



ViTAM-1XX Series

10.1", 12.1", 15", 15.6", 17", 19", 21.5", and 23.8" New Gen. IP66/IP69K

Stainless Steel Display

User Manual

Release Date			Revision
July. 2019			V1.7
[®] 2019 Aplex Techn	ology, Inc.	All Rights Reserved.	Published in Taiwan
Aplex Technology,	Inc.		
15F-1, No.186, Jiar	n Yi Road, Zhonghe	District, New Taipei City 23	5, Taiwan
Tel: 886-2-82262881	Fax: 886-2-82262883	URL: <u>http://www.aplextec.cc</u>	om/zh/home.php

Revision History

Reversion	Date	Description			
0.1	2016/12/14	For Preliminary Release			
0.2	2016/12/22	Update power consumption and net weight			
1.0	2017/01/10	Official Version			
1.1	2017/03/07	Revised VESA mounting size			
1.2	2017/07/28	Add I/O drawing and definition			
1.3	2018/02/14	LCD description			
1.4	2018/11/01	Revise Operatiing temperature+LCD size			
1.5	2018/11/22	Revise Backlight Lifetime information			
1.6	2019/01/11	Revise MB information			
1.7	2019/07/29	Add Logistic Statement			

Warning!

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

Electric Shock Hazard – Do not operate the machine with its back cover removed. There are dangerous high voltages inside.

Disclaimer

This information in this document is subject to change without notice. In no event shall Aplex Technology Inc. be liable for damages of any kind, whether incidental or consequential, arising from either the use or misuse of information in this document or in any related materials.

Dear Valued Partners

Thank you for supporting APLEX Technology. Kindly note for ViTAM series, the pressure testing screw is loosen for half turn before shipment. The purpose is to avoid potential quality concerns caused by radical air pressure change during transportation. This especially applies to air shipment with unpressurized cabin.

Upon receiving the system, please tighten the pressure testing screw before deployment to ensure 100% functionality.

Here is our suggestion:

- 1. Prepare a 3mm hex screwdriver
- 2. Tighten the screw (indicated in circle) clockwise until it is well in place
- 3. Recommend torque is 8~10 kgf-cm

Apologies for any inconveniences caused and thank you for your cooperation.

Yours Sincerely



Table of Contents

Revision History	1
Warning!	2
Disclaimer	
Logistic Statement	
0	

2.1 AD Board OSD Functions	20
2.2 OSD Controls	21
2.3 Main Menu	22

Chapter 3

3.1 Windows 7 Universal Drive	r Installation for PenMount 6000
Series	25
3.2 Software Functions	

Appendix	<u>51</u>	
Board	Dimensions	51
_		

Appendix B: Panel Mounting and VESA Mounting 52

Figures

Figure 1.1: Dimensions of ViTAM-110P/R/G/(H)	12
Figure 1.2: Dimensions of ViTAM-112P/R/G/(H)	12
Figure 1.3: Dimensions of ViTAM-115P/R/G/(H)	13
Figure 1.4: Dimensions of ViTAM-116P/R/G/(H)	13
Figure 1.5: Dimensions of ViTAM-117P/R/G/(H)	14
Figure 1.6: Dimensions of ViTAM-119P/R/G/(H)	14

4

Installation

Figure 1.7: Dimensions of ViTAM-121P/R/G/(H)	15
Figure 1.8: Dimensions of ViTAM-124P/G/(H)	15
Figure 1.9: Front View and Touch on/off Button of	VITAM-1XX
Series	16
Figure 1.10: Rear View of ViTAM-110P/R/G/(H)	17
Figure 1.11: Rear View of ViTAM-112P/R/G(H)	17
Figure 1.12: Rear View of ViTAM-115P/R/G/(H)	17
Figure 1.13: Rear View of ViTAM-116P/R/G/(H)	18
Figure 1.14: Rear View of ViTAM-117P/R/G/(H)	18
Figure 1.15: Rear View of ViTAM-119P/R/G/(H)	18
Figure 1.16: Rear View of ViTAM-121P/R/G/(H)	19
Figure 1.17: Rear View of ViTAM-124P/G/(H)	19
Figure A: Dimensions of TB-6802	51
Figure B: Yoke Mounting of ViTAM-1XX Series	52
Figure C: VESA Mounting of ViTAM-1XX Series	52

Chapter 1 <u>Getting Started</u>

1.1 Features

- 10.1"/12.1"/15"/15.6"/17"/19"/21.5"/23.8" New Gen. stainless steel display
- True flat front bezel design and grade 304 stainless steel enclosure (grade 316 for option)
- IP66/IP69K rated with M12 connectors
- Support resistive touch, projected capacitive touch, and glass
- Touch on/off button on the side edge for hygienic cleaning
- Support ergonomic versatile mounting: Yoke mounting / space-saving VESA mounting

1.2 Specifications

					ViTAM-1	XX Series	
I/O port – Standard m12 I/O Connector on the Rear Side with waterproof							
VGA		1	x M12	for VGA by 12 p	in		
				Pin Define			
			1	R		10	
			2	G		2 1	
			3	В		3	
			4	DDATA		11 8 8 8	
			5	HSYNC			
			6	GND		4 -12	
			7	VSYNC			
			8	DCLK		Pin Assignments	
			9	VCC		Front View	
			10	GND			
			11	GND			
			12	GND			
HDMI		1 x W	.F. HD	MI with wate	rproof		
				сар			
			Туре	A (Receptacle) H	IDMI	18 16 14 12 10 8 6 4 2	
		1		TMDS Data2+			

T					
	2	TM	DS Data2 Shie	eld	
	3		TMDS Data2-		
	4		TMDS Data1+		
	5	TM	DS Data1 Shie	eld	
	6		TMDS Data1-		
	7	TMDS Data0+			
	8	TMDS Data0 Shield			
	9		TMDS Data0-		
	10		TMDS Clock+		
	11	TM	1DS Clock Shie	ld	
	12		TMDS Clock-		
	13		CEC		
	14	Reserv	ved (N.C. on d	evice)	
	15	SCL(I ² C	serial clock fo	r DDC)	
	16	SDA(I ² C	serial data fo	r DDC)	
	17	D	DC/CEC Groun	d	
	18		+5 V Power		
	19	Н	ot Plug Detec	t	
Touch	1:	M12 fo	r TOUCH USB	2.0	
		CN1	Pin Define		
		1	USB 5V		
		7	D-		8
		6	D+		
		5	GND		
		4	NC		4-5-6
		3	NC		Pin Assignments Front View 正視圖
		8	NC		· · · ·
		2	NC		

