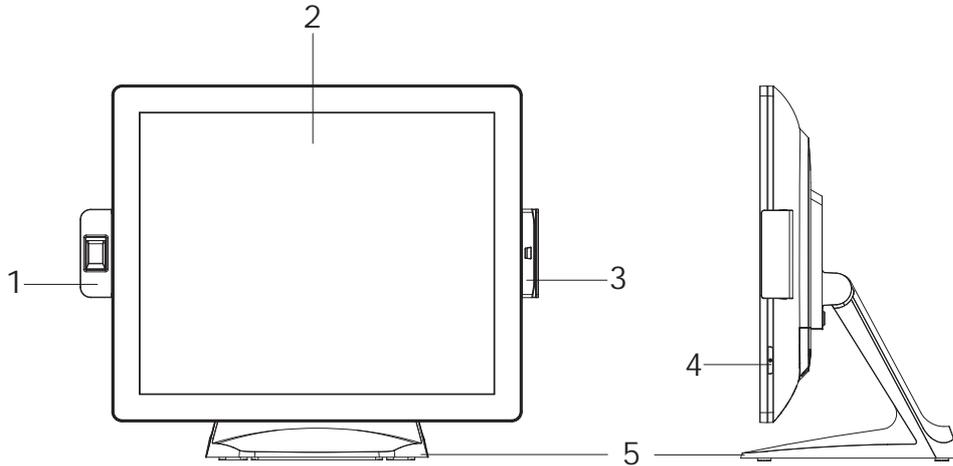
1-2. Optional Accessories



- a. MSR module
- b. Fingerprint module
- c. iButton module
- d. Customer display

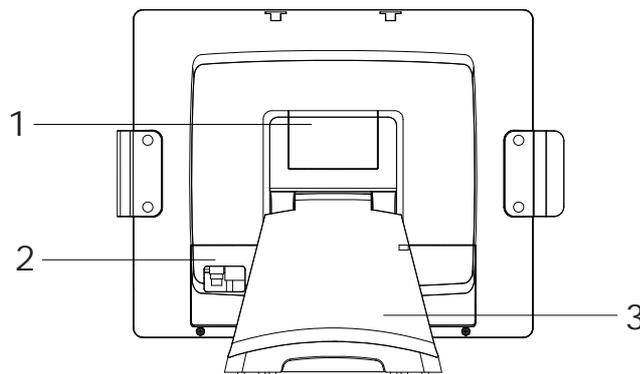
2. System View

2-1. Front & Side View



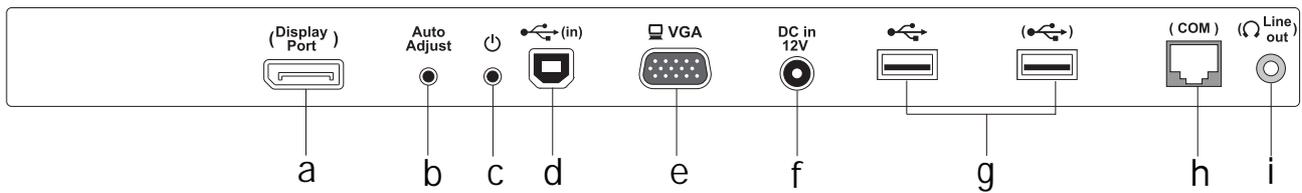
No.	Description
1	Fingerprint (option)
2	Touch screen
3	MSR (option)
4	Power button
5	Stand

