

Installation Guide for KeeTouch SAW Touch Screen V1.1

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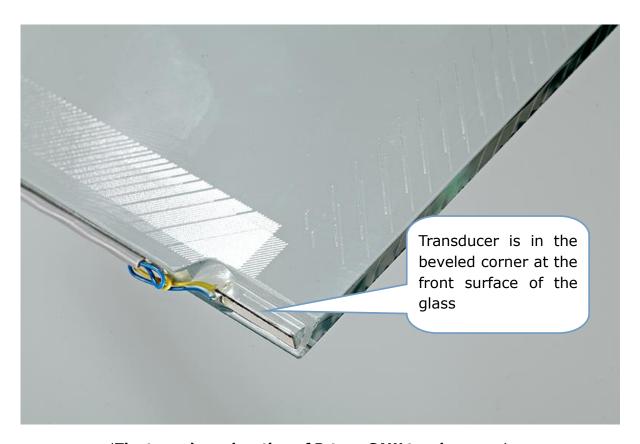
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Introduction for KeeTouch SAW Touch Screen

KeeTouch standard SAW touch screen is B-type Screen. The transducers are in the beveled corners at the front surface of the glass to protect transducer; Please refer to the picture below which shows the location of transducers of SAW touch screens.



(The transducer location of B-type SAW touch screen)



Installation Key Points for KeeTouch SAW Touch Screen

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

- 1.Disassemble the front frame and the back cover of monitor. The touch screen will be stuck onto the front surface of the LCD panel, and the controller will be fixed onto the chassis or back cover of the monitor.
- 2.Stick the touch screen onto the metal frame of LCD panel by double-sided adhesive tapes. Please pay attention to:
- 1) Make sure the surface of the metal frame of LCD panel is flat and without any thrust;
- 2) Before sticking the touch screen, please clean the surface of the metal frame of LCD panel where the double-sided adhesive tapes will be stuck;
- 3) Before sticking the touch screen, please clean the view area of LCD panel and the rear surface of touch screen;
- 4) Please adjust the location of the touch screen to make sure the view area of LCD panel is within the active area of touch screen, which means the reflection stripes of touch screen should be out of the viewing area of LCD panel;

The double-sided adhesive tapes are mainly used to prevent dust and moisture going into the clearance between the LCD panel and the touch screen, and help to fix the touch screen before assembling the front frame. Because the touch screen has weight, there should be some special designs on the front frame or alternative frames to support the touch screen after the assembly.

5) The transducers at the three corners of the touch screen and the touch screen cable



should be well-protected. Please make sure that transducers will not be touched or crashed during and after assembly. Meanwhile there should be a protection clearance of at least 1mm between the front frame and the transducers, and 2mm is recommended.

- 6) During the assembly process, please protect the touch screen carefully from any physical damages like scratches.
- 3. Assemble the touch controller onto the chassis or the back cover of the monitor. Please pay attention to:
- 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 avoid short circuit.
- 2) Make sure that the controller doesn't contact the chassis directly in case of short circuit and needs to be grounded well.
- 4. Tidy up the cables routed inside the touch monitor and then fix or band them at a proper location;
- 5. Re-assemble the front frame and the back cover of the monitor. If there is a proper dust-proof solution, please stick the dust-proof materials such as dust-proof EVA tape onto the inner edges of the front frame, and then re-assemble the front frame, now the touch monitor will have a certain dust-proof performance. Make sure that the dust-proof materials do not press the reflection stripes tightly, and it is better not to contact the reflection stripes.

Because most installation key points are applicable to the type of KeeTouch SAW touch screens. Please read them carefully.



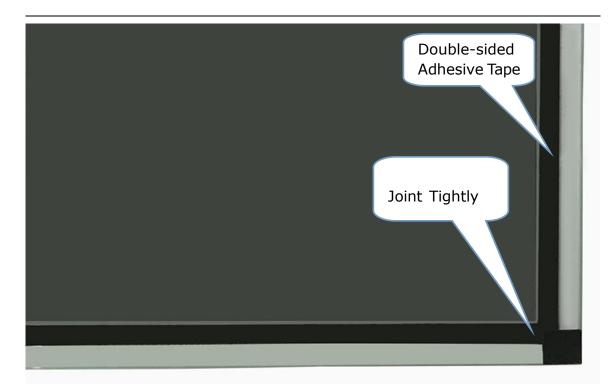
SOP for KeeTouch SAW Touch Screen Assembly

- 1. Disassemble the front frame and the back cover of the monitor.
- 2. Assemble the touch screen
- 1) The front view of the LCD panel is shown as below. Check every metal frame of the LCD panel to make sure there is no bump. If so, please grind it carefully to make sure the metal frames of LCD panel are perfectly flat and smooth for next operation. If there is PCB board on the metal frame, please remove it at first.

