IRTOUCH
SYSTEMS

Optical USB TouchScreen Driver User Manual

（For WinCE）

Beijing IRTOUCHSYSTEMS Technology Co., Ltd

Directory

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1 Installing Driver

Seven files will be used during the installation of the driver:

optusb.dll optusb.rel optusb.map	Binary files and components of the driver
optusb.reg	Registry configuration file of the driver
optusb.bib	Configuration file of the specified kernel generating conditions
optcpl.exe	Binary file of the touchscreen control panel
optcpl.bib	Configuration file of the touchscreen control panel

Step 1 - Copy the Driver

Copy the following three files **optusb.dll**, **optusb.map** and **optusb.rel** to the directory of "**release**".

Step 2 - Import to Registry

Method 1: Using a tool to import **optusb.reg** to registry.

Method 2:
1) Using a text tool to open the file **optusb.reg**, and copy all the content.
2) Using a text tool to open the file **common.reg** in the directory of "**release**" and find:

; @CESYSGEN IF CE_MODULES_USBMSC

3) Paste the content.

Step 3 - Configure file of .bib

1) Using a text tool to open the file **optusb.bib**, and copy all the content.
2) Using a text tool to open the file **common.reg** in the directory of "**release**" and find:

IF BSP_NOUSB !

ENDIF BSP_NOUSB !

3) Paste the content between the two lines.

Step 4 - Install TouchScreen Control Panel

1) Copy **optcpl.exe** to the directory of "**release**".
2) Using a text tool to open the file **optcpl.bib**, and copy all the content.
3) Using a text tool to open the file **common.bib** in the directory of "**release**".
4) Paste the content.

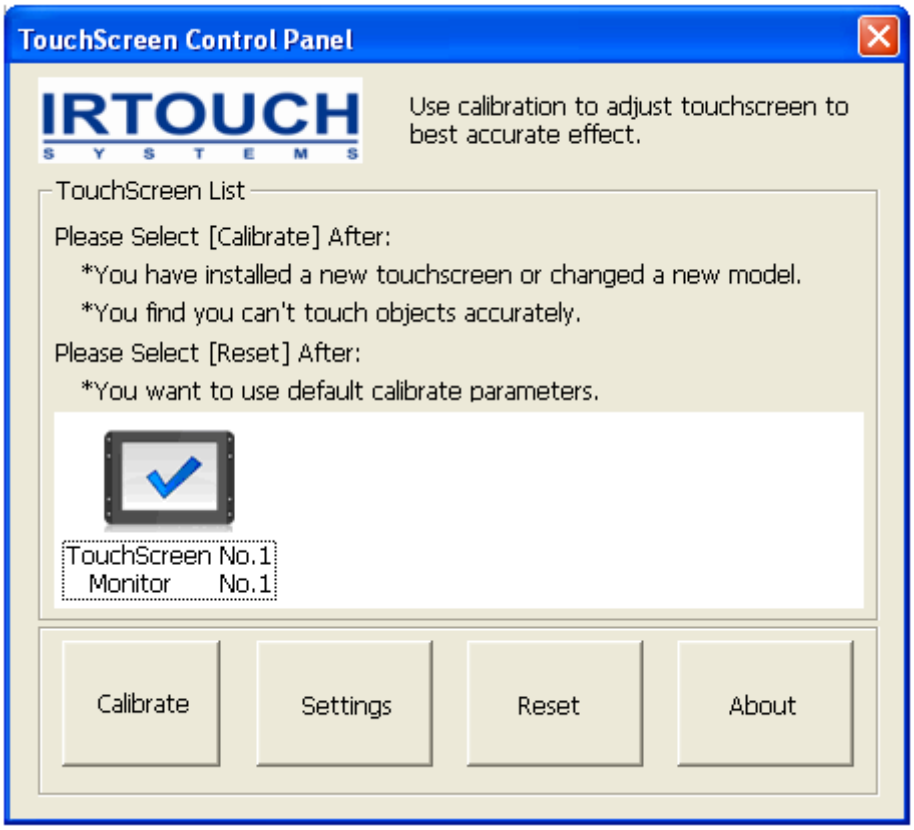
***Notes**: According to your actual situation, you can copy the program of TouchScreen Control Panel to any directory and double-click to run it, instead of installing TouchScreen Control Panel firs .*

Step 5 – Generate NK file

Using the tool of "making" to generate file of NK.bin.

