User Manual

January 2008 Revision 1.0

Point - of - Sale Monitor

Manual Version 1.0

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Safety

IMPORTANT SAFETY INSTRUCTIONS

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

CE MARK

This device complies with the requirements of the EEC directive 89/336/EEC with regard to “Electromagnetic compatibility” and 73/23/EEC “Low Voltage Directive”.

FCC

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

LEGISLATION AND WEEE SYMBOL

2002/96/EC Waste Electrical and Electronic Equipment Directive on the treatment, collection, recycling and disposal of electric and electronic devices and their components.

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

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

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

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

Revision History

Revision Number	Description	Revision Date
1.0	Initial release	2008 January

Table of Contents

1. Item Checklist

Take the system unit out of the carton. Remove the unit from the carton by holding it by the foam inserts. The following contents should be found in the carton:

1.1. Standard Items

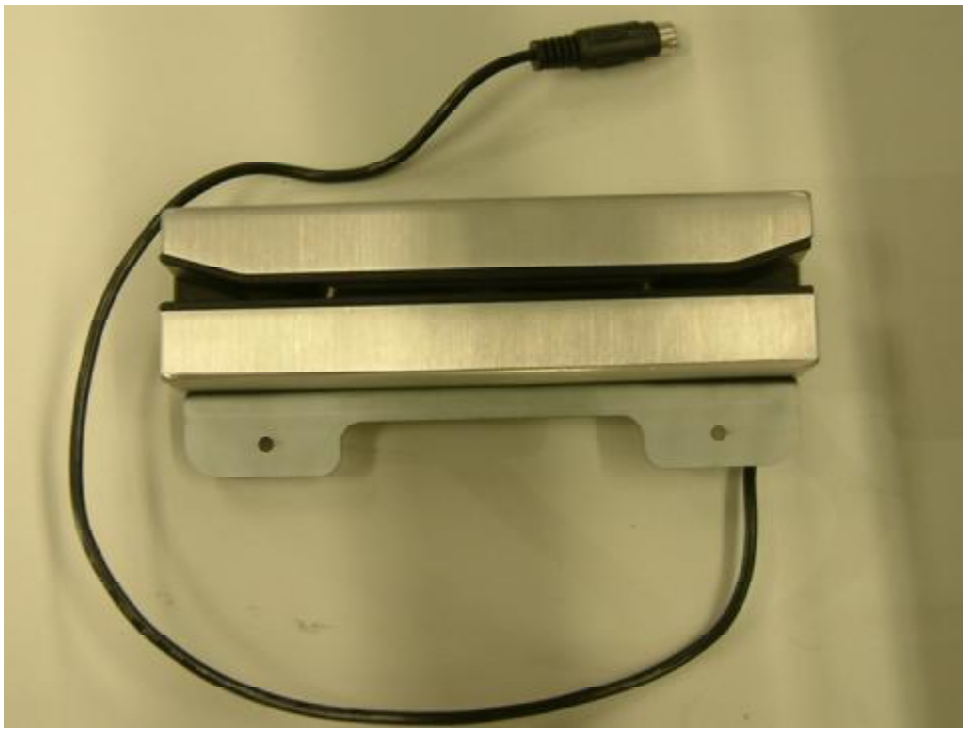
a. Driver CD

b. Power Adapter

c. Power Cable (220V or 110V)

