

Quick Installation Guide for GeneralTouch Zero-bezel SAW Touch Screen

吉锐零边框声波触摸屏快速安装指导

V1.2

GeneralTouch Technology Co., Ltd

Address: No. 6 Keyuan South Road, High-Tech Zone,

Chengdu, Sichuan Province, P.R.China.

Tel: +86-28-85124100 Fax: +86-28-85124150

Email: service@GeneralTouch.com
Web: www.GeneralTouch.com

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Key Points for Assembling GeneralTouch Zero-bezel SAW Touch Screen

吉锐零边框声波触摸屏安装要点

First of all, please focus on the following summary of key points for assembling GeneralTouch Zero-bezel SAW touch system. Before, during and after the assembly, please follow each key point below to check whether the Zero-bezel SAW touch screen is assembled correctly or not.

首先请关注下面的吉锐零边框声波触摸系统安装要点总结。在安装前、安装过程中及安装后,请逐一按照下面的要点核对零边框声波触摸屏是否正确安装。

- 1. Disassemble the front frame and back cover of monitor. The Zero-bezel touch screen will be stuck onto the front surface of LCD panel, and the controller will be fixed onto the chassis of monitor.
 - 拆下显示器的前框和后盖。零边框触摸屏将被粘贴在液晶显示面板的前面,控制器将被固定在显示器的铁盘 上。
- 2. Stick the Zero-bezel touch screen onto the metal frame of LCD panel by double-sided adhesive tapes. Please pay attention to:

用双面胶将零边框触摸屏贴在液晶显示面板的金属框上。请注意以下事项:

- 1) Make sure the surface of metal frame of LCD panel is flat and without any thrust; 请确认液晶显示面板金属框的表面是平整的,没有任何的突起。
- 2) Before sticking the Zero-bezel touch screen, please clean the surface of the metal frame of LCD panel where the double-sided adhesive tapes will be located;

在粘贴零边框触摸屏前,请清洁液晶显示面板金属框的表面,那里将会贴上双面胶。

3) Before sticking the Zero-bezel touch screen, please clean the viewable area of LCD panel and the rear surface of Zero-bezel touch screen;

在粘贴零边框触摸屏前,请清洁液晶显示面板的可视区和零边框触摸屏的背面。

4) Please adjust the location of the Zero-bezel touch screen to make sure the viewable area of LCD panel is within the viewing area of Zero-bezel touch screen, which means the reflection stripes should be out of the viewable area of LCD panel;

请调整零边框触摸屏的位置来保证液晶显示面板的可视区在零边框触摸屏的可视区范围内,这样触摸屏的反射条纹就不会出现在液晶显示面板的可视区内。

The double-sided adhesive tapes are mainly used to prevent the dust and moisture going into the clearance between the LCD panel and the touch screen, and help to fix the touch screen. Because the touch screen has gravity, there must be some special designs to support the touch screen especially for large size Zero-bezel touch screen.

双面胶是用来防止灰尘和水汽不会进入液晶显示面板和触摸屏之间的狭缝,同时帮助固定触摸屏。由于触摸屏的自重,必须要有一些特殊的设计来支持触摸屏,尤其是针对大尺寸的零边框触摸屏。

5) The transducers at the three corners of touch screen should be well-protected. Please make sure that



transducers cannot be touched or crashed during and after assembly. Meanwhile there should be a protection clearance of at least 5mm between the structural parts and the transducers;

在触摸屏三个角的换能器需要良好的保护。请确保安装过程中和安装完成后,换能器不被触摸和挤压到。同时结构件和换能器之间应至少有 5mm 的保护高度。

6) During the assembly of the touch screen, please protect the touch screen carefully against from any physical damages like scratches.

在安装触摸屏的过程中,请保护触摸屏免受任何物理损伤,例如擦伤。

- 3. Assemble the touch controller onto the chassis or back cover of touch monitor. Please pay attention to: 将控制器安装在触摸显示器的铁盘或者后盖上。请注意以下事项:
 - 1) In order to prevent interference, the controller, touch screen cable, serial cable and USB cable should be fixed as far as possible from the inverter board, A/D board and power board of the monitor. Meanwhile please make sure the cables are not crisscrossed or overlapped. If interference occurs after the assembly, please use aluminum foil to wrap the touch screen cable, serial cable and USB cable which are routing inside the monitor, meanwhile please pay attention to avoiding short circuit. 为防止干扰,控制器、屏线、串口线和 USB 线应固定在远离显示器高压板、AD 板和电源板的地方。同时请不要让各种线材交叉。如果安装后出现了干扰,请用铝箔将布置在触摸显示器内部的屏线、串口线和 USB 线包裹起来,同时注意防止短路。
 - 2) Make sure that the controller doesn't contact the chassis directly in case of short circuit and needs to be grounded well.

