DuraBrite series Outdoor High Bright Monitor

USER MANUAL

Please read this manual carefully and keep it in a safe place before use.

V1.1 2025.11

The images in this manual (including but not limited to their models, appearance, colors, dimensions, screen display content, etc.) are for illustrative purposes only. Please refer to the actual product for accuracy.

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READING TIPS

Symbol Key

	Note or Information		Warning		Caution

USAGE RECOMMENDATIONS

General Touch provides you with the following documentation:

"Sales Drawing"

"Specification Sheet"

"User Manual"

We recommend starting with the "Specification Sheet" to learn about the touch monitor's specifications and structural dimensions. For more information, refer to the "Sales Drawing". To fully understand the product, please read the "User Manual."

The introductory page of each chapter in the user manual provides an overview of the chapter's content.

This manual is intended for DuraBrite series outdoor high bright monitor.

CATALOGUE

PRECAUTIONS BEFORE USE

This section primarily covers some important points to note when using the product.

1 PRECAUTIONS BEFORE USE

1.1 Safety Precautions

Here are some safety precautions to be followed when using our product. Please read and adhere to them carefully.

Before cleaning the product, make sure to unplug the power cord, and wipe the product with a soft, dry cloth.

Do not use components other than those recommended by the manufacturer, as it may cause damage.

Do not attempt to drag the monitor by its power cord, and do not touch the plug with wet hands.

Avoid excessive bending of the plug and power cord, and do not place heavy objects on them to prevent damage.

Place the product in an area away from oil, smoke, or moisture to avoid malfunction, electric shock, or fire. Particularly, avoid operating the monitor near water or outdoors where it may be exposed to rain or snow.

Do not block the ventilation openings on the monitor casing, and do not place the monitor or power adaptor on a bed, sofa, carpet, etc., as poor ventilation may cause malfunctions or fire.

When installing the product, ensure that it is positioned at least 76 mm away from the wall for proper ventilation.

Use only the power source type listed on the product label. If you have any doubts about the power source, please contact local dealer or power supply department.

Use only properly grounded plugs and power outlets, as improper grounding may result in electric shock or device damage. If plug cannot be inserted into the power outlet, please replace the power outlet.

Ensure that the power outlet can handle the total electrical load of the connected product. Do not connect too many extension cords or plugs to a single power outlet, as it may cause a fire.

Do not place the product on an unstable or narrow surface. Place it on a flat and stable surface to prevent the product from falling and causing harm to passersby, especially children.

Do not attempt to extend the power cord, as it may cause a fire.

Do not disassemble the monitor case by yourself. If the monitor needs inspection or repair, please contact a professional service technician.

In case of the following situations, unplug the power cord first and then contact a professional service technician:

- The power cord is damaged or broken.
- The monitor fell and damaged the casing.
- The monitor display is not functioning correctly and needs to be repaired.

When not using the monitor, unplug the power cord from the power outlet.

Do not install the product in poorly ventilated, high-light, high-temperature, or humid areas.

It is important to note that the corners of the tempered glass are relatively fragile. Therefore, it is essential to exercise caution and protect the four corners of the touch screen throughout the entire process of installation and use. This is to prevent any potential damage from contact with sharp objects or from impact.

1.2 Delivery Status

According to the product specifications, all components are delivered with specific hardware or software configurations, including firmware versions. It is important to note that any modifications or changes made to the hardware or software configurations (including firmware versions) beyond the specified limits are not allowed for this product. In such cases, General Touch (the company) will not be held responsible for any consequences or liabilities that may arise.

1.3 Delivery Checklist

Number	Name	Quantity	Remarks
1	Monitor	1	
2	Power cable[1]	1	
3	Power adaptor[2]	1	The OSL323 doesn't include an adapter.
4	USB cable (Type-B to Type-A)[3]	1	For Touch Monitor
5	Brackets (includes screws) (optional)	2	For OSL323 installation (accessories)
6	Clamps	8	Accessories for PSL*** installation
7	Video Cable[4]	1	VGA, HDMI, etc.
8	Specification sheet	1	Electronic version
9	Sales drawing	1	Electronic version
10	User manual	1	Electronic version

Note: Due to variations in specific models within this product series, please refer to the actual provided model for accuracy.

[1] It should be noted that this is an optional accessory that must be purchased separately.

[2] It should be noted that this is an optional accessory that must be purchased separately.

[3] It should be noted that this is an optional accessory that must be purchased separately.

[4] It should be noted that this is an optional accessory that must be purchased separately.

1.4 Preparation

This manual is designed for DuraBrite series outdoor high bright monitors and covers basic information such as product introduction, installation and usage instructions, troubleshooting, and more.

For our touch monitor, it is important that the operators have a certain level of professional knowledge and experience.

Here are some essential elements to ensure the proper functioning of the touch monitor:

The power supply that matches the specifications of the touch monitor.

Before preparing to use the touch monitor, please make sure to determine the power supply that matches its specifications.

When installing and disassembling, it is necessary to turn off the power and then power on the monitor after assembly or installation is complete.

The touch monitor is compatible with certain operating systems on the host computer and supports specific video sources. It is important to use a compatible operating system for the host computer when using the touch monitor to ensure the touch functionality works properly. Using an incompatible operating system may result in the touch function not working or performing poorly.

Additionally, it is recommended to use a video source that has a resolution that is consistent with or supported by the touch monitor. Using a video source with an incompatible resolution may result in the inability to display content or poor display quality.

The fans located on the back of the monitor case are for ventilation. Do not block or insert anything inside the ventilation fans.

Please ensure at least 30mm clearance behind the monitor.

OVERVIEW

This section primarily focuses on introducing the features and applicable scenarios of this product series.

2 OVERVIEW

2.1 Product Definition

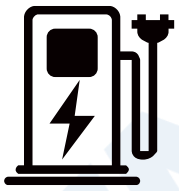
DuraBrite series outdoor high bright monitors are specially designed for high temperatures, high ambient light, and other harsh outdoor environments. They have an active cooling system and automatic light-sensitive control. The monitors actively follow environmental changes in light and darkness to adjust the brightness of the screen.

2.2 Key Features

Its super bright display ensures optimal visibility, while its high reliability and protection level guarantee long-term performance. Brightness up to 1500 nits anti-glare coating delivers better visuals and readability even in direct sunlight. UV&IR protection minimizes internal heat accumulation and decelerates the aging of components significantly. Automatic brightness adjustment corresponds with ambient light to ensure 24/7 stable performance and to extend LCD panel lifespan. The touchmonitor's waterproof and dustproof rating can reach IP65[5] & Nema 4x.

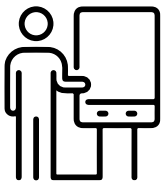
2.3 Application Scenarios

The increased brightness enables clear and legible content visibility, making them ideal for outdoor digital signage, transportation displays, and other applications exposed to direct sunlight.

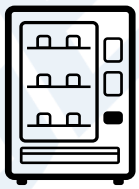


EV Charging Station

Parking Pay Station

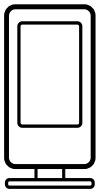


Self-service Kiosk



Vending Machine

Ticketing Machines



Outdoor Signage

[5] Regarding the IP65 protection level claimed in the product specification: The DuraBrite series Outdoor High Bright monitors can achieve an IP65 protection level, but it requires proper installation to achieve this effect. The touch monitors and cabinet must be installed correctly according to the installation steps and requirements. The cabinet surface must be flat and without deformation after installation, and the clamps must be firmly attached to the back panel of the cabinet. Please refer to section 3.3.2 for specific installation instructions.

PRODUCT DESCRIPTION

This chapter primarily covers the components, installations, usage, and routine maintenance of the product.

3 PRODUCT DESCRIPTION

3.1 Exterior

OSL223, RSL276 and OSL323

OSL223

RSL276

OSL223

PSL10S

PSL073

3.2 Components Introduction

3.2.1 Structure

A touch monitor is generally composed of touch components, display module, and various structural components. The touch components mainly include the touch screen and touch controller as core devices, the display module contain the LCD panel, A/D board etc. The structural components primarily include the front bezel, rear case/shielding cover, stand/base etc. The DuraBrite series outdoor high bright monitor is different from ordinary touch monitors. It has an integrated Ambient light sensor that automatically adjusts the screen brightness.

