

# USER'S MANUAL

**P6121-V3**

**12.1" XGA TFT Monitor**

**User's Manual**



[www.axiomtek.com](http://www.axiomtek.com)

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## **CAUTION**

If you replace wrong batteries, it causes the danger of explosion. It is recommended by the manufacturer that you follow the manufacturer's instructions to only replace the same or equivalent type of battery, and dispose of used ones.

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## Safety Precautions

Before getting started, read the following important cautions.

1. Be sure to ground yourself to prevent static charge when installing the internal components. Use a grounding wrist strap and place all electronic components in any static-shielded devices. Most electronic components are sensitive to static electrical charge.
2. Disconnect the power cords from the P6121-V3 Series before making any installation. Be sure both the system and the external devices are turned OFF. Sudden surge of power could ruin sensitive components. Make sure the P6121-V3 Series is properly grounded.
3. Do not open the system's top cover. If opening the cover for maintenance is a must, only a trained technician is allowed to do so. Integrated circuits on computer boards are sensitive to static electricity. To avoid damaging chips from electrostatic discharge, observe the following precautions:
  - Before handling a board or integrated circuit, touch an unpainted portion of the system unit chassis for a few seconds. This will help to discharge any static electricity on your body.
  - When handling boards and components, wear a wrist-grounding strap, available from most electronic component stores.

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# Chapter 1

## Introduction

This chapter contains general information and detailed specifications of the P6121-V3. Chapter 1 includes the following sections:



- **General Description**
- **Features**
- **Specifications**
- **Dimensions and Outlines**
- **I/O Outlets**
- **Package List**

### 1.1 General Description

The P6121-V3, an industrial 12.1 inches view area LCD Monitor comes with slim, light and reliable features to replace traditional bulky CRT for Industrial application. Its unique flat design is fit for panel mounting, VESA mounting, Wall mounting and Rack mounting. The display interface offers DP, HDMI and VGA for different input source from PC system or multimedia system that let you upgrade the display don't change anything from your system. Besides, for varied HMI field, you can choose one of resistive touch or glass interface to meet your application. In addition, this monitor has more comfort, safety, and environmental protection for humanized & health consideration those would be the benefit that users can get.

This LCD monitor builds in color active matrix thin-film-transistor (TFT) liquid crystal display to provide superior display performance. A maximum resolution of 1024x768 is ideal for displaying complex graphics and high-definition images. Other outstanding designs that enhance this LCD monitor's performance are Plug & Play compatibility, and OSD (On Screen Display) controls, especially OSD, it made you ease adjustment on screen image.

## 1.2 Features

- High contrast color 12.1" XGA TFT LCD display support resolution up to 1024x768
- Flat design with NEMA4/IP65-compliant
- Suits with resistive touch or glass
- High Brightness and Ultra-wide viewing angle with anti-glare features.
- Power management system conforms to VESA DPMS standard
- Advanced OSD control for picture quality adjustment
- Supports VESA ARMs, Desktop Stand Rear, Panel, Wall mount

