



# logic controls

A Bematech Company

## 15" Touch Screen Monitor



# Contents

<b>Notice.....</b>	<b>3</b>
<b>Safety Information.....</b>	<b>3</b>
<b>Precaution .....</b>	<b>3</b>
<b>Package Contents .....</b>	<b>3</b>
<b>Hardware Installation .....</b>	<b>4</b>
<b>Input.....</b>	<b>4</b>
<b>Control Buttons.....</b>	<b>5</b>
<b>OSD (On-Screen Display) Menu Mode.....</b>	<b>6</b>
<b>Screw Specification for VESA Plate Stand or Wall Mount .....</b>	<b>8</b>
<b>Quick Installation Guide for Touch Panel Driver .....</b>	<b>9</b>
<b>Calibration Guide for Touch Panel.....</b>	<b>9</b>
<b>Troubleshooting .....</b>	<b>12</b>
<b>Supported Timing .....</b>	<b>12</b>
<b>Specification.....</b>	<b>14</b>
<b>Limited Warranty Policy .....</b>	<b>15</b>

## Notice

- All Information in this manual may change without prior notice.
- To ensure safety operation of this product, please read the following menu carefully before using this product.

## Safety Information

- Do not place anything wet on the monitor or the power cord.
- Be sure to turn the monitor off before plugging the power cord into the socket.
- Be sure to check the power cord and other cords to be connected correctly.
- Do not attempt to open the monitor. You may be hurt by electric shock. For service, call your place of purchase.

## Precaution

- Do not expose the monitor to direct sunlight or heat.
- Do not spill liquid on the monitor.
- Do not use your monitor when magnets or electronic products are operating nearby.
- Do not use harsh chemicals or strong cleaning solvents to clean the monitor screen. Wipe it clean with a soft terry cloth applied with a mild solution.
- Do not place anything on your monitor. Bad ventilation may elevate temperature in the monitor.
- Do not use your fingers to touch the LCD Screen directly. Fingerprint that contains oil and may be difficult to clean.

## Package Contents

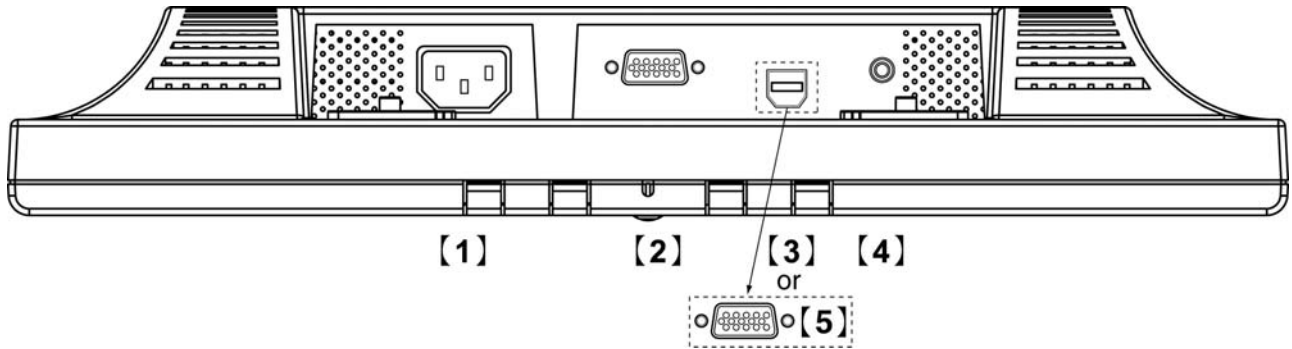
Our LCD monitor package contains the following items. Make sure you get items listed below, otherwise contact to your dealer or store.

1. 15.0" TFT LCD Monitor
2. Power Cord
3. VGA Cable
4. Audio Cable \* Audio function is optional.
5. User's Manual
6. USB Cable \* Touch Panel USB Cable is optional.
7. Touch Panel CD Driver
8. RS-232 Cabel \* Touch Panel RS-232 Cable is optional.

## Hardware Installation

Turn off LCD's and PC's power before you set it up. Follow our installation step by step.

