

Industrial Control Device

GK-7000

Manual



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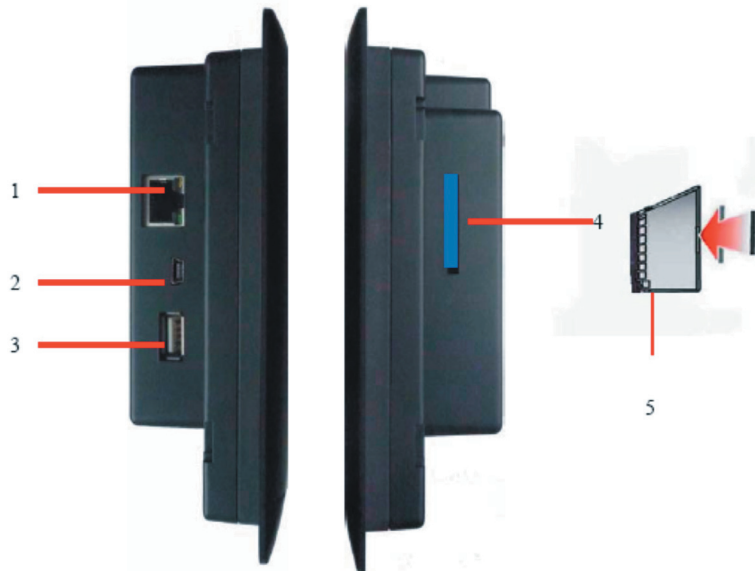
1 Introduction

GK-7000, a highly performance embedded industrial control device, which made by our company. It has a core CPU of S3C2440 processor (based on ARM Frame), with Microsoft Windows CE 5.0 operating system. With features of rich resource, interfaces, low consumption and high reliability, etc.

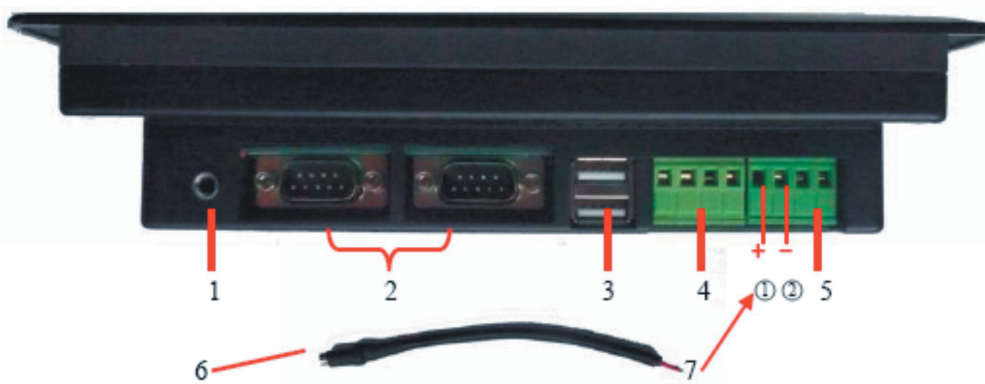
GK-7000 has the same integrated developing environment with PC, users can use Embedded Visual C++ 4.0(the same developing environment & entire compatible API, including MFC with PC's Visual C++), and Visual Studio 2003, Visual Studio 2005, etc. which makes developing application interfaces and writing widget's matter processing codes easily.