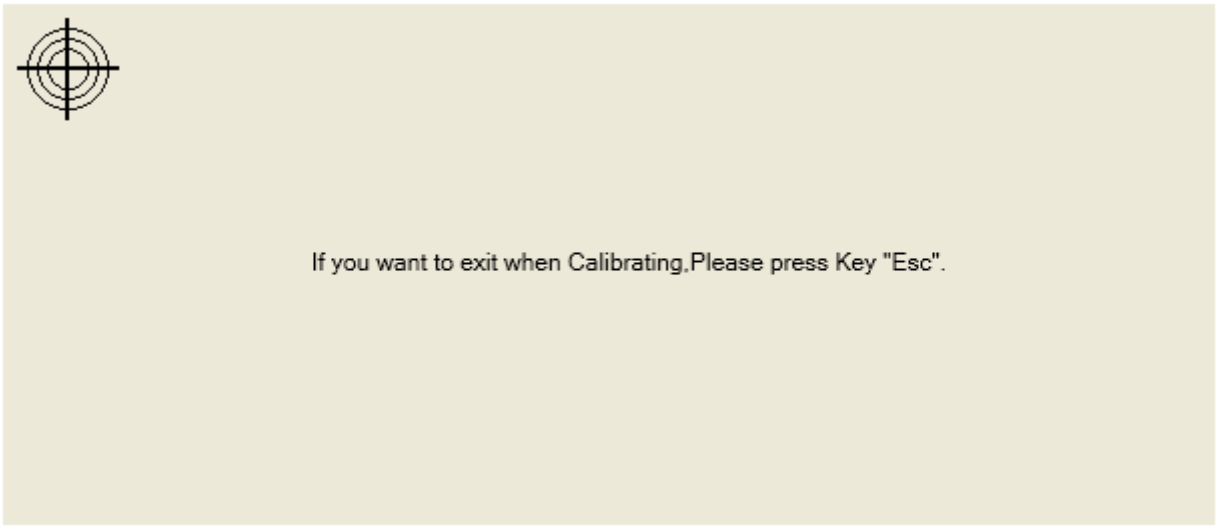
2 TouchScreen Control Panel

Double-click  optcpl.exe to open the TouchScreen Control Panel, as shown in:



2.1 Calibrating

Choose a touchscreen from the list, click [**Calibrate**] and then the calibration window appears. Calibration is done by clicking the center of each butt mark one after the other, as shown in:

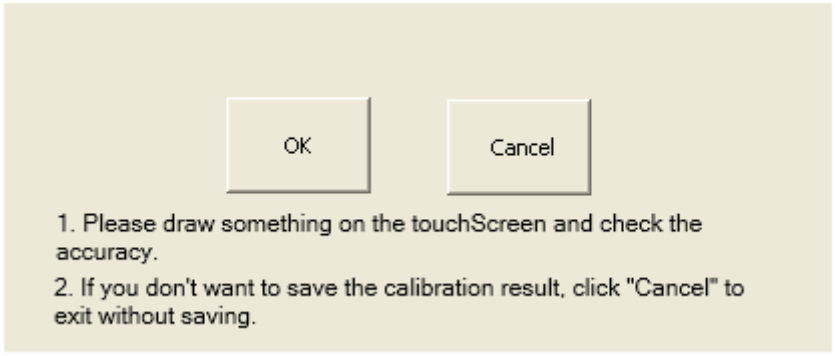


There are optional two ways of calibration: 4 points and 25 points. See “2.3.5 Calibrate Settings” for reference.

The mode of “Click on Release” (see “2.3.1 Modes” for reference) is used when calibrating. So you can move the pointer or finger without lift until hitting the center of the butt mark.

When calibrating, you can press “Esc” key to exit.

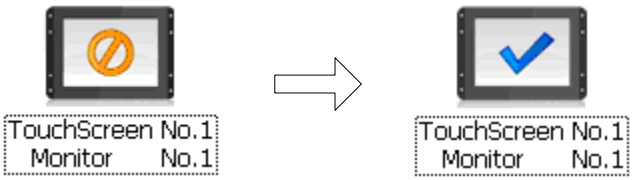
After calibration, two buttons appear, as shown in:



[**OK**]： to save the calibration result and exit.

[**Cancel**]： to exit without saving the calibration result.

After calibration, red circle in the center of the touchscreen becomes blue tick, as shown in:

