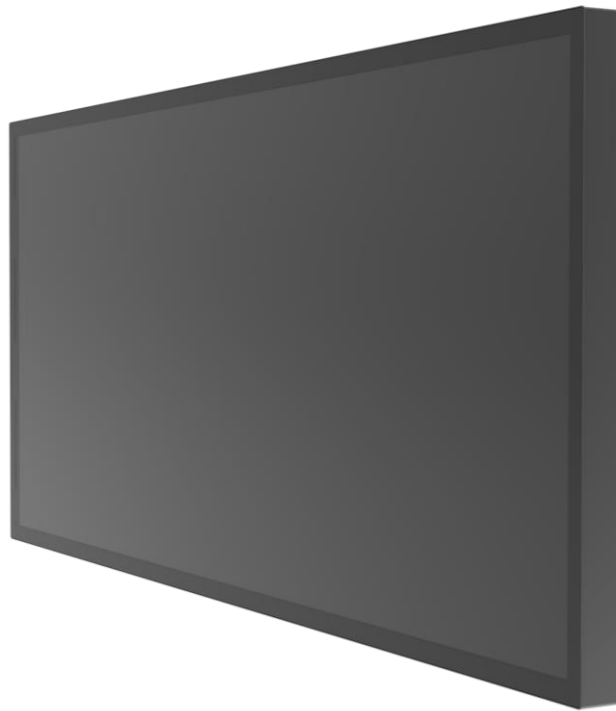


User Manual

Version 2.0 2018/07

TDS-55-P Touch Monitor



About This Document

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Compliance Information

For FCC (USA)

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For IC (Canada)

CAN ICES-3(A)/NMB-3(A)

For CE (EU)

The device complies with the EMC Directive 2014/30/EU and Low Voltage Directive 2014/35/EU

Warning:

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Usage Notice



Warning - To prevent the risk of fire or shock hazards, and do not expose the product to moisture.



Warning - Please do not open or disassemble the product as this may cause electric shock.

Precautions

Please follow all warnings, precautions and maintenance as recommended in this user's manual to maximize the life of your unit.

Do :

- Turn off the product before cleaning.
- Use a soft cloth moistened with mild detergent to clean the product housing.
- Use only the qualified power adapter that comes with your device.
- Disconnect the power plug from AC outlet if the product is not going to be used for an extended period of time.

Don't :

- Do not use abrasive cleaners, waxes or solvents for your cleaning.
- Do not operate the product under the following conditions:
 - Extremely hot, cold or humid environment.
 - Areas susceptible to excessive dust and dirt.
 - Near any appliance generating a strong magnetic field.

Table of Contents

Chapter 1	5
1.1 Overview	6
1.2 Feature	6
1.3 Specifications	6
1.4 Block Diagram	7
1.5 Interface Connectors	7
1.5.1 Power Connector	7
1.5.2 Video Signal Connector	8
1.5.3 Signal Connector	9
1.6 Package Overview	11
Chapter 2	12
2.1 About VESA Mount	13
2.1.1 Install the VESA screw	14
2.2 About General Mounting Information	15
2.2.1 Landscape	15
2.2.2 Portrait	15
2.3 On-Screen Display	16
2.3.1 OSD Function Description	17
2.3.2 Timing Table Chart	18
2.3.3 EDID Data	18
2.4 Dimension	19
2.4.1 Front View	19
2.4.2 Side View	19
2.4.3 Rear View	20
2.4.4 Back View	20
Appendix	21

Chapter 1

Product Introduction

1.1 Overview

The TDS-55A Series is a 55" large size thin-film transistor (TFT) liquid crystal display (LCD). This unit is to be used as commercial and light industrial equipment only.

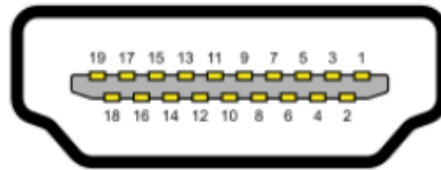
1.2 Feature

- 4K2K High Resolution Display
- Dynamic Touch Sensitivity Technology Supports up to 6mm Thickness glass
- Portrait and Landscape Display for All Solutions.
- Touch Screen Support up to 40 Points Touch.
- Supports 24/7 non-stop Operate Service.