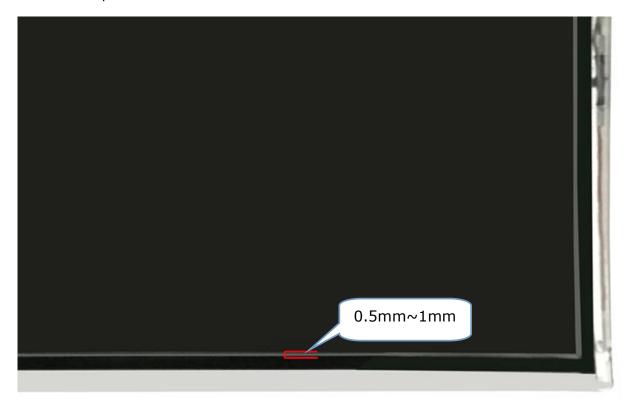


2) Stick the double-sided adhesive tapes onto the metal frame of the LCD panel and keep a 0.5~1mm distance away from the inner edge of the metal frame as shown below. Please stick the double-sided adhesive tapes straightly and tightly to prevent the intrusion of the dust and moisture, and make the joints adhere to each other closely.





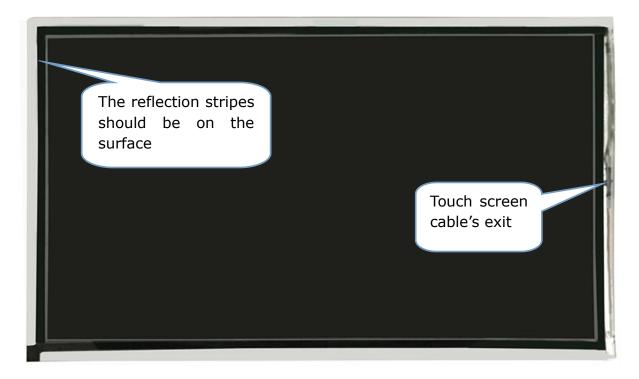
Attention: If the metal frame of the LCD panel generally larger than 26" is wide enough to stick two lines of double-sided adhesive tapes, please kindly stick two lines of double-sided adhesive tapes onto the metal frame of LCD panel straightly and tightly and also keep a $0.5 \sim 1 \text{mm}$





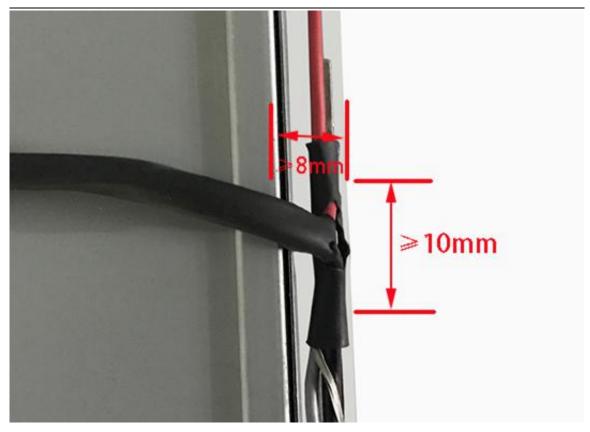
3) Clean the rear surface of the touch screen and the LCD panel with alcohol and soft cotton cloth, and then stick the touch screen onto the double-sided adhesive tapes. Please make sure the reflection stripes of the touch screen are out of the frame open area (Viewable Area) of the LCD panel, and do not press the touch screen cables.

Attention: A space of $10x10 \times 8mm(Length \times Width \times Height)$ should be reserved on the chassis or back cover as the exit of touch screen cable. Please refer to the pictures of touch screen cable's exit below, which are from the front view, back view and close-up view.