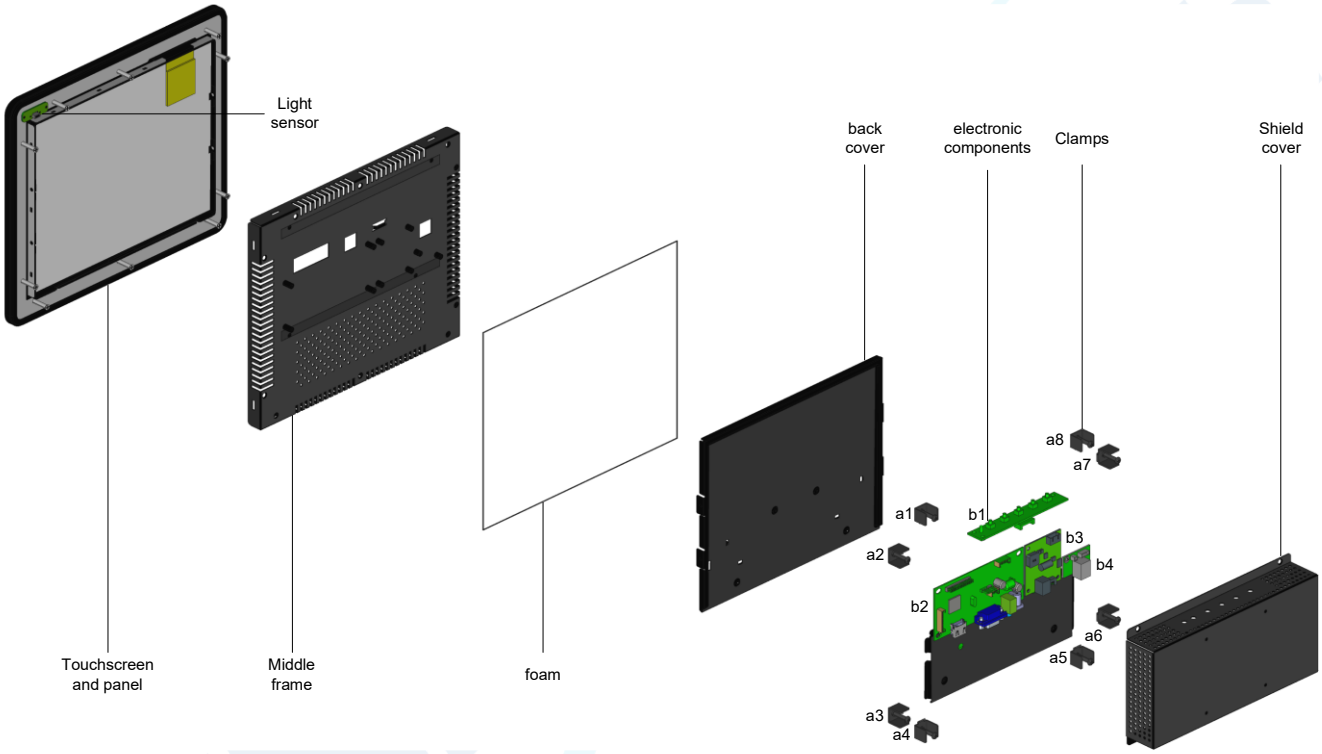


Fig 1 Cross-sectional view of the main structural components of a panel mount outdoor high bright monitor

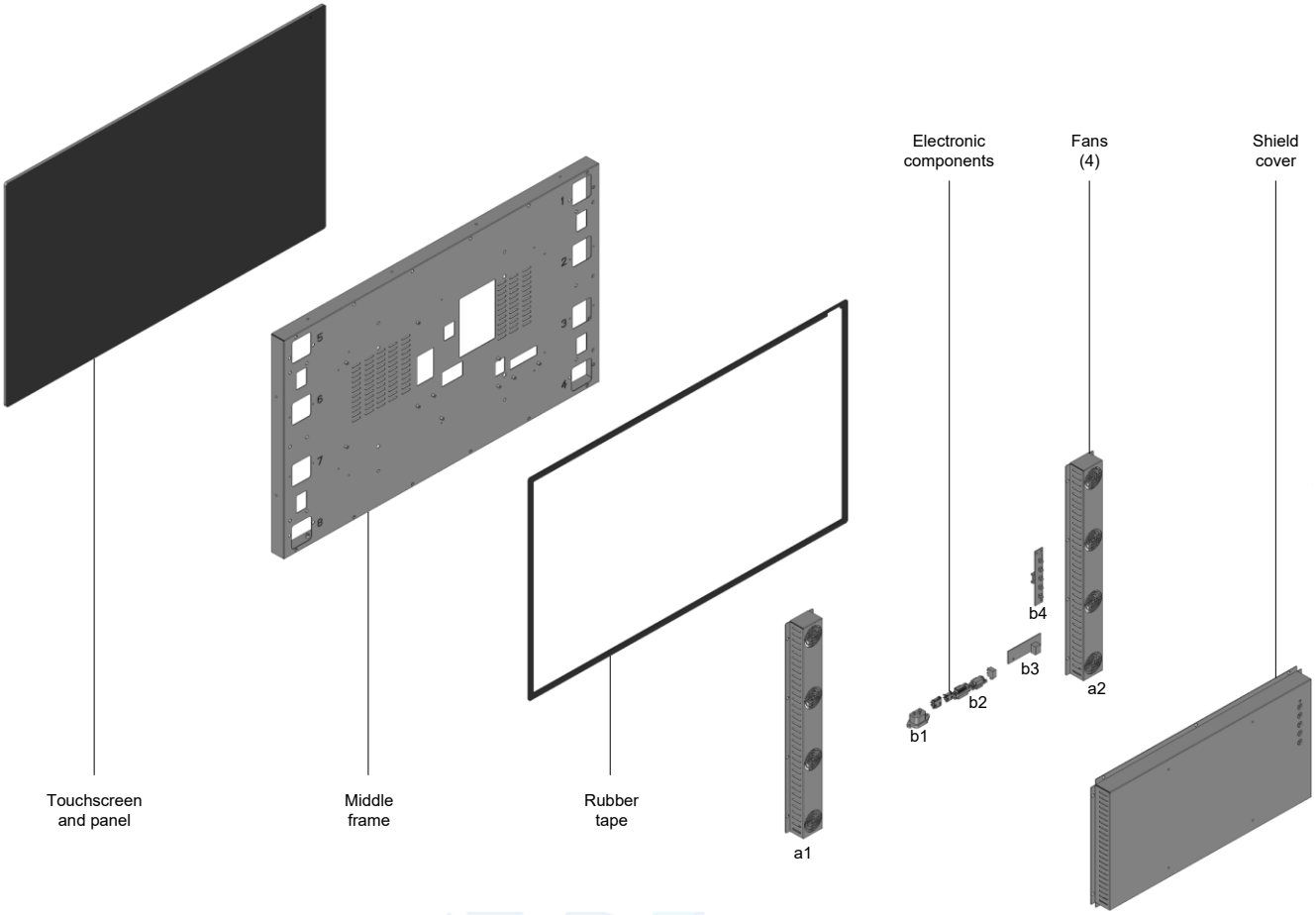


Fig 2 Cross-sectional view of the main structural components of an open frame outdoor high bright monitor

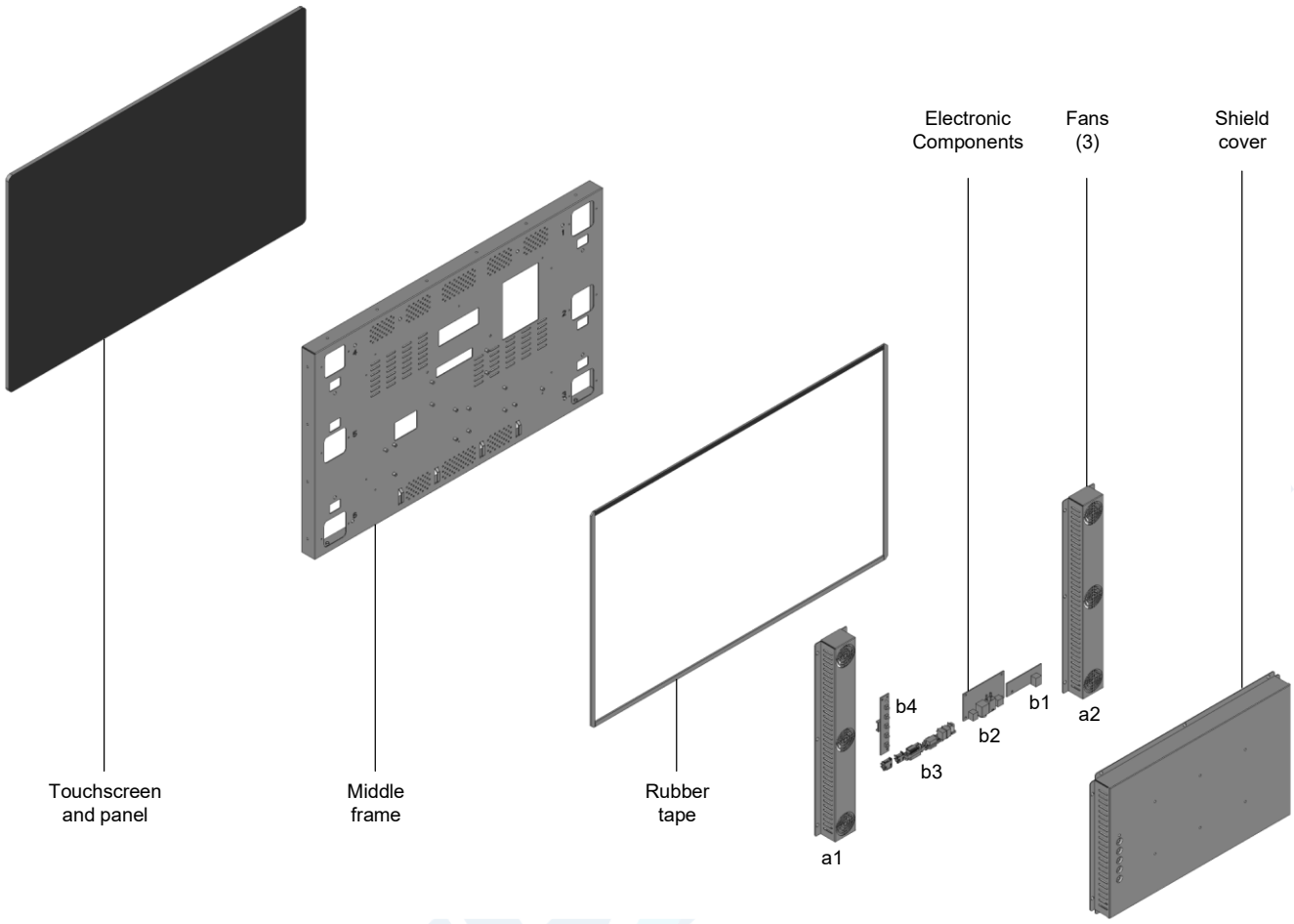


Fig 3 Cross-sectional view of the main structural components of an open frame outdoor high bright monitor

3.2.2 Interfaces

3.2.2.1 External Interfaces

The PSL073 and PSL10S video ports are VGA and HDMI.