请确认控制器不能直接接触到显示器铁盘以防短路,同时需要良好的接地。

- 4. Tidy up the cables routed inside the touch monitor and then fix or band them at a proper location; 请整理布放在触摸显示器内部的线材,并将其固定在合适的位置。
- 5. Re-assemble the back cover. The monitor becomes a Zero-bezel touch monitor.

重新安装上显示器的后盖, 普通显示器就成为零边框触摸显示器了。

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Introduction for Zero-bezel SAW Touch Screen 零边框声波触摸屏介绍

The locations of components of Zero-Bezel touch screen are shown in FIG.1 and FIG.2 below. 零边框触摸屏的零部件位置如下图 FIG.1 和 FIG.2 所示。

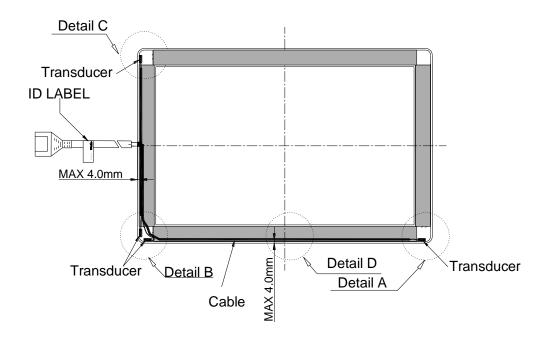


FIG.1 Back view of Zero-bezel touch screen 零边框触摸屏背面视图

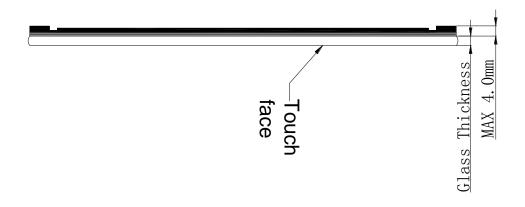


FIG.2 Cross-section view of Zero-bezel touch screen 零边框触摸屏横截面视图

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The distance between the touch screen cable and the edge of glass is no more than 4mm as shown in FIG.3 below.

屏线和玻璃边缘的距离不超过 4mm,如下图 FIG.3 所示。

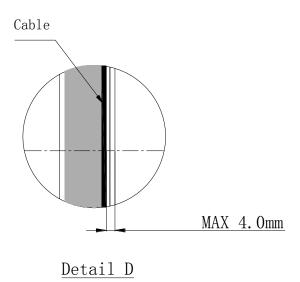


FIG.3 The location of touch screen cable 触摸屏线的位置

Before Assembly: Supporting Structure for Zero-Bezel Touch Screen

安装准备:零边框触摸屏的支撑结构

When designing new rear frame or modifying the existing rear frame to support the Zero-bezel touch screen, please reserve a groove or similar space for placing the touch screen cable. Please kindly refer to the FIG.4 below.

当设计新后框或修改现有的后框来支撑零边框触摸屏,请预留一个槽或类似的空间用于放置屏线,请参考下面的FIG.4。

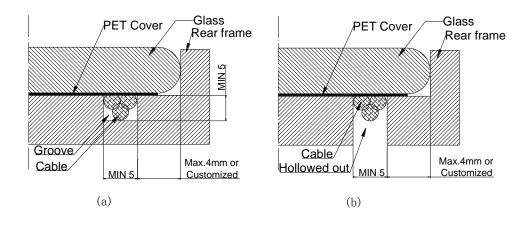


FIG.4 Rear frame profile 后框外形

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GeneralTouch can adjust the location of touch screen cable according to your structure, for example to stick the touch screen cable in the area which is just the position of clearance between the rear frame and the metal frame of LCD panel for your application. If you have such requirements, please kindly inform our sales or technical support.

吉锐可以根据您的结构来调整屏线的位置,例如将屏线粘贴在您的应用中后框和液晶面板金属边框之间的空隙。 如果您有这样的需求,请通知我们的销售或技术支持。

As there is no frame at the front to support the Zero-bezel touch screen, in order to prevent the touch screen slipping down, it is necessary to design some supporting structure to support the Zero-bezel touch screen especially for large-size (Typically \geq 26 inches) Zero-bezel touch screen. The picture below shows an example of supporting structure that a metal frame around the edges of Zero-bezel touch screen is designed to support the touch screen.