### Input



**【1】 AC Input :** This is for connecting the power cable.

**【2】 VGA PORT :** This can be connected with the D-Sub 15 pin signal cable.

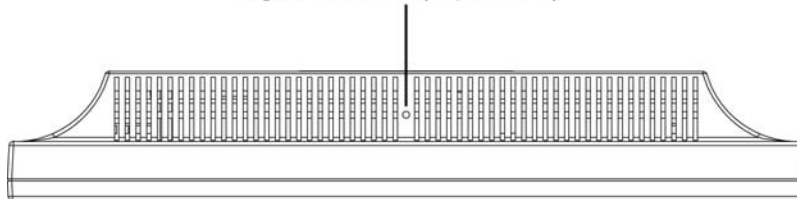
**【3】 Touch Panel Interface :** USB

**【4】 Audio In :** This can be connected to the PC audio-out connector of sound resource.

**【5】 Touch Panel Interface :** RS-232 interface (Optional)


**\*NOTICE:** Audio function is optional feature.

Light Sensor(Optional)



## Control Buttons

There are 5 keys for user to set up the monitor, including "Auto Adjust", "OSD menu", "Power", "Adjust <->", "Adjust <+>". The following descriptions are the introduction of these Keys.

A	<b>Auto Adjust (Function)- Function Select Button:</b> This button allows you to select the control functions up in the OSD. <b>Hotkey:</b> Press this button to apply the monitor setting automatically.
M	<b>Menu (Function)- Function Select Button:</b> This button allows you to select the control functions down in the OSD. <b>Hotkey:</b> Press this button to get a pop-up OSD menu.
	<b>Power:</b> Turn the LCD power on and off. When the power is on, the light is showing green, Stand by will be orange.
-	<b>Adjust &lt;- &gt;:</b> Decrease the option value in the OSD menu.
+	<b>Adjust &lt;+ &gt;:</b> Increase the option value in the OSD menu.

## OSD (On-Screen Display) Menu Mode

- \* Please adjust your Speaker Volume via your PC computer Speaker Volume control icon.
- \* Please note that Sound will continue to play when your monitor is off, to turn off please turn off your PC computer or mute the Speaker Volume control icon.

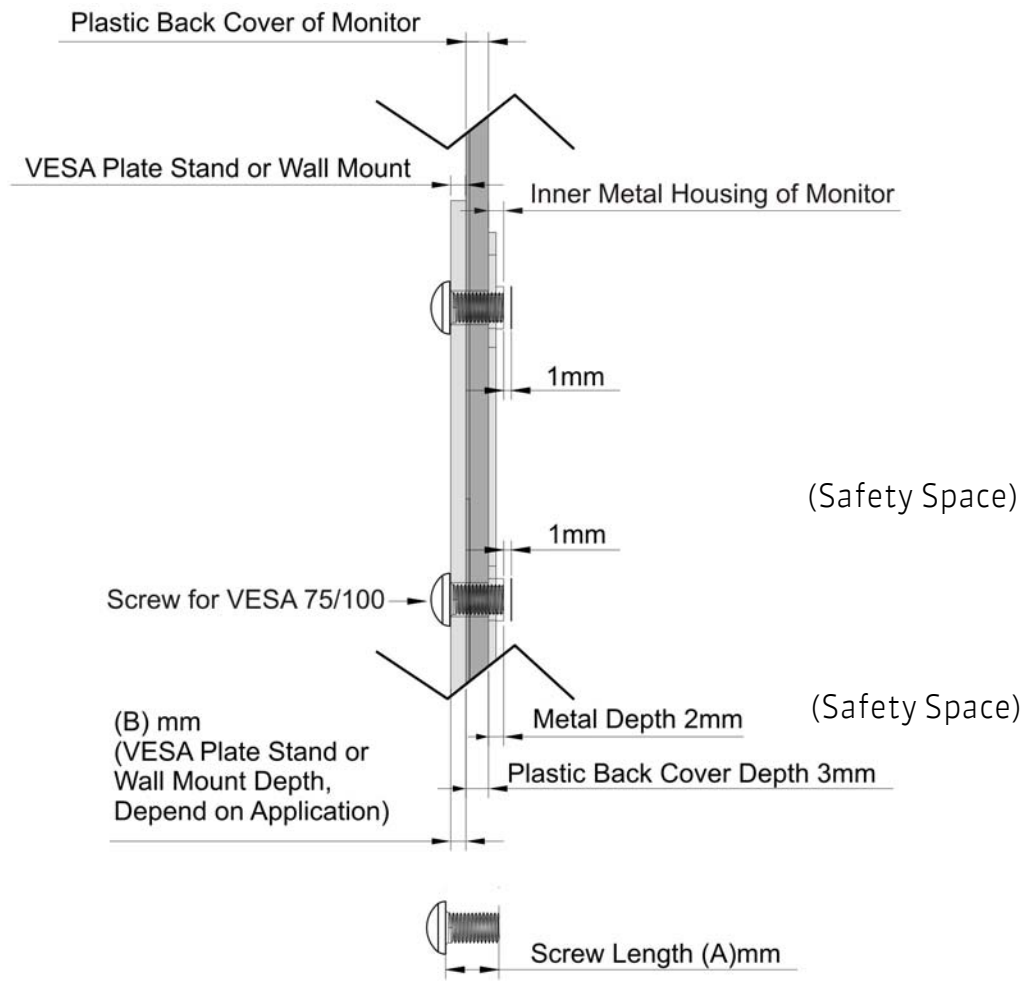
Press the OSD button to access menu, and press Increase / Decrease button for adjustment.