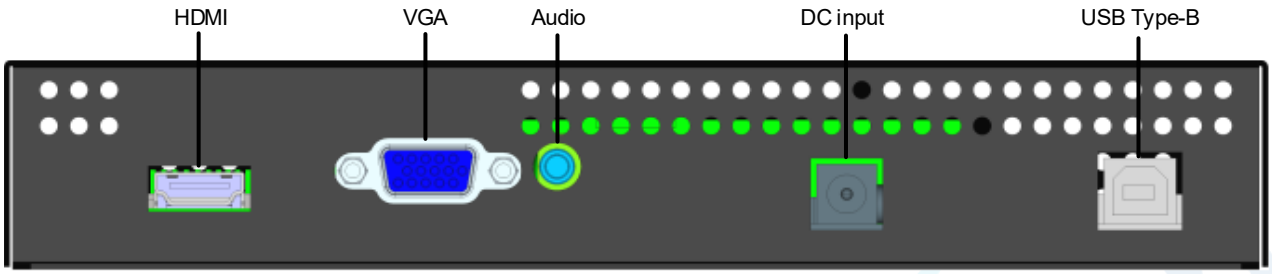


Fig 4 Bottom View of PSL073 and PSL10S Touchmonitor

The OSL323 is AC220V powered, and its video ports include VGA, DVI, DP, and HDMI.

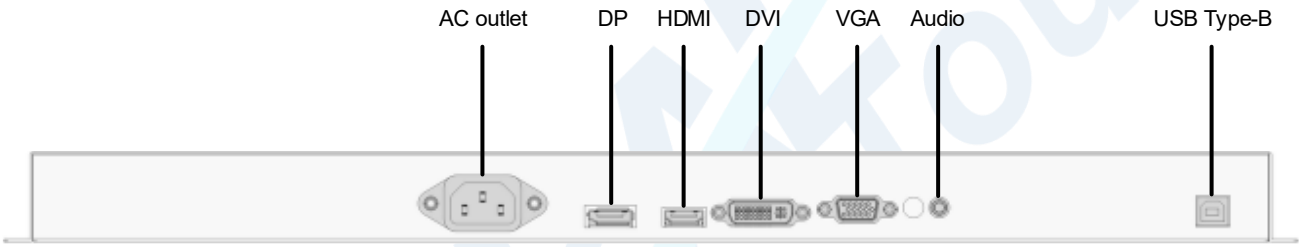


Fig 5 Bottom View of OSL323 Touchmonitor

Both RSL276 and OSL223 are DC24V powered, and the video ports include VGA, DVI, DP, and HDMI.

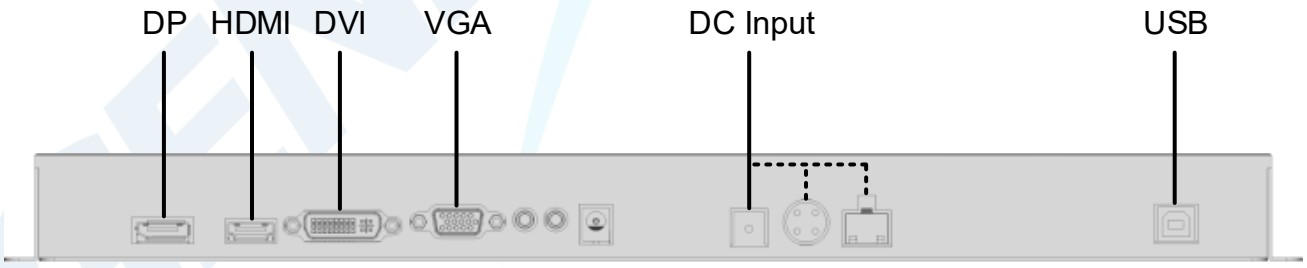
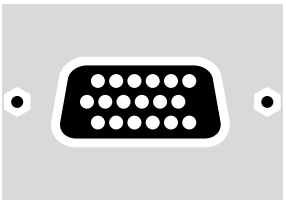


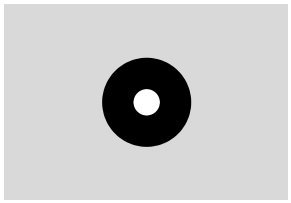
Fig 6 Bottom View of RSL276 and OSL223 Touchmonitor

Touch Monitor's Interfaces Description



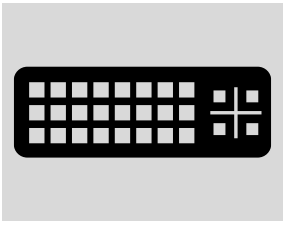
VGA (Video Graphics Array)

Used for video signal



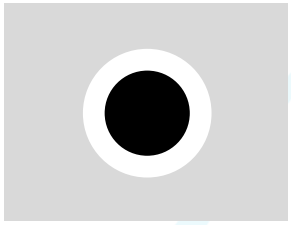
Power Supply

DC input, DC plug 2.0mm, 2.1mm, 2.5mm optional



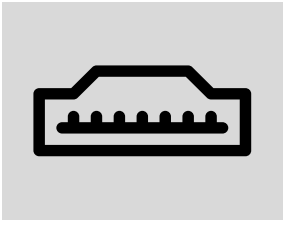
DVI-I (Digital Visual Interface – Integrated)

Used for video signal



Audio-in Jack

Microphone

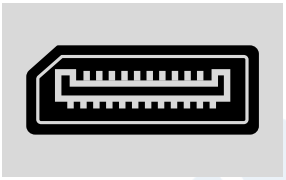


HDMI (High-Definition Multimedia Interface)

Used for video signal

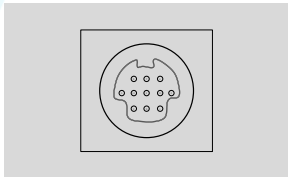
USB Type B (Touch Port)

Touch interface



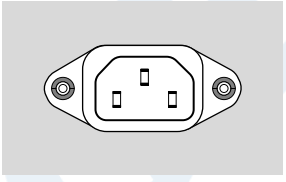
DP (DisplayPort)

Used for video signal



Mini Din (External OSD)

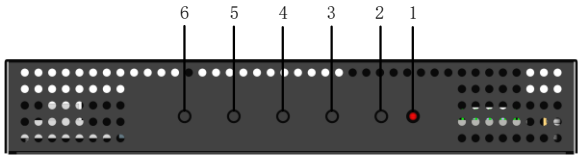
For OSD Remote

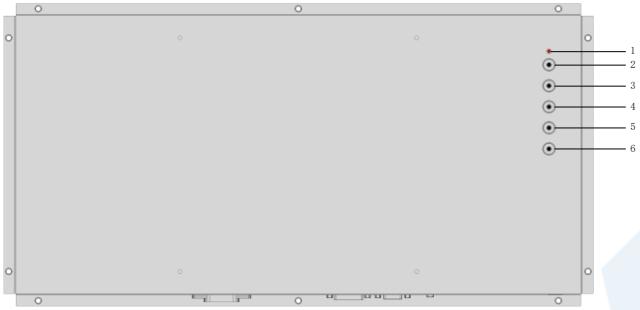


AC Outlet

3.2.2.2 OSD Button

The OSD (On-Screen Display) buttons are usually located on the back or side of the touch monitor to facilitate user operation.





The location of the OSD buttons on the touch monitor

Touch Monitor OSD Button Description

2 **POWER**

Power button, Turn ON/ OFF

3 **Auto**

Auto-adjust screen parameters, Exit/Return

4 **Menu**

Menu Button, confirm the selection

5 **Up+**

Adjustment button, Adjust Up/Right

6 **Down**

Adjustment button, Adjust Down/Left

1 **Indicator Light**

Indicates the working status of the touch monitor

Off, not connected to power

Green, normal operation

Red, connected to power but in a non-working state

3.3 Operation Instructions

3.3.1 Unboxing

After taking our product out of the packaging box, first inspect the appearance, and then read the specifications and user manual one by one. Once confirmed, connect the touch monitor to the host and power it on. The steps to open the device packaging are as follows:

