



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 |
|--|------------------------------|---------------------|
| Nov. 2018 | | V1.4 |
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| Aplex Technology, Inc. | | |
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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 |

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.

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| Disclaimer | |
| | ···· ∠ |

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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-1XX 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. HDMI with waterproof | | | 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 | ٦ | TMDS Data0+ | | |
| | 8 | TM | DS Data0 Shie | eld | |
| | 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 for DDC) | | | |
| | 16 | SDA(I ² C serial data for DDC) | | | |
| | 17 | DDC/CEC Ground | | | |
| | 18 | +5 V Power | | | |
| | 19 | Hot Plug Detect | | | |
| 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 / -20~60°C for option (for 10.1"~15" model) | | | | | |
| | 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) | 16.7M | 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/ | 50,000 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 | | | |

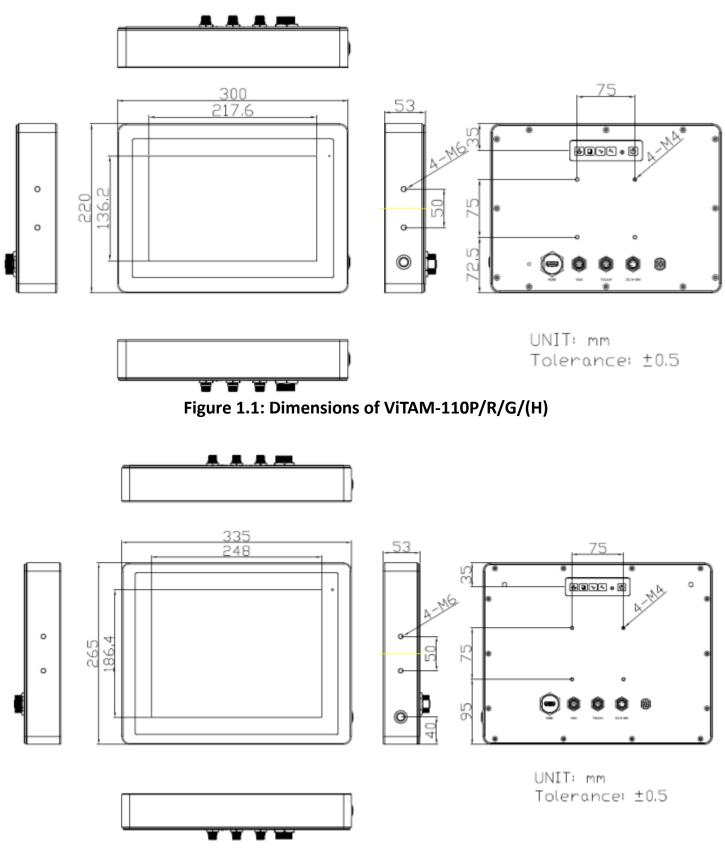
• High Brightness LCD (Option)

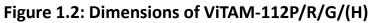
| | ViTAM-110PH/ ViTAM-110RH/ ViTAM-110GH | ViTAM-112PH/ ViTAM-112RH/ ViTAM-112GH | ViTAM-115PH/ ViTAM-115RH/ ViTAM-115GH | ViTAM-116PH/ ViTAM-116RH/ ViTAM-116GH |
|-----------------|---|---|---|---|
| Dipslay | | | | |
| Display Type | 10.1" TFT LCD | 12.1" TFT LCD | 15" TFT LCD | 15.6" TFT LCD |
| 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 |

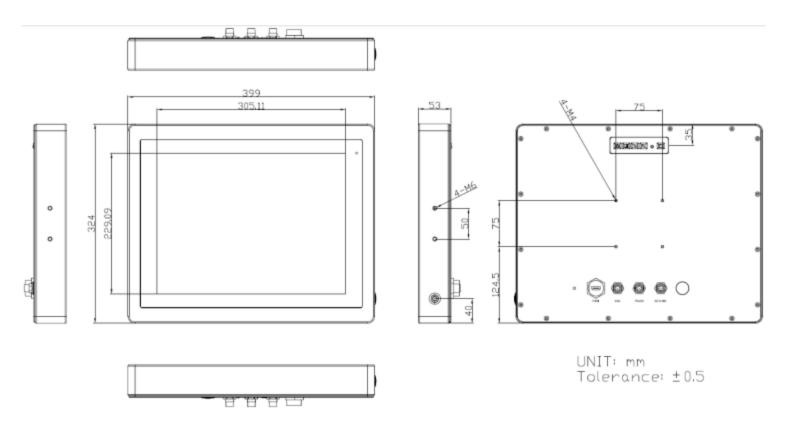
| Luminance(cd/m ²) | 1000 | 1000 | 1000 | 1000 |
|-------------------------------|-----------------|-----------------|-----------------|-----------------|
| Viewing Angle | 170(H) / 170(V) | 178(H) / 178(V) | 160(H) / 150(V) | 160(H) / 160(V) |
| | | 160(H) / 140(V) | | |
| | | (option) | | |
| Backlight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