Power	1 x DC power input (9~36V) by M12 connector Pin Define 1 NC 3 VCC 4 GND Pin Assignments Front View				
Others	1 x Touch on/off button on the side				
OSD Control Membrane	OSD on the rear side				
Speaker	1 x 2W IP65 speaker (optional)				
Touch Screen					
Туре	Resistive touch window (for R model) (not available for ViTAM-124) Projected capacitive touch screen (for P model)				
Interface	USB				
Light Transmission	Resistive touch window: over 80% Projected capacitive touch screen: over 90%				
Glass Type (option)					
Туре	AR				
Light Transmission	Over 90%				
Power					
Power Input	DC 9~36V				
Mechanical					
Construction	304 Stainless steel enclosure (default)				
	316 Stainless steel enclosure (optional)				
Construction	Stainless steel enclosure				
IP Rating	ІР66/ІР69К				
Environmental					
Operating temperature					
	0~50°C (for 15.6″, 17″, 19″, 23.8″ model)				
	0~40°C (for 21.5" High Brightness model)				
Storage temperature	-30~70°C				
Storage humidity	10 to 90% @ 40°C, non- condensing				
Certification	CE / FCC Class A				

	ViTAM-110	ViTAM-112	ViTAM-115	ViTAM-116			
	P/R/G/(H)	P/R/G/(H)	P/R/G/(H)	P/R/G/(H)			
Power Consumption							
Power Consumption	MAX: 6.2W (110R)	MAX: 8.9W (112R)	MAX: TBD (115R)	MAX: TBD (116R)			
	MAX: 11W (110P)	MAX: TBD (112P)	MAX: 9.3W (115P)	MAX: 12.5W (116P)			
Mechanical							
Mounting	VESA mount 75 x 75, Yoke mount						
Dimensions(mm)	300 x 220 x 53	335 x 265 x 53	399 x 324 x 53	440 x 290 x 55			
Net Weight	3.5 Kg	4.5 Kg	6.5 Kg	6.5 Kg			

• Power Consumption and Mechanical Specifications

	ViTAM-117	ViTAM-119	ViTAM-121	ViTAM-124
	P/R/G/(H)	P/R/G/(H)	P/R/G/(H)	P/G/(H)
Power Consumption				
Power Consumption	MAX: TBD (117R)	MAX: TBD (119R)	MAX: 11W (121R)	MAX: 26.4W (124P)
	MAX: 19.2W (117P)	MAX: 18.6W (119P)	MAX: TBD (121P)	
Mechanical				
Mounting	VESA mount 75 x 75,	VESA mount 100 >	x 100, Yoke mount	VESA mount 200 x
	Yoke mount			100, Yoke mount
Dimensions(mm)	432 x 358 x 55.3	470 x 388.6 x 60	571 x 362 x 55	656 x 423 x 53
Net Weight	7.5 Kg	8.8 Kg	9.4 Kg	12 Kg

• Standard LCD

	ViTAM-110P/ ViTAM-110R/ ViTAM-110G	ViTAM-112P/ ViTAM-112R/ ViTAM/112G	ViTAM-115P/ ViTAM-115R/ ViTAM-115G	ViTAM-116P/ ViTAM-116R/ ViTAM-116G
Dipslay				
Display Type	10.1" TFT LCD	12.1" TFT LCD	15" TFT LCD	15.6" TFT LCD
Max. Resolution	1280 x 800	800 x 600/	1024 x 768	1366 x 768
		1024 x 768 (option)		
Max. Colors	16.7M	262K/16.2M (option)	262K	16.7M
Contrast Ratio	800: 1	800: 1/	800: 1	500: 1

		700: 1 (option)		
Luminance(cd/m ²)	350	450 / 500 (option)	420	300
Viewing Angle	170(H) / 170(V)	160(H) / 150(V)	160(H) / 160(V)	160(H) / 160(V)
		160(H) / 140(V)		
		(option)		
Backlight Lifetime	15,000 hrs	50,000hrs/	30,000 hrs	50,000 hrs
		30,000 hrs (option)		
Option	Optical bonding			

	ViTAM-117P/ ViTAM-117R/	ViTAM-119P/ ViTAM-119R/	ViTAM-121P/ ViTAM-121R/	ViTAM-124P/ ViTAM-124G
	ViTAM-117G	ViTAM-119G	ViTAM-124G	
Dipslay				
Display Type	17" TFT LCD	19" TFT LCD	21.5" TFT LCD	23.8" TFT LCD
Max. Resolution	1280 x 1024	1280 x 1024	1920 x 1080	1920 x 1080
Max. Colors	16.7M	16.7M	16.7M	16.7M
Contrast Ratio	1000: 1	1000: 1	3000: 1	3000: 1
Luminance(cd/m ²)	350	350	300	250
Viewing Angle	170(H) / 170(V)	170(H) / 165(V)	178(H) / 178(V)	178(H) / 178(V)
Backlight Lifetime	50,000 hrs	50,000 hrs	50,000 hrs	30,000 hrs
Option		Optical	bonding	

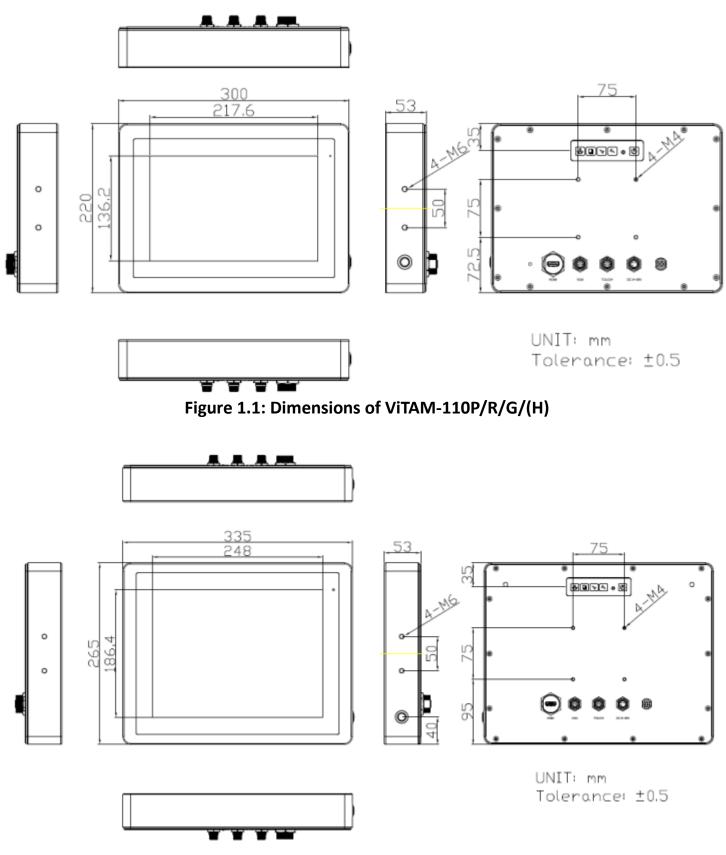
• High Brightness LCD (Option)