2-2. Rear View



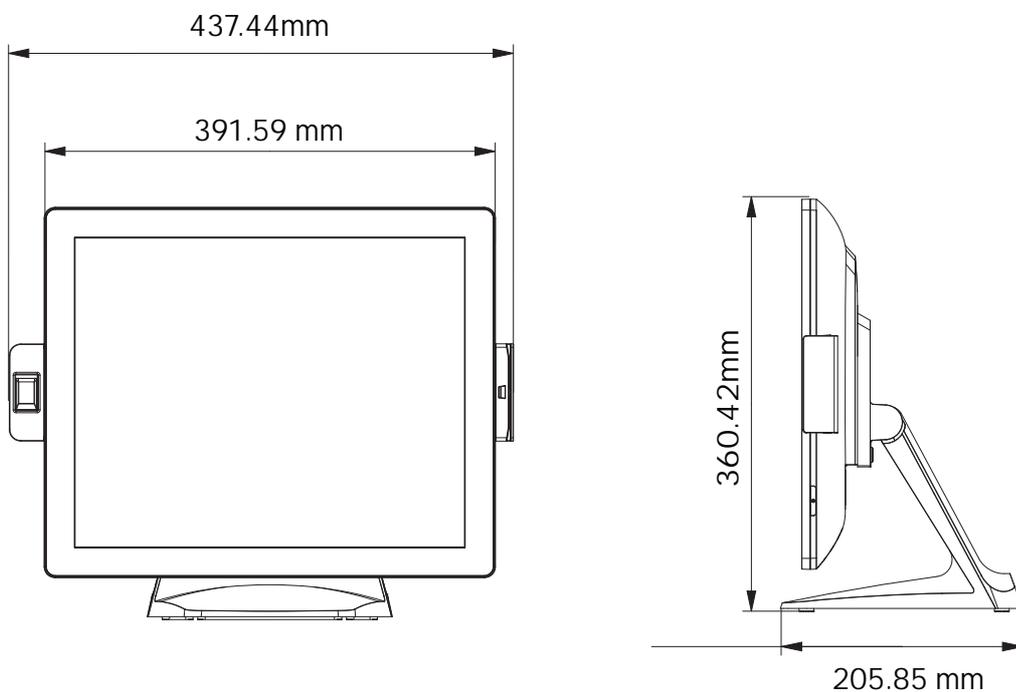
No.	Description
1	VESA top cove
2	Cable cover
3	Stand cover

2-3. IO Ports View



No.	Description
a	Display port (option)
b	Auto adjust
c	Power button
d	USB in
e	VGA
f	DC in 12V
g	USB 2.0 x2 (one is option)
h	COM (option)
i	Line-out (option)