d. System

1.2. Optional Items

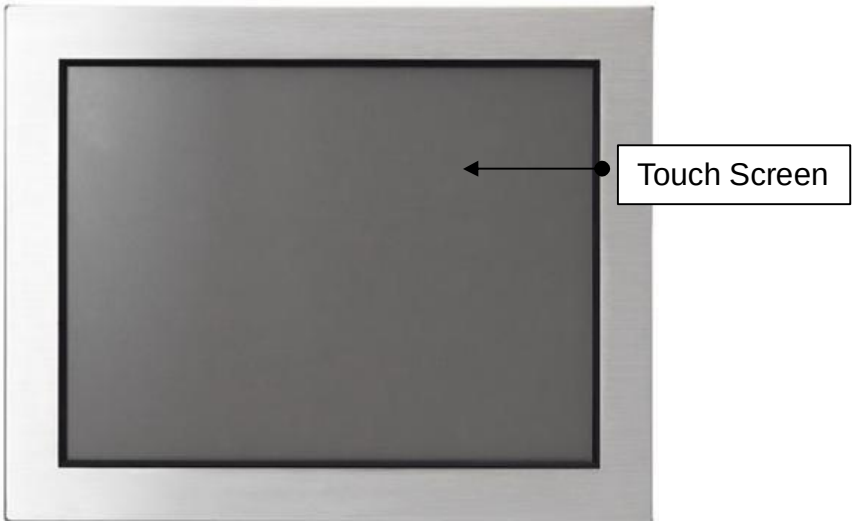


a. MSR

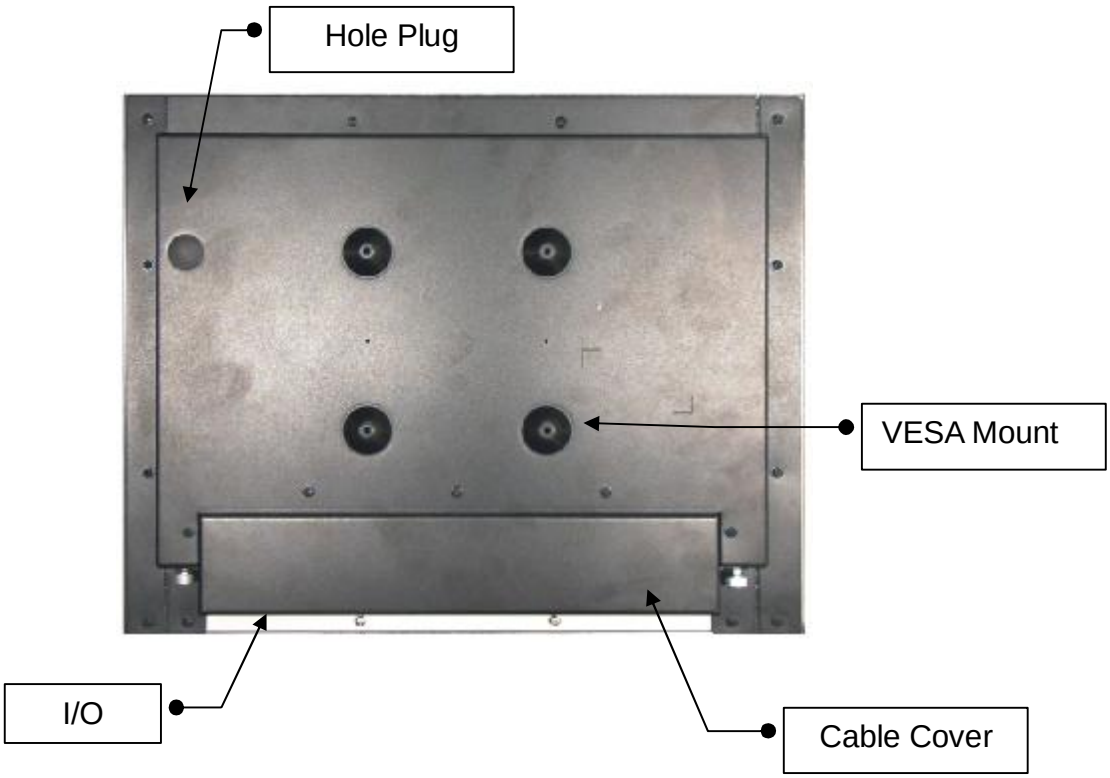
b. VFD

2. System View

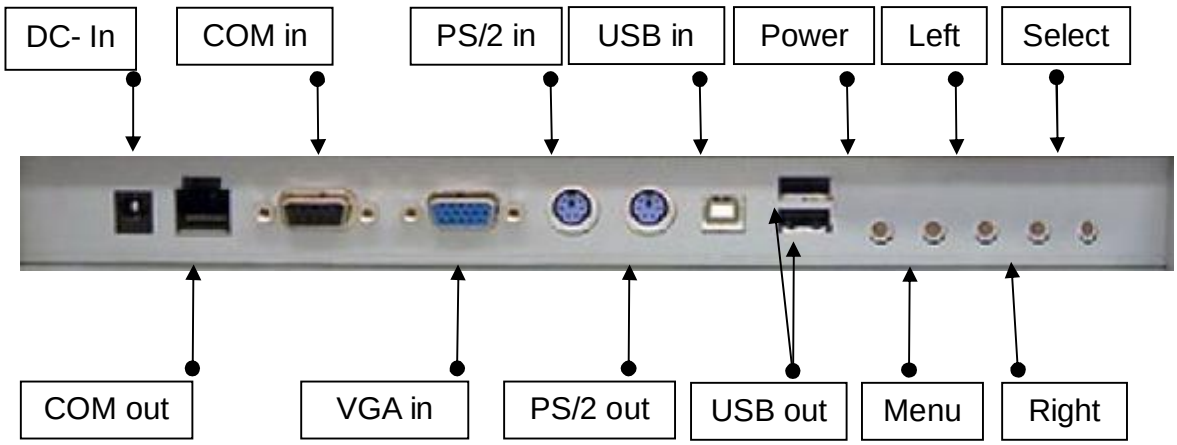
2.1. Front View



2.2. Rear View



2.3. I/O View


DC- In
COM in
PS/2 in
USB in
Power
Left
Select
COM out
VGA in
PS/2 out
USB out
Menu
Right

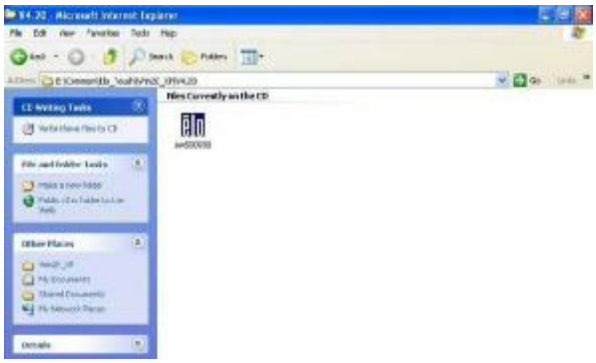
3. Drivers Installation

3.1. Driver List

Folder/File	File Description
<CD>:\POS720.htm	B13 Driver List
<CD>:\COMMON\Elo_Touch	ELO Touch Driver
<CD>:\COMMON\POS_Touch	POSTouch Driver

-The following procedures are for Windows 2000/XP, other platforms are similar.

3.2. ELO Touch Driver Installation



a. Click ”sw500930” on the My computer window.

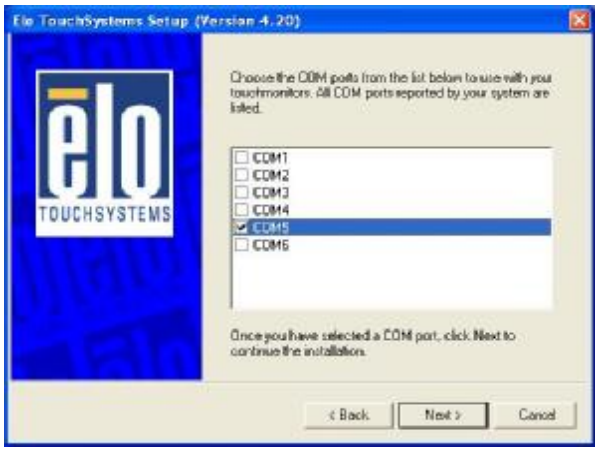
b. Click the “OK” button on the Welcome window.

c. Click the ”Unzip” button on the WinZip Self-Extractor window.

d. Select “Install Serial Touchscreen Drivers” and then click the “Next” button on the Welcome window.

e. Click the “Yes” button on the License Agreement window.

f. Click the “Next” button on the on the “Select the COM ports…” window.



g. Select “COM5” and click the “Next” button on the Choose the COM ports… window.

h. Click the “Next” button on the You have selected the COM ports…window.

i. Click the “Finish” button on the Setup Complete window

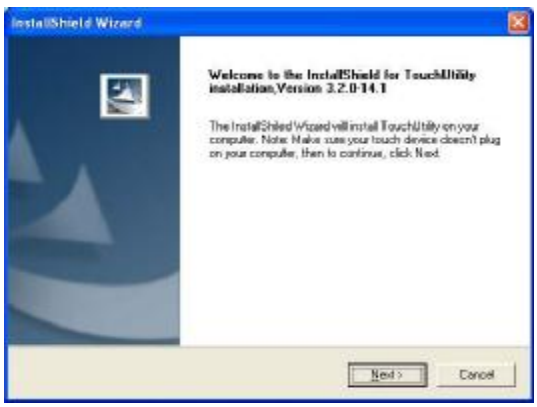
j. Click the “Yes” button and restart your system.

k. After the computer has restarted, click “Align” on the Elo Touchscreen Properties window.

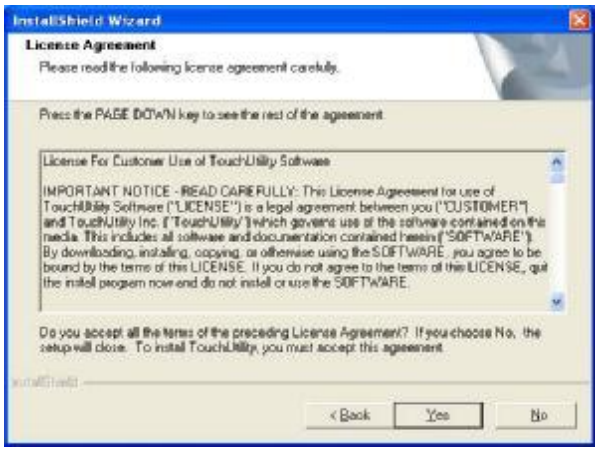
l. Follow the instructions on the screen to calibrate the touch panel.