1.3 Specifications

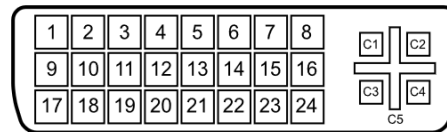
LCD Touch Panel	
Size	55" TFT LCD
Brightness	500 cd/m ² (Non-touch screen) 425 cd/m ² (P-CAP)
Number of Pixels	3840(H) x 2160(V)
Touch Type	P-CAP/ 40 points
Environment	
Power Input	AC 100 ~ 240V, 50/60Hz
Operating Temperature	0°C ~ 40°C
Storage Temperature	-20°C ~ 60°C
Operating Humidity	20% ~ 80% RH, non-condensing
Mounting	VESA 400 mm x 400 mm
Dimension (W x H x D)	1247.6mm x 78.8mm x 732.4mm
Net Weight	30.75 kg
Gross Weight	37.21 kg

1.5.2 Video Signal Connector



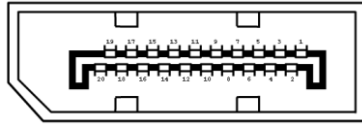
The video signal input via HDMI female connector.
Connector Pin Assignment:

Pin	Signal	Pin	Signal
1	TMDS Data2+	11	TMDS Clock Shield
2	TMDS Data2 Shield	12	TMDS Clock-
3	TMDS Data2-	13	CEC
4	TMDS Data1+	14	Reserved (N.C. on device)
5	TMDS Data1 Shield	15	SCL
6	TMDS Data1-	16	SDA
7	TMDS Data0+	17	DDC/CEC Ground
8	TMDS Data0 Shield	18	+5V Power
9	TMDS Data0-	19	Hot Plug Detect
10	TMDS Clock+		



The video signal input via DVI female connector.
Connector Pin Assignment:

Pin	Signal	Pin	Signal
1	TMDS Data 2-	16	Hot Plug Detect
2	TMDS Data 2+	17	TMDS Data 0-
3	TMDS Data 2/4 Shield	18	TMDS Data 0+
4	TMDS 4-	19	TMDS Data 0/5 Shield
5	TMDS 4+	20	TMDS Data 5-
6	DDC Clock	21	TMDS Data 5+
7	DDC Data	22	TMDS Clock Shield
8	Analog vertical sync	23	TMDS Clock+
9	TMDS Data 1-	24	TMDS Clock-C1
10	TMDS Data 1+	C1	Analog red
11	TMDS Data 1/3 Shield	C2	Analog green
12	TMDS 3-	C3	Analog blue
13	TMDS 3+	C4	Analog horizontal sync
14	+5V DDC Power	C5	Analog ground Return for R,G,B signals
15	Gnd (+5, Analog V/H Sync)		