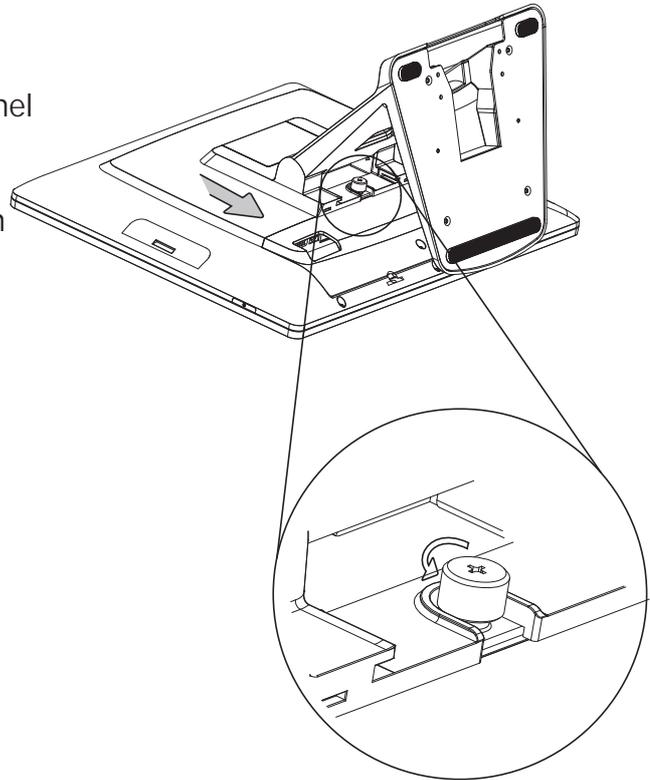
2-4. Dimensions



3. System Assembly & Disassembly

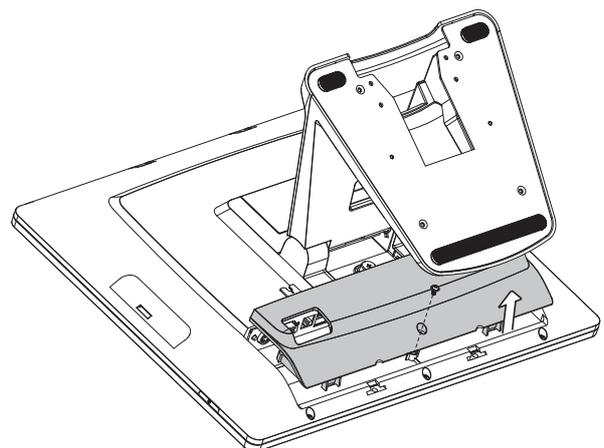
3-1. Disassemble the Stand

1. Loosen the thumb screw (x1) and slide the stand towards the IO panel to release it from the system.
2. Reverse the steps above to attach stand to the system.



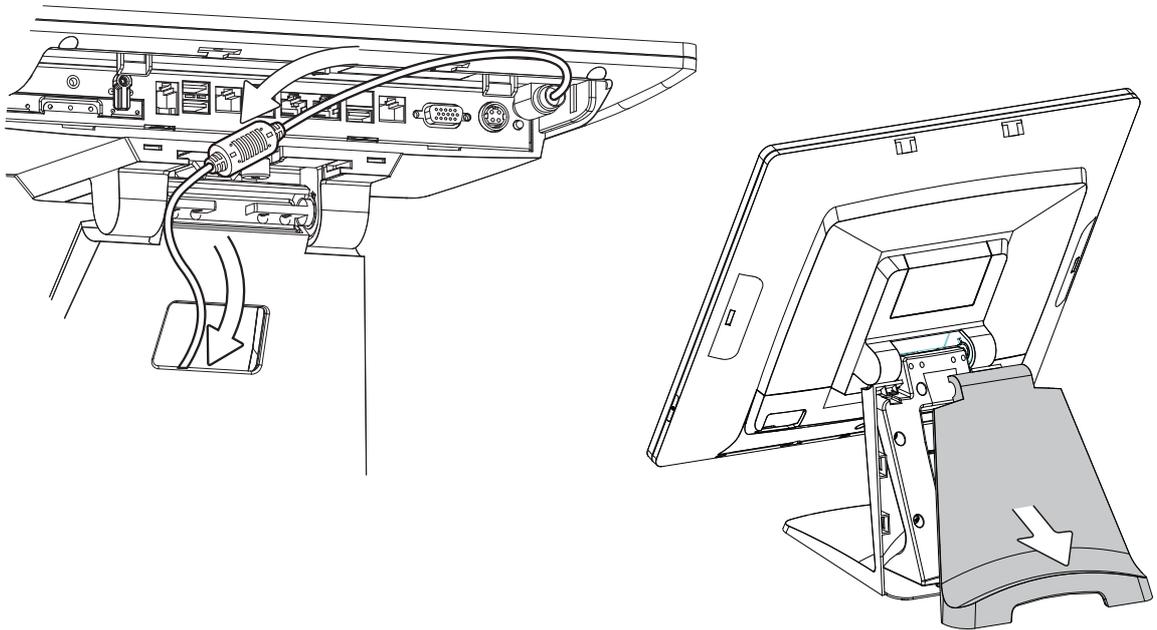
3-2. Remove the Cable Cover

1. Remove the screw (x1) of the cable cover.
2. Pull the cable cover upwards to release it from the system.



3-3. Install the Power Adapter

The system is equipped with a 36W power adapter. Please follow the steps to install the power adapter.

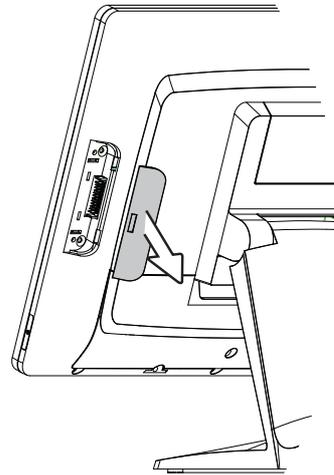


1. Follow the steps described in Chapter 3-2 to release the cable cover first.
2. Connect the power adapter to the 19V DC in port and then route the cable through the hole of the stand as shown in the picture.
3. Open the stand cover and arrange the cable.