3.3. POSTouch Driver Installation

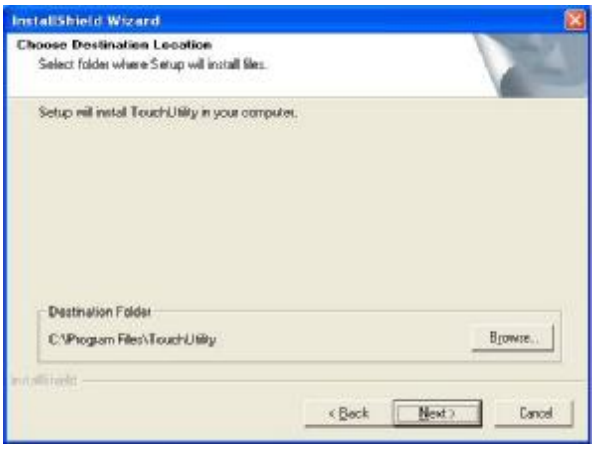
a. Double click the ”Setup” on the “My Computer” window.



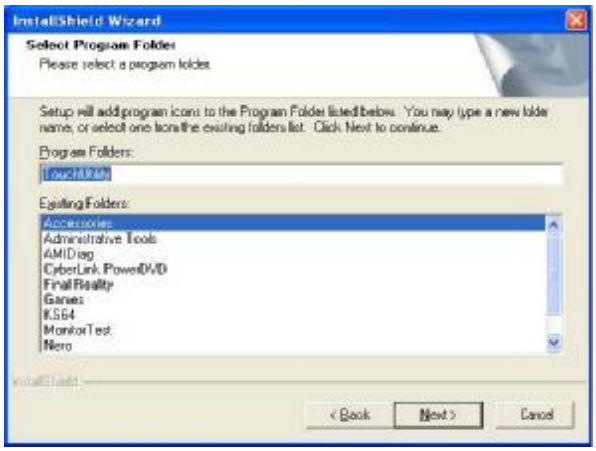
b. Click the “Next“ button on the “Welcome window”.



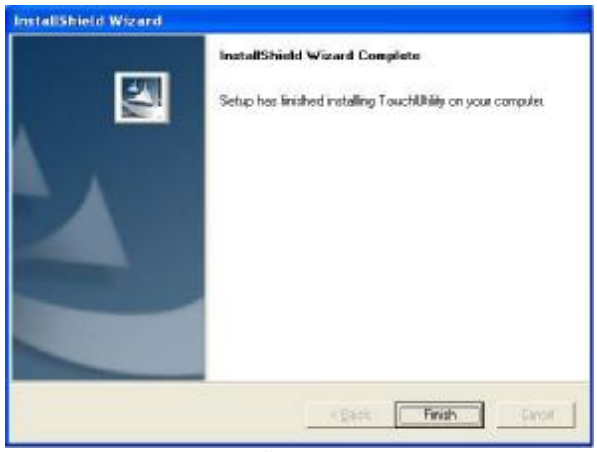
c. Click the ”Yes” button on the “License Agreement” window.



d. Click the ”Next” button on the “Choose Destination Location” window.



e. Click the “Next” button on the “Select Program Folder” window.

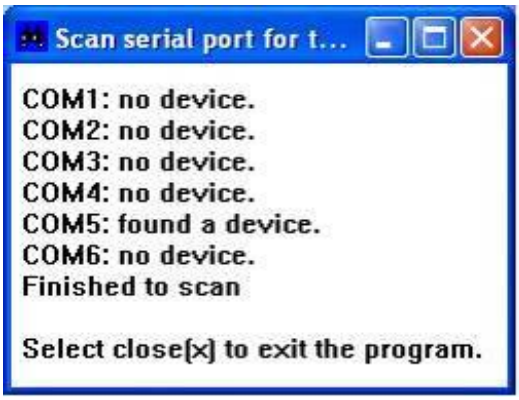


f. Click the “Finish” button on the “Install Shield Wizard Complete” window.

g. Click the “Continue Anyway “button on the “Hardware Installation” window.

h. Select the “Yes” and click the”OK” button and restart your system.

i. After the computer has restarted, select “Programs **à** TouchUtility **à** Scan RS232 Touch Device”.

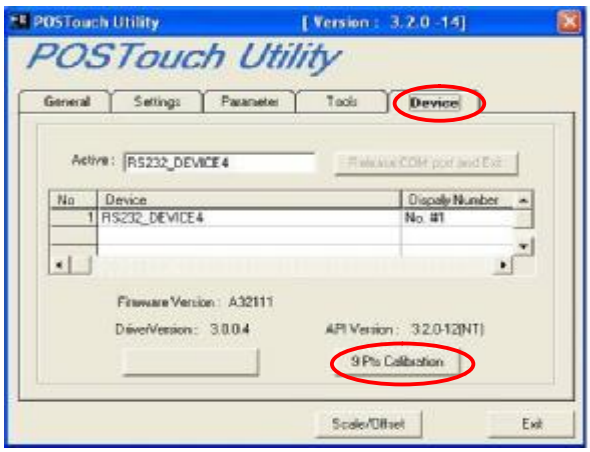


j. The serial ports are scanned for a touch device.

k. Select “Programs **à** TouchUtility **à** Touch Utility”.

l. Click “Scale / Offset” on the POSTouch Utility window.

m. Follow the instructions on the screen to do a three point calibration of the touch panel.

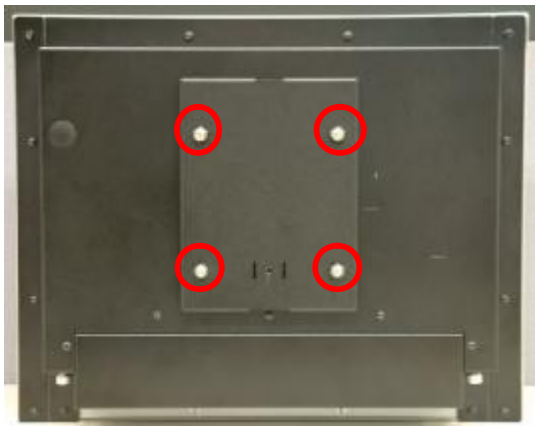


n. Select “Device **à** 9Pts Calibration” on the POSTouch Utility window.

o. Follow the instructions on the screen to do a nine point calibration of the touch panel.

4. System Installation

4.1. VESA Installation

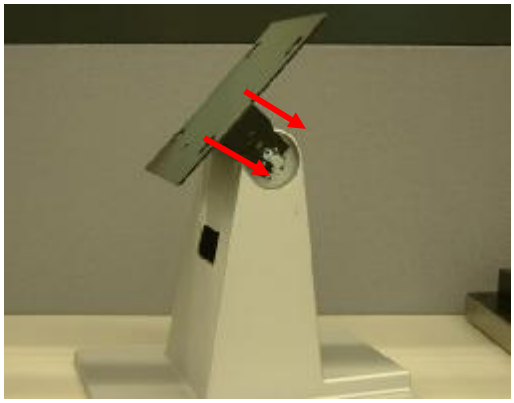


a. Place the panel bracket on the on the back of the system, and align the bracket holes with the VESA holes of the system.
Tighten the screws (4)"