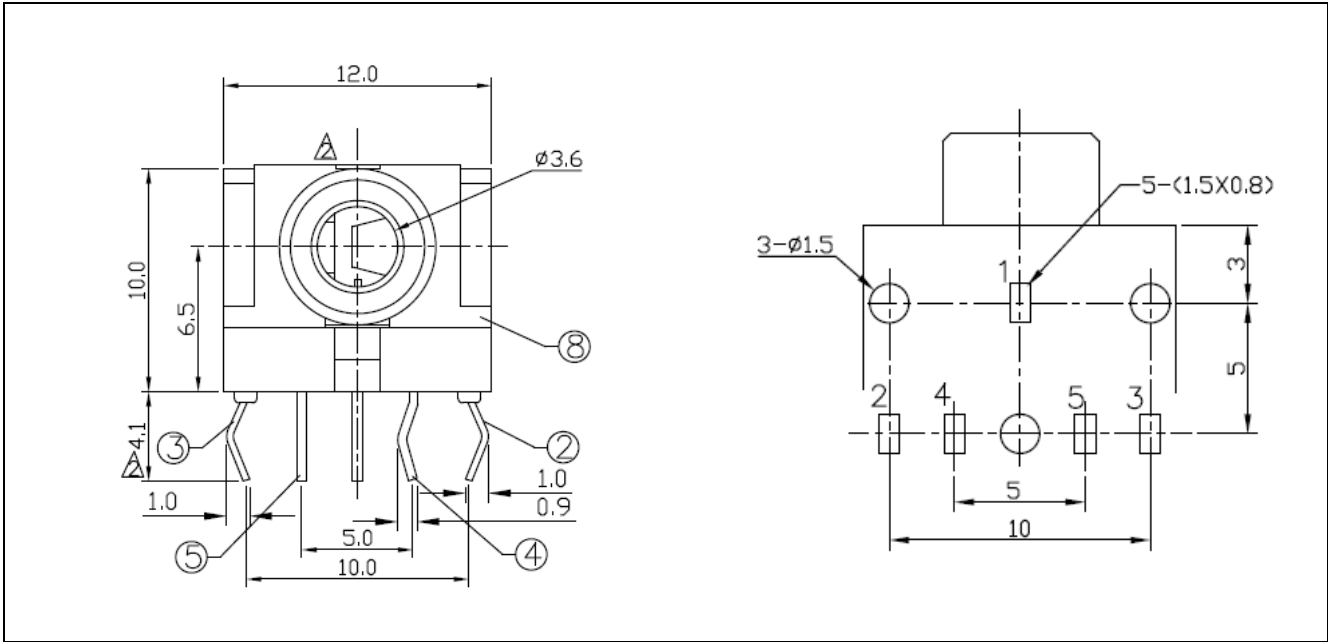
The video signal input via Display Port (1.2) connector.
Connector Pin Assignment:

Pin	Signal
1	ML_Lane 3(n) Data3 -
2	Signal ground
3	ML_Lane 3(p) Data3 +
4	ML_Lane 2(n) Data2 -
5	Signal ground
6	ML_Lane 2(p) Data2 +
7	ML_Lane 1(n) Data1 -
8	Signal ground
9	ML_Lane 1(p) Data1 +
10	ML_Lane 0(n) Data0 -
11	Signal ground
12	ML_Lane 0(p) Data0 +
13	Signal ground
14	Signal ground
15	AUX_CH(p) AUX + Signal for Auxiliary Channel
16	Signal ground
17	AUX_CH(n) AUX - Signal for Auxiliary Channel
18	Hot Plug
19	DP_PWR Return
20	DP_PWR

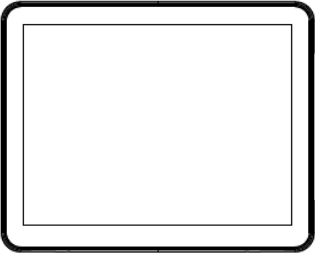
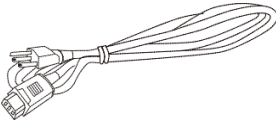
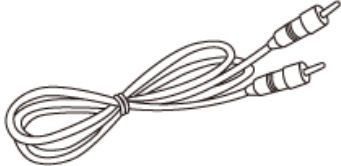
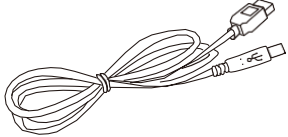

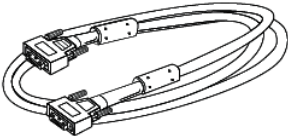
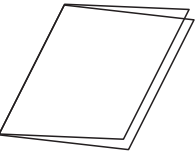


1.5.3 Signal Connector

<p>USB Connector</p>	Pin	Description
	1	VCC
	2	D-
	3	D+
	4	GND
<p>RJ11 Connector (Remote Key)</p>	Pin	Description
	1	MENU
	2	UP
	3	DOWN
	4	SELECT
	5	POWER
6	GND	

Audio Line in / Line out connector



1.6 Package Overview

		
LCD Display	Power Cord	Audio cable
		
USB Cable (A to B)	HDMI Cable	DVI to VGA cable
		
Quick Start Guide	CD	Screw (M4) x 20 pcs

Warning!