2 Product Overview

2.1 Interfaces & Appearance

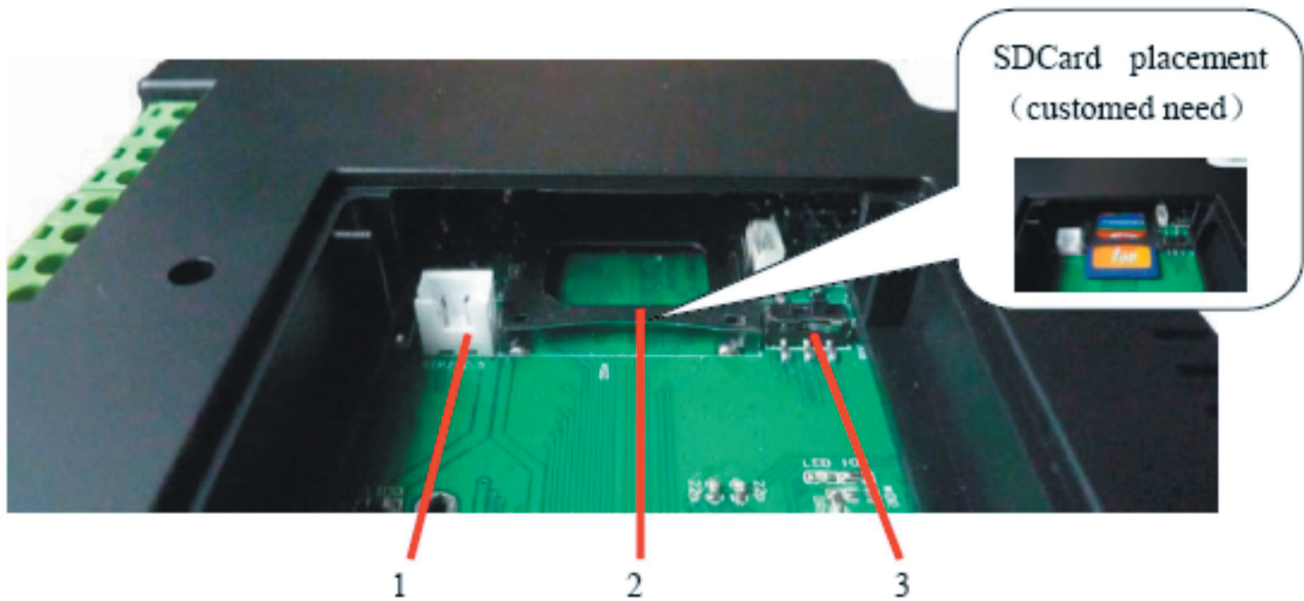


1. Ethernet
2. USB Host
3. USB Interface
4. SD Card slot
5. SD Card insert direction



1. Earphone jack
2. RS232
3. USB Interfaces
4. RS485: connect RS485 communication line A, B, Z, Y from left to right.
5. DC: 1 for "+", 2 for "-"
6. Power switch cable
7. Red cable 1 for "+", white cable 2 for "-".

Ps: Please make sure that power switch cable connected well to avoid unnecessary problems.