(The front view after sticking the touch screen)





(The back view after sticking the touch screen)

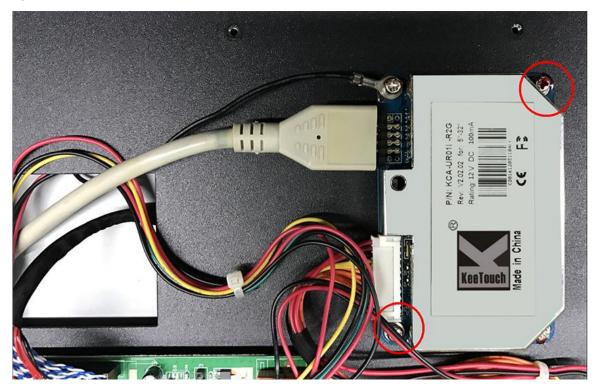


(The close-up view after sticking the touch screen)

3.Assemble the controller



- 1) The mounting location of the controller is usually selected near the exit of the touch screen cable on the chassis of LCD panel or the back cover of touch monitor. It is necessary to keep the touch screen cable and the controller at some distances from the power board, A/D board and inverter board, which aims to avoid the interference from those boards.
- 2) Please add at least 2 screws with stages onto the chassis or back cover which are used to fasten the two mounting holes on the diagonal of the controller. Meanwhile make sure that, after the assembly the controller will not touch the chassis in case of short circuit.
- 3) Assemble the controller onto those screws as shown below in the red circle.



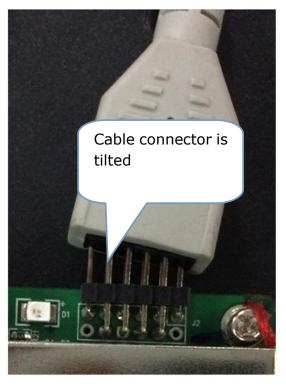
- 4. Cable routing and the endings
- 1) Make the touch screen cable go through the hole which is reserved on the chassis or back cover and then connect with the controller. The touch screen cable should be routed on the chassis or the back cover as short as possible to avoid interference. If the controller is near the power board, the interferences from the power board will act on



the controller and cables. This kind of interference may cause the cursor jump automatically. If this kind of problem occurs, please try to use aluminum foil to wrap the touch screen cable to solve it.

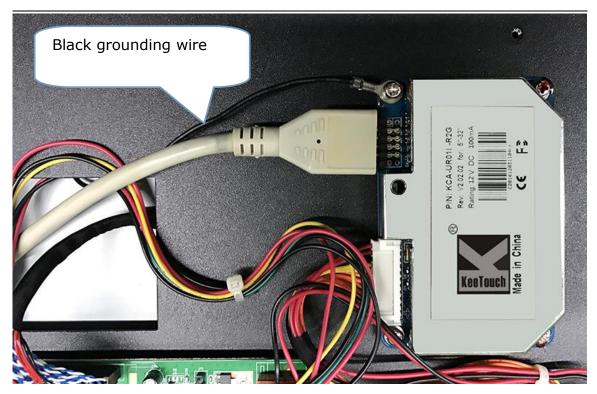
Attention: The picture below shows the improper examples on fixing the touch screen cable, it will lead that the touch system works abnormally.



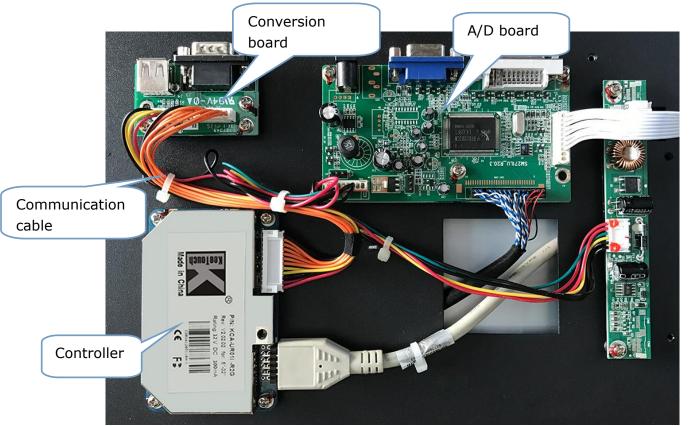


Attention: For dust-proof, water proof and front frame touch screen, there is a black grounding wire bundled with the touch screen cable. When connecting the touch screen cable, please fix the grounding wire onto the chassis or a mounting stud used to fasten the controller to realize Grounding.





2) Make the communication cable routed in a reasonable way and connect the controller with A/D Board or other connectors.