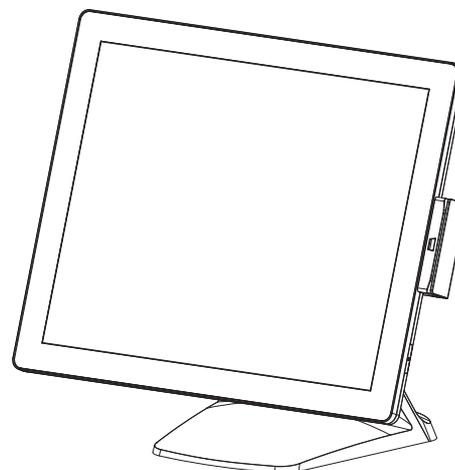
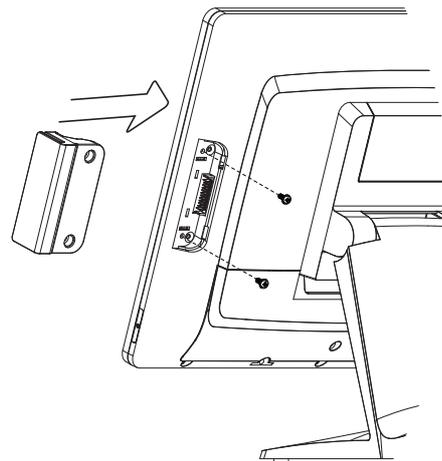
4. Peripheral Installation

4-1. Install the MSR Module

1. Remove the dummy cover first.

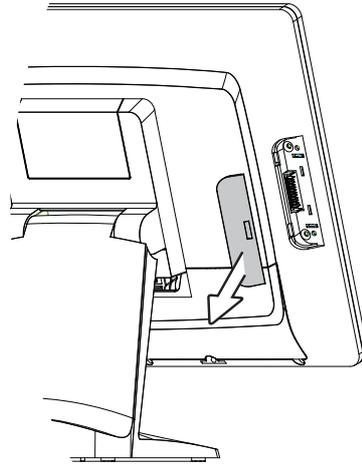


2. Insert the MSR module in place and fasten the screws (x2) on the back to secure the module.

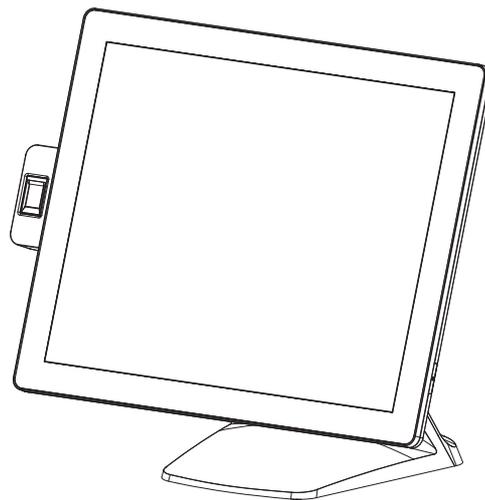
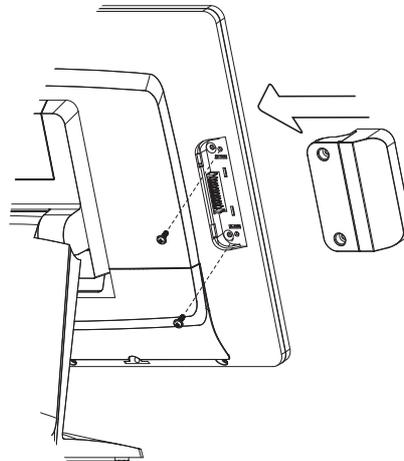