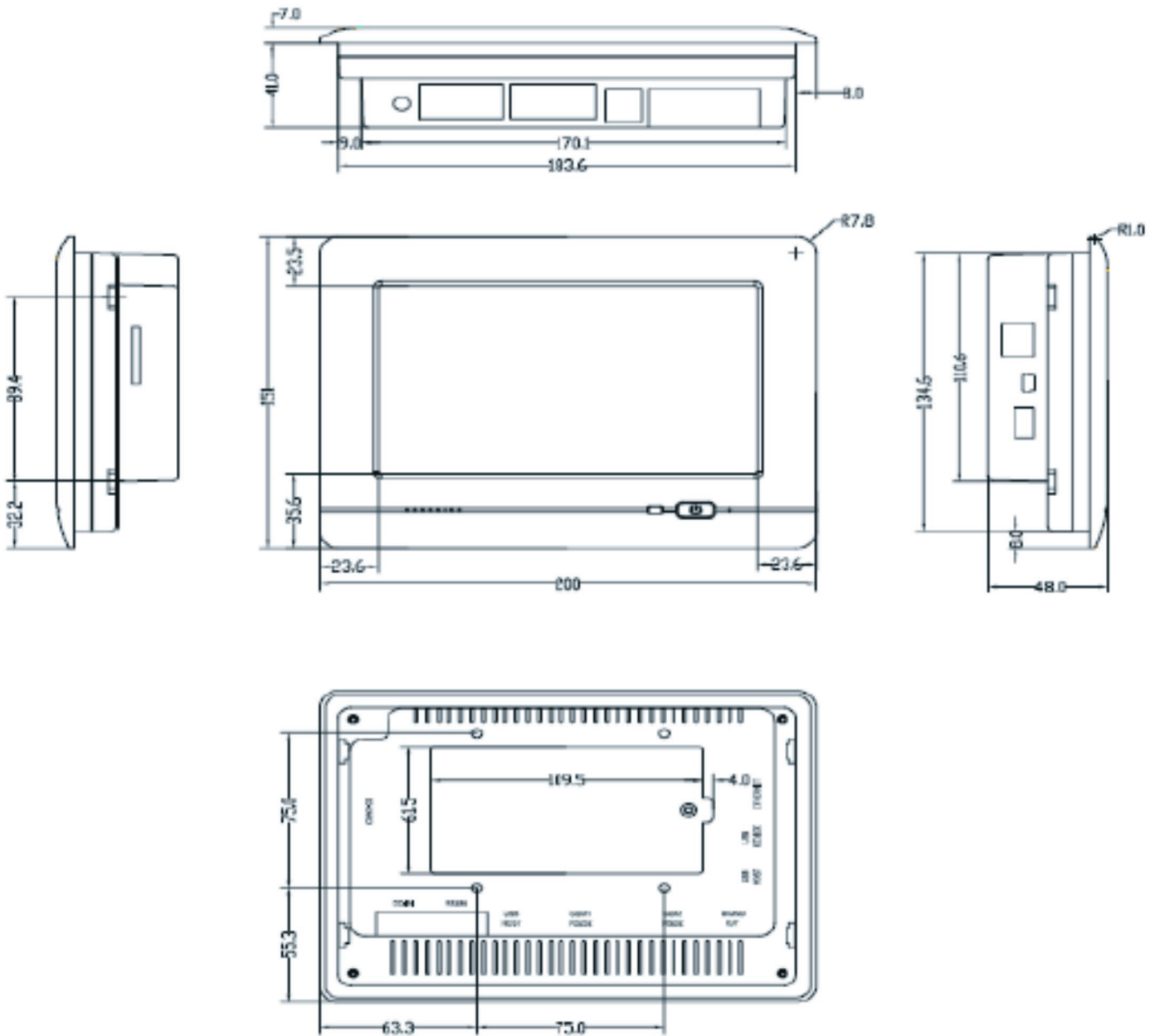


1. Battery interface
2. SD Card slot
3. RS232 and RS485 switch



1. Speaker orifice
2. Indicator light: It turns green when power on with or without battery. It turns red when charging power on, then turns green when charge full. It also turns red when charging power off, then quench when charge full.
3. POWER

2.2 Casing Dimensions (mm)

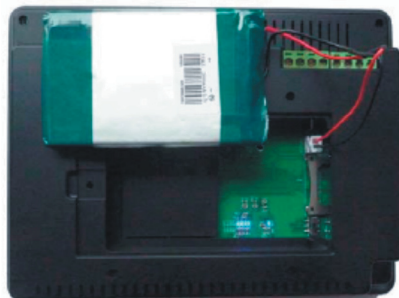


2.3 Battery Installation

a) Battery:



b) Plug power line into socket of battery slot.



c) After plug in and put the battery into slot.

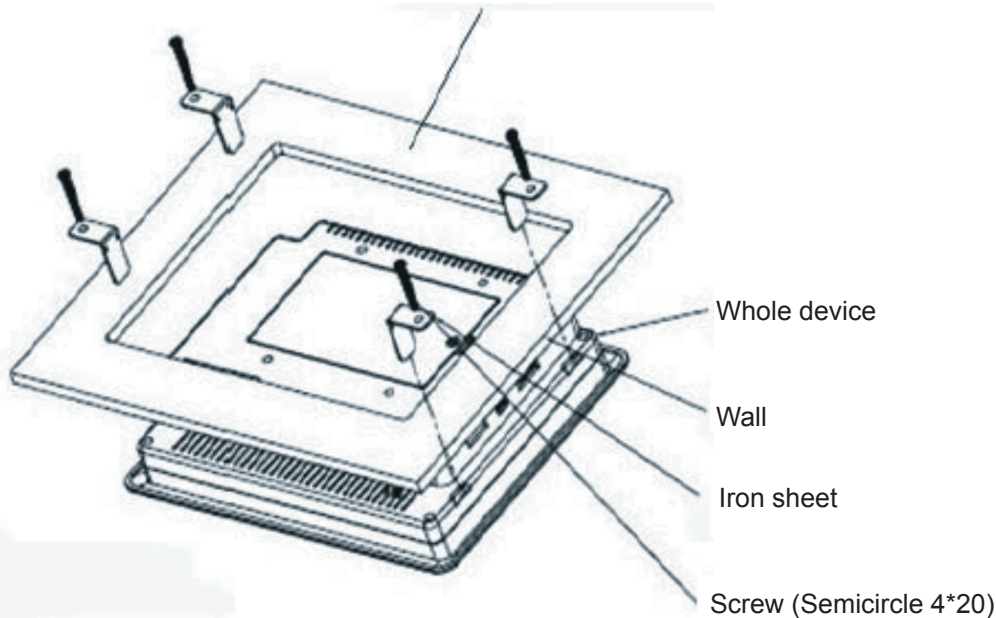


d) Settle the power line in the slot, then finish installation.