由于没有前框支撑零边框触摸屏,为了防止触摸屏滑落,有必要设计支撑结构用于支撑零边框触摸屏,尤其是大尺寸(一般≥26 英寸)零边框触摸屏。下图展示了一个支撑结构的实例,一个在零边框触摸屏边缘周围的金属边框被设计来支撑触摸屏。



FIG.5 Metal supporting frame 金属支撑框

Assembly 安装

- 1. Clean the back surface of Zero-bezel touch screen and the LCD panel with alcohol and soft cotton cloth. 用酒精和软布清洁零边框触摸屏的背面和液晶面板。
- 2. Stick double-sided adhesive tapes 粘贴双面胶 Based on the structure of your rear frame, there are two ways to stick the double-sided adhesive tapes. 基于您的后框结构,有两种粘贴双面胶的方法。
 - 2.1 For the rear frame with the structure showed in FIG.6 below, please kindly stick the double-sided adhesive tapes onto the PET cover straightly and tightly and keep a 1mm distance from the inner edges of PET cover.

对于下图 FIG.6 所示结构的后框,请将双面胶又直又紧地粘贴到 PET 层并与 PET 层内边缘保留 1mm 的距离。



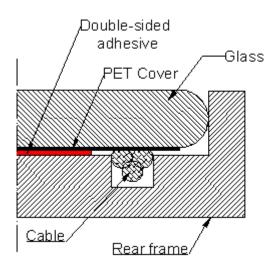


FIG.6 One structure of rear frame 一种后框结构

2.2 For the rear frame with the structure showed in the FIG.7 below, please tear off the PET cover, clean the original narrow double-sided adhesive tapes by alcohol carefully and then straightly and tightly stick the double-sided adhesive tapes onto the background area and keep a 1mm distance from the inner edges of background area.

对于下图 FIG.7 所示结构的后框,请撕下 PET 层,用酒精仔细地清洁掉原来的窄双面胶,再将双面胶又直又紧地粘贴到背景区,注意与背景区内边缘保留 1mm 的距离。

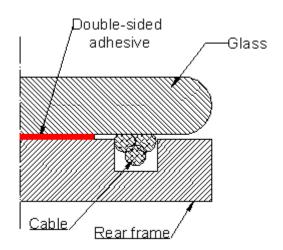
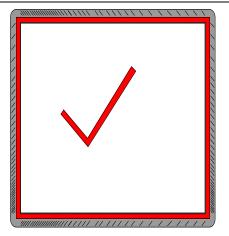


FIG.7 One structure of rear frame 一种后框结构

FIG.8 below shows the right way and wrong way to stick the double-sided adhesive tapes. There are two easy mistakes in the wrong way. "X1" means that the double-sided adhesive tapes are stuck too long to affect the transmission of signal. "X2" means that the double-sided adhesive tapes cover the reflection stripes.

下面的 FIG.8 展示了粘贴双面胶正确的和错误的方法,其中有两个易犯的错误。错误"X1"指双面胶粘贴过长影响了信号的传输。错误"X2"指双面胶遮住了反射条纹。





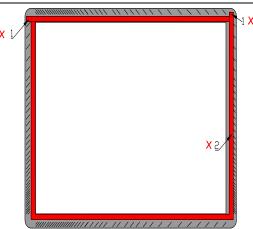


FIG. 8 Right and wrong ways for sticking double-sided adhesive tapes 粘贴双面胶的正确和错误方法

2.3 Please kindly make the joints of double-sided adhesive tapes adhere to each other closely.

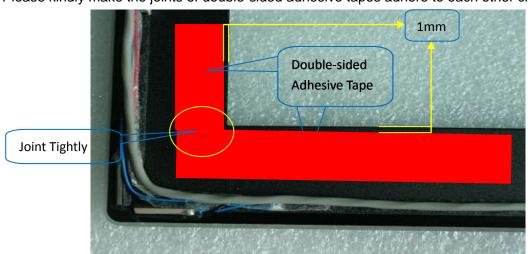


FIG.9 Stick double-sided adhesive tape 粘贴双面胶

3. Stick the touch screen onto the LCD panel. Please make the viewable area of Zero-bezel touch screen in alignment with the viewable area of LCD panel.

将触摸屏粘贴到液晶面板,请将零边框触摸屏的可视区对准液晶面板的可视区。

After assembly, if you find any problems of the touch function which may be caused by improper assembly or any other reasons, please feel free to contact our technical support by the contact information in the end of this Installation Guide.