<b>BRIGHTNESS</b>	<b>Adjust the brightness of the display</b> IBT (Light Sensor)-(Optional): This feature automatically adjusts your monitor brightness base on ambient light changes. To activate this feature please select Auto icon within the main OSD Brightness icon. To deactivate please select Manual instead of Auto.
<b>CONTRAST</b>	Adjust the difference between light and dark area.
<b>PHASE</b>	Adjust picture Phase to reduce horizontal lines onscreen.
<b>CLOCK</b>	Adjust picture Clock to reduce vertical lines onscreen
<b>H-POSITION</b>	Adjust the horizontal position of the picture.
<b>V-POSITION</b>	Adjust the vertical position of picture.
<b>RESET</b>	Recall the default setting.
<b>COLOR TEMPERATURE</b>	Adjust the color temperature.
<b>RED</b>	Adjust the Red color temperature.
<b>GREEN</b>	Adjust the Green color temperature.
<b>BLUE</b>	Adjust the Blue color temperature.
<b>LANGUAGE</b>	Select the display language of the OSD Menu.
<b>MISCELLANEOUS</b>	“No” will take you to the exit menu. “Yes” will bring you to the sub menus of the Miscellaneous menu.
<b>EXIT OSD</b>	Save and exit OSD.

## MISCELLANEOUS

<b>RETURN</b>	Return to main menu.
<b>OSD H-POSITION</b>	Adjust the horizontal position of the OSD.
<b>OSD V-POSITION</b>	Adjust the vertical position of the OSD.
<b>OSD DURATION</b>	Adjust the timing of the OSD menu.
<b>AUTO COLOR</b>	Adjust the color automatically.

## Screw Specification for VESA Plate Stand or Wall Mount



1.  $(B)+5\text{mm} \leq \text{Screw Length (A)} \leq (B)+6\text{mm}$
2. **Mechanical Screw  $\Phi 4 \text{ mm}$**

**Caution:** Please follow the Screw Specification in diagram while you assembling VESA Plate stand or Wall Mount Plate into monitor back cover. Otherwise, It may cause a mechanical damage.

## Quick Installation Guide for Touch Panel Driver

The Driver supports a lot of operating systems, i.e. Windows 95, Windows 98, Windows ME, Windows NT4, Windows 2000, Windows XP, Windows XP Tablet PC Edition, Windows CE2.12/3.0/.NET, DOS, iMac, RedHat / Mandrake Linux.

Follow these steps to install Touch Panel Driver.

1. Put the **Driver** CD to CD-ROM.
2. Change directory to **Win9X\_ME** or other directories depends on your operating system.
3. Double click the **Setup.exe**, then windows starts to run the installation program. Notice that does not plug the USB controller or RS-232 controller on the system before the installation has been finished.
4. Just click [**Next >**] button to continue installation.
5. Then check the check box if PS/2 touch controller is to be installed. The default is unchecked. Then Press [**Next >**] to continue installation.
6. Choose the setup type that best suits your needs. There are two accessory utilities for choosing, **Rotation Monitor Utility** and **Shutdown Utility**. Users can install the utility they want by checking the box. Then Press [**Next >**] to continue installation.
7. Select the appropriate folder where set-up files will be installed. Then Press [**Next >**] to continue installation.
8. Then type in the name of program folder for the touch panel driver or press [**Next >**] to continue. There will be a default name for it.
9. Windows is copying files to disk and the setup is complete. It will request re-boot computer. Press [**Yes >**] to re-boot immediately or [**No >**] to re-boot later. The installation will not be finished until system re-boot.
10. Setup is complete. After the touch panel driver installation, the USB device will be found automatically as soon as it was plugged into the computer. Then users can see the new device on the application program window. And, the program will remove the USB Device automatically as soon as it was unplugged. ( **USB device is not supported for Windows95** )