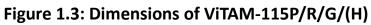
| | Vitam-117PH/ | Vitam-119PH/ | Vitam-121PH/ | Vitam-124PH/ |
|-------------------------------|-----------------|-----------------|-----------------|-----------------|
| | Vitam-117RH/ | Vitam-119RH/ | Vitam-121RH/ | ViTAM-124GH |
| | ViTAM-117GH | ViTAM-119GH | ViTAM-121GH | |
| Dipslay | | | | |
| 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 | 50,000hrs |
| Option | Optical bonding | | | |

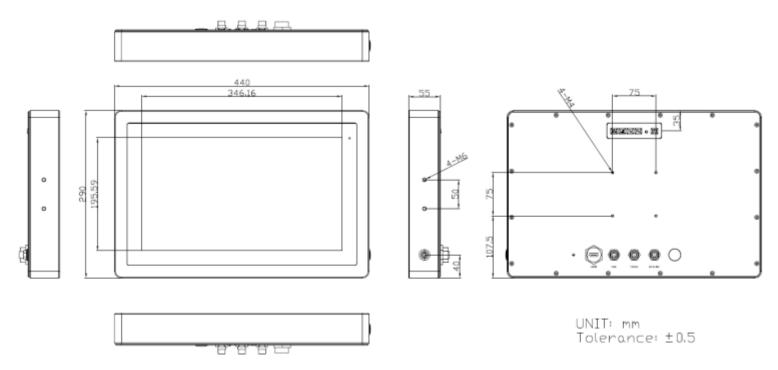
1.3 Dimensions



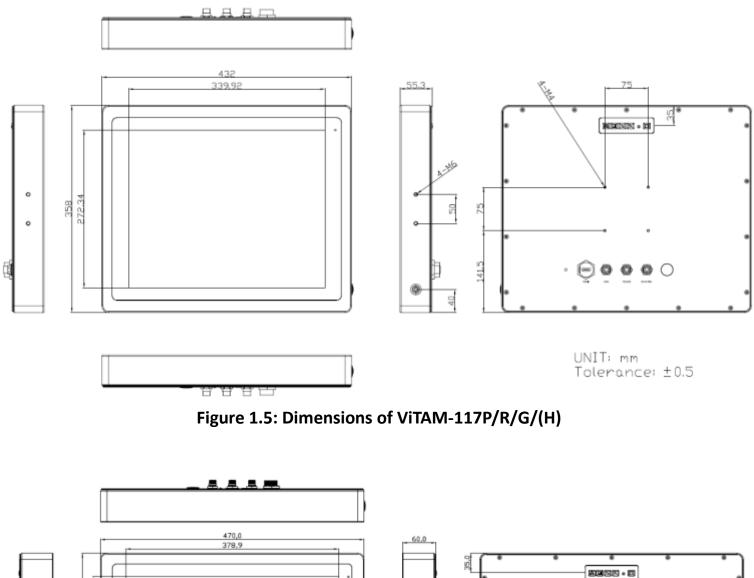


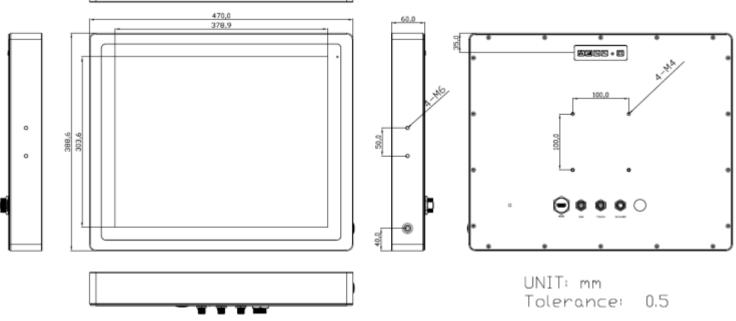