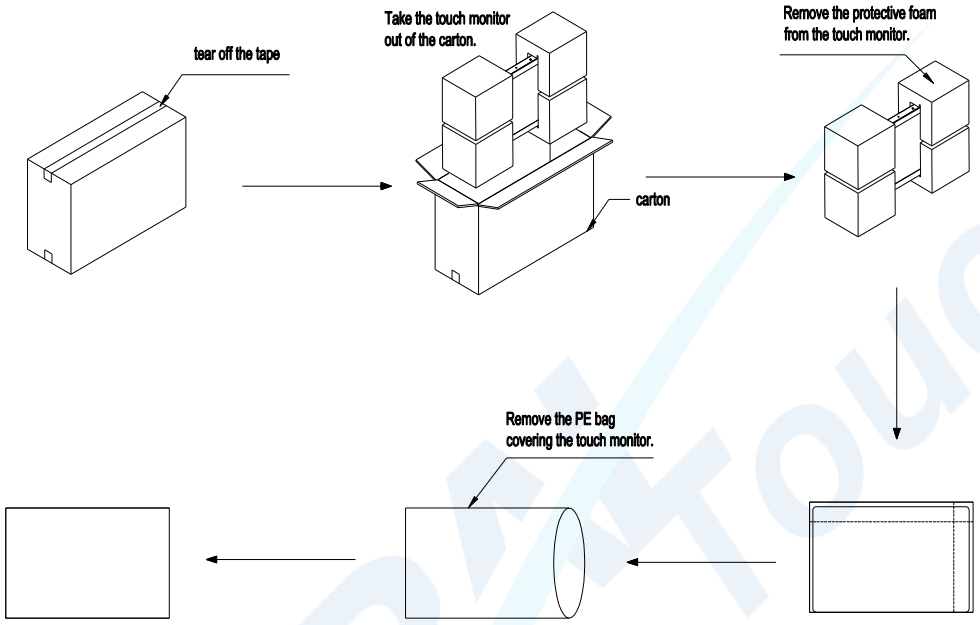


Fig 7 Standard Unboxing Process

Unboxing precautions:

- Do not discard the original packaging box.
- Check the goods list against your order to ensure completeness.
- Keep the documents that come with the device, as they contain important information about the device and how to use it.
- Check for any obvious transportation damage inside the packaging.

If you find any transportation damage or discrepancies between the packaging and the order, please inform General Touch's sales or after-sales department.

3.3.2 Mounting

For open frame monitors, we utilize the VESA interface of the display for desktop and wall mounting installations. Additionally, we support other installation methods, such as integrating the device into a cabinet by combining it with a mounting bracket and the VESA interface.

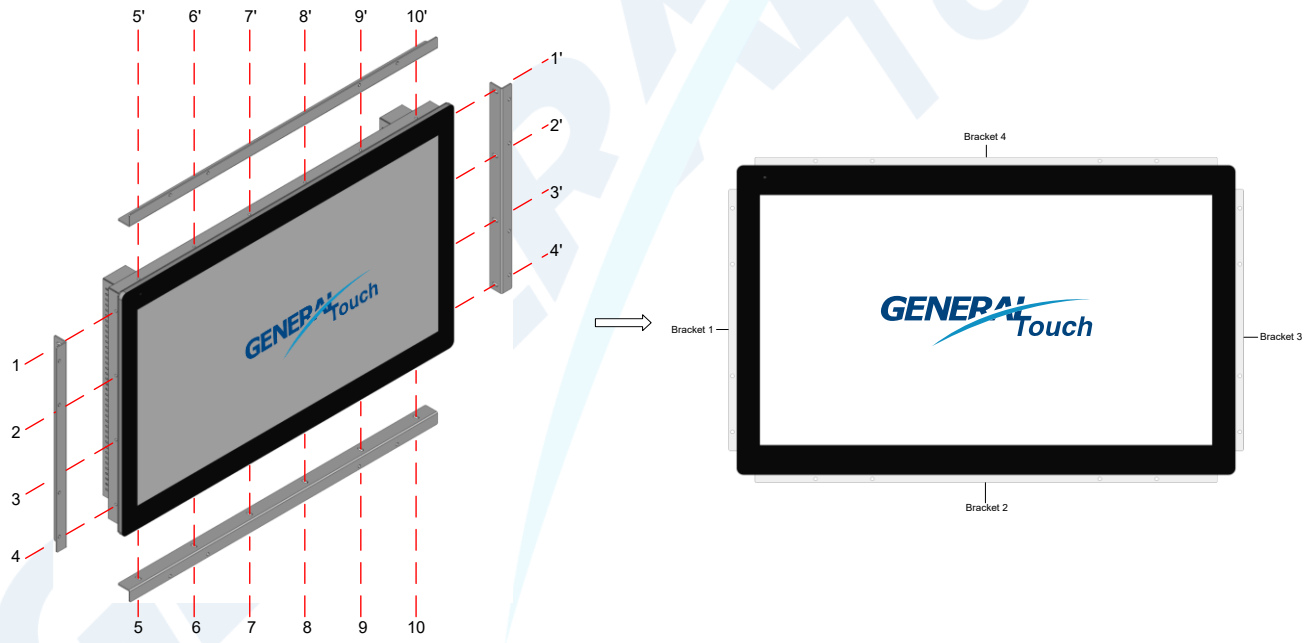
The ambient light sensor may not function properly if the portrait orientation is upside-down, a focused light source is close to the sensor window, or the sensor window is blocked. Reference the sales drawing for details on light sensor location.

Try to avoid mounting the product in direct sunlight if possible. Use overhangs or orient away from the sun to reduce environmental stress on the product and prolong its life.

3.3.2.1 For OSL323, OSL223 and RSL276 mounting

The touch monitor can be mounted on a cabinet using the reserved mounting holes on its side. To install the bracket, refer to the following method and diagram before attaching it to the cabinet.

Please ensure at least 30mm clearance behind the monitor.



Secure the brackets to the side of the touch monitor using screws.

Secure the touch monitor that attached brackets to the cabinet using screws.

The open frame monitor design several mounting features for customer to fit in cabinet, which provide brackets onto cabinet. For details specification, please consult specification with GT.

For our panel mount touch monitors, we utilize the mounting hole of the side of the Touch Monitor and clamps for embedded mounting.

3.3.2.2 For PSL073 and PSL10S mounting

For embedded mounting, select an appropriate cabinet and secure it with clamps.

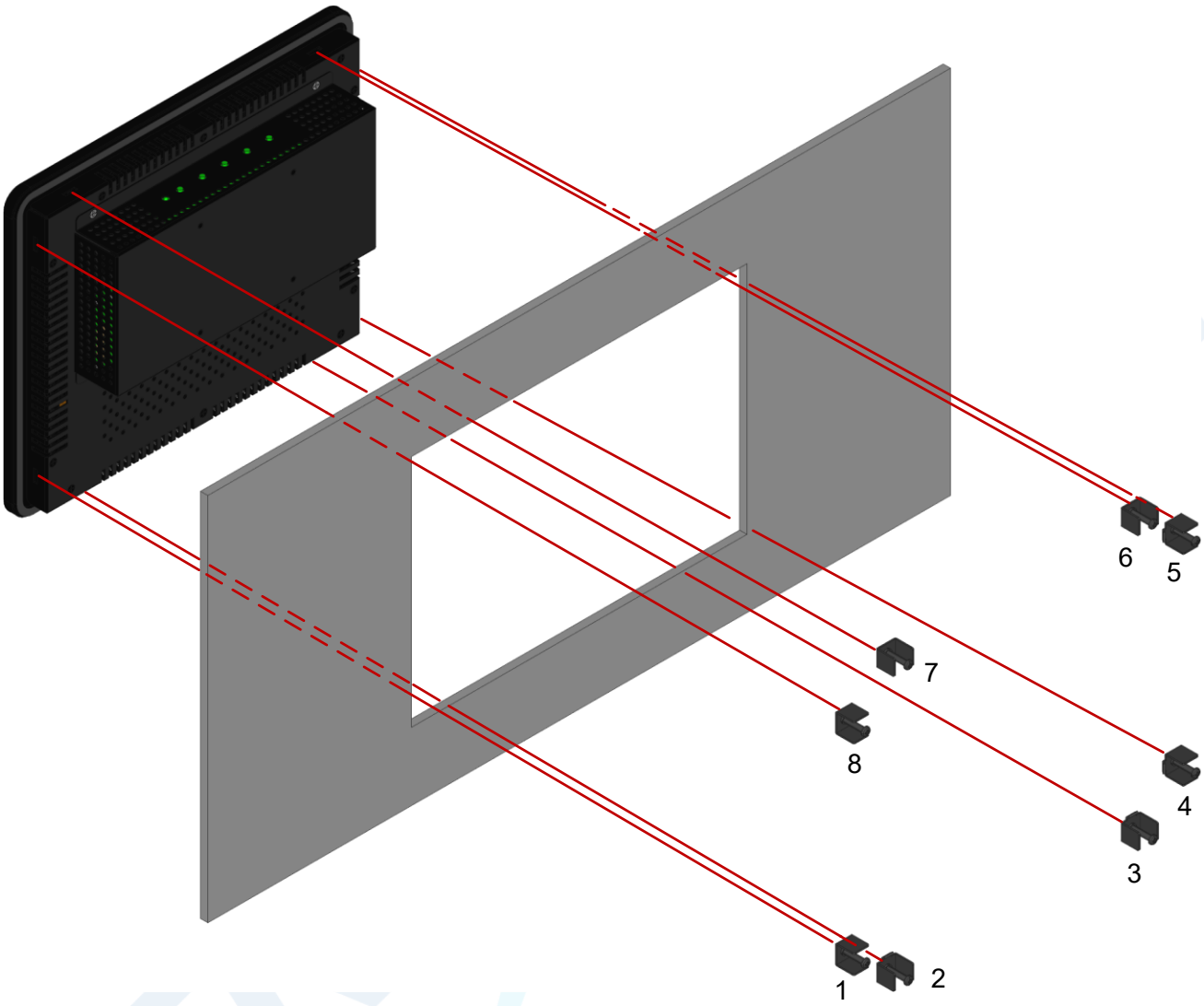
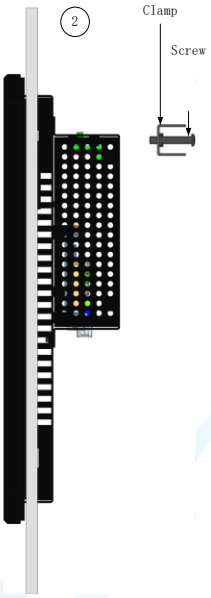


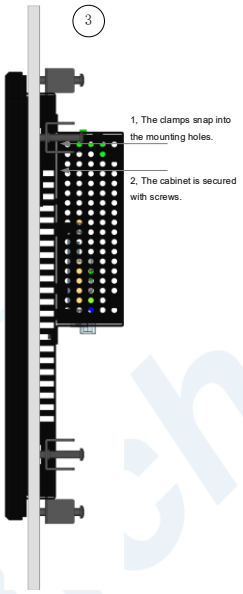
Fig 8 10.1'' Embedded Mounting Installation Diagram

Here is a diagram of how the installation is broken down:

①Embed the touch-monitor inside the cabinet.