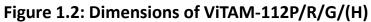
	ViTAM-110PH/ ViTAM-110RH/ ViTAM-110GH	ViTAM-112PH/ ViTAM-112RH/ ViTAM-112GH	ViTAM-115PH/ ViTAM-115RH/ ViTAM-115GH	ViTAM-116PH/ ViTAM-116RH/ ViTAM-116GH
Dipslay				
Display Type	10.1" TFT LCD	12.1" TFT LCD	15" TFT LCD	15.6" TFT LCD
Max. Resolution	1280 x 800	800 x 600/	1024 x 768	1366 x 768
		1024 x 768 (option)		
Max. Colors	16.7M	262K/16.2M (option)	262k	16.7M
Contrast Ratio	800: 1	700: 1	800: 1	500: 1

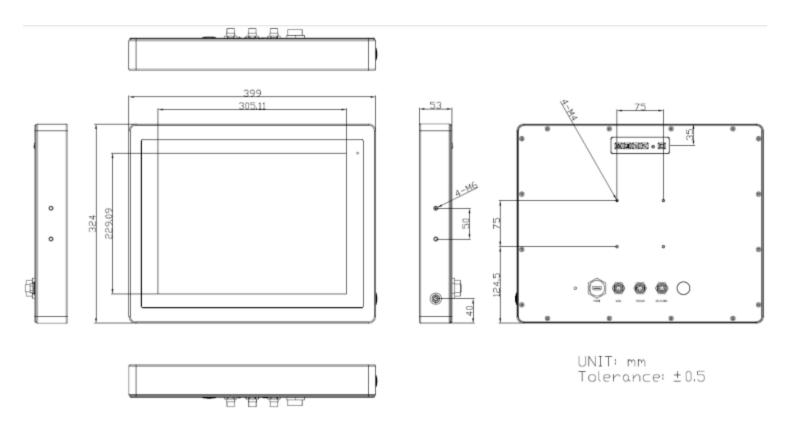
Luminance(cd/m ²)	1000	1000	1000	1000
Viewing Angle	170(H) / 170(V)	178(H) / 178(V)	160(H) / 150(V)	160(H) / 160(V)
		160(H) / 140(V)		
		(option)		
Backlight Lifetime	50,000hrs	50,000hrs	30,000hrs	50,000hrs
Option	Optical bonding			

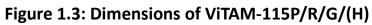
	ViTAM-117PH/	Vitam-119PH/	Vitam-121PH/	ViTAM-124PH/
	Vitam-117RH/	ViTAM-119RH/	Vitam-121RH/	ViTAM-124GH
	ViTAM-117GH	ViTAM-119GH	ViTAM-121GH	
Dipslay				
Display Type	17" TFT LCD	19" TFT LCD	21.5" TFT LCD	23.8" TFT LCD
Max. Resolution	1280 x 1024	1280 x 1024	1920 x 1080	1920 x 1080
Max. Colors	16.7M	16.7M	16.7M	16.7M
Contrast Ratio	1000: 1	1000: 1	3000: 1	5000: 1
Luminance(cd/m ²)	1000	1000	1000	1000
Viewing Angle	170(H) / 160(V)	170(H) / 160(V)	178(H) / 178(V)	178(H) / 178(V)
Backlight Lifetime	50,000hrs	50,000hrs	50,000hrs	30,000hrs
Option	Optical bonding			

1.3 Dimensions









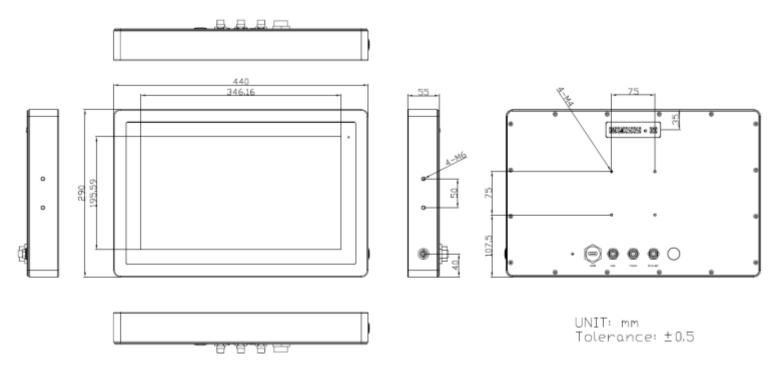
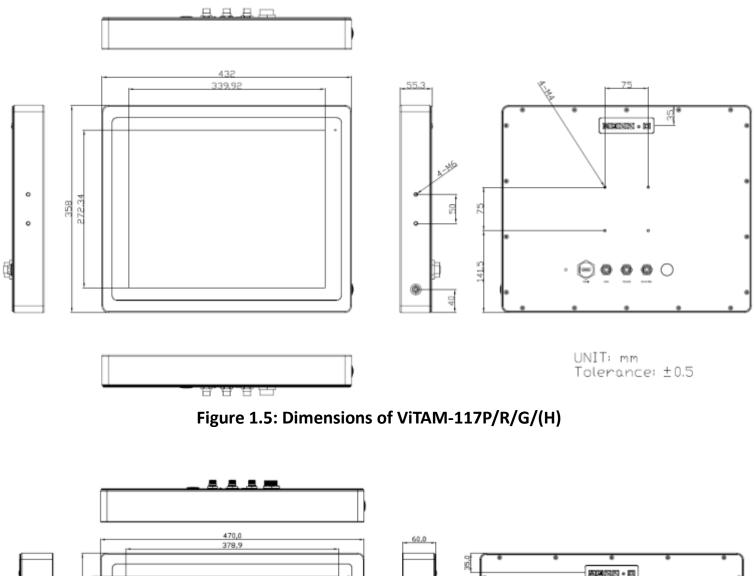


Figure 1.4: Dimensions of ViTAM-116P/R/G/(H)