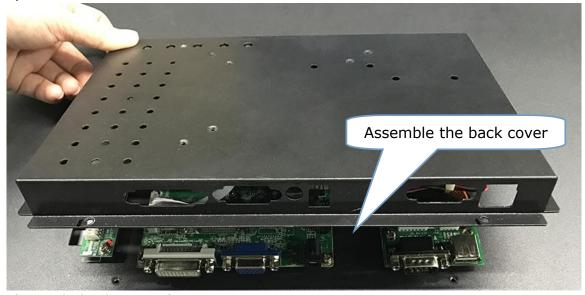


3) Fix cables with zip ties as shown below in the red circle.





4) Assemble the back cover .



5) Stick the dust-proof tapes

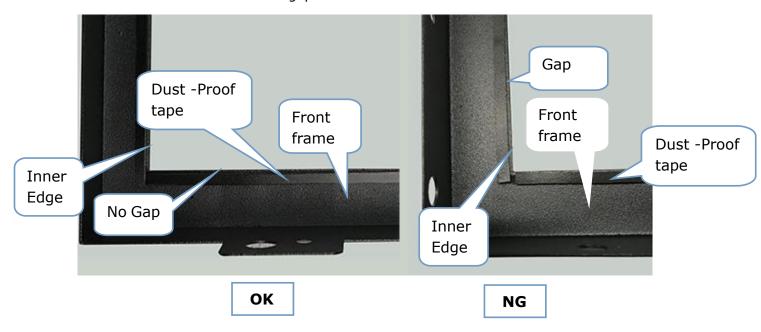
Attention: When sticking dust-proof tapes, please pay attention to the points below, in order to achieve the best dust-proof effect.

i. Please kindly stick the dust-proof tapes along with the inner edge of front frame.

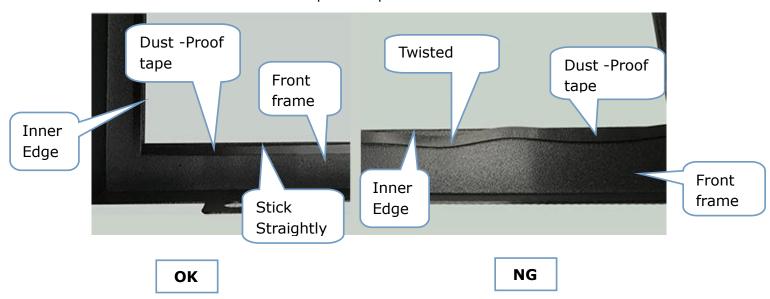
If the dust-proof tapes are stuck with a distance away from the inner edge, the dust



and dirt will accumulate in this gap.

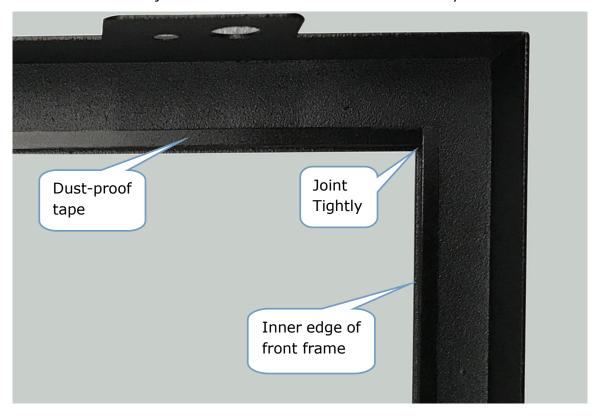


ii. Please do not make the dust-proof strips twisted.

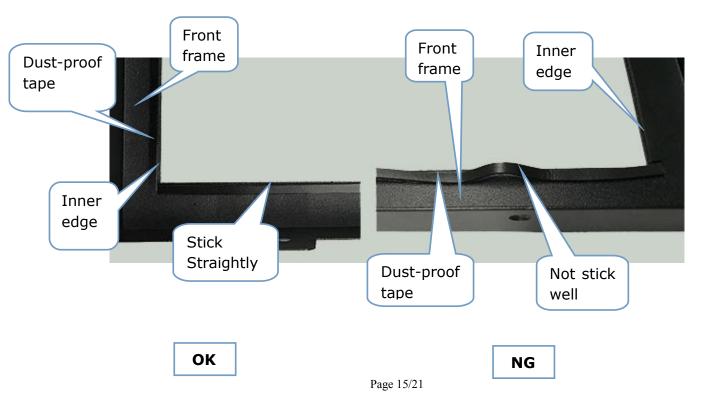




iii. Please make the joints at corners adhere to each other closely.