安装完成后,如果你发现因任何安装过程不合理的操作或其他原因导致触摸功能故障的问题,请根据该快速安装指导最后的联系信息联系我们的技术支持。

Notes 注意事项

1. The structure parts cannot place any pressure to the transducers and touch screen cables. At the three corners with transducers, in order to protect the transmission of touch signal, please keep the protection areas clean without anything sticking both on the front and rear surface. The protection areas of rear surface are the gray area with 45° solid lines as shown below. Please kindly refer to the drawing of Zero-bezel touch screen to determine the detailed size of the protection areas.



结构件不能对换能器和屏线施加任何的压力。

在有换能器的三个角落,为了保护触摸信号的传递,请保持保护区域没有任何残留物,包括触摸屏正面和背面。背面的保护区域是下图所示的灰色带 45° 斜实线的区域。请根据零边框屏体的图纸确定保护区域的具体尺寸。

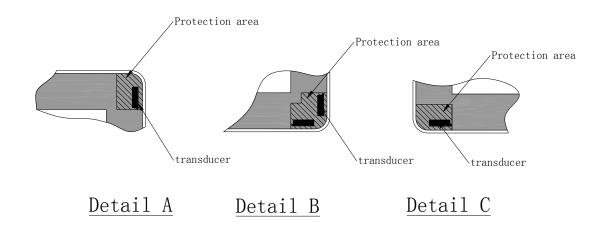


FIG.10 Protection areas on the rear surface of Zero-bezel touch screen 零边框触摸屏背面的保护区域

At the same time, please reserve a protection height of at least 5mm between the transducers and the structure parts around the protection areas above.

同时在上面的保护区域周围,请在换能器和结构件之间预留至少5mm的保护高度。

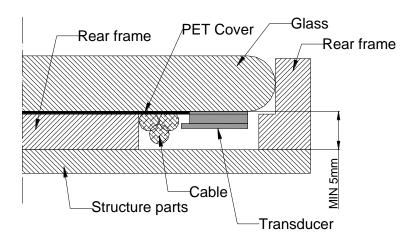


FIG.11 Protection height for transducer 换能器的保护高度

2. If there is a rear frame as shown in FIG.12 below to support the Zero-bezel touch screen, don't use any glue or other soft material to fill the gap between touch screen and rear frame after assembly.

如有一个展示在下面 FIG.12 中的后框支撑触摸屏,禁止用胶或其他软性物料填充触摸屏和后框之间的缝隙。

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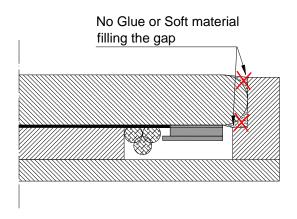


FIG.12 Don't fill the gap by glue or soft material 禁止用胶或软性物料填充缝隙

Postscript: Application Examples Shows

附记: 应用实例展示

The following pictures show some application examples integrated with Zero-bezel touch screen. 下面的图片展示一些零边框触摸屏的应用实例。

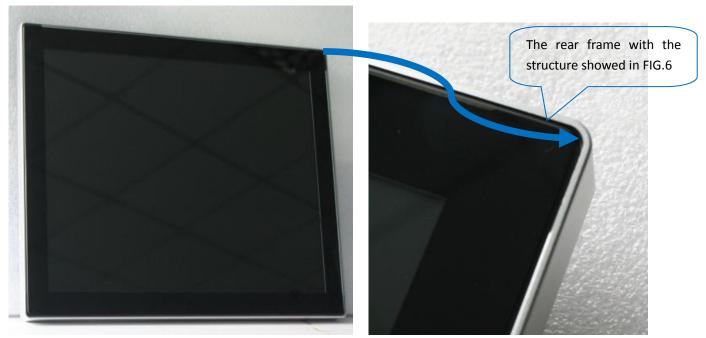


FIG.13 15" Touch monitor with Zero-bezel touch screen 15"零边框触摸显示器



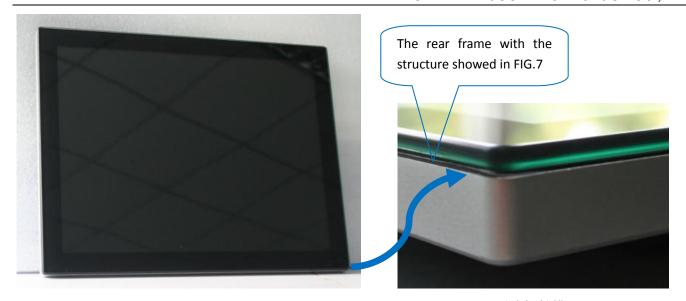


FIG.14 15" Touch monitor with Zero-bezel touch screen 15"零边框触摸显示器



FIG.15 23" AIO computer with Zero-bezel touch screen 23"零边框一体机



Appendix 附录

Touch Screen Care and Cleaning

The touch screen requires very little maintenance. GeneralTouch recommends that you use a 50:50 isopropyl alcohol and water solution to clean the touch screen surface periodically. You can also use straight isopropyl alcohol or other **neutral** glass cleaner. If you use non-neutral cleaner, it may corrode the special surface treatment layer of touch screen and then cause the special surface treatment layer loses function. If the glass cleaner enters into the area of reflection stripes, the reflection stripes may be corroded and finally the touch function will be affected.