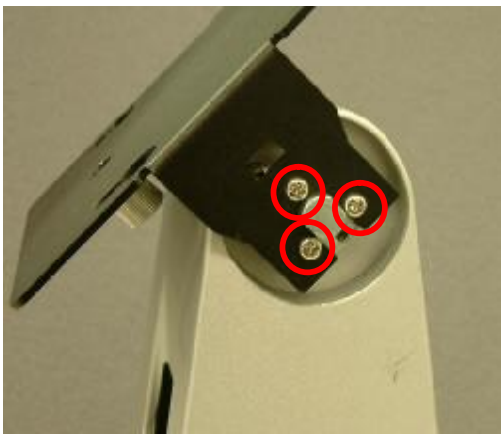
b. Place the wall mount kit on the panel bracket and tighten the screw (1)

c. Attach the panel to the wall mount bracket and tighten the thumb screw to finish the Wall Mount Installation

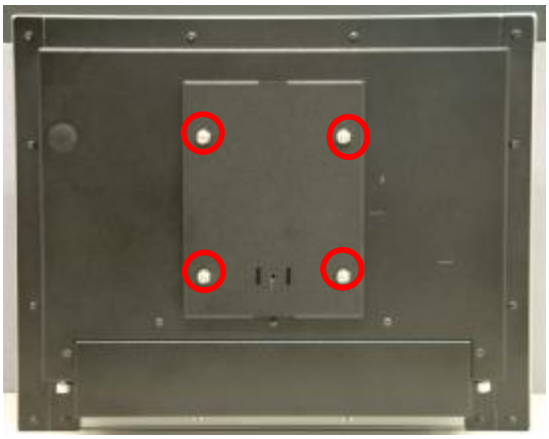
4.2. Stand Holder Installation



a. Slide the stand bracket into the position



b. Tighten the screws (6), 3 on each side



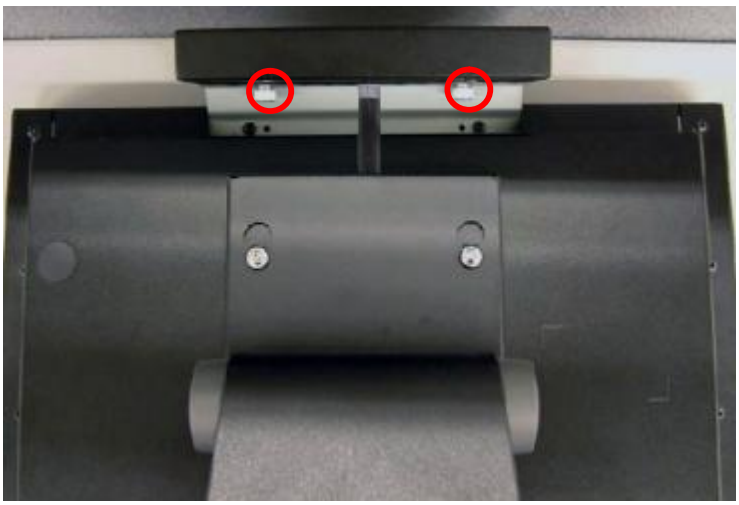
c. Attach the stand holder to the VESA holds and tighten the screws (4)

d. Attach the panel to the stand bracket

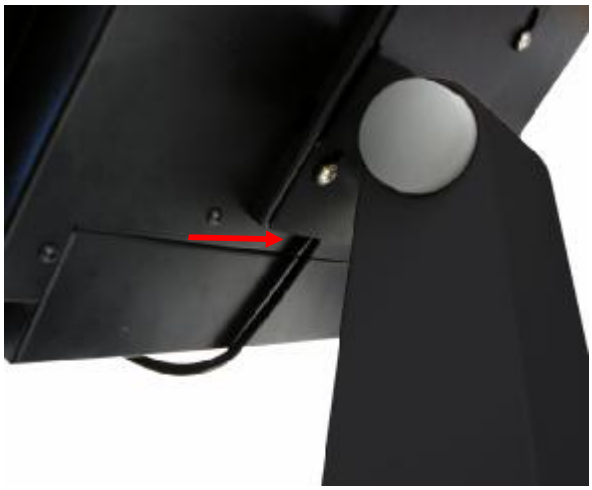
e. Tighten the thumbscrew (1)

4.3. VFD Installation

a. Place the VFD holder on the VFD bracket and tighten the thumb screws (2)



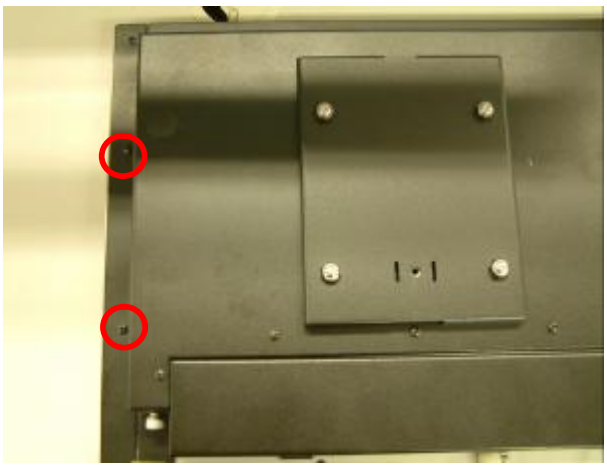
b. Attach the VFD holder on the rear cover and tighten the screws (2). Put the VFD cable through the VESA bracket



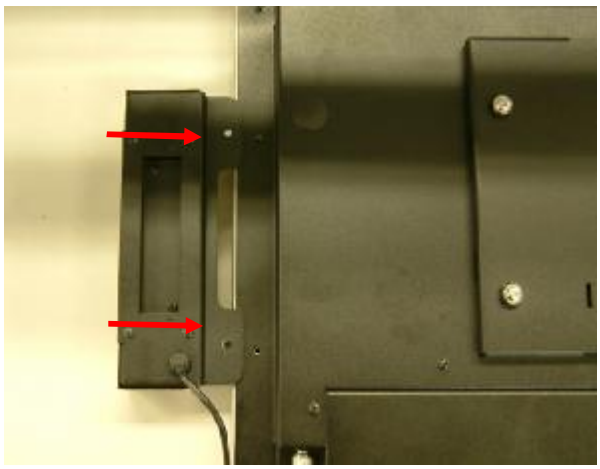
c. The cable should come out from the bottom side of the VESA bracket and band over in order to connect to the I/O port

d. Connect to the COM port as shown by the picture to finish the installation

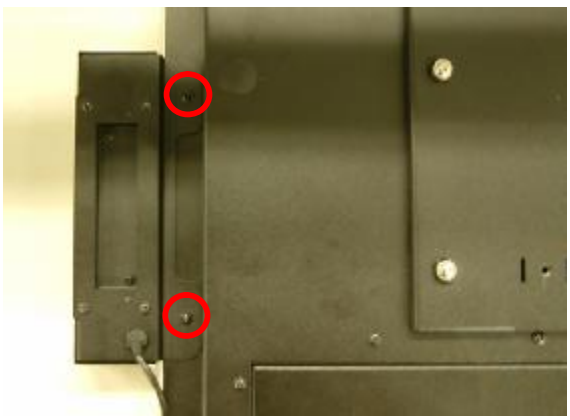
4.4. MSR Installation



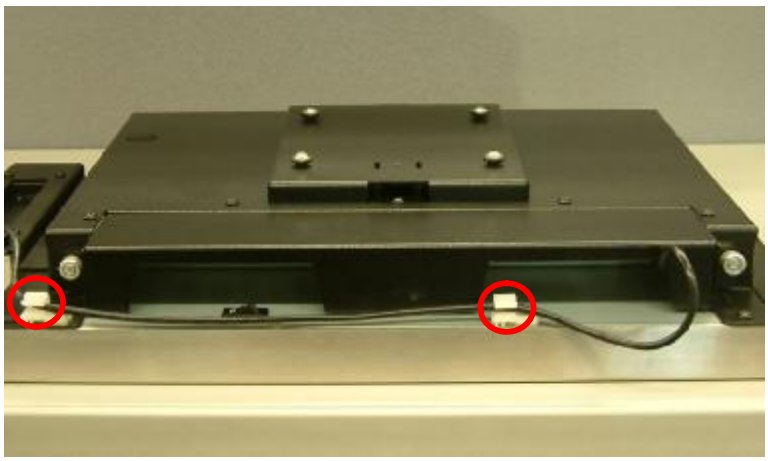
a. Loosen the screws (2)