## 1.3 Specifications

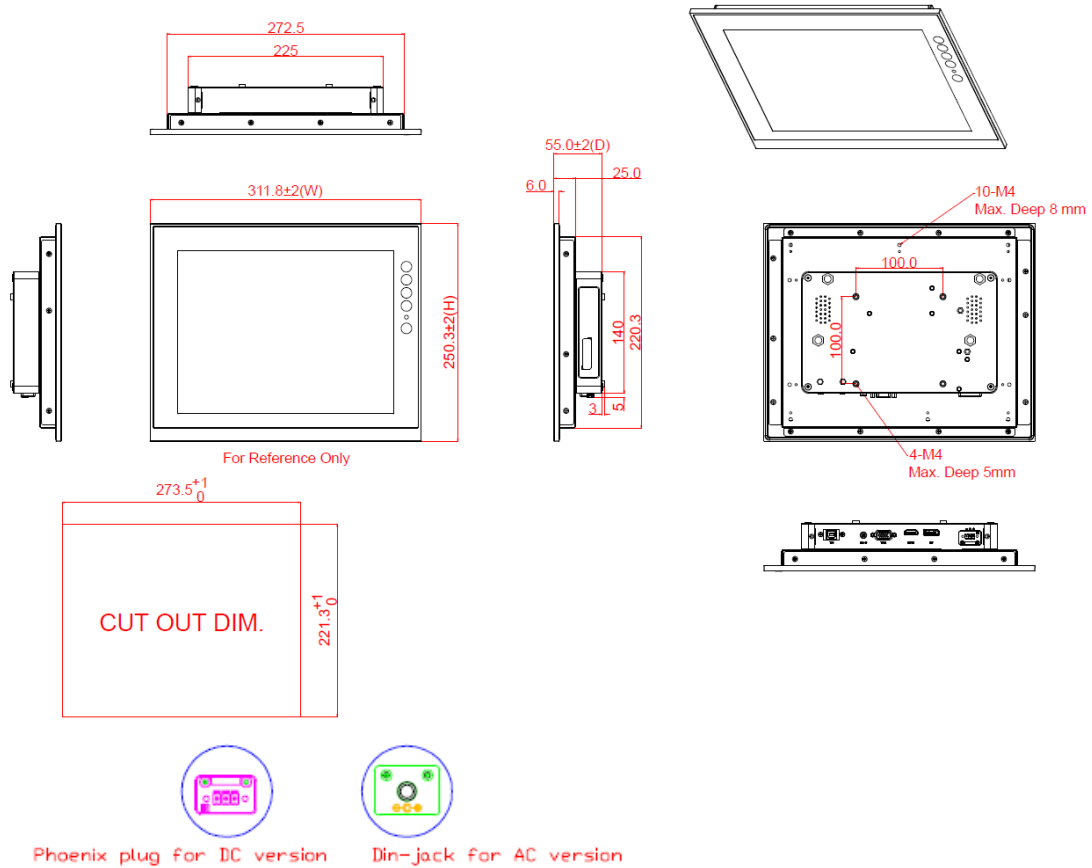
- 12.1" XGA(1024x768) LCD with LED backlight
- Resistive Touch or glass
- Front bezel design with NEMA4/IP65
- Control: OSD (On Screen Display) control pad on the side
- Mounting: Support Panel mount, VESA arm mount, Wall mount
- Net/Gross Weight
  - P6121-V3: 2.35 kg (5.18 lbs)/2.8 kg (6.17 lbs)
- Dimension (Main Body Size)
  - P6121-V3: 311.81 mm (12.28") (W) x 250.31 mm (9.85") (H) x 54.95 mm (2.16") (D)
- Operation Temperature
  - 0°C to 50°C
- Relative Humidity
  - 10% to 90% @ 40°C, Non-Condensing
- Power input
  - DC Version: Terminal block (24Vdc)
  - Max power consumption: 21W



**NOTE:** All specifications and images are subject to change without notice.

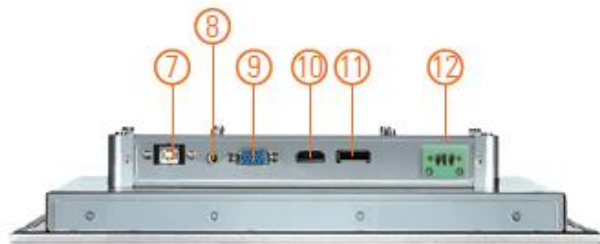
## 1.4 Dimensions and Outlines

The following diagrams show the dimensions and outlines of P6121-V3 (AC Version by project)



## 1.5 I/O Outlets

Please refer to the following illustration for I/O locations of the P6121-V3.



- |                            |  |
|----------------------------|--|
| 7. RS-232 or USB for Touch | 11. DP                                     |
| 8. Line-in                 | 12. Screw type or Phoenix type power input |
| 9. VGA                     |  |
| 10. HDMI                   |  |



## 1.6 Packing List

When you receive the P6121-V3, the bundled package should contain the following items:

- **P6121-V3 unit x 1**
- **VGA cable x1**
- **USB cable cable x1 (for touch version only )**
- **Panel mount kit set x 1 (optional)**
- **HDMI cable x1 (optional)**
- **DP cable x1 (optional)**
- **Wall mount bracket x1 (optional)**

If you can not find the package or any items are missing, please contact Axiomtek distributors immediately.