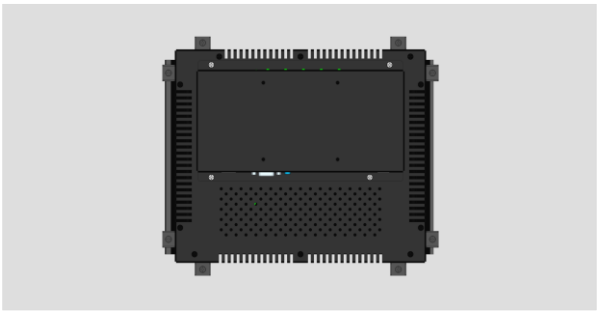
②Fit the touch-monitor to the cabinet. Remove the clips and screws.



③The clamps snap into the mounting holes on the side of the touch-monitor. Tighten the screws until they are against the cabinet.

Diagram of the complete installation

Front view of the touch-monitor



Back view of the touch-monitor

3.3.3 Usage

3.3.3.1 Ventilation

The High Bright Monitor has a built-in ventilation circulation system with a fan and temperature sensor, and associated components. The left side is the air outlet, and the right side is the air inlet. The iThermal system achieves dynamic heat dissipation and optimal cooling effect through intelligent thermal management.

Fig 9 Ventilation Diagram

A temperature sensor is integrated within the internal portion of the high bright monitor, the primary function of which is to monitor the backlight temperature of the touch monitor. In instances where the backlight temperature is observed to be in the lower range (i.e., below 30℃), the fan of the functions at a reduced speed (3000 rpm). Conversely, when the backlight temperature reaches a higher range (30℃ ~ 59℃), but does not reach the maximum operating temperature, the fan speed is gradually increased to enable the touch monitor to achieve the purpose of ventilation and heat dissipation. This process continues until the backlight temperature of the touch monitor returns to within the normal operating temperature range.

No.	Temperature Trigger Threshold[6]	Rotational Speed[7]	Recovery Threshold	Note
1	＜30℃	low (30%)	/	/
2	30℃ ~ 59℃	medium (80%)	＜30℃	The RPM of the fan varies according to the temperature.
3	60℃	high (100%)	＜60	Maximum RPM

[6] The temperature here refers to the backlight temperature of the touch monitor, not the ambient temperature.

[7] The fan's maximum rotational speed is 10,000 RPM ± 10%, meaning the blades rotate 10,000 times per minute.

3.3.3.2 Connecting to the PC and Power

Our High-Brightness Monitors are simple to set up. They are manufactured with integrated video ports, allowing users to connect their own media player or PC.

After installing the display, for the initial use, please connect the video cable first, then plug in the power and turn it on. During regular use, simply connect the power according to your habit.

The external interfaces are located at the back of the Touch Monitor, as detailed in section "3.2.2.1". To power on the device, use the provided power cable and adapter to connect it to the power source. Refer to the respective product label for all power-related information.

Once the power adapter is connected to the power source, the indicator light on the Touch Monitor will turn on and display red. After the host is powered on, the Touch Monitor will receive the video signal and display content, and the indicator light will turn green. The connection diagram is shown below:

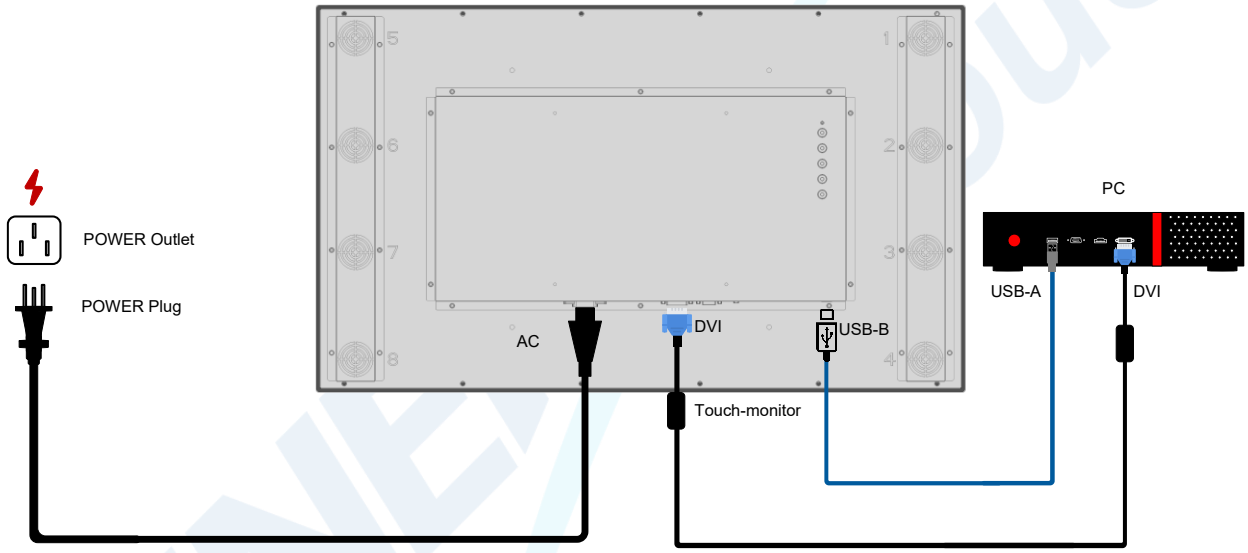


Fig 10 OSL323 Touch Monitor Connection Diagram

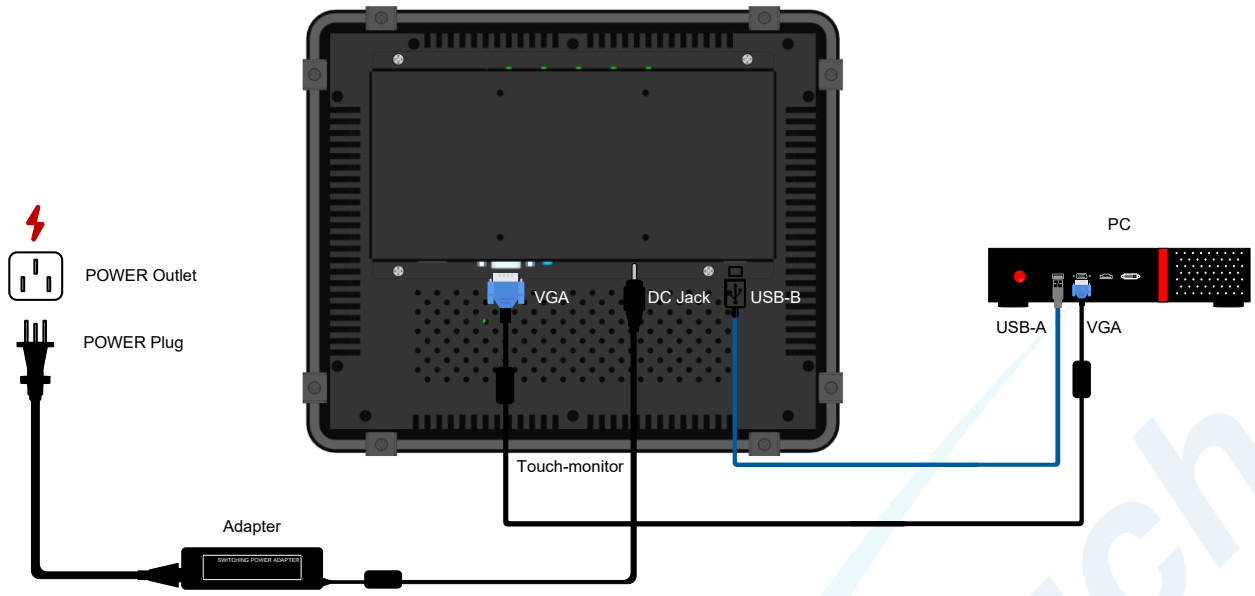


Fig 11 10.1” Touch Monitor Connection Diagram

Please note: In order to achieve optimal performance, it is generally recommended to match the computer's output resolution with the native resolution of the Touch Monitor for the best image quality. The product images shown in the connection diagram above are for illustrative purposes only. Please refer to the actual products for accurate representation. The host computer and power outlet are not provided by General Touch.