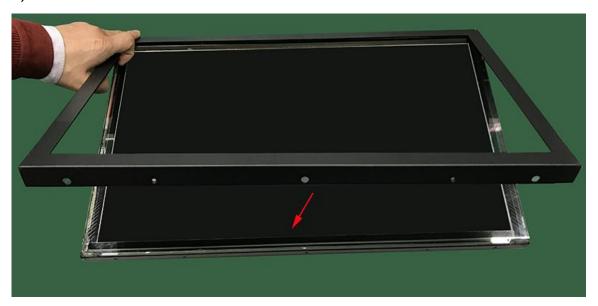


iv. After sticking the dust-proof tapes, please kindly use your finger to press the dust-proof tapes to ensure the contact area is stable and big enough.





6) Assemble the front frame



(Assemble the front frame)

Now the assembly work is finished, and the touch monitor has a certain dust-proof performance.



Notes

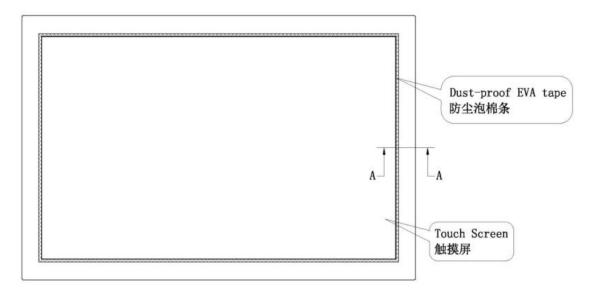
1) Protect the transducers and the touch screen cable

During the whole assembling process, please protect the touch screen especially the transducers on the corners from any pressure or impact. Please refer to the details below.

The transducers are on the front surface of touch screen, and the front frame is at the top of monitor to protect the transducers and the reflection stripes. When assembling the front bezel, please pay attention to protecting the transducers. After assembly, there should be at least 1mm reserved between the transducer and front frame for the purpose of protection. At the same time, the transducers and reflection stripes should be cleaned and without anything sticking. Please refer to the diagram of protection height. (Please check the picture of page18)

2) The dust-proof solution

In order to keep the good touch performance, it is necessary to use the dust-proof EVA tape to keep the reflection stripes area against from dust. The location of the dust-proof EVA tape is shown in picture below.

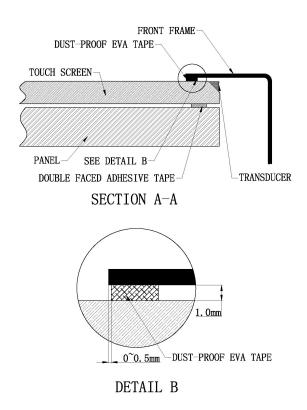


(The location of dust-proof EVA tape)

Attention: Make sure that the dust-proof materials including dust-proof EVA tape does not press the reflection stripes tightly, and it is better not to touch the reflection stripes.



The schematic diagram and enlarged picture of this solution are shown in the two pictures below. This solution is usually used in most requirements for indoor applications such as office, hospitality and gaming. The compression amount of the dust-proof EVA tape is usually about 30% of its original thickness after assembly. In the case below, its thickness is 1.5mm before assembly. When finishing the installation, about 1mm height space should be kept between the touch screen and the front frame.



(Enlarged picture for dust-proof EVA tape solution)

After assembly, if you find any touch function problem 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.

The END of the SOP!



Appendix

Touch Screen Care and Cleaning

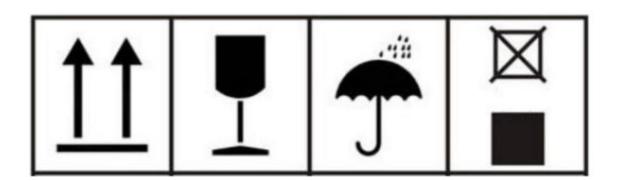
The touch screen requires very little maintenance. KeeTouch recommends that you use a 50:50 isopropyl alcohol and water solution to clean the touch screen surface periodically. You can also use straight isopropyl alcohol or other neutral glass cleaner. If you use non-neutral cleaner, it may corrode the 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.

Touch Screen Transportation

KeeTouch SAW touch screen are made by glass, so proper transportation is needed. Please pay attention to the following transportation warnings marked on the box:







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 abnormality, please kindly inform us at once.



Contact Information

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