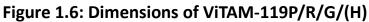


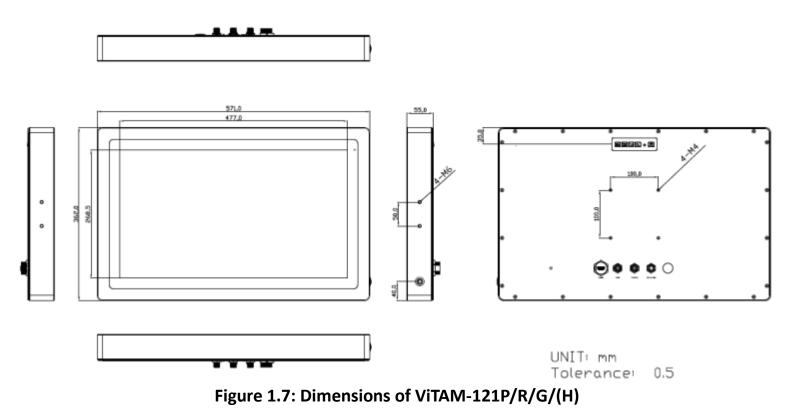












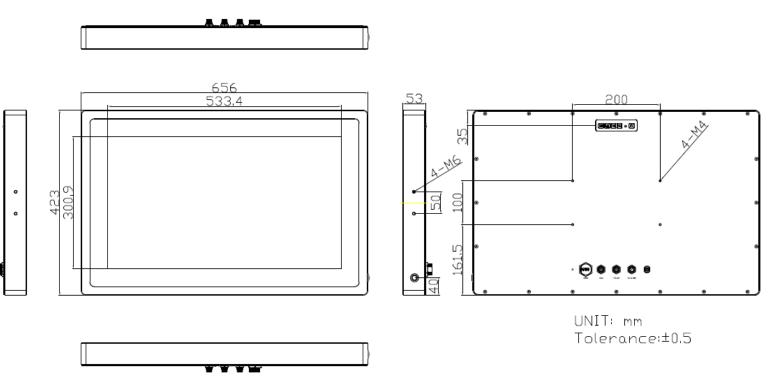


Figure 1.8: Dimensions of ViTAM-124P/G/(H)

1.4 Brief Description of ViTAM-1XX Series

VITAM-1XX series with TB-6029 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.

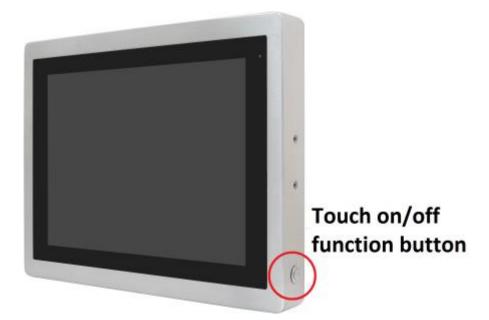


Figure 1.9: Front View and Touch on/off Button of ViTAM-1XX Series



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)



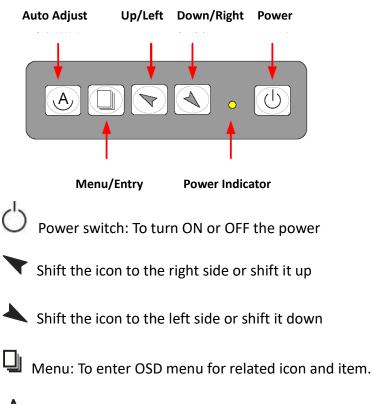
Figure 1.16: Rear View of ViTAM-121P/G/(H)



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...