4-2. Install the Fingerprint Module

1. Remove the dummy cover first.

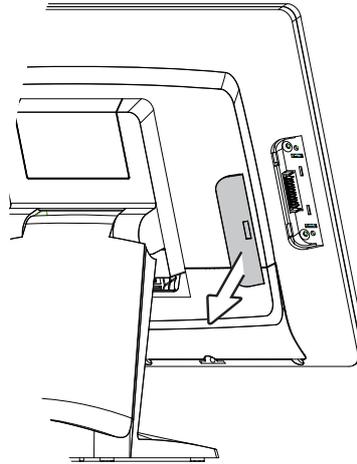


2. Insert the Fingerprint module in place and fasten the screws (x2) on the back to secure the module.

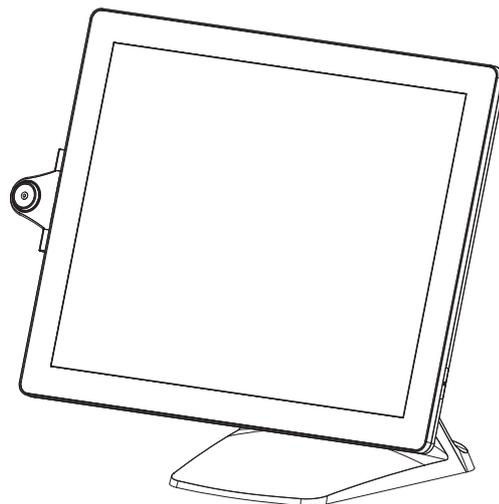
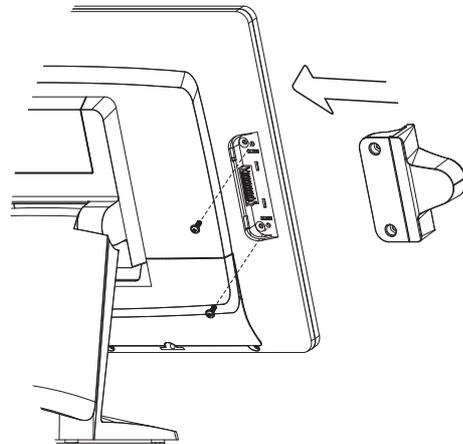


4-3. Install the iButton Module

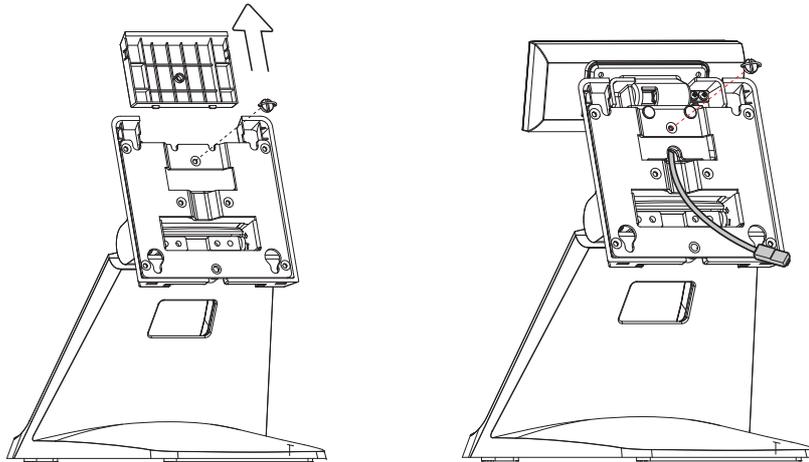
1. Remove the dummy cover first.