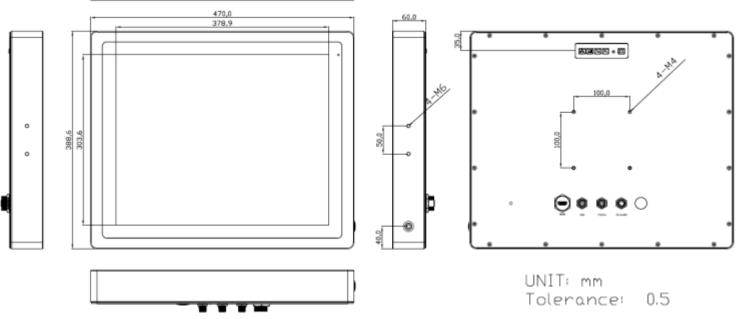
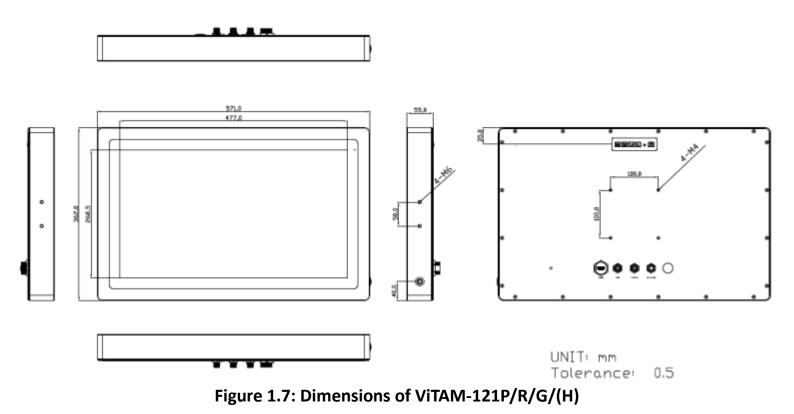


Figure 1.6: Dimensions of ViTAM-119P/R/G/(H)



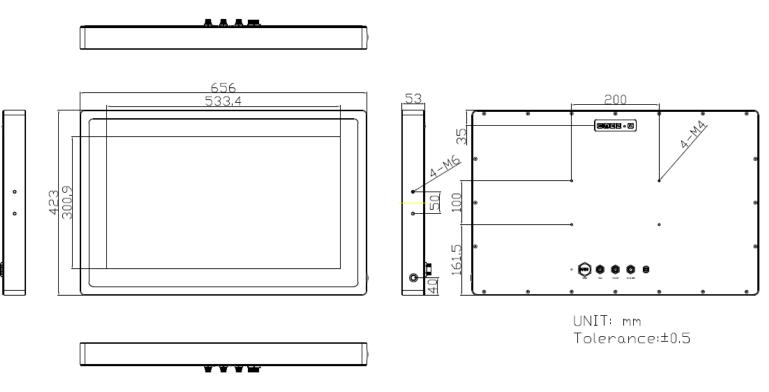


Figure 1.8: Dimensions of ViTAM-124P/G/(H)

1.4 Brief Description of ViTAM-1XX Series

VITAM-1XX series with TB-6802 AD board is an IP66/IP69K rated with M12 connectors new generation stainless steel display, which comes with 10.1", 12.1", 15", 15.6", 17", 19", 21.5", and 23.8" color TFT LCD. VITAM-1XX series are wide range DC 9~36V power input and true flat front bezel designed with grade 304 stainless steel enclosure (grade 316 is for option). Futhermore, the models support resistive touch, projected capacitive touch, and glass for option, and can be high brightness LCD and optical bonding designed for option. It supports touch on/off button on the side edge for hygienic cleaning nad ergonomic versatile mounting: Yoke mounting and space-saving VESA mounting.

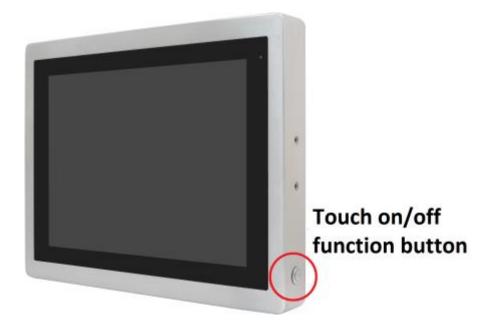


Figure 1.9: Front View and Touch on/off Button of ViTAM-1XX Series



Figure 1.10: Rear View of ViTAM-110P/R/G/(H)



Figure 1.11: Rear View of ViTAM-112P/R/G/(H)



Figure 1.12: Rear View of ViTAM-115P/R/G/(H)



Figure 1.13: Rear View of ViTAM-116P/R/G/(H)



Figure 1.14: Rear View of ViTAM-117P/R/G/(H)



Figure 1.15: Rear View of ViTAM-119P/G/(H)



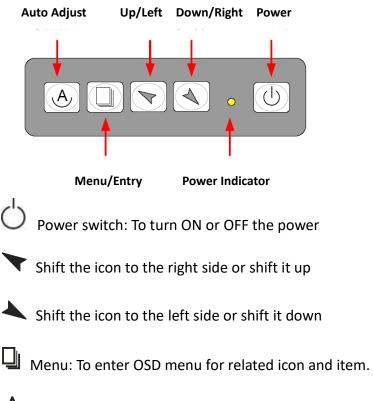
Figure 1.16: Rear View of ViTAM-121P/G/(H)



Figure 1.17: Rear View of ViTAM-124P/G/(H)

Chapter 2_

2.1 AD Board OSD Functions



Auto Button: One-touch auto adjustment

1.) Getting into Burn-in Mode

Before setting into a burn-in mode, first disconnect the AC power cord. Then press (don't let them go) the \checkmark buttons until the AC power cord is connected and the "RGB" appears on the top left corner of your screen. Now it can be put into the burn-in mode for changing colors.

2.) Getting Out of Burn-in Mode

Before getting out of the burn-in mode, please first disconnect the AC power cord. Then press the
button (If not workable, press the button and don't let them go) until the AC power cord is connected. Please don't let your fingers go until the AC power cord is connected again and the wording of "RGB" appears on the top left corner of your screen, and wait for 3 second. Under the non-signal entry situation, if **Cable Not Connected** is seen, exit is thus successfully made.

When the Burn-in Mode is Unable to Eradicate...

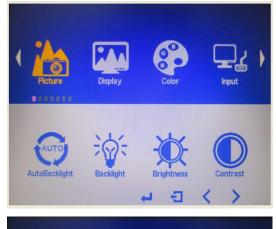
- If the "RGB" is still on the top left corner of the screen, press up to enter
 "Miscellaneous" and choose "Reset", and then Yes, and press up. When the screen goes black, disconnect power and repeat the above steps.
- If the "RGB" is not found, disconnect the AC power cord first. Then press the buttons (don't let them go) until the AC power cord is connected, and wait for 2 to 3 seconds. When "RGB" appears, repeat the above steps.