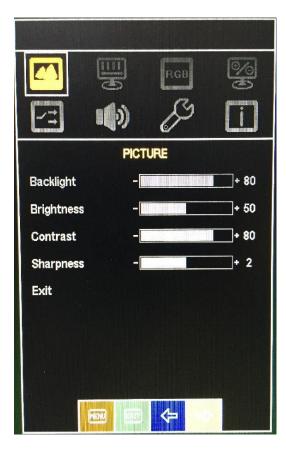
- If the "RGB" is still on the top left corner of the screen, press up to enter
 "Miscellaneous" and choose "Reset", and then Yes, and press up. When the screen goes black, disconnect power and repeat the above steps.
- If the "RGB" is not found, disconnect the AC power cord first. Then press the buttons (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:

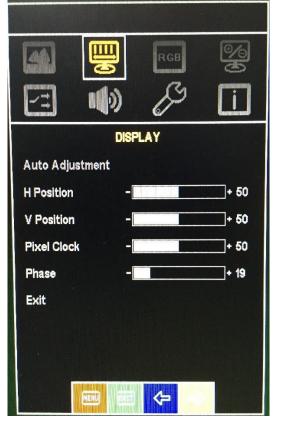
- 1. Press 🖵 (Menu) to show the OSD menu or disable the OSD menu.
- 2. Select the icon that you wish to adjust with the (\checkmark / \checkmark or +/-) key in the menu.
- 3. Press \bigcup (Menu) and then choose the item with the (\checkmark/\checkmark or +/-) key.
- 4. Press \square (Menu) and then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

2.3 Main Menu



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

- Backlight
- Brightnaess
- Contrast
- Sharpness
- Exit



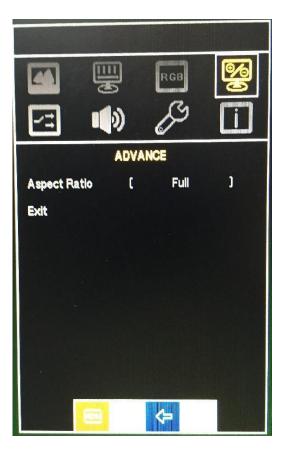
In the **DISPLAY**, there are the following items:

- AutoAdjustment
- H Position
- V Position
- Pixel Clock
- Phase
- Exit

| | | RGB | M B |
|--------------|----|---------|--------|
| | | B | i |
| | CO | LOR | |
| Gamma | ſ | Off | ĵ |
| Color Temp | C | 6500K |] |
| Color Effect | ſ | Standar | a] |
| Exit | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | ¢ | |

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

- Gamma
- Color Temp
- Color Effect
- Exit



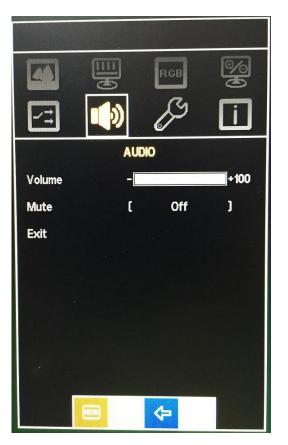
In the ADVANCE, there are the following item:

- Aspect Ratio
- Exit

| | | RGB | 10/2 |
|------------|------|-----|------|
| | -40 | ß | |
| | U U | 0 | |
| | NF | UT | |
| Auto Selec | :t | | |
| VGA | | | |
| DP | | | |
| DVI | | | |
| Exit | | | |
| | | | |
| | | | |
| | | | |
| | Kan) | Ŷ | |

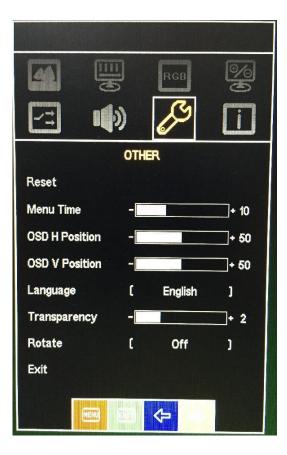
In the **INPUT**, there are the following items:

- Auto Select
- VGA
- DP
- DVI
- Exit



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

- Volume
- Mute
- Exit



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

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



Exit 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

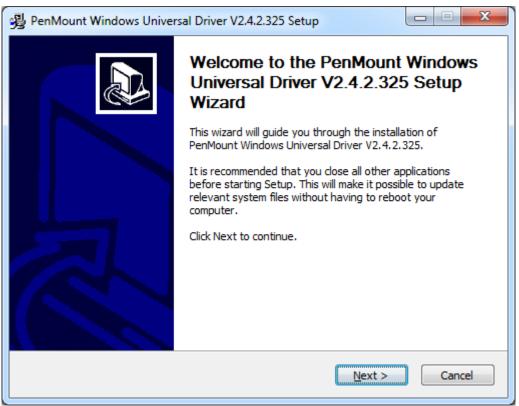
PenMount 6000 Series

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.