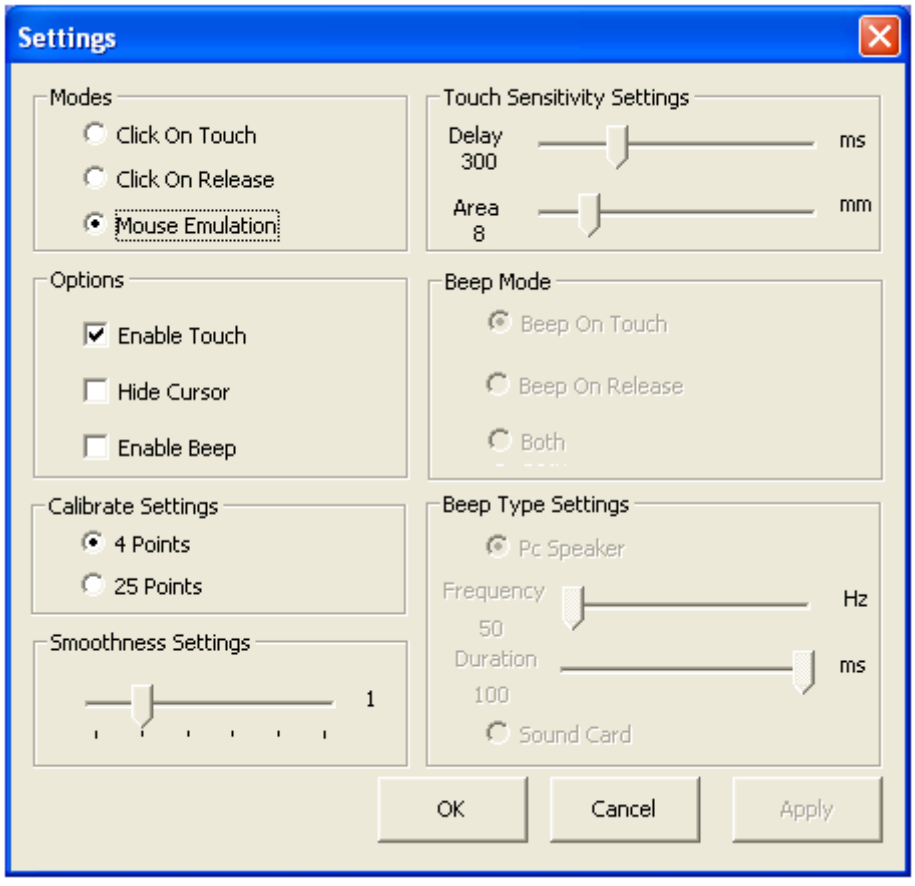


2.2 Reset

Choose a touchscreen from the list, click [**Reset**] to abandon the previous calibration result and use the default calibration data. Blue tick in the center of the touchscreen becomes red circle.

2.3 Settings

Click the [**Settings**] button on the TouchScreen Control Panel, the "Settings" panel appears, as shown in:



***Notes**: For the detailed descriptions of those functions, you can refer to the introduction of the rest*

of this chapter. You can flexibly set related parameters according to hardware statuses and external factors, so as to achieve the best practical effects. See "Attachment - General setting of the touchscreen (As reference)" for reference.

2.3.1 Modes

There are three touch modes:

1. **Click on Touch:**

Mouse single click event happens immediately at the point when the finger contacts the touchscreen. The mode is applied only to click objects, but not to drag objects. Touchscreens in the mode responds fastest and are usually used for clicking big buttons. Under this mode, Beep mode that can be used is only "Beep on Touch".

2. **Click on Release:**

Mouse single click event happens at the point when the finger leaves the touchscreen. You can move the pointer or finger without lift until you accurately hitting the object that you want to click. Touchscreens in the mode are usually used for clicking small buttons. Under this mode, Beep mode that can be used is only "Beep on Release".

3. **Mouse Emulation:**

Default mode of the driver. Full emulation of mouse functions, including left-clicking, moving, lifting, and dragging objects. The mode is very suitable to the following applications: writing, drawing, and dragging maps. Under this mode, you can choose any mode among the three Beep modes.

2.3.2 Options

1. **Enable Touch:**

Enable (default)/disable touchscreen.

2. **Hide Cursor:**

Hide cursor without turn off the mouse functions. It is necessary in some cases.

3. **Enable Beep:**

After checking the option, Beep mode enables. As a result, when mouse click event happens, a sound tip prompts.

You can set the features of the function in “Beep Mode” and “Beep Type Settings” on the right side of the panel. See “2.3.4 Beep Mode and Beep Type Settings” for reference.

2.3.3 Touch Sensitivity Settings

Through touch sensitivity settings, you can set a number of touch delay (Delay) to allow a time for the fingers’ lifting and dropping when touching. You can also set an allowed touch scope (Area) as the fingers’ stay area.

You can set the features of the function in “Touch Sensitivity Settings” on the right side of the panel:

① **Delay**：to adjust the number of touch delay, the higher the value, the longer the delay time, range from 50~1000 (unit: millisecond).

② **Area**：to adjust the effective area of the touch scope, the higher the value, the wider the effective area, range from 0~50 (unit: millimeter).

2.3.4 Beep Mode and Beep Type Settings

You can choose a beep mode from “Beep Mode” on the right side of the panel:

① **Beep On Touch**：sound tip prompts immediately when the finger contacts the touchscreen.