Apply the cleaner with a soft, lint cloth. Always dampen the cloth and then clean the screen. Be sure to spray the cleaner onto the cloth, not the screen. This method is helpful to control the cleaner consumption. If directly spraying the cleaner onto the touch screen, too much cleaner is likely to be sprayed, then the cleaner mixed with dust and dirt will seep into the area of reflection stripes through the clearance between the front frame and touch screen, thus it will affect the touch function.

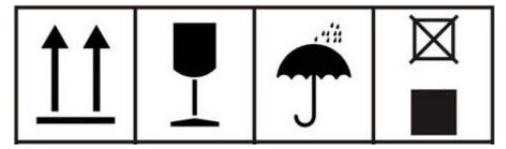
触摸屏只需要较少的维护,我司推荐定期使用 50:50 的酒精和水溶液清洁触摸屏玻璃表面,你也可以直接使用纯异丙醇或者其他**中性**玻璃清洁剂。如果使用非中性清洁液,可能会腐蚀屏体表面的特殊处理层,使特殊处理层功能失效。如果非中性清洁液流入条纹区,也可能造成条纹的腐蚀,最终影响触摸性能。

请使用软布料配合清洁剂进行清洁,**先将清洁剂喷到软布料上,注意不是喷到触摸屏上,再用软布清洁触摸屏。** 这样会帮助控制清洁剂的用量。如果直接将清洁剂喷到触摸屏,很容易喷洒过多的清洁液,这样混有灰尘和脏污的清洁液就会通过前框和屏体间的缝隙渗入条纹区,影响触摸性能。

Touch Screen Transportation

GeneralTouch SAW touch screen are made by glass, so proper transportation is required. Please pay attention to the following transportation warnings marked on the carton:

吉锐声波触摸屏是由玻璃加工而成,因此需要采用合理的运输方式。请注意下面在包装箱上的运输警示标识:



When receiving the touch screens from the forwarder, please make sure to open the box and check the products before signing the receipt. If there is any abnormity, please kindly refuse to sign the receipt and inform us at once.

当你从托运公司收到触摸屏,请首先开箱检验货物是否完好后再签署收据。如果您发现任何异常,请立刻告知我们。



Contact Information

GeneralTouch Technology Co., Ltd.

Add.: No.6 Keyuan South Road, High-Tech Zone, Chengdu, China Zip Code: 610041

Tel: +86-28-85124114 Fax: +86-28-85124115 E-Mail: service@generaltouch.com

成都吉锐触摸技术股份有限公司

地址:成都市高新区科园南路6号 邮编:610041

电话: +86-28-85124114 传真: +86-28-85124115 邮箱: service@generaltouch.com

GeneralTouch Technology Customer Service Department

Supervisor: Ms. Du Mingyu

Tel: +86-28-85124103

Fax: +86-28-85124115

E-Mail: Du@generaltouch.com

成都吉锐触摸技术股份有限公司客户服务部 主管:杜明玉

电话: +86-28-851241103 传真: +86-28-85124115 邮箱: Du@generaltouch.com

Contact Information of Technical Supports

技术支持联系方式

International				
Region	Technical Support	Phone Number	Fax Number	Email Address
Europe	Ms. Ceci Chen	+86-28-85124119	+86-28-85124115	ceci@generaltouch.com
America	Mr. Lin Mao	+86-28-85124100	+86-28-85124115	linmao@generaltouch.com
Asia-Pacific	Ms. Ceci Chen	+86-28-85124119	+86-28-85124115	ceci@generaltouch.com
Japan, Taiwan	Mr. Lin Mao	+86-28-85124100	+86-28-85124115	linmao@generaltouch.com
中国				
区域	技术支持	电话号码	传真号码	邮箱
华东、华南、西南	李成勇	+86-28-85124101	+86-28-85124115	cyli@generaltouch.com
北方区	林茂	+86-28-85124100	+86-28-85124115	linmao@generaltouch.com

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