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# Chapter 2

## System Setup

This chapter details the system parts and components with figures. Sections include:

- **System Configuration**
- **Panel Mounting**
- **Wall Mounting**
- **VESA Mounting**
- **Rack Mounting**

### 2.1 System Configuration

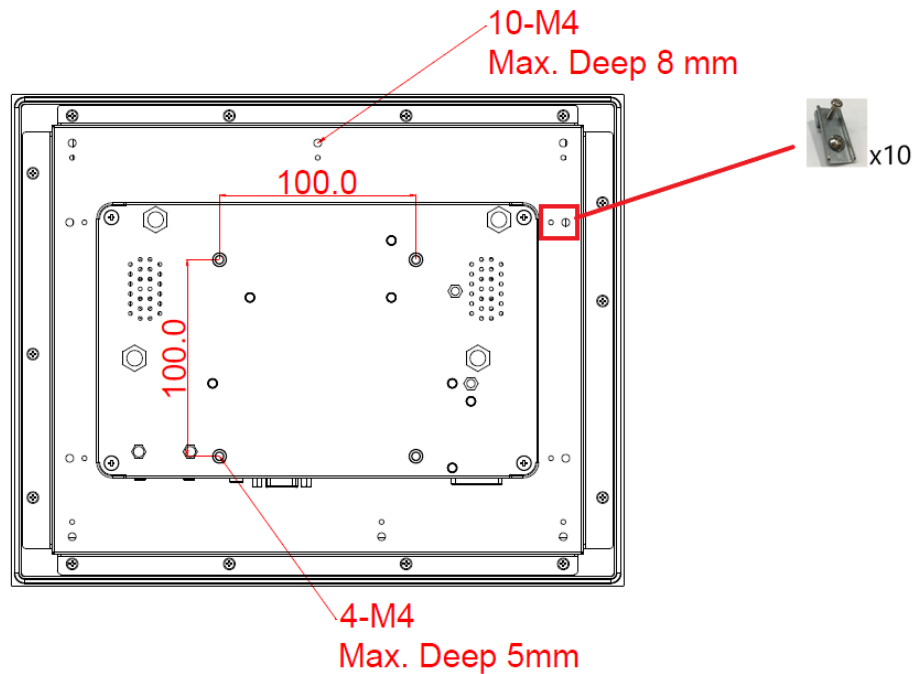
The figure below shows the side views of P6217W series.



- 1. Exit:**  
Jump out the selection icon / Auto adjust.
- 2. Menu:**  
Press this button to turn on/off the OSD (On Screen Display) main menu.  
Press this button to activate selected items.
- 3. SEL-:**  
To scroll down the menu to decrease the value of selected item.
- 4. SEL+:**  
To scrolling up the menu to increase the value of selected item
- 5. Power LED:**  
When the light is green, the power is on, red light when stand by.
- 6. Power switch:**  
Press this button to turn on/off the monitor.

## 2.2 Panel Mounting

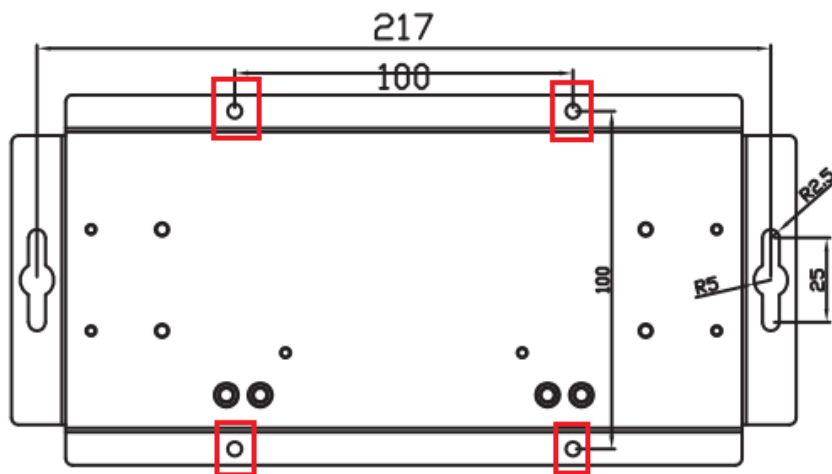
The P6121-V3 is designed for panel mount application. To mount the P6121-V3, the standard set of mounting kit (included in the system packaging) is needed.