2.2 OSD Controls

To make any adjustment, select the following:

- 1. Press 🖵 (Menu) to show the OSD menu or disable the OSD menu.
- 2. Select the icon that you wish to adjust with the (\checkmark / \checkmark or +/-) key in the menu.
- 3. Press \Box (Menu) and then choose the item with the (\checkmark/\checkmark or +/-) key.
- 4. Press \square (Menu) and then adjust the quality with the (\checkmark / \checkmark or +/-) key.

2.3 Main Menu





In the **PICTURE**, there are the following items:

- AutoBacklight
- Backlight
- Brightness
- Contrast
- Sharpness
- Exit



In the **DISPLAY**, there are the following items:

- AutoAdjust
- H Position
- V Position
- Disp Rotate
- 🕨 Exit



In the **COLOR**, there are the following items:

- Panel Uniformity
- Gamma
- Color Temp
- Color Effect
- Exit



In the **INPUT**, there are the following items:

- A0:VGA
- D1:DP
- D3:HDMI
- Exit



In the **AUDIO**, there are the following items:

- Volume
- Mute
- Audio Source
- Exit



ものへと

In the **OTHER**, there are the following items:

- Reset
- Menu Time
- OSD H Position
- OSD V Position
- Language
- Transparency
- Rotate
- Exit

Information part.

Chapter 3_

Installation

This chapter describes how to install drivers and other software that will allow your touch screen work with different operating systems.

3.1 Windows 7 Universal Driver Installation for

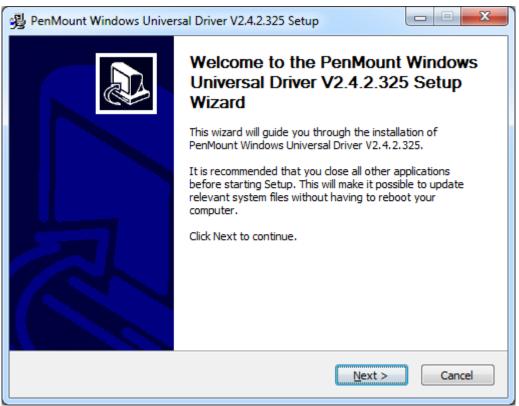
PenMount 6000 Series

Before installing the Windows 7 driver software, you must have the Windows 7 system installed and running on your computer. You must also have one of the following PenMount 6000 series controller or control boards installed: PM6500, PM6300.

3.1.1 Installing Software(Resistive Touch)

If you have an older version of the PenMount Windows 7 driver installed in your system, please remove it first. Follow the steps below to install the PenMount DMC6000 Windows 7 driver.

Step 1. Click Next to continue.



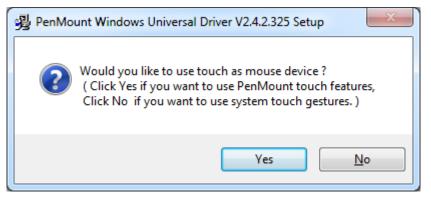
Step 2. Read the license agreement. Click **I Agree** to agree the license agreement.

PenMount Windows Universal Driver V2.4.2.325 Setup
License Agreement Please review the license terms before installing PenMount Windows Universal Driver V2.4.2.325.
Press Page Down to see the rest of the agreement.
PLEASE READ THE LICENSE AGREEMENT
PenMount touch screen driver software is only for using with PenMount touch screen controller or control board. Any person or company using a PenMount driver on any piece of equipment which does not utilize an PenMount touch screen controller will be prosecuted to the full extent of the law.
If you accept the terms of the agreement, click I Agree to continue. You must accept the agreement to install PenMount Windows Universal Driver V2.4.2.325.
Nullsoft Install System v2.46

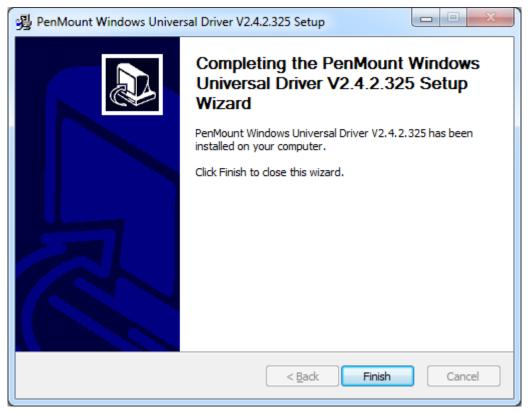
Step 3. Choose the folder in which to install PenMount Windows Universal Driver. Click **Install** to start the installation.

😼 PenMount Windows Universal Driver V2.4.2.325 Setup
Choose Install Location Choose the folder in which to install PenMount Windows Universal Driver V2.4.2.325.
Setup will install PenMount Windows Universal Driver V2.4.2.325 in the following folder. To install in a different folder, click Browse and select another folder. Click Install to start the installation.
Destination Folder C:\Program Files (x86)\PenMount Windows Universal Driver Browse
Space required: 0.0KB Space available: 136.8GB
Nullsoft Install System v2.46

Step 4. Click Yes to continue.

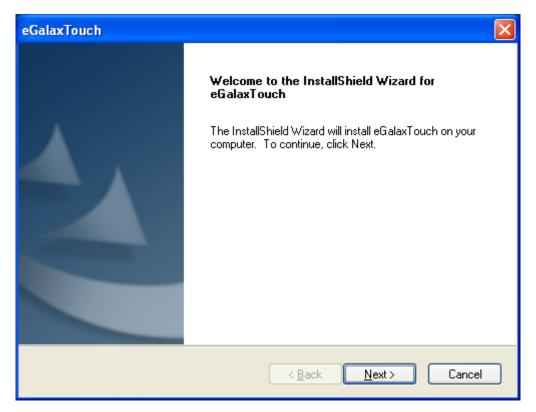


Step 5. Click Finish to complete installation.



3.1.2 Installing Software (Projected Capacitive)

Step 1. Click Next to continue.