## Calibration Guide for Touch Panel

### 4 points calibration

1. It needs calibration before the touchscreen can work accurately. Whenever the user feel the accuracy lost, user can do calibration again to get a more accuracy touch function.
2. Pressing this button, a new window will be popped-up at the location when the touchscreen was mapped to area for this touch system to guide the user do 4 points calibration. Screen displays as follows.
3. User should follows the guide to touch and hold the blinking X symbol in the calibration window until it does not blink to make sure that the utility can gather enough data for computation. In addition, a time line bar is shown in the bottom of the window to indicate time elapsed. If the touchscreen was not touched before the time line bar going to right end, the calibration task will be terminated automatically.



Touch the blinking symbol on panel until beep or stop blinking.

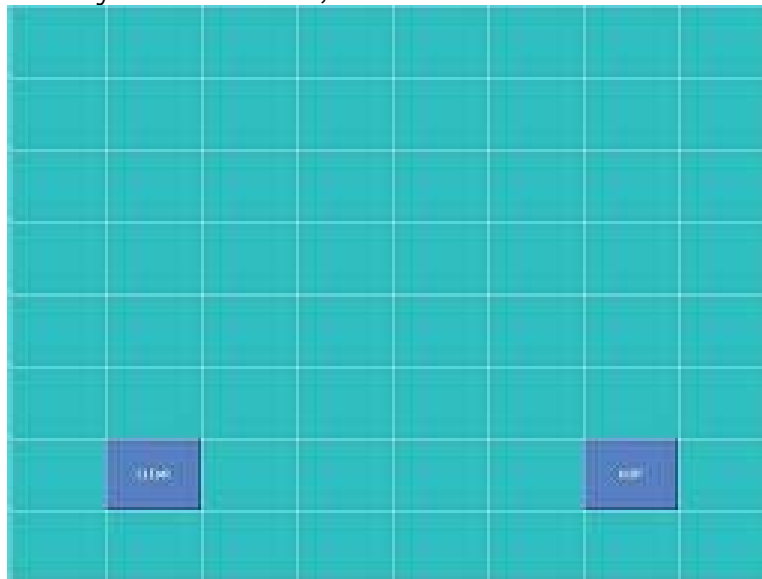
### Linearization

1. Linearization ( 25 or 9 points calibration ) function is used to compensate the touchscreen linearity. After linearization completed, the linearity of the touchscreen will be shown in the Linearity curve window.
2. Pressing this button, a new window will be popped-up at the location when the touchscreen was mapped to area for this touch system to guide the user do 25 points calibration. User should follows the guide to touch and hold the blinking X

symbol in the calibration window until it does not blink to make sure that the utility can gather enough data for computation. In addition, a time line bar is shown in the bottom of the window to indicate time elapsed. If the touchscreen was not touched before the time line bar going to right end, the calibration task will be terminated automatically.

### **Draw Test**

This function is used for accuracy and performance check. Press this button and a new pop up window will be popped up in the location where the touchscreen was mapped to the touch system as below,



User can press the Clear button to clear the window. Press Quit button to terminate this draw test. In drawing test window, users can verify the panel linearity, calibration capability, and drawing line quality.

### **Mouse Emulator**

The touch panel driver emulates mouse left and right button function. After installing the touch panel driver, a mouse icon will show in the desktop.

1. Change right / left button by clicking the upper small rectangular box of mouse icon. Blue area expresses what button has been selected.
2. Touch panel driver also provides an option for advanced Mouse Emulation setting. When user enables the “Auto Right Button”, it will force driver to report a right click mouse event to OS when users do a continuing touch till time out. It no longer needs to touch the right button in the Touchtray to activate a right click. This feature makes users to do right click more easily with touchscreen.

## Troubleshooting

Make sure that your monitor is properly installed if you have encountered any trouble using this product.

**There is no picture on the screen.**

**Check:**

1. Power saving mode. Press any key and move the mouse to deactivate the mode.
2. Signal cable connector pins. If there are bent or missing pins, consult your place of purchase.

**Characters look too dark or too light**

**Check:** Using OSD Menu to adjust the Brightness.

**When your monitor shall be adjusted?**

**Check:** If the resolution or frequency is being changed.

**The text appears on the screen are unclear.**

**Check:** Make sure the resolution or refresh rate match with the Display Mode.

**Touch panel function without response.**

**Check:** Make sure that touch screen controller driver must be installed into your PC system and calibrate touch screen before you use it.