▲ P6121-V3 Panel Mount kits

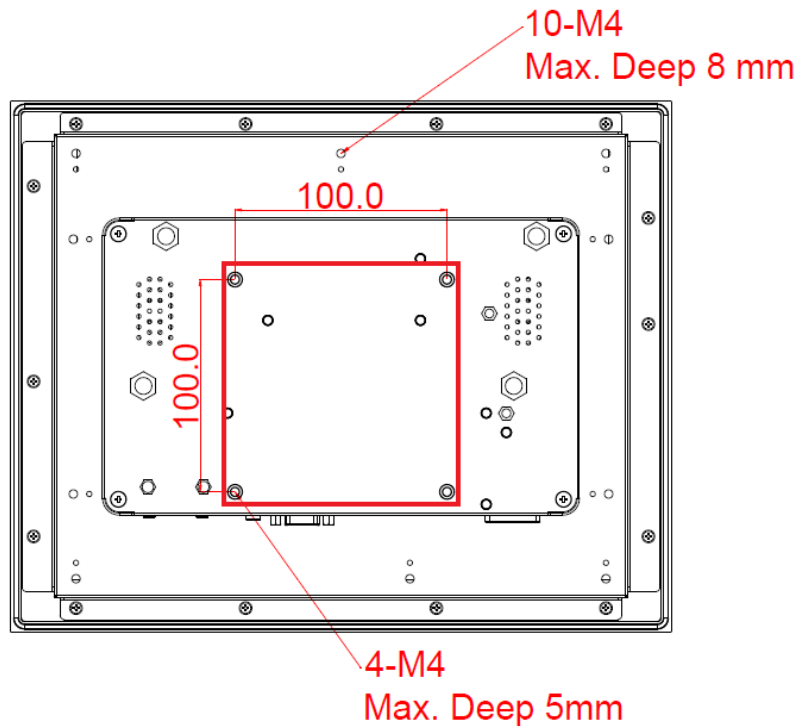
## 2.3 Wall Mounting

The P6121-V3 provides VESA mount and wall mount. Screw four screws to fix the kit in the back chassis.



## 2.4 VESA Mounting

The P6121-V3 provides VESA mount at the back of system. Screw four screws to fix the kit in the back chassis.



## 2.5 OSD Key Configuration

### 1. Menu:

- Press this button to turn on/off the OSD (On Screen Display) main menu.
- Press this button to activate selected items.

### 2. SEL+:

- To scroll up the menu.
- To increase the value of selected item.

### 3. SEL-:

- To scroll down the menu.
- To decrease the value of selected item.

### 4. Exit:

- Jump out the selection icon.
- Auto adjust.

### 5. Power LED:

When the indicator light is green, it means there is a signal, and it lights up red when there is no signal.

### 6. Monitor Power switch:

Press this button to turn on/off the monitor.

# Appendix A

## Supported Input Timing Modes

### Supported Input Timing Modes

Pixel Format	Refresh Rate	Standard Type	NOTE
640*480	60 Hz	Industry Standard	
	75 Hz	VESA Standard	
800*600	60 Hz	VESA Guidelines	
	75 Hz	VESA Standard	
1024*768	60 Hz	VESA Guidelines	
	75 Hz	VESA Standard	
1280*1024	60 Hz	VESA Standard	
	70 Hz	VESA Standard	
	75 Hz	VESA Standard	
1360*768	60 Hz	VESA Standard	
	75 Hz	VESA Standard	
1920*1080	60 Hz	CEA Standard	