② **Beep On Release**：sound tip prompts at the point when the finger leaves the touchscreen.

③ **Both**：sound tip prompts when the finger contacts and leaves the touchscreen. Under this mode, only “Touch Mode” can be used.

You can set the features of the mode in “Beep Type Settings”:

① **PC Speaker**：send out beep through the default PC card, and you can adjust the frequency (Frequency)and duration (Duration) of beep to change the sound.

② **Sound Card**：send out sound through the sound card.

***Notes**: “PC Speaker” and “Sound Card” are mutually exclusive, and you can only choose one of them.*

2.3.5 Calibrate Settings

There are optional two ways of calibration:

① **4 Points**：4 points calibration.

② **25 Points**：25 points calibration.

By default, 4 points calibration is used.

2.3.6 Smoothness Settings

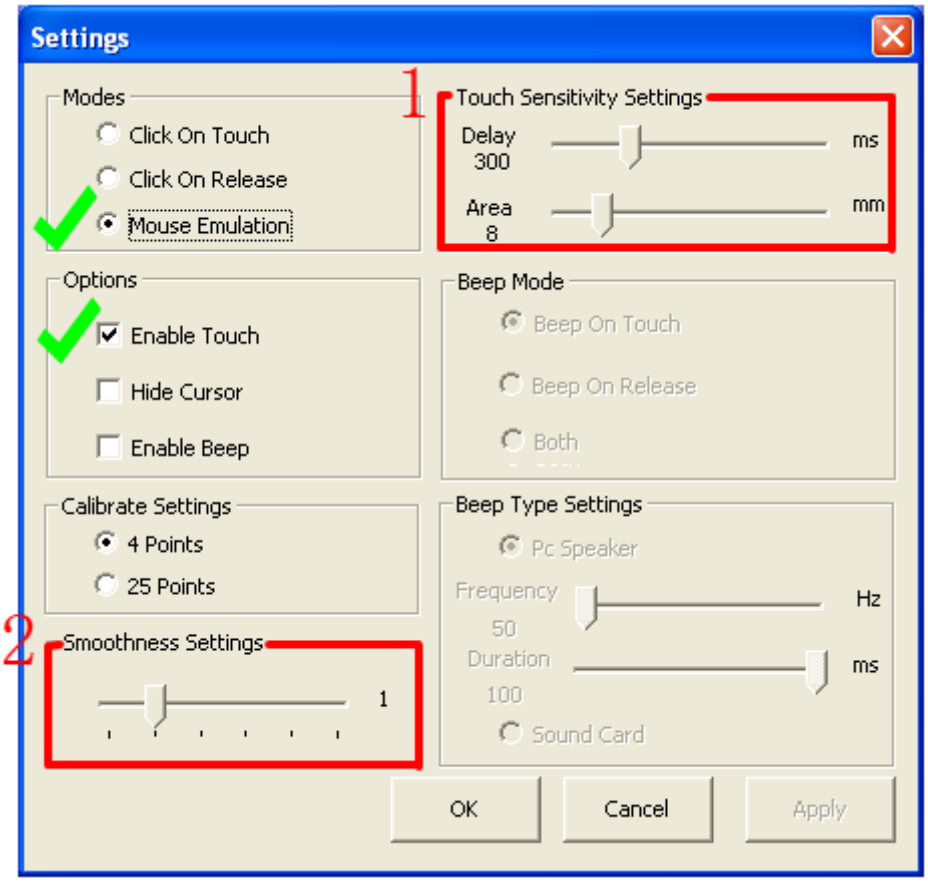
You can drag the slider to adjust the value of the smoothness, from 0 to 5.

***Tips**: The higher value of the smoothness, the better effect of writing or drawing, but the higher requirement of the computer system configuration. The lower value of the smoothness, the faster of writing or drawing. It is recommended that you use the default setting (the value set to 1).*

Attachment - General setting of the touchscreen (As reference)

Select "**Mouse Emulation**" mode, then check "**Enable Touch**" in "Options". Whether checking "**Hide Cursor**" or "**Enable Beep**" depends on your actual conditions.

Setting Description:



1. **Touch Sensitivity Settings:**

Through touch sensitivity settings, you can set a certain time and scope for the fingers' lifting and dropping when touching. In general, "**Delay**" is set to 300ms (0.3 second), "**Area**" is set to 8mm.

2. **Smoothness Settings**

You can drag the slider to adjust the value of the smoothness, from 0 to 5.The higher value of the smoothness, the better effect of writing or drawing, but the higher requirement of the computer system configuration. The lower value of the smoothness, the faster of writing or drawing. It is recommended that you use the default setting (the value set to 1).