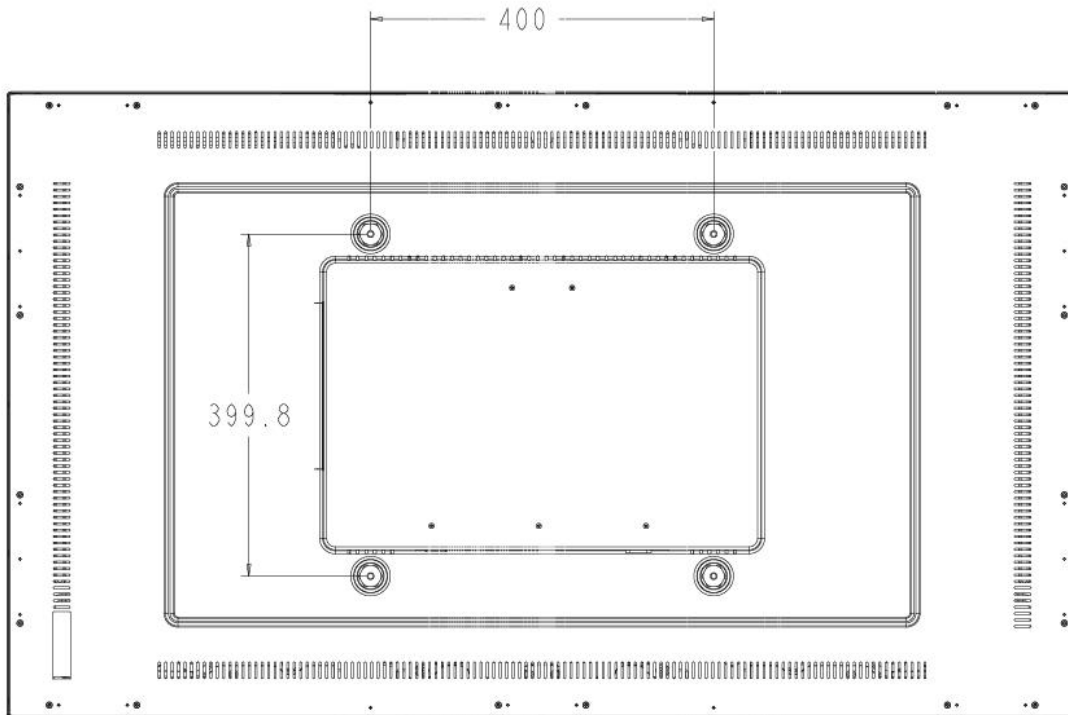
This product is intended to be supplied by a AC-in Power source, rated 100V~240V, 1.3~2.5A 50/60Hz minimum, T_{ma} = 40 degree C minimum, and the altitude of operation = 3048m minimum. If it needs further assistance with purchasing the power source, please contact to TES for further information.

Chapter 2

Product Installation

2.1 About VESA Mount

The TDS-55 series conform to the “VESA Flat Display Mounting Interface Standard” which defines a physical mounting interface for touch monitor and corresponding with the standards of touch monitor mounting devices. The VESA mount is located on the back of this unit.



Warning!

Please select the TES original screws!