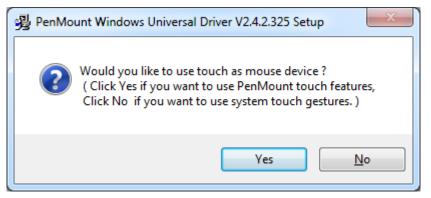
Step 2. Read the license agreement. Click **I Agree** to agree the license agreement.

| 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 |

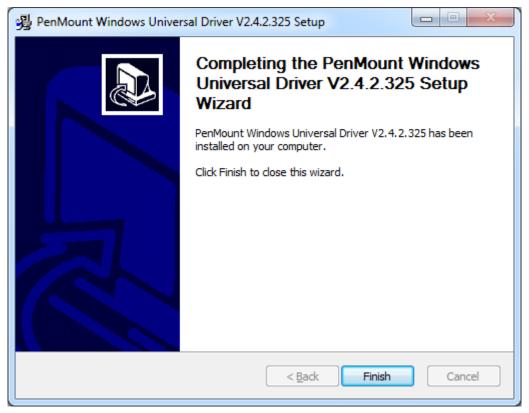
Step 3. Choose the folder in which to install PenMount Windows Universal Driver. Click **Install** to start the installation.

| 😼 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 — Cancel |

Step 4. Click Yes to continue.

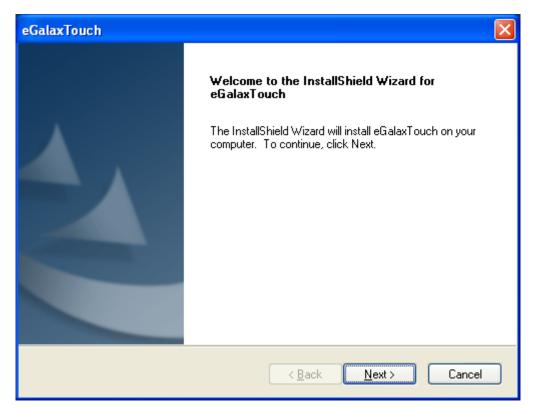


Step 5. Click Finish to complete installation.



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 | x |
|--|-------|
| 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. Disclaimer: EETI MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, | III I |
| I accept the terms of the license agreement Definit I do not accept the terms of the license agreement | |
| < <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 | × |
|--|--------------------------------------|
| Setup Type Select the setup type that best suits your needs | S. |
| Do 4 point calibration after system reboot | |
| C Every system boot up | |
| Next system boot up | |
| ⊙ None | |
| | |
| | |
| | |
| | |
| InstallShield | |
| | < <u>B</u> ack <u>N</u> ext > Cancel |

Step 6. Click OK.