3.3.3.3 Touch

Our Touch Monitor supports various gesture operations such as tapping and swiping. Please refer to the following gesture table for more details:

Table 1 Touch Gesture Descriptions

Gestures	Name	Type	Descriptions
	Tap	Static Gestures	Single Finger (Pads) to Touch and Swipe the Screen
	Multi Tap	Gesture Operations	Multiple Fingers (Pads) to Touch and Swipe the Screen
	Swipe	Gesture Operations	Moving a finger (Pads) across the screen
	Other	Gesture Operations	Supports Touch Operations on Different Platforms

Note: The above gestures are based on the Windows Universal Platform for the host operating system, as well as support from certain applications. The icons are for reference only, and the actual display on the touchscreen may vary depending on the specific model.

3.3.3.4 OSD buttons description

Fig 12 OSD Button Diagram

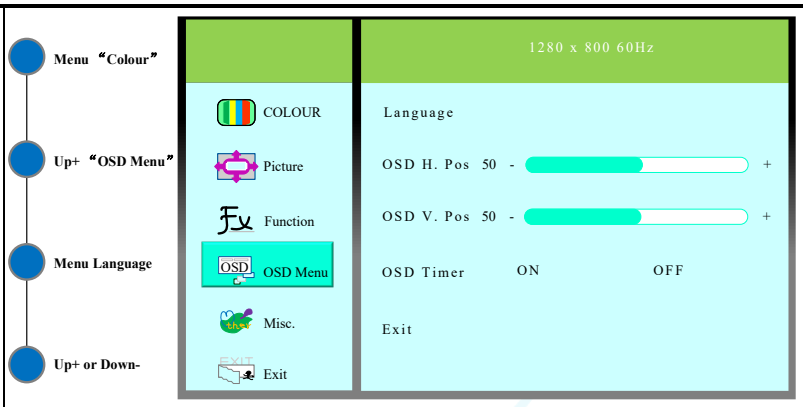
To adjust the screen and parameters of the Touch Monitor, it is necessary to understand the options and functions provided in the OSD menu (On-Screen Display), as well as how to use them. You can operate the OSD menu using the buttons located on the back of the Touch Monitor.

Note: It is important to familiarize yourself with the functions of each button, as described in section 3.2.2.2 regarding the explanation of OSD button functions, in order to successfully complete the OSD parameter settings. The following illustrations are for reference only. Different models may have slight differences in their display interface and operational methods (workflow), so please refer to the actual device for accurate information.

3.3.3.4.1 User Interface 1

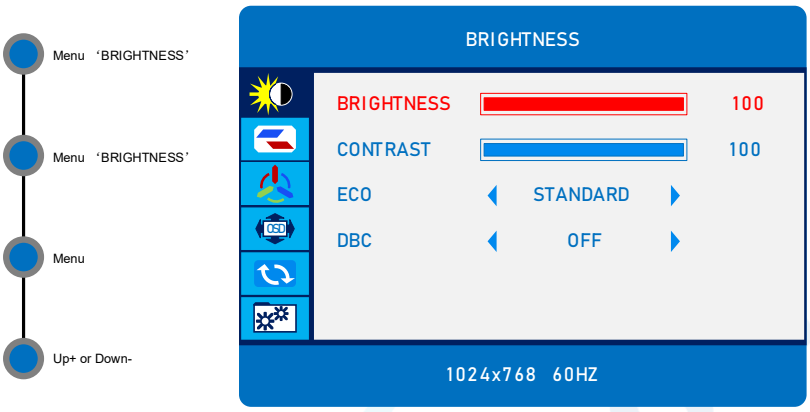
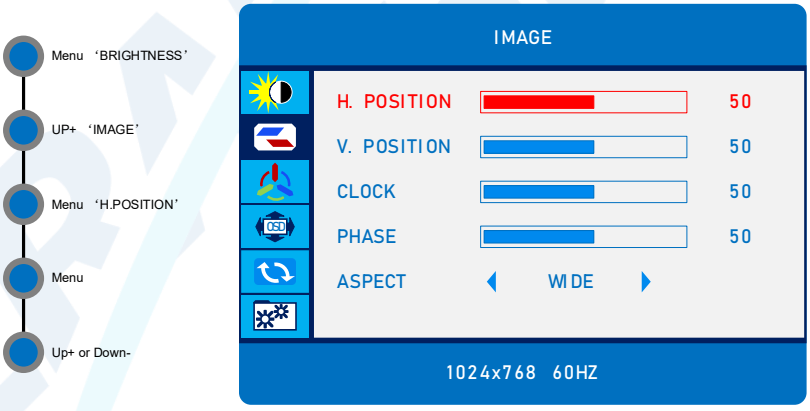
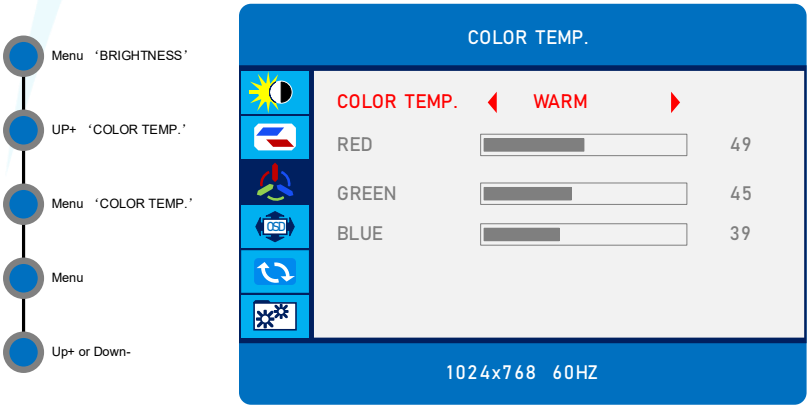
The OSD menu interface is compatible with the PSL073 and PSL10S.

Contrast: 0~100; Brightness: 0~100; Colour Temp: 9300K, 6500K, User	 Fig 13 "Colour" Menu
H Position: 0~100; V Position: 0~100; Phase: 0~100; Clock: 0~100; Sharpness: 1, 2, 3, 4, 5	 Fig 14 "Picture" Menu
Auto Adjust: YES, NO; Auto Colour: YES, NO;	 Fig 15 "Function" Menu

Language optional; English, Français, Deutsch, Español, Italiano, 简体中文 The adjustment range: OSD H Position: 0~100 OSD V Position: 0~100 OSD Timer: ON, OFF	 Fig 16 "OSD Menu" Menu
Input: VGA, HDMI Reset: YES, NO	 Fig 17 "Misc." Menu
Exit	 Fig 18 "Exit" Menu

3.3.3.4.2 User Interface 2

The OSD menu interface is compatible with the OSL323, RSL276 and OSL223.

BRIGHTNESS: 0~100 CONTRAST: 0~100 ECO: STANDARD, DBC: ON, OFF	 Fig 19 "BRIGHTNESS" Menu
H. POSITION: 0~100 V. POSITION: 0~100 CLOCK: 0~100 PHASE: 0~100 ASPECT: WIDE, 4:3, 16:9, 1:1	 Fig 20 "IMAGE" Menu
COLOR TEMP.: WARM, COOL, USER RED: 0~100 GREEN: 0~100 BLUE: 0~100	 Fig 21 "COLOR TEMP." Menu

LANGUAGE: ENGLISH, 简 体 中 文 ,
Español, Русский, Français, Deutsch……
OSD H. POS.: 0~100
OSD V. POS.: 0~100
OSD TIMER: 0~100
TRANSPARENCY: 0~100