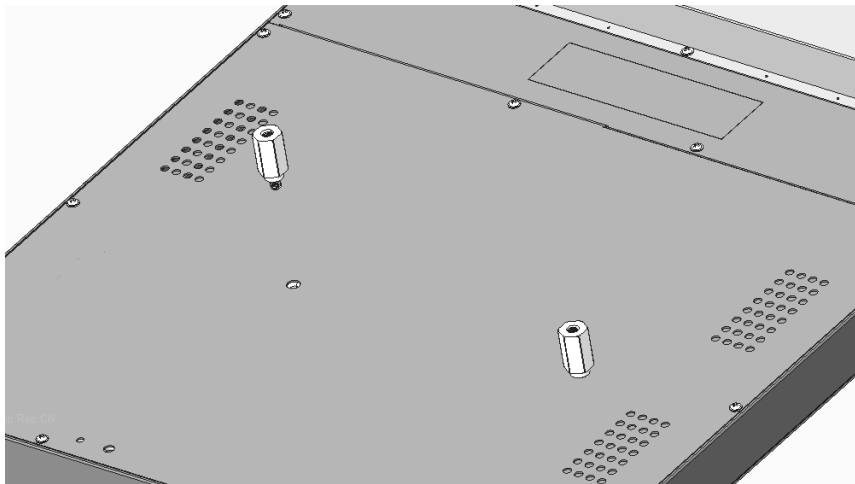
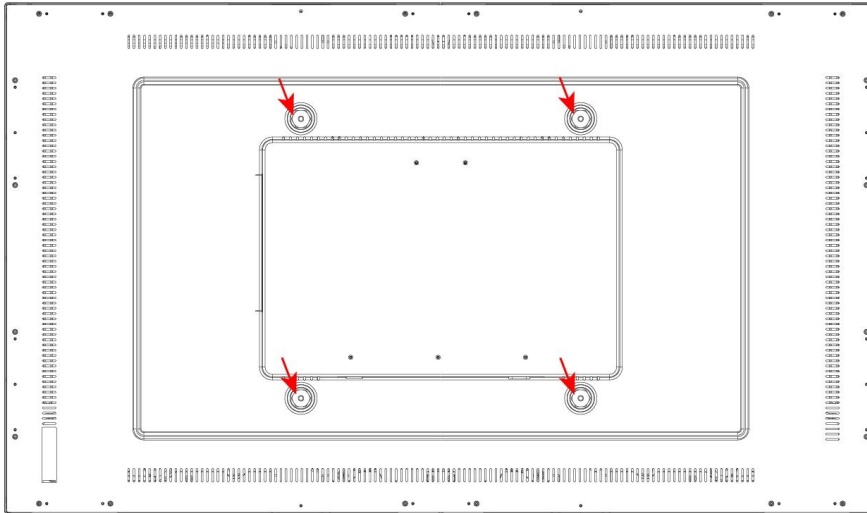
The distance between the back cover surface and the bottom of the screw hole is 6~7 mm. Please use M5 screws diameter with proper length to mount your monitor.

2.1.1 Install the VESA screw

Note: Please install/ dismantle the product when the device is in the shutdown state.