| eGalax | Fouch - 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 |

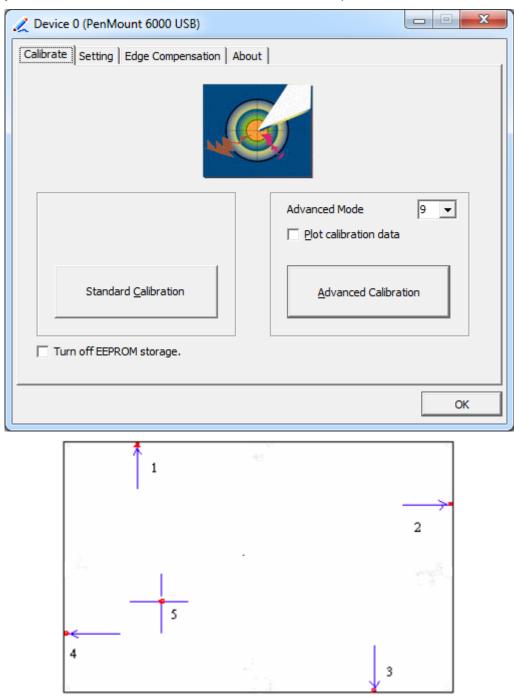
Calibrate

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'. |

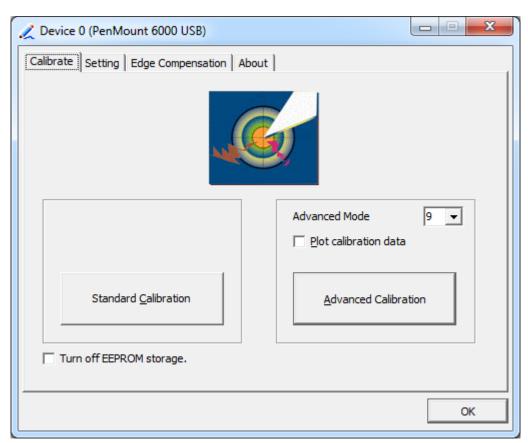
Step 1. Please select a device then click "Configure". You can also double click the device too.

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

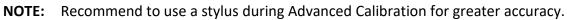


Step 2. Click "Standard Calibration" to start calibration procedure

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. |

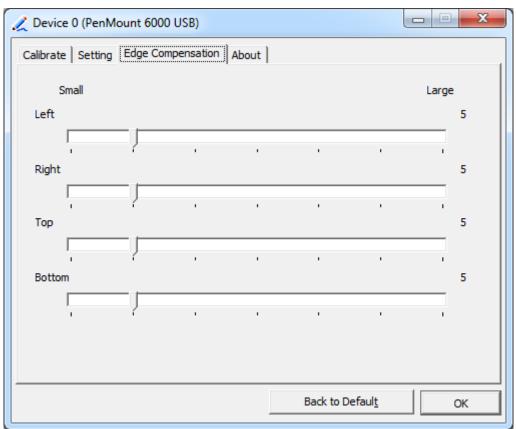
Setting

| 🗶 Device 0 (PenMount 6000 USI | B) | |
|---|---------------------------|-------------------|
| Calibrate Setting Edge Compen | sation About | |
| Operation Mode | Mouse Emulation 💌 | |
| Beep Sound | Kind of Sound | Buzzer Beep 💌 |
| Beep Mode © Beep on pen down | Beep Frequency | 1000 Hz |
| C Beep on pen yp | Beep Duration | 100 ms |
| C Beep on both | | |
| Cursor Stabilizer You can use Cursor | Use press and hold as rig | ght dick |
| Stabilizer to remove jitter of cursor. | Delay: | 2.0 sec |
| | Back to De | 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.

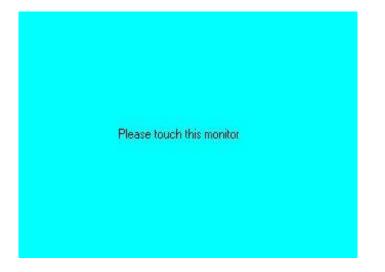
Enable the multiple display function as follows:

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

to assign touch controllers to displays.

| area PenMount Control Panel | |
|--------------------------------------|----|
| Device Multiple Monitors Tools About | 1 |
| Multiple Monitor Support | |
| Map Touch 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.

| nt | oint | | | | | | | |
|----|------|--|--|--|--|--|--|--|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

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> | | | |

Appendix A:

Board Dimensions

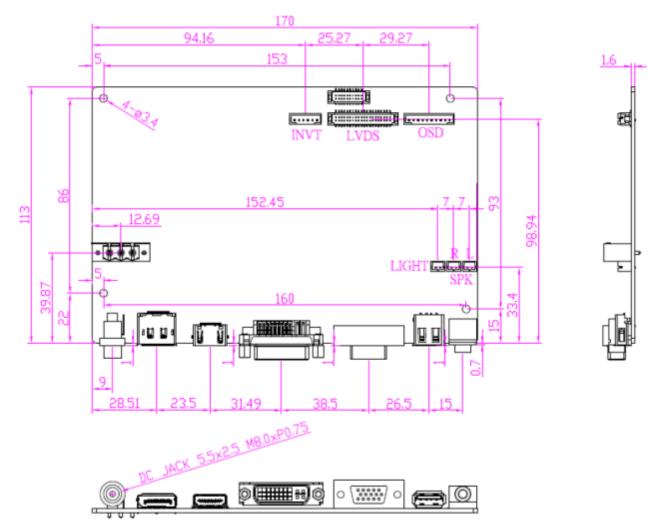


Figure A: Dimensions of TB-6029

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