b. slide the MSR into the position



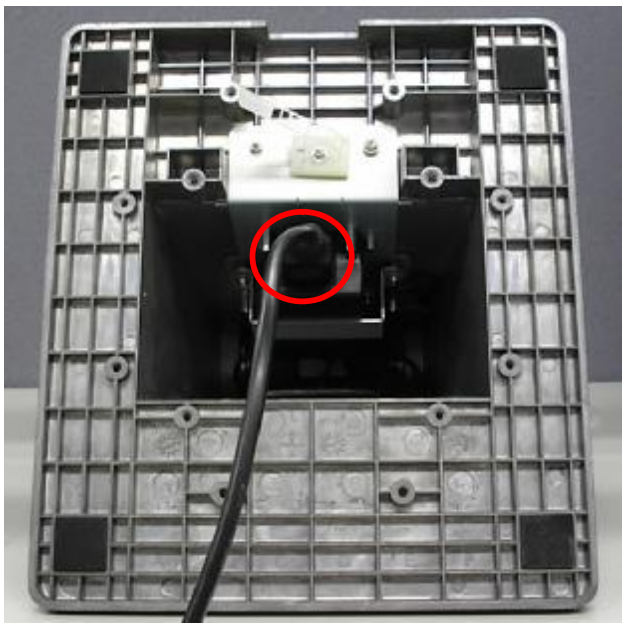
c. Tighten the screws (2)



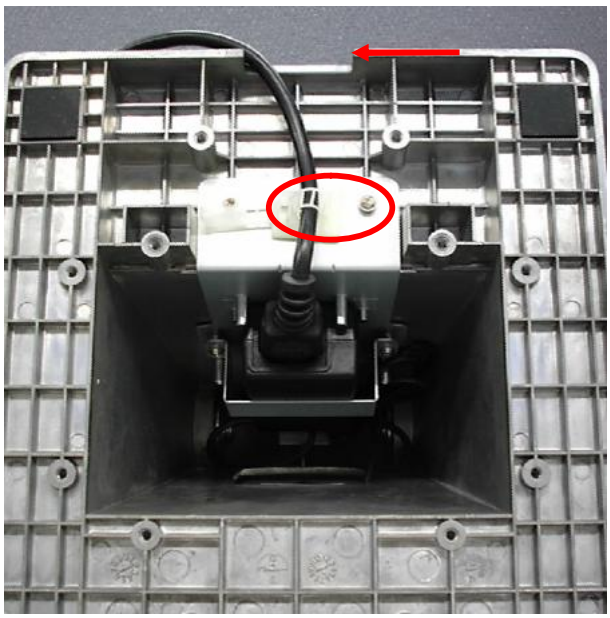
d. Put the MSR cable through the holders(2)

e. Connect the MSR cable to the PS2 socket to finish the installation

4.5. Power Cord Installation



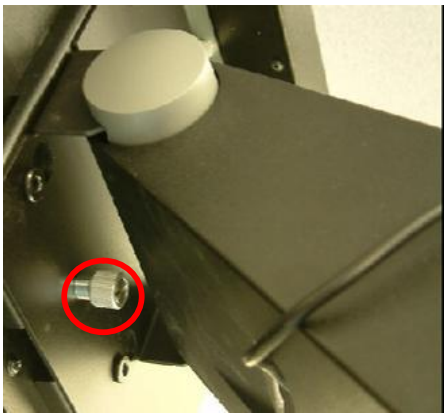
a. Connect the power cord to the adaptor



b. Place the cable on the holder and clip to properly locate it. Route through the base gap for cable management

5. System Disassembly

5.1. Removing the Stand and the Stand holder

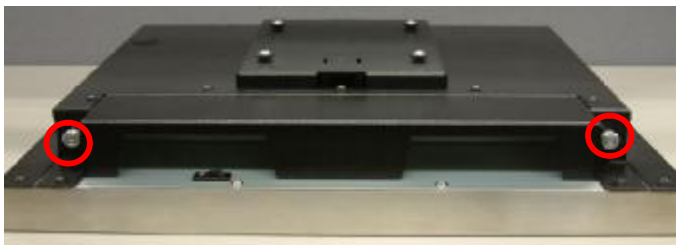


a. Loosen the thumbscrew (1)

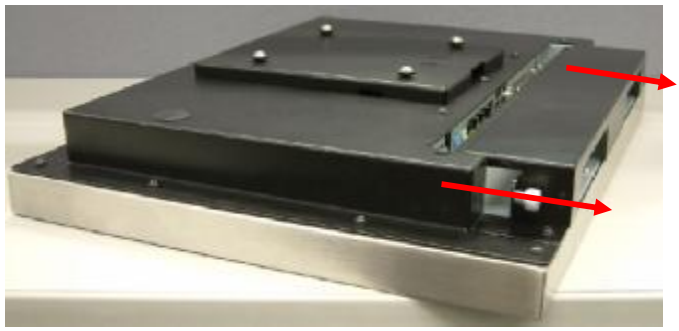
b. Lift the panel up and separate it from the stand bracket

5.2. Opening the I/O Cover

To open the I/O cover, please first follow the steps in chapter 5.1



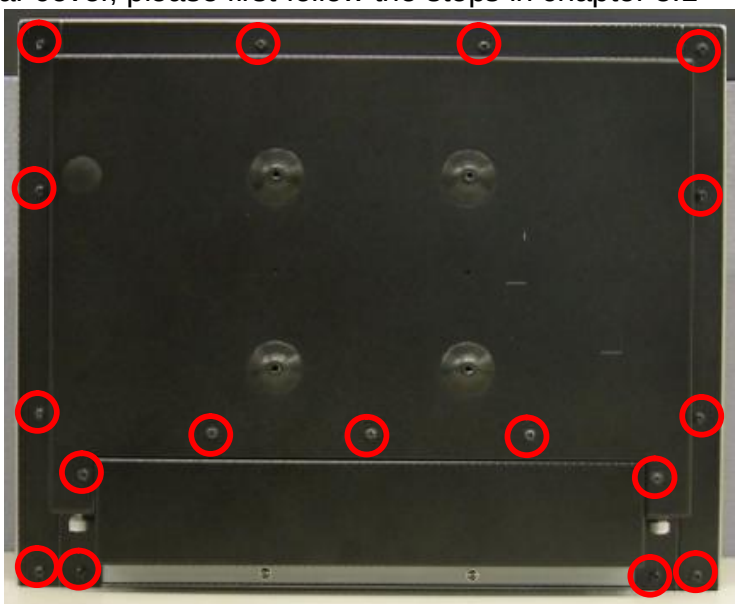
a. Loosen the thumbscrews (2)



b. Remove the I/O cover from the panel

5.3. Opening the Rear Cover

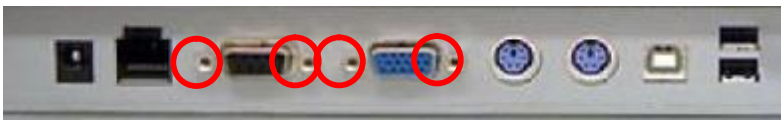
To open the rear cover, please first follow the steps in chapter 5.1