Step 2. Select I accept the terms of the license agreement. Click Next.

eGalaxTouch	×
License Agreement Please read the following license agreement carefully.	
Declaration and Disclaimer	•
The programs, including but not limited to software and/or firmware (hereinafter referred to "Programs" or "PROGRAMS"), are owned by eGalax_eMPIA Technology Inc. (hereinafter referred to EETI) and are compiled from EETI Source code. EETI hereby grants to licensee a personal, non-exclusive, non-transferable license to copy, use and create derivative works of Programs for the sole purpose in conjunction with an EETI Product, including but not limited to integrated circuit and/or controller. Any reproduction, copies, modification, translation, compilation, application, or representation of Programs except as specified above is prohibited without the express written permission by EETI.	H
I accept the terms of the license agreement Definition I do not accept the terms of the license agreement InstallShield	
< <u>Back</u> <u>N</u> ext > Can	el

Step.3. Click Next to continue.

eGalaxTouch	×
Setup Type Select the setup type that best suits your needs.	
Extra PS/2 interface driver for eGalaxTouch controller. Please check the check box for PS/2 touch controller.	
InstallShield	
< <u>B</u> ack <u>N</u> ext > Cancel]

Step 4. Click Install RS232 interface driver.

eGalaxTouch	×
Setup Туре	
Select the setup type that best suits your needs.	
Extra RS232 interface driver for eGalaxTouch controller. Please check the check box for RS232 touch controller.	
Install RS232 interface driver	
InstallShield	1
	J

Step 5. Select None. Click Next.

eGalaxTouch	X
Setup Type Select the setup type that best suits your needs	
Do 4 point calibration after system reboot	
O Every system boot up	
🔿 Next system boot up	
⊙ None	
InstallShield	
	< <u>B</u> ack <u>N</u> ext > Cancel

Step 6. Click OK.

eGalaxT	iouch - InstallShield Wizard 🛛 🛛 🔀
(į)	If you are trying to install the USB touch device, please make sure that your touch monitor or touch controller's USB cable is plugged into the computer now. Please close the "Found New Hardware Wizard" dialog when it appears.
	ОК

Step 7. Click Support Muti-Monitor System. Click Next.

eGalaxTouch
Setup Type Select the setup type that best suits your needs.
If you want to use Multi-Monitor, please check the box. ▼Support Multi-Monitor System
InstallShield

Step 8. Go to C:\Program Files\eGalaxTouch. Click Next.

eGalaxTouch	×
Choose Destination Location Select folder where setup will install files.	
Setup will install eGalaxTouch in the following folder. To install to this folder, click Next. To install to a different folder, click Browse and select another folder.	
Destination Folder C:\Program Files\eGalaxTouch InstallShield < Back	

Step 9. Click Next.

eGalaxTouch	×	
Select Program Folder		
Please select a program folder.		
Setup will add program icons to the Program Folder listed below. You may type a new folder name, or select one from the existing folders list. Click Next to continue.		
Program Folder:		
eGalaxTouch		
Existing Folders:		
Accessories		
Administrative Tools Games		
Startup		
InstallShield		
< <u>B</u> ack <u>N</u> ext > Cancel		

Step 10. Click **Create a eGalaxTouch Utility shortcut on desktop**. Click **Next**.

eGalaxTouch	×
Setup Type Select the setup type that best suits your needs.	
Select the features you want to install, and deselect the features you do not want to install. Click Next to continue. ✓ Create a eGalaxTouch Utility shortcut on desktop	
InstallShield]

Step 11. Wait for installation.

eGalaxTouch	\mathbf{X}
Setup Status	
eGalaxTouch is configuring your new software installation.	
C:\Program Files\eGalaxTouch\msvcrt.dll	
InstallShield	
	Cancel

Step 12. Click Yes to do 4 point calibration.

Questio	n 🛛 🔀
2	The eGalaxTouch driver has been installed, before operating touch function, please do 4 point calibration. Would you do 4 point calibration now ?
	<u>Y</u> es <u>N</u> o

3.2 Software Functions

3.2.1 Software Functions(Resistive Touch)

Upon rebooting, the computer automatically finds the new 6000 controller board. The touch screen is connected but not calibrated. Follow the procedures below to carry out calibration.

- 1. After installation, click the PenMount Monitor icon "PM" in the menu bar.
- 2. When the PenMount Control Panel appears, select a device to "Calibrate."

PenMount Control Panel(Resistive Touch)

The functions of the PenMount Control Panel are **Device**, **Multiple Monitors**, **Tools** and **About**, which are explained in the following sections.

Device

In this window, you can find out that how many devices be detected on your system.

PenMount Control Panel	- - X
Device Multiple Monitors Tools About	
Select a device to configure.	
6	
PenMount 6000 USB	
Configure Refresh	
Configure Refresh	
	ОК

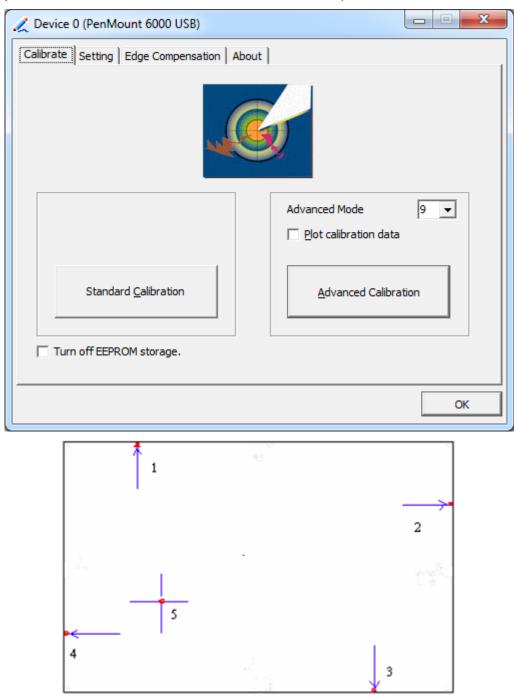
Calibrate

This function offers two ways to calibrate your touch screen. 'Standard Calibration' adjusts most touch screens. 'Advanced Calibration' adjusts aging touch screens.

Standard Calibration	Click this button and arrows appear pointing to red squares. Use your finger or stylus to touch the red squares in sequence. After the fifth red point calibration is complete. To skip, press 'ESC'.	
Advanced Calibration	Advanced Calibration uses 4, 9, 16 or 25 points to effectively calibrate touch panel linearity of aged touch screens. Click this button and touch the red squares in sequence with a stylus. To skip, press ESC'.	