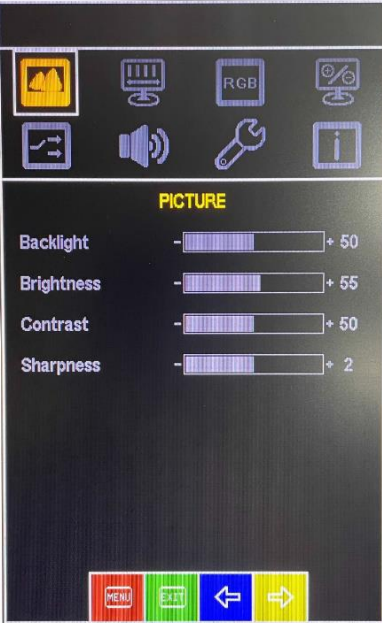
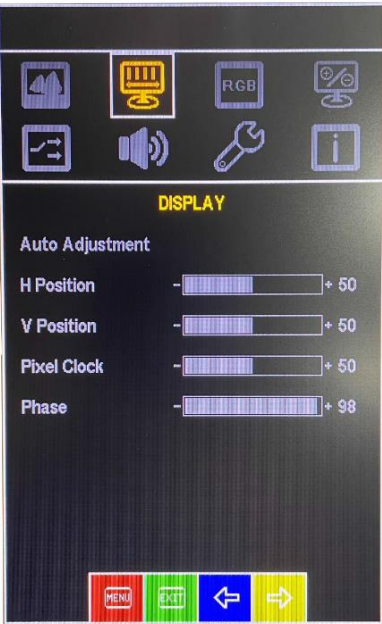
**NOTE:** *Timing depends on LCD Panel's requirement.*

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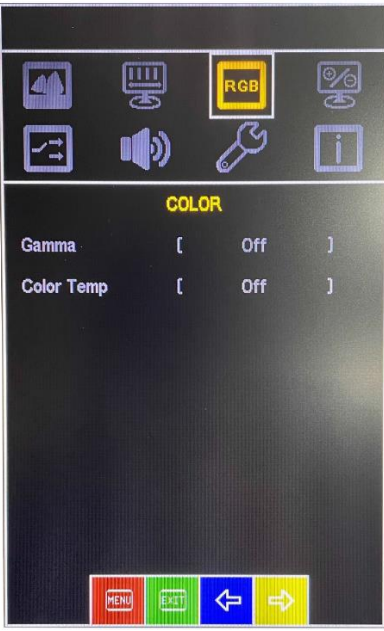
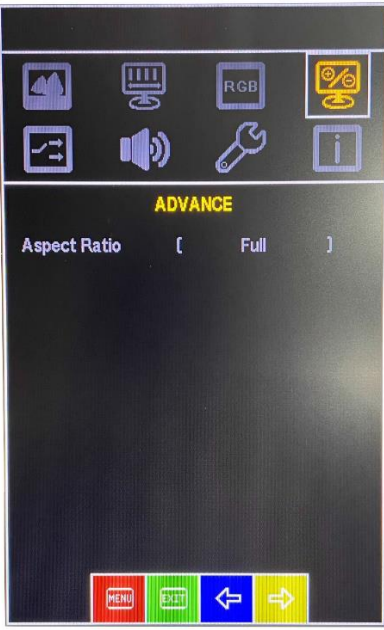
# Appendix B OSD Operation


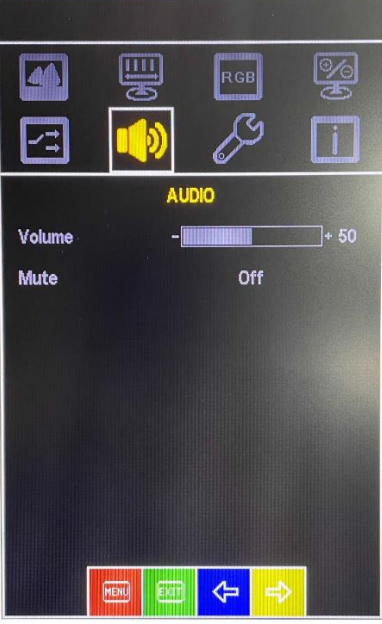
## Function Description of OSD Menu

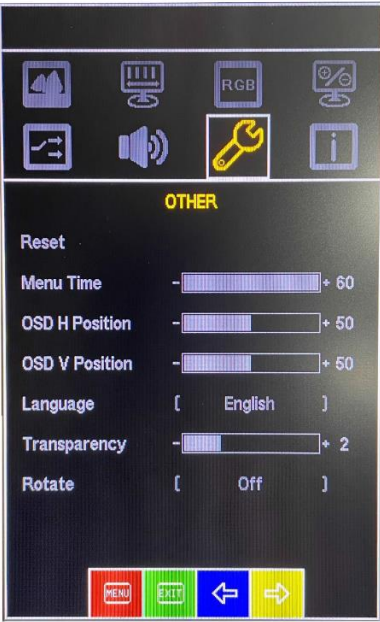

※The layout and format of OSD depends on customer's request.