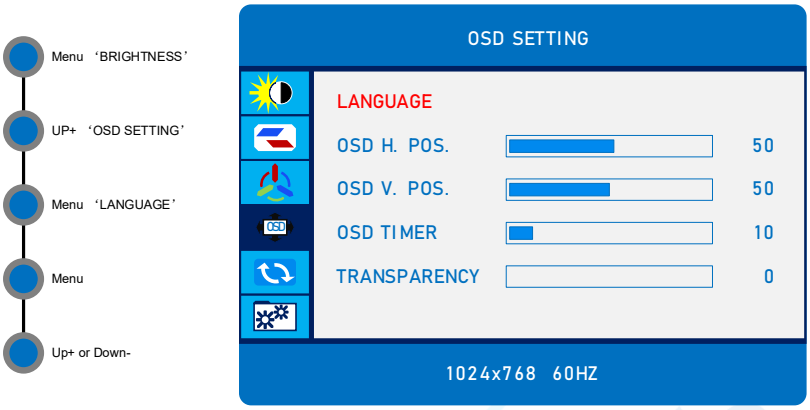


Fig 22 "OSD SETTING" Menu

IMAGE AUTO ADJUST
COLOR AUTO ADJUST
RESET

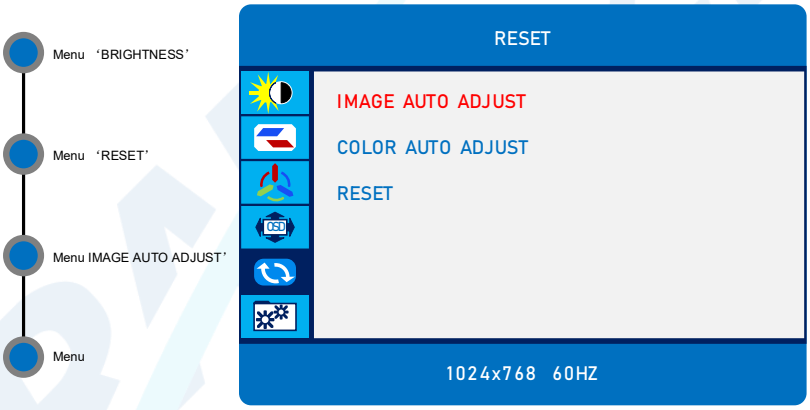


Fig 23 "RESET" Menu

SIGNAL AOURCEL: VGA, HDMI
MUTE: ON, OFF
VOLUME: 0~100

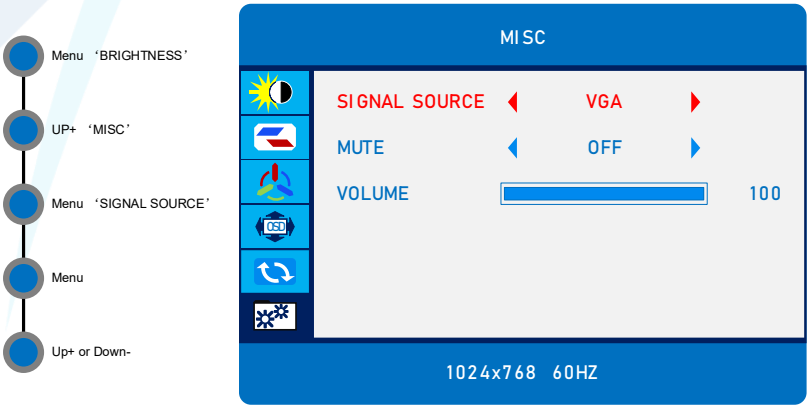


Fig 24 "MISC" Menu

3.3.4 Cleaning, Maintenance, and Repair

3.3.4.1 Cleaning

Do not spray water directly onto the product and do not use inflammable materials such as thinner or benzene to wipe the product.

To clean the product, unplug the power cord and wipe it gently with a soft cloth.

When cleaning the product or the screen, do not use cleanser, automobile or industrial shiner, abrasive or wax, benzene, alcohol, etc., as this may damage the product.

3.3.4.2 Maintenance

Avoid prolonged static displays. Continuous display of unchanged images or pages may cause "image persistence" or "screen burn-in" on the screen.

If the monitor is not used for a long time (more than a week continuously), please unplug the power.

Excessive brightness and contrast settings can result in overly bright or dark screen display, affecting visual performance and potentially reducing the lifespan of the monitor. Adjust brightness and contrast reasonably according to ambient lighting and personal preferences.

Avoid placing the monitor in direct sunlight to prevent damage to the screen and reduce display effectiveness.

Extended usage is not beneficial for LCD monitors. When not in use, it is advisable to turn off the monitor's power.

Avoid collisions and vibrations when moving, handling, or cleaning the monitor to prevent damage to internal components.

Keep a distance from objects with strong magnetic fields as they can generate additional voltage within the monitor, affecting voltage stability. Prolonged exposure to strong magnetic fields can also cause color distortion, affecting LCD display performance and lifespan.

LCD monitors generate considerable heat, and prolonged usage can result in excessive internal temperatures, which can impact the lifespan of the LCD. Therefore, avoid placing LCD monitors in overheated areas.

Minimize the impact of static electricity on the monitor by using an anti-static wristband or touching a metal part to discharge static electricity.

Keep cables away from magnetic fields and avoid twisting or folding them to prevent monitor malfunctions.

Keep the power cord away from water sources, open flames, and high temperatures to prevent aging or damage that may cause safety hazards.

3.3.4.3 Repair

Please leave repair services to qualified, knowledgeable, and experienced repair engineers.

Do not attempt to repair or modify the equipment without prior authorization from the manufacturer.

Always use original components for replacements.

When reassembling, ensure that other intact components are placed back in their appropriate positions.

When disconnecting cables from electronic devices, take care not to damage the wire sections to avoid poor contact.

Use a screwdriver that matches the size of the screws when installing or removing screws.

TROUBLESHOOTING GUIDE

This section provides an overview of common types of product malfunctions and troubleshooting methods.

4 TROUBLESHOOTING GUIDE

4.1 Types of Malfunctions

For our touch display monitors, the common types of malfunctions can be categorized into touch-related issues and display-related issues.

4.2 Troubleshooting Process

If you encounter any abnormalities while using our touch display monitor, please first determine the type of malfunction, and then refer to the "Common Malfunction Reference Table" for preliminary analysis and assessment. If you are unable to troubleshoot the issue and restore normal operation, please follow our After-sales Process to request assistance.

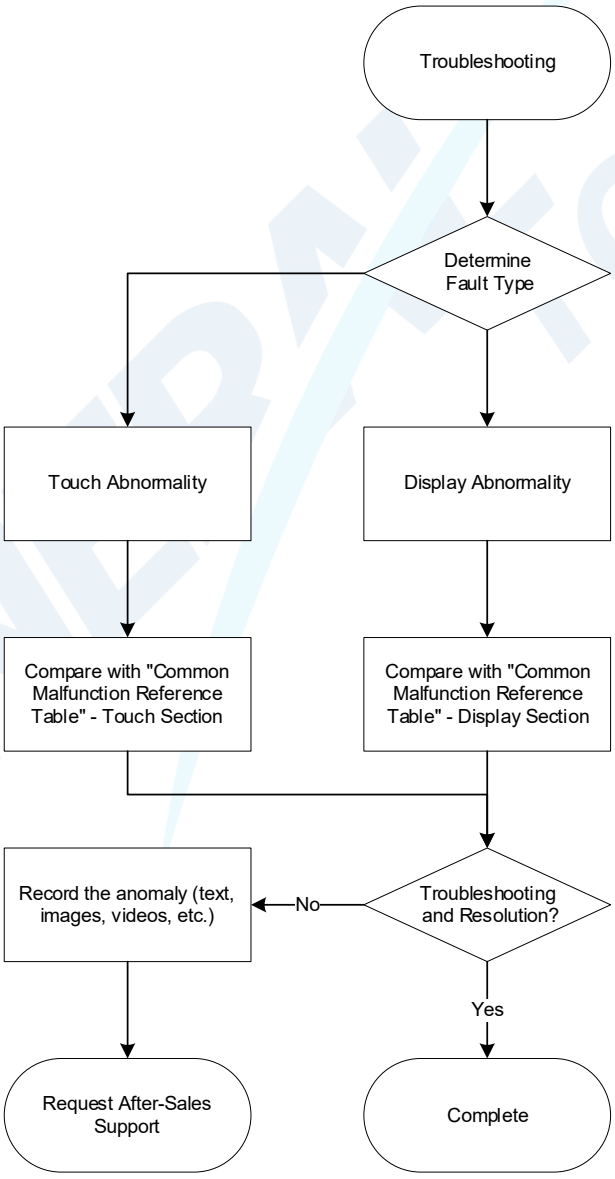


Fig 25 Common Troubleshooting Process

4.3 Common Malfunction Reference Table

If you encounter any malfunctions or abnormalities while using the touch display monitor, please refer to the following suggestions. If the issue persists, please contact your local dealer or reach out to General Touch's after-sales support.

Table 2 Common Malfunction Reference Table

Fault Code	Fault Category	Common Issues	Possible Causes	Troubleshooting Methods	Fault Severity
TP-1	Capacitive Touch	Erratic touch input	Program configuration error	Reconfigure parameters	I
TP-2			External environmental interference	Measure static sensitivity through signal testing	
TP-3			Controller damage	Measure voltage or perform information testing	
TP-4		Broken lines at the edges or incomplete lines	Resolution mismatch	Specifically for some irregular screens, specialized resolutions need to be matched	II
TP-5			Resolution mismatch	Observe edge signal values through signal testing	
TP-6			Damaged edge channels	Visual observation or continuity testing Continuity testing	
TP-7			Damaged FPC ribbon cable or sensor	Continuity testing	
TP-8		Touch lock points	Abnormal screen panel	Perform signal testing and observe if the screen panel meets flatness standards	II
TP-9			Electromagnetic interference	Observe CDC static changes	

Fault Code	Fault Category	Common Issues	Possible Causes	Troubleshooting Methods	Fault Severity
TP-10			Controller malfunction	Perform cross-testing by replacing the screen panel	
TP-11				Test CDC static changes of the controller	
TP-12		Unresponsive touch (delayed or broken lines when drawing)	Decreased signal sensitivity	Read information values using information testing tools	II
TP-13			Outdated motherboard driver version	Reload driver software, mainly for Android or Linux	
TP-14			Abnormal firmware parameter	Reconfigure firmware parameters	
TP-15			Using fingertips instead of finger pad during touch testing	Perform touch testing using finger pad	
TP-16		Touch non-responsive	Touch display not connected to the host	Check if the host is connected or use the system "Device Manager" to see if devices are connected, and reconnect and reinsert signal cables	II
TP-17			Damaged signal cable	Replace signal cable (Type-B to Type-A)	
TP-18			Poor contact between touch screen and controller	Disassemble and reinsert FPC ribbon cables	
TP-19			Incorrect firmware or program writing	Reflash firmware	

Fault Code	Fault Category	Common Issues	Possible Causes	Troubleshooting Methods	Fault Severity
TP-10			Other issues	Read screen panel signal waveform	
TP-21		Loose or disconnected screen wires	Abnormal sensor channels	Test channels through signal testing	II
TP-22			Damaged sensor	Visual observation	
TP-23			Damaged FPC ribbon cable	Visual observation	
TP-24			Incorrect firmware parameter configuration	Update firmware	
D-1	Display	Black screen	Power not connected	Check if the power is properly connected and check the indicator light status (refer to section 3.2.2.2 for indicator light	II
D-2			Video cable not connected	Connect and reconnect	
D-3			Other issues	Contact us	
D-4		Inverted display image	Incorrect OSD settings	Adjust in the OSD menu (refer to section 3.3.3.4.1 and 3.3.3.4.2 for "Picture" adjustment)	I
D-5		Screen distortion	Loose video cable	Connect and reconnect	II
D-6		Other issues	Any other display-related abnormalities	Contact us	II
D-7		Monitor display is dim	Low brightness values	Use the OSD to increase the brightness.	I

Fault Code	Fault Category	Common Issues	Possible Causes	Troubleshooting Methods	Fault Severity
D-8			Low contrast ratio values	Use the OSD to increase the contrast.	I
D-9			abnormal ambient light sensor	Check if Light sensor is on and adjusting for the ambient lighting conditions.	II

SERVICE AND SUPPORT

This chapter mainly introduces our after-sales service and technical support.