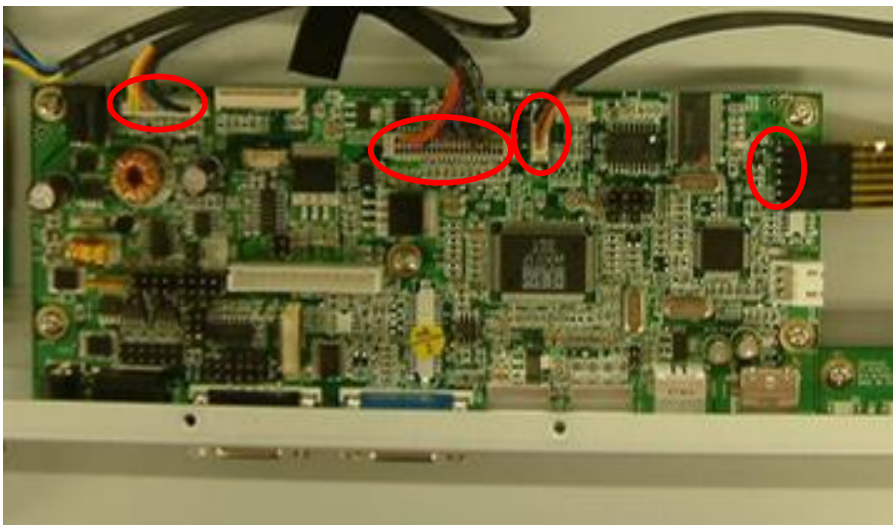
a. Remove the screws (17) to remove the rear cover

5.4. Replacing the Scalar Board

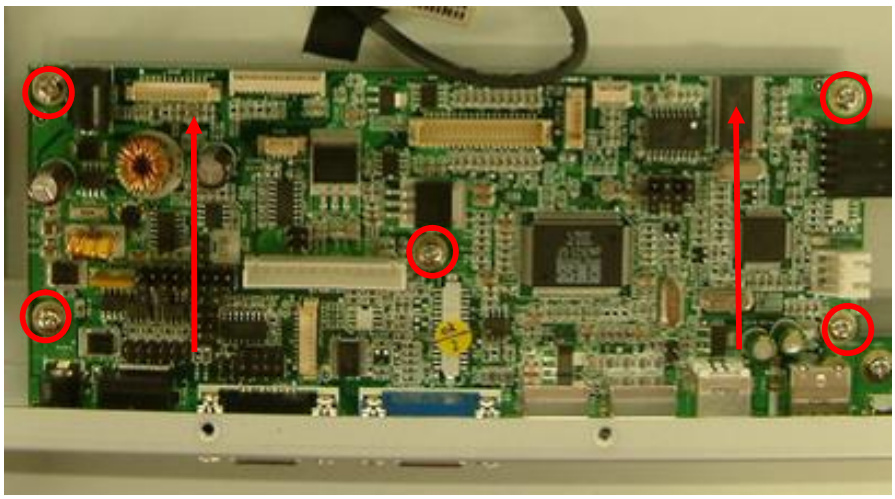
To replace the scalar board, please first follow the steps in chapter 5.1, 5.2 and 5.3



a. Remove the hex screws(4)



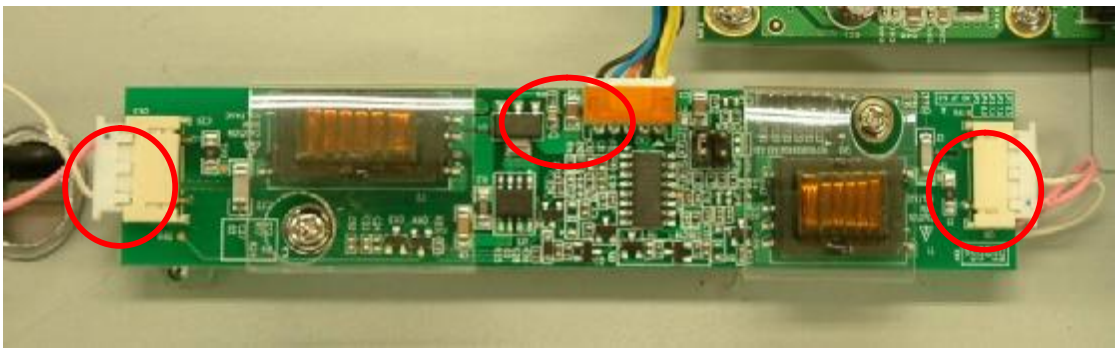
b. Disconnect the cables (4)



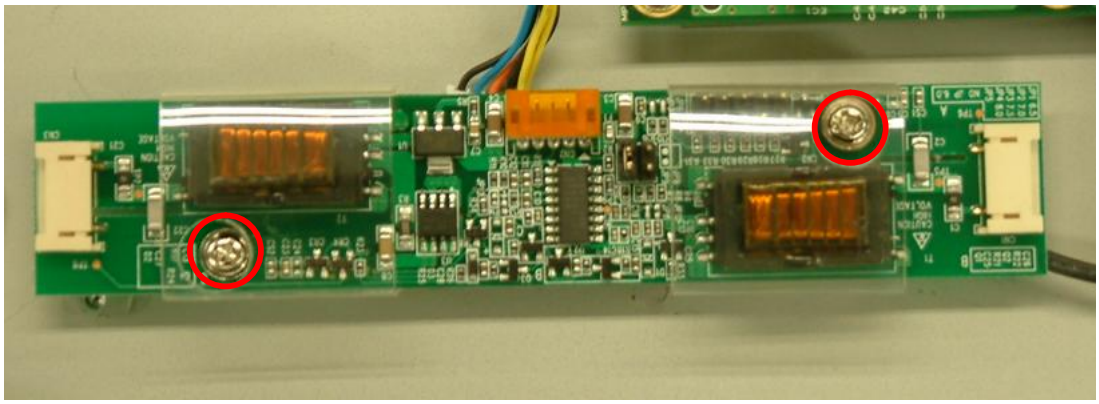
c. Remove the screws (5) then slide the scalar board to the direction as shown by the arrows to replace it

5.5. Replacing the Inverter Board

To replace the inverter board, please first follow the steps in chapter 5.1, 5.2, and5.3.



