iNEXIO
Driver's User Guide

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Chapter 1

Introduction

iNexio Touch Driver is the software for the Infrared Touch Screen of Nexio Co., Ltd. It provides full touch screen functionality for all software applications running under Microsoft Windows.

This version of iNexio Touch Driver software for your Nexio touch screen supports Serial, USB controllers.

Once you install iNexio Touch Driver, you can select, launch, and drag objects using the touch screen. To make a selection, you simply touch the screen. It's that easy and natural – just touch to select.

iNexio Touch Driver Includes :

■ iNexio Touch Driver

iNexio Touch Driver is the software that the system uses to communicate with the touch screen. The driver enables you to use the iNexio touch screen with applications runing in Windows environments. You can run Windows programs and use touch (finger or pen) input without any program modifications.

- Touch screen Control Panel
  You can use the touch screen control panel to set your preferences for the touch screen.

  For example, you can define the following preferences:
  • Whether the touch action occurs when you touch the screen or when you lift your finger (or pen) off the screen.

  • Whether you hear a sound when you touch the screen

  • How fast you need to touch to produce a double-click

You can also use the control panel to calibrate the touch screen, to stabilize the cursor, and define where the cursor appears relative to your touch (an offset)

■ Touch Click Control

Touch Click Control has the same function of Windows right mouse button. Any touch on the monitor on which Right Button is running will produce a right button click.

■ Uninstalling iNexio Touch Driver

The Uninstall utility automatically delets all iNexio Touch Driver components from your computer and removes all iNexio entries from the system files.

■ mPopup Control

mPopup Control runs Disable Touch Area Limit & Disable Mouse Action function.
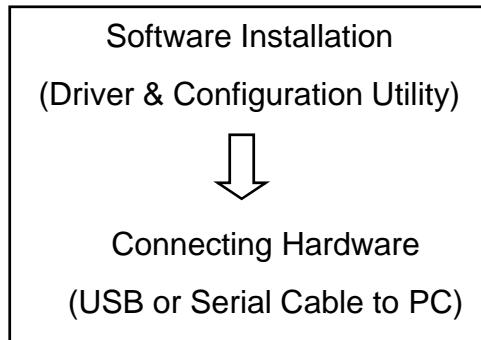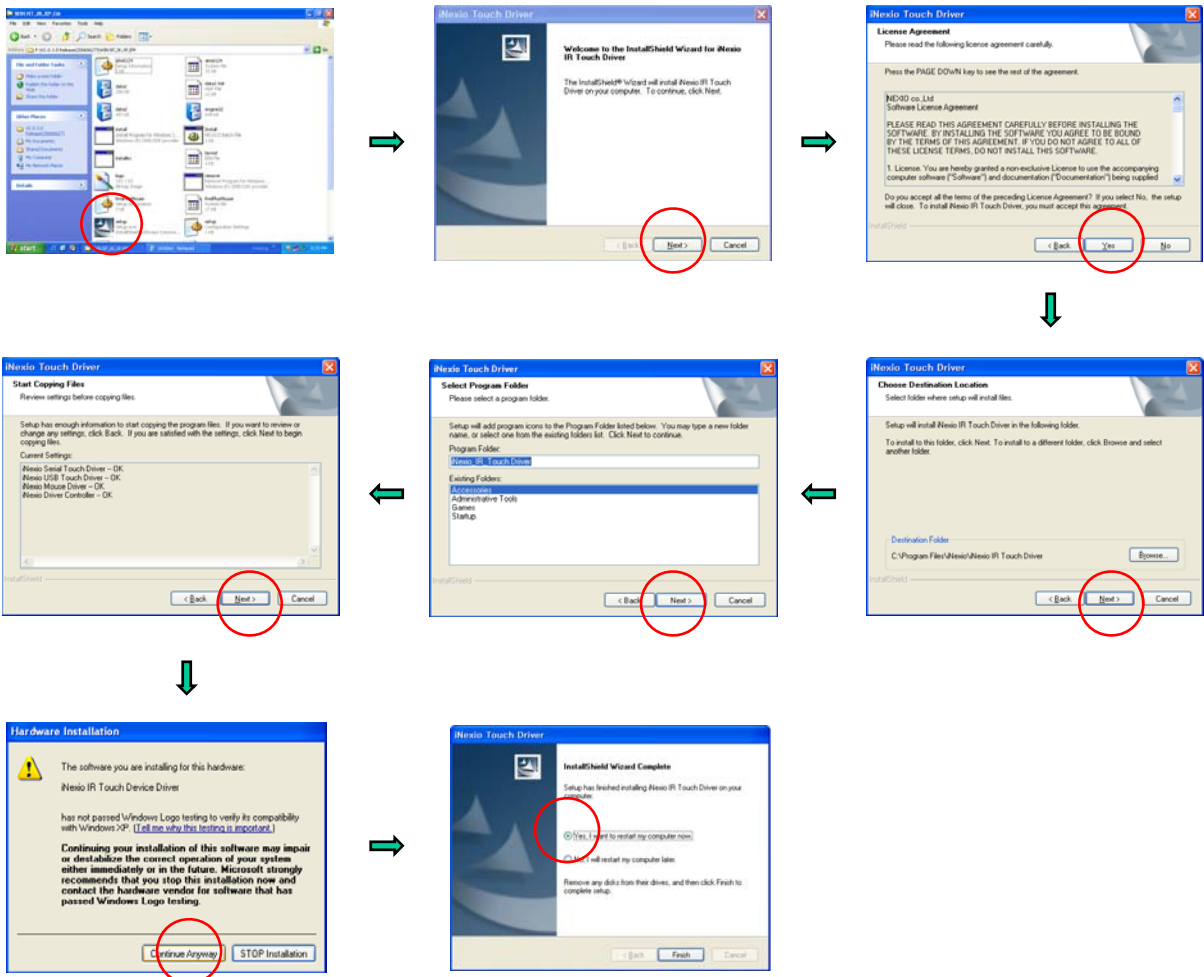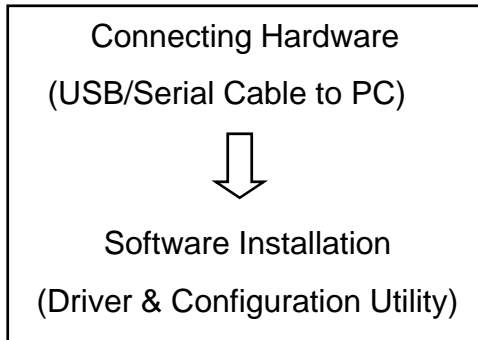
Chapter 2