Step 1: Fasten two M6 screws nut into the VESA hole

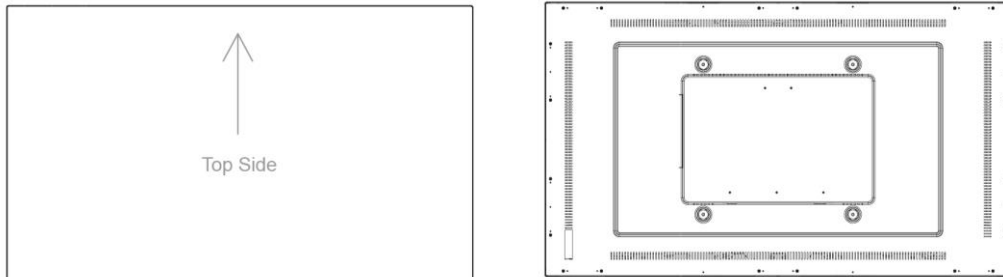
The length of screw nut is 30mm



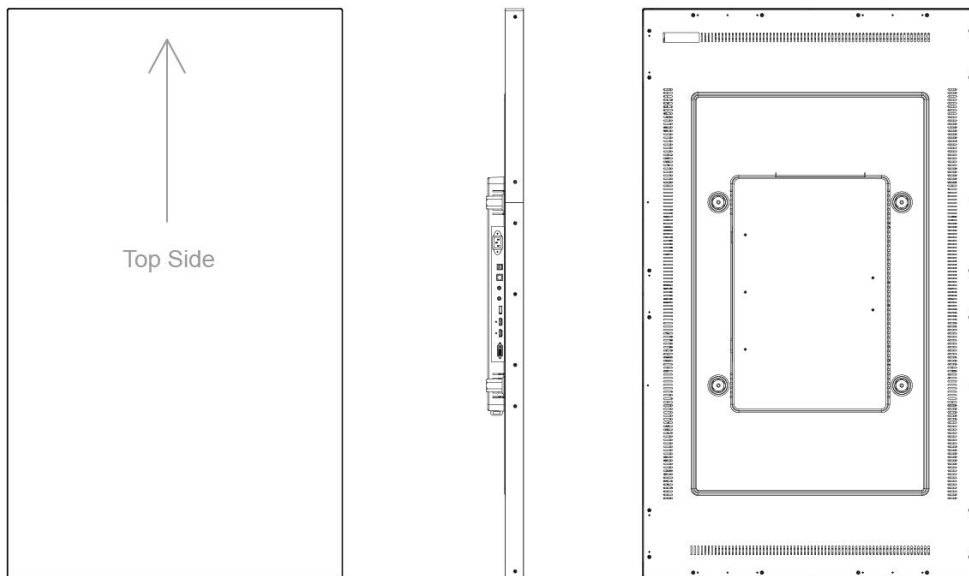
2.2 About General Mounting Information

The following two mounting orientations are supported: Landscape and portrait mode. For optimal touch performance, ensure that the monitor is supported fully and is as flat as possible.

2.2.1 Landscape

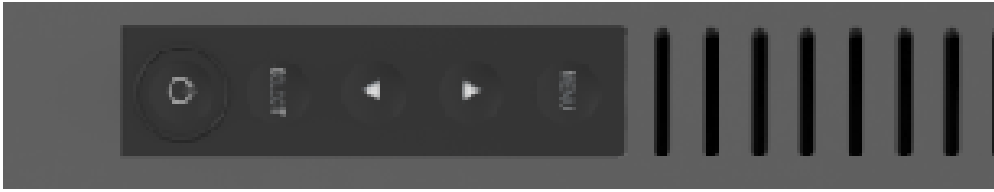


2.2.2 Portrait



2.3 On-Screen Display

The TDS-55 Lite series provide side panel controls. And the following is OSD function table:



Key \ OSD	Menu off status	Menu on status
MENU	Menu appear	Menu disappear/ return to main item
▲	Brightness	Main item select up/ Adjust up
▼	Contrast	Main item select down/ Adjust down
SELECT	Auto Adjusting	Enter/Select sub-item function
⏻	Power On/Off	

1. Press the “MENU” button to pop up the “on-screen menu” and press “Up” or “Down” button to select among the five functions in the main menu.
2. Press “SELECT” to enter the sub menu, and then use “Up” or “Down” button to select the adjustable functions.
3. Choose the adjustment items in the sub menu by pressing the “SELECT” button.
4. Adjust the value of the adjustment items by pressing the “Up” or “Down” button.
5. With the OSD menu on screen, press “Menu” button to return main menu or exit OSD.
6. The OSD menu will automatically close, if you have left it idle for a pre-set time.
7. To Lock the OSD / Power menu buttons, please follow the instructions below.

(Please note: the monitor has to be turned ON with a valid signal pre-set)

- a. Without the OSD menu on screen, press and hold “Menu” key, and press “POWER” once then release “MENU” key. The “Lock/Unlock” menu will appear for 5 seconds.
- b. Use the "UP" and "DOWN key to select OSD or Power setting then set at "Lock" (or "Unlock") by pushing the "ENTER" button.
- c. When pressing “MENU” button, the previous setting will be saved and exit the “Lock/Unlock” menu automatically.

Please note:

1. When the OSD Lock function is selected, this indicates that all the buttons except “power” button are now disabled.
2. When the Power Lock function is selected, this indicates that the power key is disabled; user can not to turn off the monitor by "Power" key.
3. How to enter factory OSD menu, please follow the instructions below.

- a. Without the OSD menu on screen, press and hold “Menu” key ,and press “UP” once then release “MENU” key. The factory menu will appear on the screen.
 - d. Use the "UP" and “DOWN key to select main functions, then press “SELECT” to enter sub menu for adjusting (or setting) those values.
 - c. Select “GoTo Main” and press “SELECT” to exit factory OSD menu, it will automatically switch to user menu for normal OSD operation.
4. In power saving status, to press “Menu” button can wake up OSD for selecting video port.