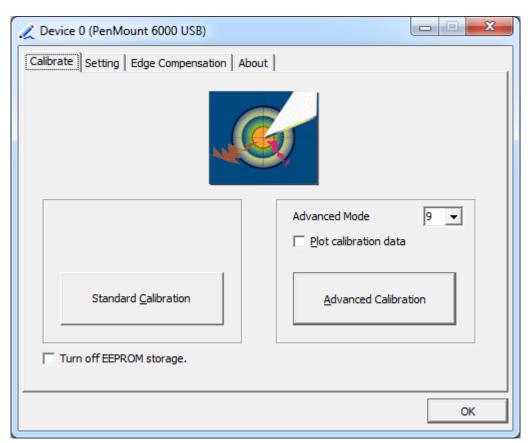
Step 1. Please select a device then click "Configure". You can also double click the device too.

PenMount Control Panel	- X
Device Multiple Monitors Tools About	
Select a device to configure.	
6	
PenMount 6000 USB	
Configure Refresh	
	ок

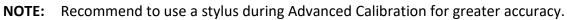


Step 2. Click "Standard Calibration" to start calibration procedure

NOTE: The older the touch screen, the more Advanced Mode calibration points you need for an accurate calibration. Use a stylus during Advanced Calibration for greater accuracy. Please follow the step as below:



Step 3. Select Device to calibrate, then you can start to do Advanced Calibration.





Plot Calibration Data	Check this function and a touch panel linearity	
	comparison graph appears when you have finished	
	Advanced Calibration. The blue lines show linearity	
	before calibration and black lines show linearity after	
	calibration.	
Turn off EEPROM	The function disable for calibration data to write in	
storage	Controller. The default setting is Enable.	

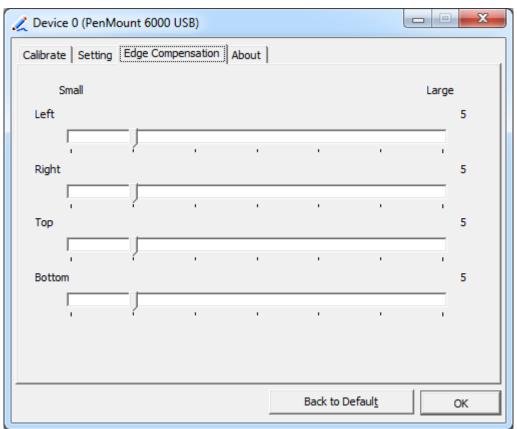
Setting

🗶 Device 0 (PenMount 6000 USB)		
Calibrate Setting Edge Compens	sation About	
Operation Mode	Mouse Emulation	
Beep Sound	Kind of Sound	Buzzer Beep 💌
Beep Mode Beep on pen d <u>o</u> wn	Beep Frequency	1000 Hz
C Beep on pen <u>up</u>	Beep Duration	100 ms
C Beep on both	ļ	
Cursor Stabilizer	✓ Use press and hold as ri	ght dick
Stabilizer to remove jitter of cursor.	Delay:	2.0 sec
	Area:	
	Back to D	efaul <u>t</u> OK

Touch Mode	This mode enables and disables the mouse's ability to drag
	on-screen icons – useful for configuring POS terminals.
	Mouse Emulation – Select this mode and the mouse
	functions as normal and allows dragging of icons.
	Click on Touch – Select this mode and mouse only provides a
	click function, and dragging is disables.
Beep Sound	Enable Beep Sound – turns beep function on and off
	Beep on Pen Down – beep occurs when pen comes down
	Beep on Pen Up – beep occurs when pen is lifted up
	Beep on both – beep occurs when comes down and lifted up
	Beep Frequency – modifies sound frequency
	Beep Duration – modifies sound duration
Cursor Stabilizer	Enable the function support to prevent cursor shake.
Use press and	You can set the time out and area for you need.
hold as right click	

Edge Compensation

You can use Edge Compensation to calibrate more subtly.



About

This panel displays information about the PenMount controller and driver version.

🟒 Device 0 (PenMo	ount 6000 USB)	
Calibrate Setting	Edge Compensation About	
	·	
/	PenMount 6000 USB (10-bit)	
~	Driver Version	2.4.2
	Firmware Version	6000.6.0.0
	Firmware Config Data	2,36864,852,32,7,500,12
		ОК

Multiple Monitors

Multiple Monitors support from two to six touch screen displays for one system. The PenMount drivers for Windows 7 support Multiple Monitors. This function supports from two to six touch screen displays for one system. Each monitor requires its own PenMount touch screen control board, either installed inside the display or in a central unit. The PenMount control boards must be connected to the computer COM ports via the USB interface. Driver installation procedures are the same as for a single monitor. Multiple Monitors support the following modes:

> Windows Extends Monitor Function Matrox DualHead Multi-Screen Function nVidia nView Function

NOTE: The Multiple Monitor function is for use with multiple displays only. Do not use this function if you have only one touch screen display. Please note once you turn on this function the rotating function is disabled.

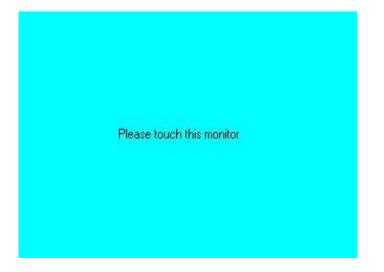
Enable the multiple display function as follows:

1. Check the Enable Multiple Monitor Support box; then click Map Touch Screens

to assign touch controllers to displays.

PenMount Control Panel	
Device Multiple Monitors Tools About	1
Multiple Monitor Support	
Map <u>T</u> ouch Screens	
	ОК

- 2. When the mapping screen message appears, click **OK**.
- 3. Touch each screen as it displays "Please touch this monitor". Following this sequence and touching each screen is called **mapping the touch screens.**



- 4. Touching all screens completes the mapping and the desktop reappears on the monitors.
- 5. Select a display and execute the "Calibration" function. A message to start calibration appears. Click **OK**.



- 6. "Touch this screen to start its calibration" appears on one of the screens. Touch the screen.
- 7. "Touch the red square" messages appear. Touch the red squares in sequence.
- 8. Continue calibration for each monitor by clicking **Standard Calibration** and touching the red squares.

NOTES:

- 1. If you use a single VGA output for multiple monitors, please do not use the **Multiple Monitor** function. Just follow the regular procedure for calibration on each of your desktop monitors.
- 2. The Rotating function is disabled if you use the Multiple Monitor function.
- 3. If you change the resolution of display or screen address, you have to redo **Map Touch Screens,** so the system understands where the displays are.

About

This panel displays information about the PenMount controller and this driver version.