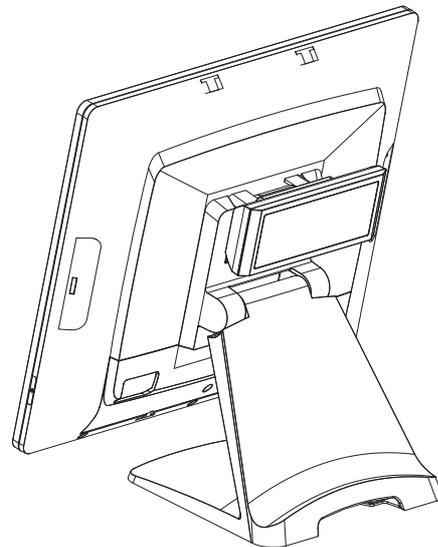
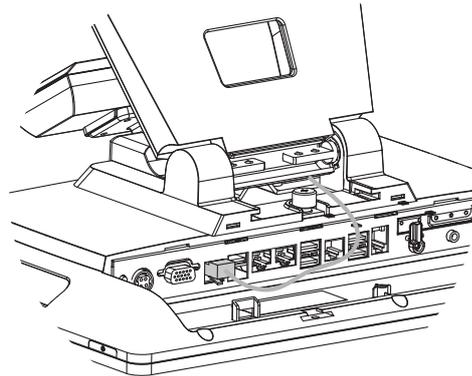
2. Insert the iButton module in place and fasten the screws (x2) on the back to secure the module.



4-4. Install the LCM Module



1. Follow the steps in Chapter 3-1 to disassemble the stand from the LCD panel.
 2. Remove the thumb screw (x1) from the VESA top cover and then pull the cover up.
 3. Attach the VFD module to system by fastening the thumb screw (x1).
 4. Route the RJ-45 cable through the hole of the stand as picture shown.
 5. Attach the stand to the LCD panel and fasten the thumb screw (x1).
 6. Connect the RJ-45 cable to COM port on the systems IO panel. Make sure the system is powered off.
- * Please note the cable cover (refer to Chapter 2-2) have to be removed before routing the cable.