5 SERVICE AND SUPPORT

5.1 Pre-sales Consultation

We provide professional pre-sales consultation services to our users. You can obtain timely and comprehensive information about our products and corresponding services through various channels such as our official website, email, and telephone.

5.2 After-sales Service

If you have any questions about the product or need assistance with equipment malfunctions, you can first refer to the user manual and frequently asked questions available on our website. If the issue persists, please contact us directly.

To provide global support, we collaborate with local representatives/service providers to assist customers with support and services. For more information, you can contact us or leave a message using the following methods, and we will respond promptly and provide assistance as soon as possible!

5.2.1 After-sales Process

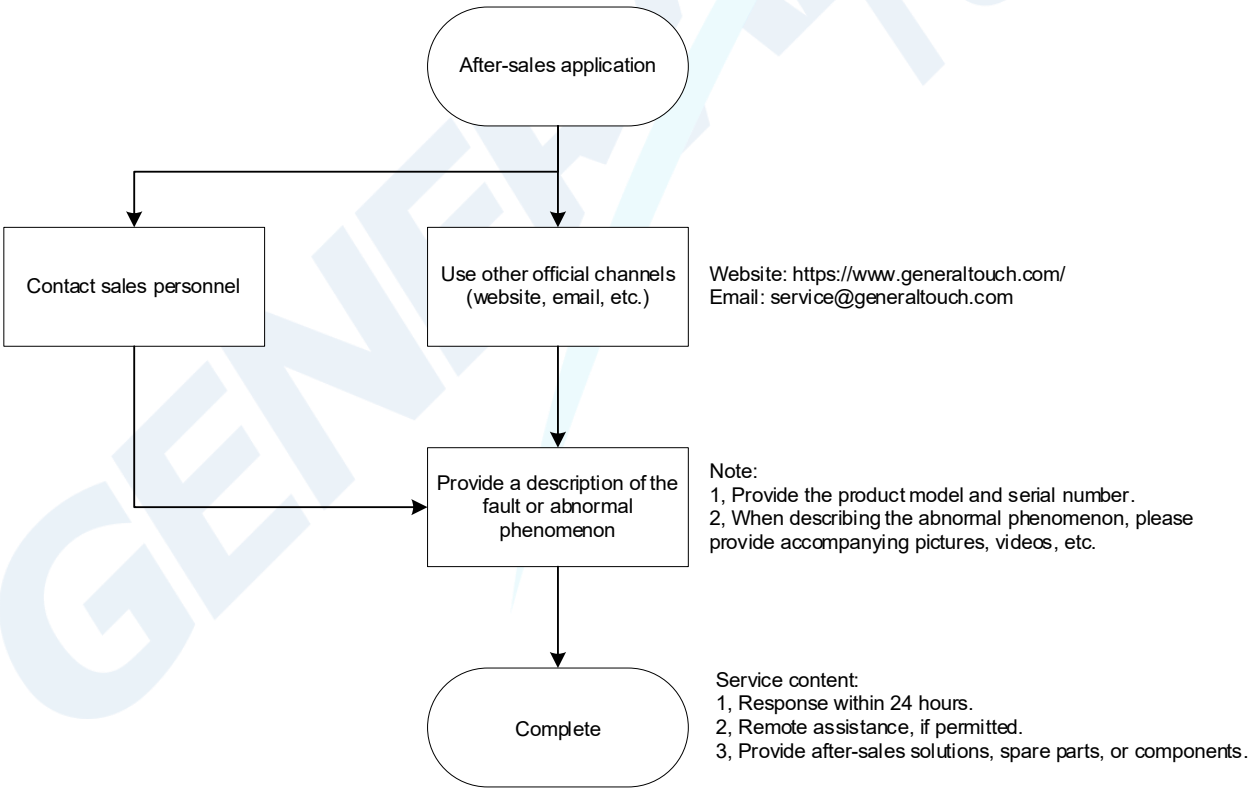


Fig 26 After-sales Process

5.2.2 Warranty Policy

The following is our product warranty commitment. During the warranty period, we provide free product repairs and replacement services for key components. For products that have exceeded the warranty period, we may charge a certain fee. For more details, please refer to our warranty policy on the official website under the "Warranty Services" section. Throughout the entire lifecycle of the product, you can expect comprehensive service from our company. The warranty policy provided below is for reference only. In case of any inconsistencies, the contract or specification sheet shall prevail.

Table 3 Warranty Policy

Touchscreen Components	SAW		5 Years
	PCAP		3 Years
	IR		1.5 Years
	FOG/Touch film/Touch Glass		6 months
	Resistive		1 Year
Touch Monitor	Flat	Not High TNI & High Brightness	3 Years
		High TNI & High Brightness	1 Year
	Curved		1 Year
Touch Computer (All-In-One)	With or without touch function		2 Years
Touch & Display Kits	Touchscreen and LCD panel bonding together		1 Year

5.2.3 Service Assurance

We are based in Chengdu, China, and have established after-sales repair centers in Europe. We also work with local agents and partners in the Americas, India, and other regions to provide diverse after-sales services.

We have dedicated departments and professionals to promptly and efficiently respond to customer needs. For common issues, we provide online consultation and support. For severe faults that require factory repairs, we offer return-to-factory repairs and the option of sending spare parts, based on our warranty policy.

5.3 Customization Services

We specialize in providing professional customized solutions for users. Based on your needs, we can offer complete product customization, such as touchscreens, touch displays, and all-in-one touch systems. You can learn about our customization service policies and options on the official website under "Customer Customization", or you can directly consult with us.

5.4 Debugging and Firmware Upgrades

Our open frame touch displays usually do not require additional debugging and can be used directly. However, if you have specific requirements for touch experience, we also provide corresponding services, including touch calibration, touch signal testing, and firmware upgrades.

5.4.1 Debugging

5.4.1.1 Touch Calibration

Our touch displays are calibrated before leaving the factory and do not require manual calibration. However, for specific user requirements, we can provide calibration tools for you to choose from during the use of our products to adapt to different usage scenarios.

5.4.1.2 Touch Signal Testing

This is mainly provided when needed for maintenance or troubleshooting purposes, to assist you in identifying the source of faults.

5.4.2 Firmware Upgrades

For touch displays, our firmware includes touch-related firmware and display-related firmware. They are already adapted and debugged during the production process and do not require separate or additional firmware writing.

Our products support firmware upgrades for both functional improvements and fault troubleshooting. You can obtain firmware through official channels and use our dedicated tools. Please note that we reserve the right to refuse after-sales support for any damage or faults caused by the use of unofficial firmware provided by other companies.

5.4.2.1 Touch Firmware

Touch firmware upgrades can be directly written using software and can adjust touch sensitivity, sensing levels, etc.

5.4.2.2 Display Firmware

Display firmware needs to be written using separate tools and can preset features such as startup screen logo and display ratios.

APPENDIX

This chapter primarily introduces the product models within this series, as well as some terms and annotations.

6 APPENDIX

6.1 Specifications

6.1.1 Dimensions

For detailed dimensions and specifications, please refer to the sales drawings.

6.1.2 Technical Indicators

6.1.2.1 Display Parameters

For detailed specifications, please refer to the specification sheet.

6.1.2.2 Touch Performance

For conventional capacitive touch displays, they support up to 10-point touch with touch gestures including tapping and multi-point drawing. For acoustic touch displays, they support single-point touch with touch gestures including tapping and single-point drawing.

6.1.3 Environmental Adaptability

The general working environment is as follows:

Operating temperature: -20 ~ 60°C.

Storage temperature: -20 ~ 70°C.

Operating humidity: 20% ~ 80%.

Storage humidity: 10% ~ 90%.

The above working environment requirements are based on common and general usage scenarios for conventional models.

6.2 Terms

OSD: On-Screen Display

PCAP: Projected Capacitive Touch

VESA: Video Electronics Standards Association

RPM: Revolutions Per minute

6.3 Contact Us

Address: No. 6, Keyuan South Road, Chengdu High-tech Zone, Sichuan Province, China

This manual may be subject to updates without prior notice.

You can check the latest version on the General Touch official website or contact us directly.

https://www.generaltouch.com/

If you have any questions or suggestions regarding the user manual, please contact us via the following email: **info@generaltouch.com**.