OSD MENU	Description
 <p style="text-align: center;">Picture</p>	<p>Press "+" to increase or "-" to decrease The Backlight, Brightness or Contrast. or Sharpness.</p> <p><b>Backlight</b> Adjust the Backlight of the screen.</p> <p><b>Brightness</b> Adjust the brightness of the signal.</p> <p><b>Contrast</b> Adjust the contrast of the screen.</p> <p><b>Sharpness</b> Adjust the Sharpness of the screen.</p>
 <p style="text-align: center;">Display</p>	<p><b>Auto Adjustment</b> Automatic display adjustment</p> <p><b>H Position.</b> Adjust the horizontal position of Screen</p> <p><b>V Position.</b> Adjust the vertical position of the Screen</p> <p><b>Pixel Clock</b> Adjust Frequency to fill the display</p> <p><b>Phase</b> Adjust the phase control of the image.</p>



 <p style="text-align: center;">Color</p>	<p><b>Gamma</b> Set the Gamma to 2.0, 2.2, 2.4 and off.</p> <p><b>Color Temp</b> You can select the screen's color level of the white color field from the default color temperature settings. Also, you can fine tune the color temperature by USER option if necessary. Set color to 6500k , 9300k , USER .</p>
 <p style="text-align: center;">Advance</p>	<p><b>Aspect Ratio</b> Select Aspect Ratio</p> <ul style="list-style-type: none"> <li>● 4:3</li> <li>● 5:4</li> <li>● 16:9</li> <li>● Full</li> </ul>

 <p>The image shows the 'INPUT' OSD menu. At the top, there are eight icons: a landscape icon, a monitor icon, an 'RGB' icon, a monitor with a percentage icon, a highlighted 'Input' icon, a speaker icon, a wrench icon, and an information icon. Below the icons, the word 'INPUT' is displayed in yellow. Underneath, the text 'Auto Select' is followed by a list of options: 'VGA', 'DP', and 'HDMI'. At the bottom, there are four navigation buttons: 'MENU' (red), 'EXIT' (green), a left arrow (blue), and a right arrow (yellow).</p>	<p><b>Select the Video input Source</b></p> <ul style="list-style-type: none"><li>● Auto Select</li><li>● VGA</li><li>● DP</li><li>● HDMI</li></ul>
 <p>The image shows the 'AUDIO' OSD menu. At the top, there are eight icons: a landscape icon, a monitor icon, an 'RGB' icon, a monitor with a percentage icon, a highlighted 'Audio' icon, a speaker icon, a wrench icon, and an information icon. Below the icons, the word 'AUDIO' is displayed in yellow. Underneath, there are two settings: 'Volume' with a slider bar ranging from '-' to '+ 50', and 'Mute' with the text 'Off'. At the bottom, there are four navigation buttons: 'MENU' (red), 'EXIT' (green), a left arrow (blue), and a right arrow (yellow).</p>	<p><b>Volume</b> Adjust the Volume.</p> <p><b>Mute</b> Set the Mute on/off.</p>

 <p style="text-align: center;">Other</p>	<p><b>Reset</b> Adjust the Menu Time.</p> <p><b>OSD H. Position.</b> Adjust the horizontal position of the OSD Menu screen's image.</p> <p><b>OSD V. Position.</b> Adjust the vertical position of the OSD Menu screen's image.</p> <p><b>Language</b> Set the Language English/繁體中文.</p> <p><b>Transparency</b> Adjust the OSD Transparency.</p> <p><b>Rotate</b></p>
 <p style="text-align: center;">Information</p>	<p>Show as timing and firmware version</p>

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