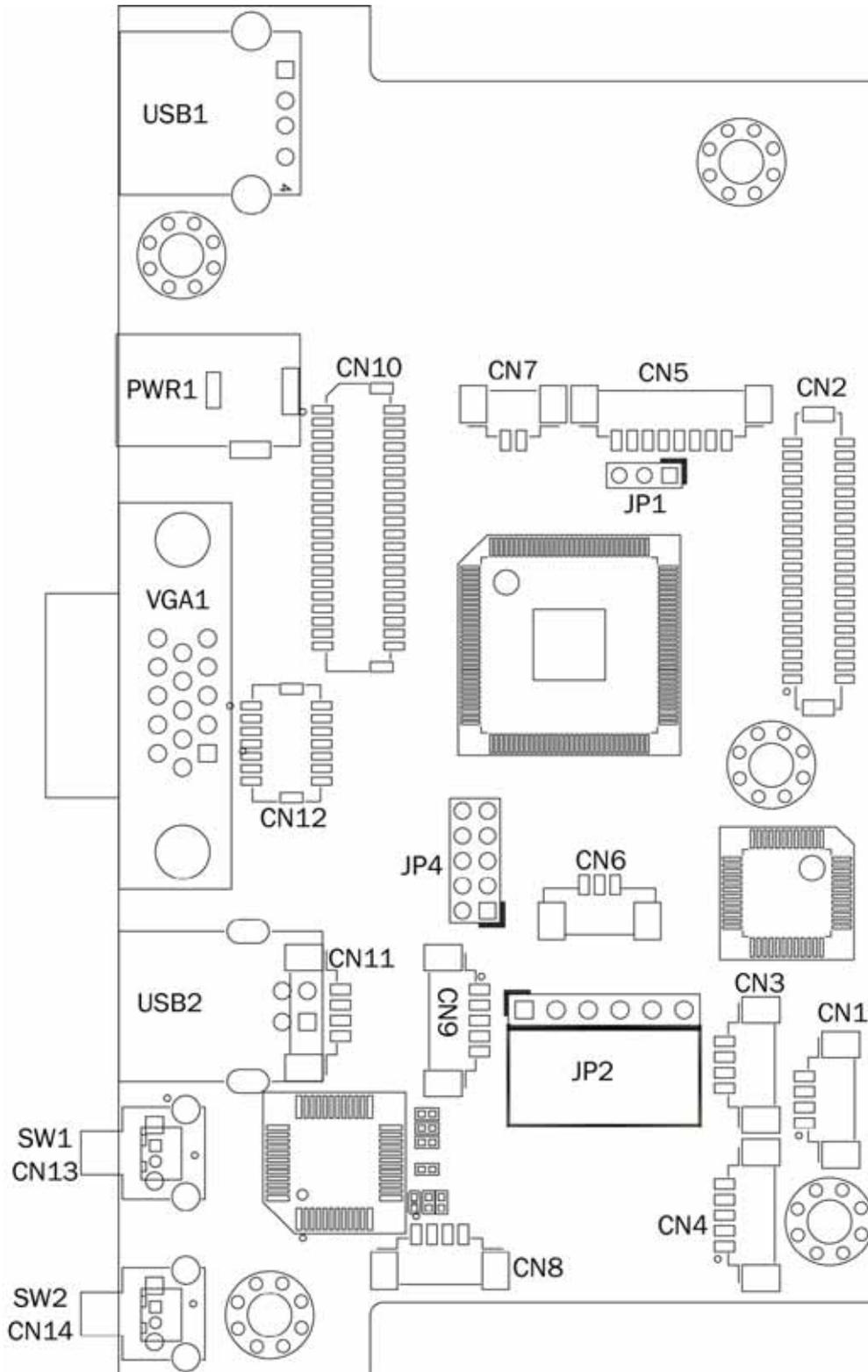
5. Specification

Model Name	Pulse Ultra Touch Monitor 17
Mainboard	D01
LCD Touch Panel	
LCD size	17" TFT LED Panel
Brightness (cd/m ²)	350 nits
Maximan resolution	1280 x 1024
Touch screen type	True flat P-CAP
Tilt angle	0~90°
I/O Ports	
USB in	1 x USB 2.0 (Type B to PC)
USB out	1 x USB 2.0 (Type A to device)
VGA	1
DC jack	1
OSD button	2 (power, auto adjust)
Optional I/O Ports	
Display port	1
COM	1
USB	1 x USB 2.0 (Type A)
Audio	1 x line out
Power	
Power adapter	36W, 12V/3A
Peripherals (optional)	
MSR	1 (USB)
Fingerprint	1 (USB)
iButton	1 (USB)
Customer display	Flush mount LCM display 2 x 20 characters (USB)
Speaker	2 x 2W
Certificate	
EMC & Safety	FCC, Class A, CE, LVD
Environment	
Operating temperature	0°C ~ 40°C (32°F ~ 104°F)
Storage temperature	-20°C ~ 60°C (-4°F ~ 140°F)
Humidity	20% ~ 80% RH non-condensing
Dimension (W x D x H)	LCD 90 degree: 391.1 x 210.4 x 368 mm
Weight	5.8kgs
Mounting	100mm x100mm VESA Standard holes

* This specification is subject to change without prior notice.

6. Configuration

6-1. D01 AD Board Layout



6-2. Connectors & Functions

Connector	Function
CN1/3/4	USB connector (downwtream)
CN2	eDP output connector
CN5	Keypad connector
CN6	Debug
CN7	Power On/Off connector
CN8	OSD On/Off LED
CN0	MCU debug
CN10	DVI/DP input connector
CN11	USB connector upstream)
CN12	Internal VGA input connector
CN13	Power On/Off connector
CN14	Auto adjust
PWR1	DC jack 12V
USB1	USB connector (downstream)
USB2	USB connector (downstream)
VGA1	VGA input
JP1	Touch select
JP2	Touch sensor
JP4	LCD ID setting

6-3. Jumper Setting

LCD ID Setting

Panel#	Resolution	LVDS		Output Interface	JP4										
		Bits	Channel												
OCH	1280 x 1024	24	Dual	LVDS Panel	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td>2</td> <td>4</td> <td>6</td> <td>8</td> <td>10</td> </tr> <tr> <td>1</td> <td>3</td> <td>5</td> <td>7</td> <td>9</td> </tr> </table>	2	4	6	8	10	1	3	5	7	9
2	4	6	8	10											
1	3	5	7	9											

▲ = Manufacturer Default Setting

1
2

 Jumper open

1
2

 Jumper short