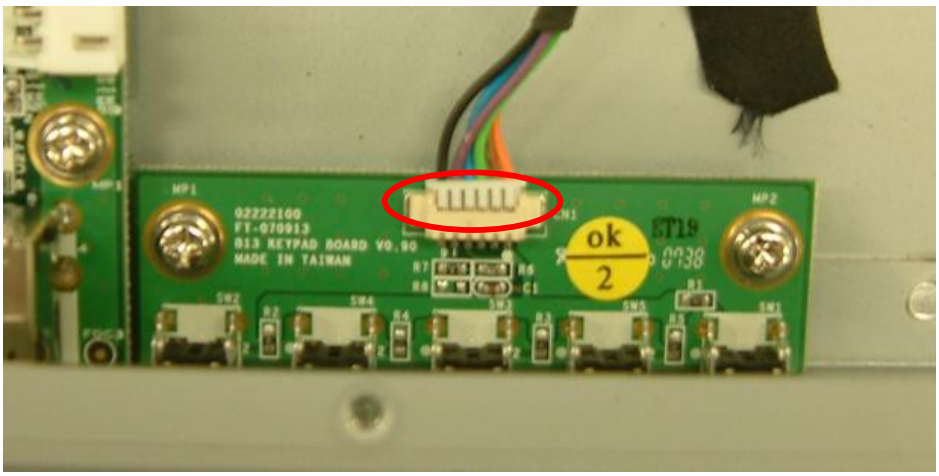
a. Disconnect the cables (3)



b. remove the screws (2) to replace the inverter board

5.6. Replacing the OSD Board

To replace the OSD board, please first follow the steps in chapter 5.1, 5.2, and5.3.



a. Disconnect the cables (4)

b. Remove the screws (6) to replace the OSD board

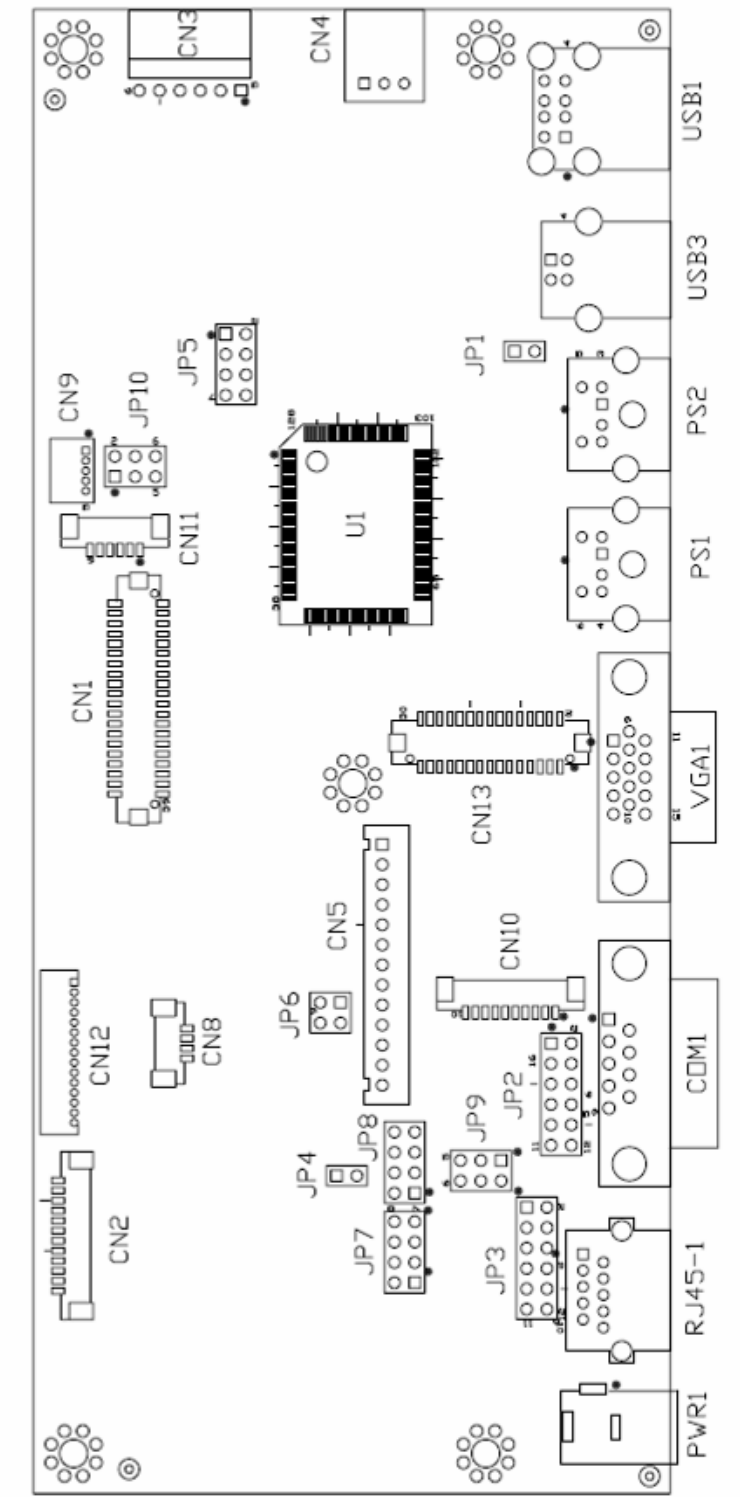
6. Specification

Main board	B13		
LCD Panel			
Panel Size	12.1" TFT LCD	15" TFT LCD	17" TFT LCD
Brightness	400nits	350nits	300nits
Resolution	800 x 600	1024 x 768	1280 x 1024
Touch	Resistive / IR type (Option, replace Tempered Glass)		
External I/O Ports			
VGA	1		
PS/2	2 (1XPS/2 in to PC, 1XPS/2 out to MSR /Keyboard)		
OSD Button	5 (power, menu, left, right, select)		
USB	2x USB (type A), 1x USB (type B) to PC		
Serial / COM	2 x COM (1 x DB-9/F type to PC) 1x RJ45 type to VFD		
Power adapter			
Power Source	12V /2.5A 30W		12V /5A 60W
Peripheral			
Metal MSR	3 Tracks (PS/2)		
Metal Customer Display	Flush mount VFD (COM)		
Environment			
EMC & Safety	FCC Class A, CE, LVD		
Operating Temperature	0°C ~ 40°C (41°F ~ 95°F)		
Storage Temperature	-20°C ~ 60°C (-4°F ~ 140°F)		
Operating Humidity	5% ~ 95% RH non condensing		
Storage Humidity	5% ~ 95% RH non condensing		
Dust & Water Proof	IP55 (Front bezel)		
Dimension (W x D x H)	90° Angle 331 x 250 x 346mm 13” x 9.8” x 13.6”	90° Angle 386 x 250 x 370mm 15.2” x 9.8” x 14.6”	90° Angle 411 x 250 x 390mm 16.2” x 9.8” x 15.4”
	Wall mount 331 x 55 x 260mm 13” x 2.2” x 10.2”	Wall mount 386 x 60 x 308mm 15.2” x 2.4” x 12.1”	Wall mount 411 x 60 x 345mm 16.2” x 2.4” x 13.6”
Mounting	75mm x 75mm Standard VESA	100mm x 100mm Standard VESA	

- This specification is subject to change without prior notice.