2.3.1 OSD Function Description

ITEM	CONTENT	Default
Contrast	The monitor luminance level control.	50
Brightness	The monitor backlight level control.	50
Auto Adjust	Automatically adjusts the screen image of VGA signal, affecting the H-position, V-position, Frequency, and Phase menu.	NA
Left/Right	Moving screen image horizontal position to left or right.	NA
Up/Down	Moving screen image vertical position to up or down.	NA
Horizontal size	The screen image horizontal dot clock adjustment.	NA
Fine	The screen image pixel phase adjustment.	NA
OSD Left/Right	Moving OSD menu horizontal position to left or right.	50
OSD Up/Down	Moving OSD menu vertical position to up or down.	50
OSD Time out	OSD auto-disappear time selection.	15
OSD Language	OSD menu language selection. (English, French, Deutsch, Italian, Spanish, Japanese , Simplified Chinese and Korean)	English
Factory Reset	Factory default value restored.	NA
Color Temperature	Color temperature selection. (5500K, 6500K, 7500K, 9300K, User; default: User)	USER
Red	Red gain of selected color temperature. (only User mode can be adjusted)	97
Green	Green gain of selected color temperature. (only User mode can be adjusted)	100
Blue	Blue gain of selected color temperature. (only User mode can be adjusted)	97

2.3.2 Timing Table Chart

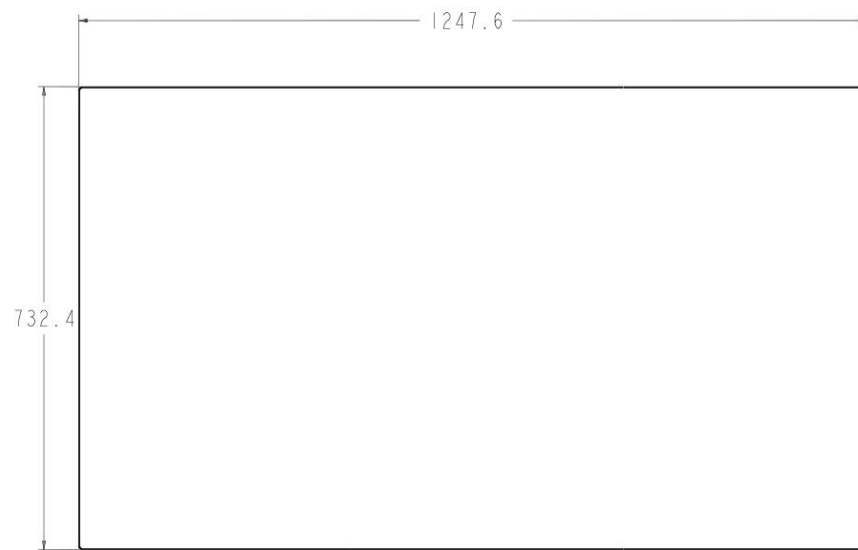
Mode	Resolution	H-Freq. (KHz)	Bandwidth (MHz)	Polarity	
				H	V
1	VGA 640x480 60Hz	31.47	25.175	-	-
2	VESA 800x600 60Hz	37.88	40	+	+
3	VESA 1024x768 60Hz	48.36	65	-	-
4	VESA 1280x720 60Hz	44.772	74.5	-	+
5	VESA 1280x768 60Hz	47.776	79.5	-	+
6	VESA 1280x1024 60Hz	64	108	+	+
7	VESA 1280x960 60Hz	60	108	+	+
8	VESA 1440x900 60Hz	56	106.5	-	+
9	VESA 1360x768 60Hz	47.712	85.5	+	+
10	VESA 1680x1050 60Hz	65.2	146	-	+
11	FHD 1920x1080 60Hz	67.5	148.5	+	+
12	WQHD 2560x1440 60Hz(RB)	88.787	241.5	+	-
13	UHD 3840x2160 30Hz	67.5	297	+	+
14	UHD 3840x2160 60Hz	135	594	+	+