📽 PenMount Control Panel 📃 🗖	
Calibrate Draw Multiple Monitors Option About	
PenMount DMC9000 and DMC9100	
Firmware Version	
A1.20 [COM1@19200bps] A2.00 [COM2@19200bps]	
E-mail : <u>salt@salt.com.tw</u> Website : <u>www.salt.com.tw</u>	
Copyright(C) 2003 Salt Int'l Corp.	
ОК	

PenMount Monitor Menu Icon

The PenMount monitor icon (PM) appears in the menu bar of Windows 7 system when you turn on PenMount Monitor in PenMount Utilities.



PenMount Monitor has the following function



Control Panel	Open Control Panel Windows
Веер	Setting Beep function for each device
Right Button	When you select this function, a mouse icon appears in the right-bottom of the screen. Click this icon to switch between Right and Left Button functions.
Exit	Exits the PenMount Monitor function.

Configuring the Rotate Function

- 1. Install the rotation software package.
- 2. Choose the rotate function (0°, 90°, 180°, 270°) in the 3rd party software. The calibration screen appears automatically. Touch this point and rotation is mapped.

Please touch the point				

NOTE: The Rotate function is disabled if you use Monitor Mapping

3.2.2 Software Functions(Projected Capacitive)

General

In this window, you can see there is USB Controller. Click **OK** to continue.

🗟 eGala	axTouch : USB Controller	×
General	Setting Tools Display Hardware About	
Ins	talled Touchscreen Controllers	
U	USB SB Controller	
l É	Monitor	
N	Add Remove	
	OK Cancel Apply	

Monitor Mapping

to adjust touch panel

Add

to search for device

Setting

🖻 eGalaxTouch : USB Controller	×
General Setting Tools Display Hardware About	
Beep Frequency Image: Beep On Touch Image: Frequency Image: Beep On Release Image: Duration Image: Beep From System Beep Image: Duration Image: Beep From Sound Card Image: Duration	
Linearization Style © 9 Points © 25 Points	
Double Click Time Shorter<	
Double Click Area Smaller<	
Normal Mode Option	
OK Cancel Apply	

Веер

- Beep On Touch
- Beep On Release
- Beep From System Beep
- Beep From Sound Card

Linearization Style

- 9 points
- 25 points

Double Click Time

Shorter

Longer

Double Click Area

Smaller

Bigger

Normal mode

Simulate the mouse mode

Option	×
Option	
Function	
Smaller<<	
Auto Right Click Time 1000 ms Shorter<<	
Shorter<< >>Longer	
OK Cancel Apply	

Option

Function Enable Constant Touch Enable Auto Right Click Enable Touch Enable Cursor Stabilization Constant Touch Area Auto Right Click Time

Tools

Click **OK** to continue the settings.

🗟 eGalaxTouch : USB Controller 🛛 🔀				
General Setting Tools Display Hardware About				
	Linearization Curve			
	4 Points Calibratio	Do 4 points alignment to match display.		
	Clear and Calibrat	e Clear linearization parameter and do 4 points alignment.		
	Linearization	Do 9 points linearization for better touchscreen linearity.		
	Draw Test	Do draw test to verify the touch accuracy.		
OK Cancel <u>A</u> pply				

4 Points Calibration

Do 4 points alignment to match display.

Clear and Calibrate

Clear linearization parameter and do 4 points alignment.

Linearization

Do 9 points linearization for better touchscreen linearity.

Draw Test

Do draw test to verify the touch accuracy.

Display

In this window, it shows the mode of display.

🖻 eGalaxTouch : USB Controller	×
General Setting Tools Display Hardware About	
Display	
Double click on the monitor area to map the touchscreen to the display monitor. I Enable Multiple Monitors.	
🧮 Map to main display if system has only one display monitor.	
Operation Mode Operatio	
C Upper Screen C Right Screen Other	
OK Cancel Apply	

Enable Multiple Monitors.

Map to main display if system has only one display monitor

Full Screen Lower Screen Left Screen Upper Screen Right Screen

Other		
Other Active Area		
Other		
C Quarter 1	C Quarter 3	C Customized
O Quarter 2	C Quarter 4	
Customized Area800 X	480	
Left 0	Тор	
Right 800	Bottom 480	
Drag	Working Area	
	OK	Cancel Apply

Other



Other	
Other Active Area	
Active Area	
🔲 Enable The Active Area Function.	
Active Area List Left	O Top O
1 Right	0 Bottom
Drag Active Area	
	OK Cancel Apply

Active Area

Drag active area to enable Active Area Function.

Hardware

🖻 eGalaxTouch : USB Controller 🛛 🔀
General Setting Tools Display Hardware About
Controller Model PCAP7200 Series Firmware Version 1030
Hardware Calibration
OK Cancel Apply

Saturn Hardware Configuration

Saturn - Hardware Configuration	×			
Saturn				
Saturn - Hardware Configuration				
Sensitivity 128	,			
Delay Time 800 us Shorter<	er			
Reset all of the control parameters to factory default setting.				
OK Ca	ancel			

About

To display information about eGalaxTouch and its version.

🖻 eGalaxTouch : U	SB Controller	×		
General Setting To	ols Display Hardware About			
	Touch Screen Utility			
	Copyright (C) 2000-2011			
eGalaxTouch	eGalax_eMPIA_TechnologyInc.			
	Version 5.11.0.9126			
We provide a full range of controllers for				
The resistive contro through RS232, PS	oller communicates with the PC system directly 5/2 or USB port.			
	nized for an accurate, sensitive and quick touch Ill as an ease of use interface.			
The driver supports a set of operating systems, i.e. Windows(R) 2000 / Windows(R) XP , Windows Vista(R), Wind				
	S			
<				
	OK Cancel <u>Apply</u>			

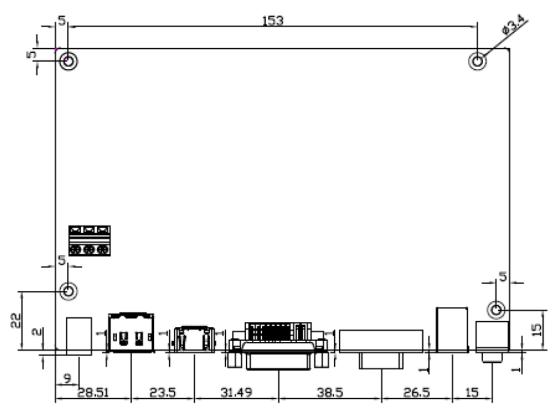


Figure A: Dimensions of TB-6802

Appendix B: Yoke Mounting and VESA Mounting

The ViTAM-1XX Series model can be Yoke mounted and VESA mounted as shown in Picture below.



Figure B: Yoke mounting of ViTAM-1XX Series



Figure C: VESA mounting of ViTAM-1XX Series