7. Connectors and Jumper Settings

7.1. B13 Scalar board



7.2. Jumper Settings

7.2.1 Power Mode Setting

Function	JP4
◎ On	1-2
Off	N/C

7.2.2 COM3 Power Setting

Function	JP9
◎ COM3 PIN10_RI	1-2
COM3 PIN10_+5V	3-4
COM3 PIN10_+12V	5-6

7.2.3 USB Touch Setting

Function	JP10
◎ Docking	3-5, 4-6
On Board	1-3, 2-4

7.2.4 COM Port RS232 Touch / Int. COM / RS232 Card Reader/ Ext. COM Setting

Function	JP2	JP3	JP7	JP8
◎ RS232 Touch	1-2, 3-4, 5-6, 7-8		1-2, 5-6	1-2, 5-6

Note:

OPEN SHORT

7.3. Connectors

Connector	Function
CN1	LCD Interface Connector
CN2	Inverter Connector
CN3	Resistive Touch Panel Connector
CN4	Power State LED Connector
CN5	VGA Extender Connector
CN6	Power ON/OFF Connector (Reserve)
CN8	GM2621 SPI Connector (Reserve)
CN9	Internal USB Device Connector (Down-Stream)
CN10	Internal COM Device Connector (Output)
CN11	Keypad Connector
CN12	Card Reader Connector
CN13	DVI Connector
COM1	COM Port Connector (Input)
PS1	P/S2 Input Connector
PS2	P/S2 Output Connector
PWR1	+12V Input
PWR2	+12V Input (Internal)
RJ45_1	COM Port Connector (Output)
USB1	USB Port (Down-Stream x2)
USB3	USB Port (Upstream)
VGA1	VGA Input Connector

7.4. Connectors Pin Definition

CN1: LVDS Interface

Pin 1	LVDS_B0+	Pin 2	LVDS_A3+
Pin 3	LVDS_B0-	Pin 4	LVDS_A3-
Pin 5	GND	Pin 6	GND
Pin 7	LVDS_B1+	Pin 8	LVDS_CLKA+
Pin 9	LVDS_B1-	Pin 10	LVDS_CLKA-
Pin 11	GND	Pin 12	GND
Pin 13	LVDS_B2+	Pin 14	LVDS_A2+
Pin 15	LVDS_B2-	Pin 16	LVDS_A2-
Pin 17	GND	Pin 18	GND
Pin 19	LVDS_B3+	Pin 20	LVDS_A1+
Pin 21	LVDS_B3-	Pin 22	LVDS_A1-
Pin 23	GND	Pin 24	GND
Pin 25	LVDS_CLKB+	Pin 26	LVDS_A0+
Pin 27	LVDS_CLKB-	Pin 28	LVDS_A0-
Pin 29	GND	Pin 30	GND
Pin 31	+5V_LCDVDD	Pin 32	+3.3V_LCDVDD
Pin 33	+5V_LCDVDD	Pin 34	+3.3V_LCDVDD
Pin 35	+5V_LCDVDD	Pin 36	+3.3V_LCDVDD
Pin 37	+5V_LCDVDD	Pin 38	+3.3V_LCDVDD
Pin 39	+5V_LCDVDD	Pin 40	+3.3V_LCDVDD

CN2: Inverter Connector

Pin 1	+12V_INV	Pin 2	+12V_INV
Pin 3	+12V_INV	Pin 4	+12V_INV
Pin 5	Back-Light Enable	Pin 6	N/C
Pin 7	N/C	Pin 8	Brightness Control
Pin 9	GND	Pin 10	GND
Pin 11	GND	Pin 12	GND

CN3: Resistive Touch Panel Connector

Pin 1	ESD1	Pin 2	ESD2
Pin 3	ESD3	Pin 4	ESD4
Pin 5	ESD5	Pin 6	N/C

CN4: Power State LED Connector

Pin 1	LED_On	Pin 2	GND
Pin 3	LED_Off		

CN5: VGA Extender Connector

Pin 1	+5_+12V Power	Pin 2	+5_+12V Power
Pin 3	GND	Pin 4	VGA_CAT5_DATA
Pin 5	VGA_CAT5_CLK	Pin 6	VGA_CAT5_VSYNC
Pin 7	VGA_CAT5_/HSYNC	Pin 8	GND
Pin 9	CAT5_EN#	Pin 10	GND
Pin 11	VGA_CAT5_B+	Pin 12	VGA_CAT5_G+
Pin 13	VGA_CAT5_R+		

CN8: GM2621 SPI Connector (Reserve)

Pin 1	N/C	Pin 2	RS232_SPI_RX#
Pin 3	RS232_SPI_TX#	Pin 4	GND

CN9: Internal USB Device Connector (Down-Stream)

Pin 1	+5V	Pin 2	USB20_R_P-
Pin 3	USB20_R_P+	Pin 4	GND
Pin 5	BUFFER_CTRL_ELO		

CN10: Internal COM Device Connector (Output)

Pin 1	DCD#	Pin 2	RX#
Pin 3	TX#	Pin 4	DTR#
Pin 5	GND	Pin 6	DSR#
Pin 7	RTS#	Pin 8	CTS#
Pin 9	RI#	Pin 10	+5V

CN11: Keypad

Pin 1	+3.3V_GM2621	Pin 2	GPIO_LED_OFF#
Pin 3	GPIO_LED_ON#	Pin 4	KEYPAD_IN
Pin 5	KEYPAD_GND	Pin 6	GND

CN12: Card Reader Connector

Pin 1	+5V	Pin 2	+5V
Pin 3	KDATA_SIO_TO_MSR	Pin 4	KDATA_SIO_TO_MSR
Pin 5	KDATA_MSR_TO_GFINGER	Pin 6	KCLK_MSR_TO_GHINGER
Pin 7	RS232_6_RX#	Pin 8	RS232_6_TX#
Pin 9	RS232_6_CTS#	Pin 10	RS232_6_RTS#
Pin 11	KB_EN	Pin 12	GND
Pin 13	USB20_MSR_P0+	Pin 14	USB20_MSR_P0-
Pin 15	GND		

CN13: DVI Connector

Pin 1	GND	Pin 2	TMDS_A0+
Pin 3	DVI_DET	Pin 4	TMDS_A0-
Pin 5	GND	Pin 6	GND
Pin 7	+5V_DVI	Pin 8	TMDS_A1+
Pin 9	N/C	Pin 10	TMDS_A1-
Pin 11	GND	Pin 12	GND
Pin 13	N/C	Pin 14	TMDS_A2+
Pin 15	N/C	Pin 16	TMDS_A2-
Pin 17	DVI_R_DDC_DATA	Pin 18	GND
Pin 19	DVI_R_DDC_CLK	Pin 20	TMDS_CLKA+
Pin 21	N/C	Pin 22	TMDS_CLKA-
Pin 23	N/C	Pin 24	GND
Pin 25	N/C	Pin 26	N/C
Pin 27	N/C	Pin 28	N/C
Pin 29	N/C	Pin 30	GND

COM1: COM Port Connector (Input)

Pin 1	RS232_DCD#	Pin 2	RS232_RX#
Pin 3	RS232_TX#	Pin 4	RS232_DTR#
Pin 5	GND	Pin 6	RS232_1_DSR#
Pin 7	RS232_RTS#	Pin 8	RS232_1_CTS#
Pin 9	RS232_RI		