2.3.3 EDID Data

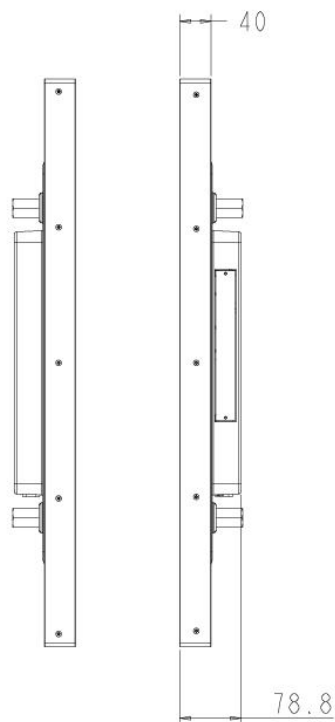
The monitor assembly shall provide a display communications channel that conforms to VESA DDC2B hardware requirements. This configuration shall contain the 128-byte EDID file as specified by VESA EDID Standard.

2.4 Dimension

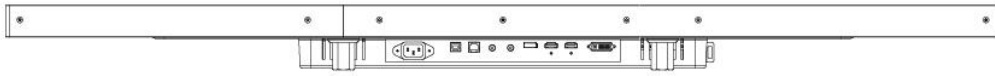
2.4.1 Front View



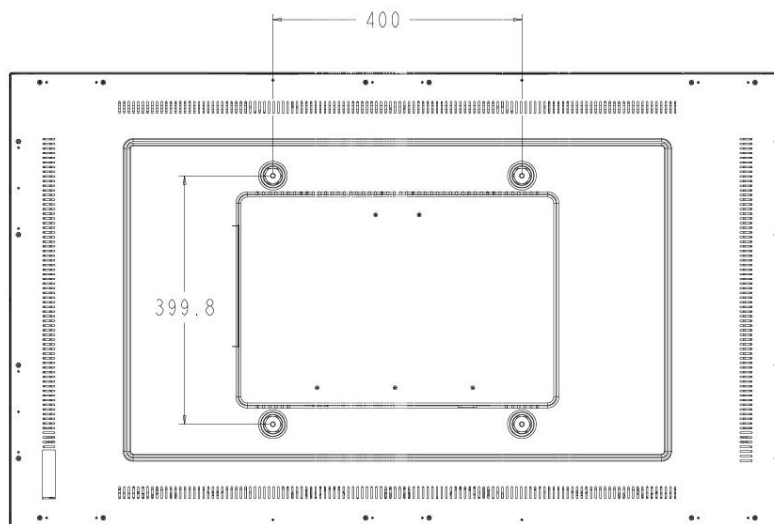
2.4.2 Side View



2.4.3 Rear View



2.4.4 Back View



Appendix

Declaration of the Presence Condition of the Restricted Substances Marking

設備名稱：觸控螢幕 Equipment name : Touch Monitor		型號（型式）：TDS-55 Type designation (Type) : TDS-55				
單元 Unit	限用物質及其化學符號 Restricted substances and its chemical symbols					
	鉛 Lead (Pb)	汞 Mercury (Hg)	鎘 Cadmium (Cd)	六價鉻 Hexavalent chromium (Cr ⁺⁶)	多溴聯苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)
塑膠零件 Plastic Parts	○	○	○	○	○	○
金屬零件 Metal Parts	-	○	○	○	○	○
線纜和電纜組件 Cable component	-	○	○	○	○	○
薄膜液晶面板 LCD Panel	-	○	○	○	○	○
觸控式螢幕面板 Touch Panel	-	○	○	○	○	○
電路板 PCBA	-	○	○	○	○	○
軟體(光碟..等) Software	○	○	○	○	○	○
<p>Note 1 : “Exceeding 0.1 wt %” and “exceeding 0.01 wt %” indicate that the percentage content of the restricted substance exceeds the reference percentage value of presence condition. °</p> <p>Note 2 : “○” indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.</p> <p>Note 3 : The “-” indicates that the restricted substance corresponds to the exemption.</p>						