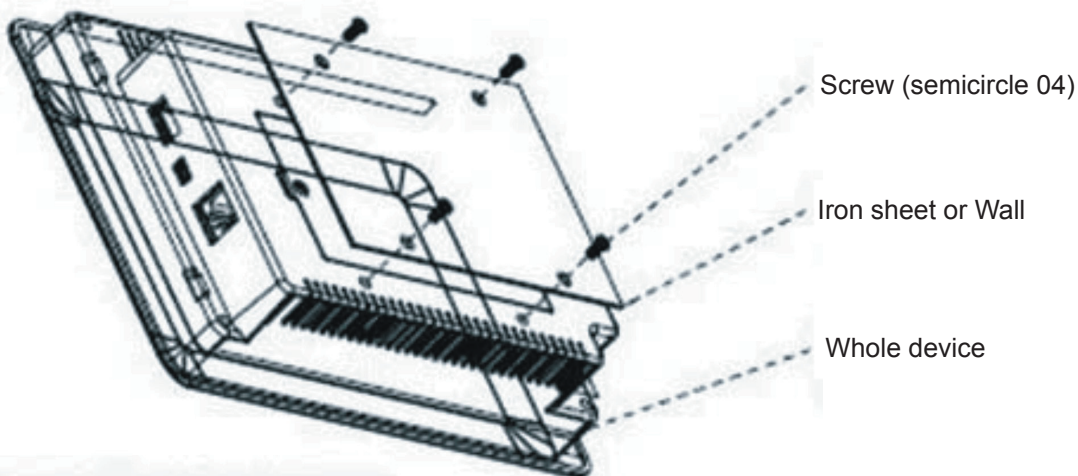
2.4 Whole Installation

Overview of opening for installing placement



About Mounting Process for GK-7000

1. Mounting the whole device into the wall. (ps: the thickness of wall should be within 15mm)
2. Insert the 4 iron sheets to the sockets at the back of device. (as the guiding lines of above chart)
3. Lock the 4 screws (semicircle 4*20) up to the holes of iron sheets until the end.



About VISA Mounting Process for GK-7000

Lock the 4 screws (semicircle 04) through the holes of iron sheet or wall up to the standard VISA sockets at the back of device. (Ps: with the standard of thickness is 1mm for iron sheet or wall, the length of screw is 6mm; when the thickness of iron sheet or wall added by 1mm, as well as the length of screw accordingly, and so forth)

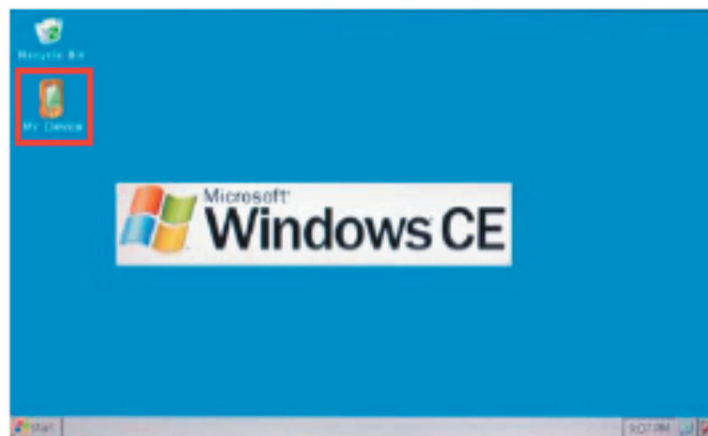
3 Touch Screen Calibration

If the touch screen can't respond your click, please run the touch screen calibration program.

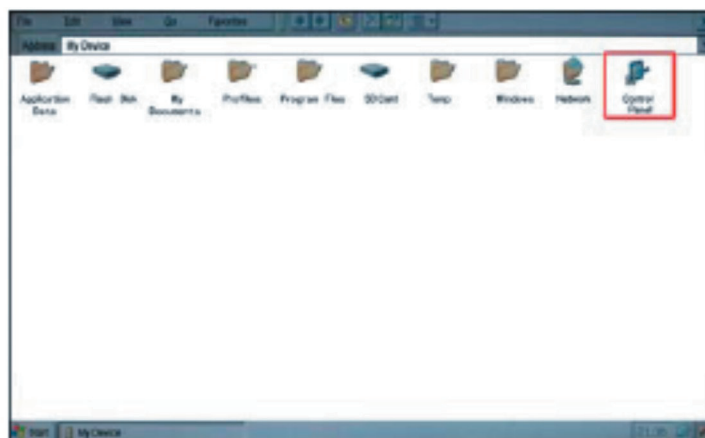
a) Connect the power and press the power key to open, directly enter into the OS of Windows CE