## Supported Timing

Item	Standards	Resolution	Dot Clock (MHz)	Vertical Scanning Frequency (Hz)	Horizontal Scanning Frequency (KHz)	Sync Polarity or composite sync (H/V)	Operating Mode
1	VGA	640x480	25.18	59.94	31.47	-/-	A
2	VESA	640x480	31.50	72.81	37.86	-/-	A
3	VESA	640x480	31.50	75.00	37.50	-/-	A
4	VESA	800x600	36.00	56.25	35.16	+/+	A
5	SVGA	800x600	40.00	60.32	37.88	+/+	A
6	VESA	800x600	50.00	72.19	48.08	+/+	A

7	VESA	800x600	49.50	75.00	46.88	+/+	A
8	VGA	720x400	28.32	70.09	31.47	-/+	A
9	XGA	1024x768	65.00	60.00	48.36	-/-	A
10	VESA	1024x768	75.00	70.07	56.48	-/-	A
11	VESA	1024x768	78.75	75.03	60.02	+/+	A

★A = Analog Mode

★If the input timing is closed to one of the above, generally it can be displayed well by optimum adjusting.

## Specification

Input Signals	VGA	VGA compatible analog RGB Composite sync supported
Compatibility	PC	Up to 1024X768@75Hz(Non-interlaced)
Connector	VGA Audio* Touch* Power	D-sub 15-pins Stereo Phone Jack USB* RS-232* A/C Input
Power	Voltage Consumption Power saving mode	Built-in universal power supply: 100-240 VAC, 50/60 Hz Active < 30 Watt Max. Standby < 2 Watt
Internal Speaker		Speaker x 2 *
User Interface	LED Indicator	Active - Green Standby - Orange
Operating Condition	Temperature Humidity	Operating:5°C to 40°C 20% ~ 80% R.H.
Dimensions	Physical	T5A: 357mm(W) x 342mm(H) x 171mm(D) T5B: 396mm(W) x 341mm(H) x 235mm(D) T5C: 357mm(W) x 317mm(H) x 201mm(D)
Net Weight		T5A / T5C: 4 Kg ± 1 T5B: 4.2 Kg ± 1
DDC		DDC2B
Power Management		VESA DPMS
Regulation (Certifications)		UL, FCC, CE
Touch Panel		5 Wire Resistive Touch Panel
Others		Light Sensor *

### Notice:

1. \* Speaker, Touch and Light Sensor are optional.
2. Product specification is subject to change without notice.

## **Limited Warranty Policy**

All LCD monitors feature a three-year-limited warranty with free change in the first year from the date of purchase. If product is determined to be defective, we will repair or replace the product with refurbished or remanufactured parts or components during the warranty period.

This warranty is valid only for the first consumer purchaser.

This warranty does not cover cosmetic damage or damage due to acts of God, accident, misuse, abuse, negligence, commercial use or modifications of, or to any part of the product.

This warranty does not cover damage due to improper operation or maintenance (see manual), connection of improper voltage supply, or attempted repair by anyone other than a facility authorized by us to service the product. This warranty does not cover irregular pixel performance on the screen, and damages result due to delivery or improper shipping. This warranty does not cover product sold AS IS or WITH ALL FAULTS, and failure to follow instructions supplied with the product.

This warranty is invalid if the factory-applied serial number has been altered or removed for the product and broken security seal.

The customer must have model number, serial number, and original proof of purchase in the form of a bill of sales or receipt invoice, which is evidence that the unit is within the warranty period, must be presented to obtain warranty service.

Our helpful technical support and customer service staff will attempt to correct any minor issues that might be causing the product failure. If the technical service or customer representative is unable to fix the issue by phone, a return material authorization (RMA) number will be issued. Along with the proof of purchase and the RMA number, the customer can ship the defective unit back to us. Once the defective unit is received, and tested, we will ship a replacement unit back to customer. It is the responsibility of the customer to properly package the monitor with plugs, power supply, etc.

We shall not be liable for the loss of the use of the product, inconvenience, loss or any other damages, direct or consequential, arising out of the use of, inability to use, or any claim against the customer by any other party. Some regions do not allow exclusion of incidental or consequential damages, so the above limitations and exclusions may not apply to you.

# 15" Touch Screen Monitor



[logiccontrols.com](http://logiccontrols.com)