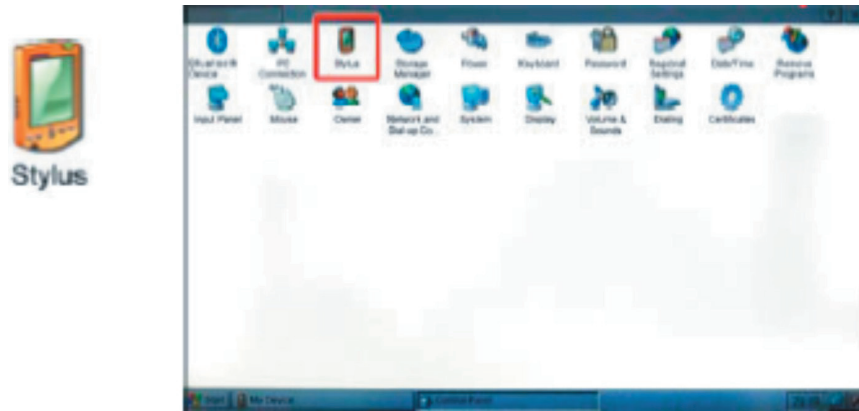
b) Click "My Device" enter into the file manager



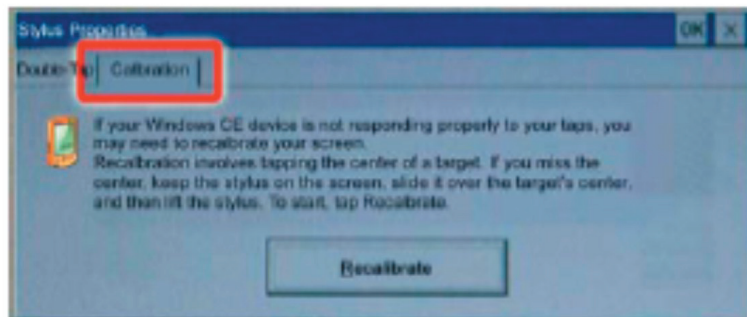
c) Click "Control Panel" in the file manager



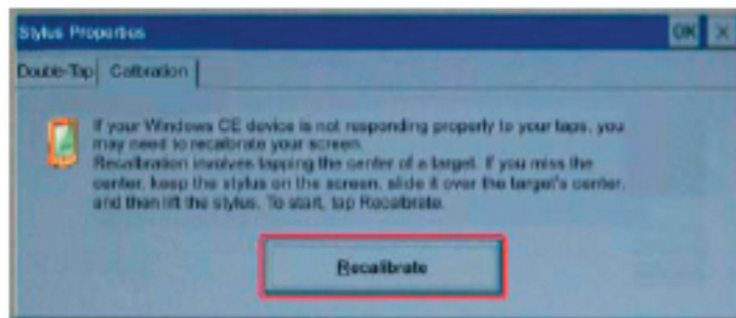
d) Then click "Stylus"



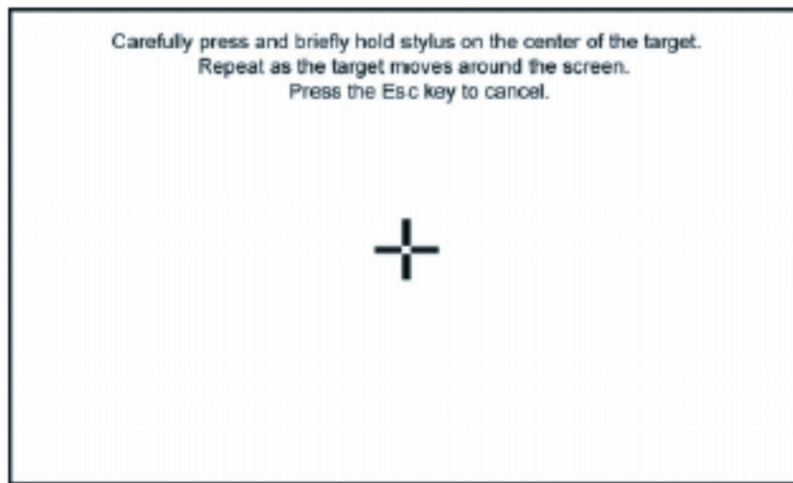
e) Select "Calibration" in "Stylus Properties" dialog box



f) Click "Recalibrate" to begin the calibration.

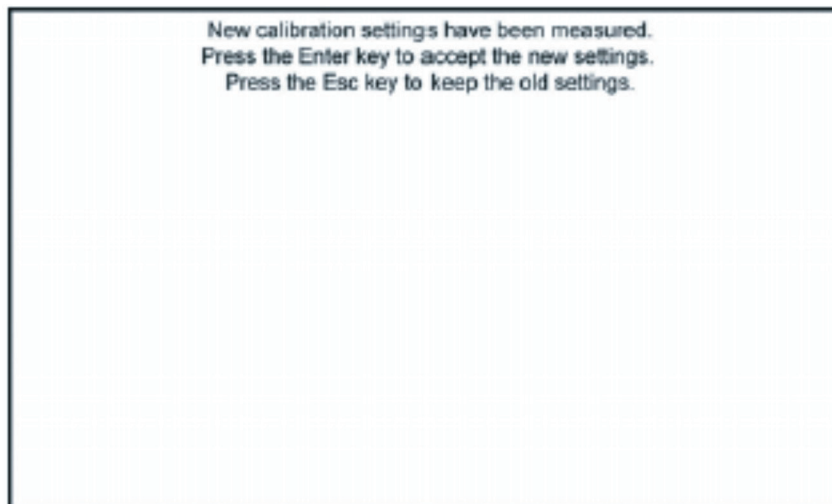


g) During calibration, hold on your finger or touch pen on the cross center of the screen until it moves to another area on the screen.



Operational step: When the object is movable in screen, repeat this action. (there are 5 proof read points)

h) Arbitrarily click the screen after calibration. Return to “Stylus Properties”



i) Finish calibration;

Click  accept new interpose, and exit to screen calibration.

Click :  reservation plain is interposed, and exit to screen calibration.

4 Specifications

Screen	7" Color TFT LCD
Resolution/Brightness	800×480 / 300 cd/m2
Input Mode	Touch
DC Input	9V—12V
Audio Output	≤≤=1.2W
Power Consumption	10W—12W
Interfaces	RS232/RS485/SD slot(up to 2G)/Ethernet
CPU	ARM9 32bit 400MHZ processor
Memory	64MB FLASH, 128MB SDRAM
Dimension(LWD)	200×151×50 mm
Weight	546g (without battery) / 610g (with battery)
Windows CE 5.0	
Visual Basic, EVC supports	
USB I/F (active sync)	
Keyboard & Mouse support	

5 Accessories



- | | |
|------------------------|-------------------|
| 1. USB connection line | 1 piece |
| 2. Touch pen | 1 piece |
| 3. Drive DC | 1 piece |
| 4. Screw & Iron sheet | 4 piece*2 |
| 5. Manual | 1 piece |
| 6. Power switch cable | 1piece (optional) |
| 7. DC Adapter | 1piece (optional) |
| 8. Battery | 1piece (optional) |

6 Q & A

A) Power Issues Can not power on

1) Bad connection.

a) Please check the connector plugs and connector jack.

Ps: Please make sure that power switch cable connected well to avoid unnecessary problems.

B) Screen Issues

1) No display.

2) Implement time last long when click on functions, which result in can't be activated.

3) Delaying or stagnating when pictures switch.

Please restart the device when above-mentioned issues happen.

4) Touch screen doesn't response to clicks correctly.

a) Please calibrate the touch screen. (see more details on "Touch screen calibration")

5) Screen displays blurred.

a) Please check whether screen has dustiness or not. Please clean it with soft cloth, which do not litter flocking.

7 Safety Instructions

Properly maintain your system to guarantee its service life and reduce the damage risk.

- It should avoid the humidity and extreme temperature when using.
- Avoid being revealed making equipment for a long time under shoot straight at sunlight or intense ultraviolet ray lamp light.
- Avoid heavy impact or drop onto the ground.
- The LCD screen is very easy to shave a wound, avoid crashing please. Be sure not to use other sharp article to bump against touch screen.
- The fuselage is external, close a power source, allocate away mains lead if should be clean, quality cloth cleans with tiny wet soft when clean screen, in order to not lose trifling soft of cotton please.
- Strictly forbid the machine presumptuously dismantling or keeping the machine, otherwise, possibility damage in repair.
- Do not place with your equipment or accessory and other inflammable liquid, the gas or other explosive articles place together, to avoid happening dangerous.