Installing

Uninstalling

Control Panel

Installing iNexio Touch Driver

```
┌─────────────────────────────────────────────┐
│           Software Installation               │
│   (Driver & Configuration Utility)            │
│                   ⇩                           │
│           Connecting Hardware                 │
│       (USB or Serial Cable to PC)             │
└─────────────────────────────────────────────┘
```

1. Insert the Driver CD-ROM into your PC.
2. Browse to the folder and double-click the "Setup.exe" file.
3. Follow the onscreen instructions to begin the installation.
4. Connect Touch screen monitor cable(USB or Serial) into your PC

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┌─────────────────────────────────────────────┐
│                                             │
│            Connecting Hardware              │
│                                             │
│        (USB/Serial Cable to PC)             │
│                                             │
│                   ⇩                         │
│                                             │
│            Software Installation            │
│                                             │
│     (Driver & Configuration Utility)        │
│                                             │
└─────────────────────────────────────────────┘
```

1.   Upon your system's reboot, the 'Found New Hardware Wizard' appears.
        Select [Advanced] installation - Click [Next].

2   Follow the onscreen instructions to begin the installation.

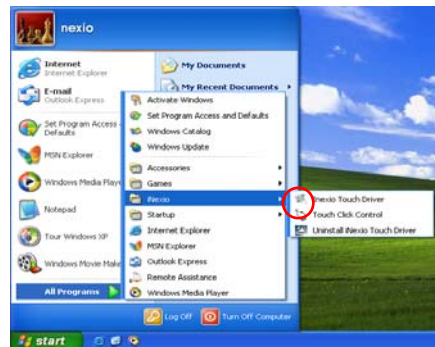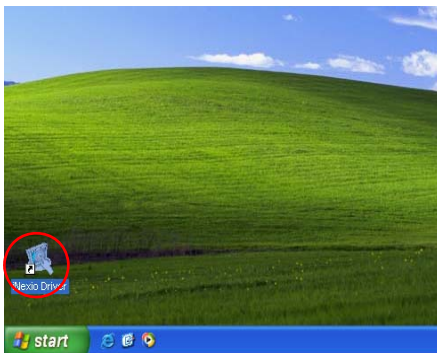3.   Double-click "Setup.exe" file in the install CD as described on the previous page.
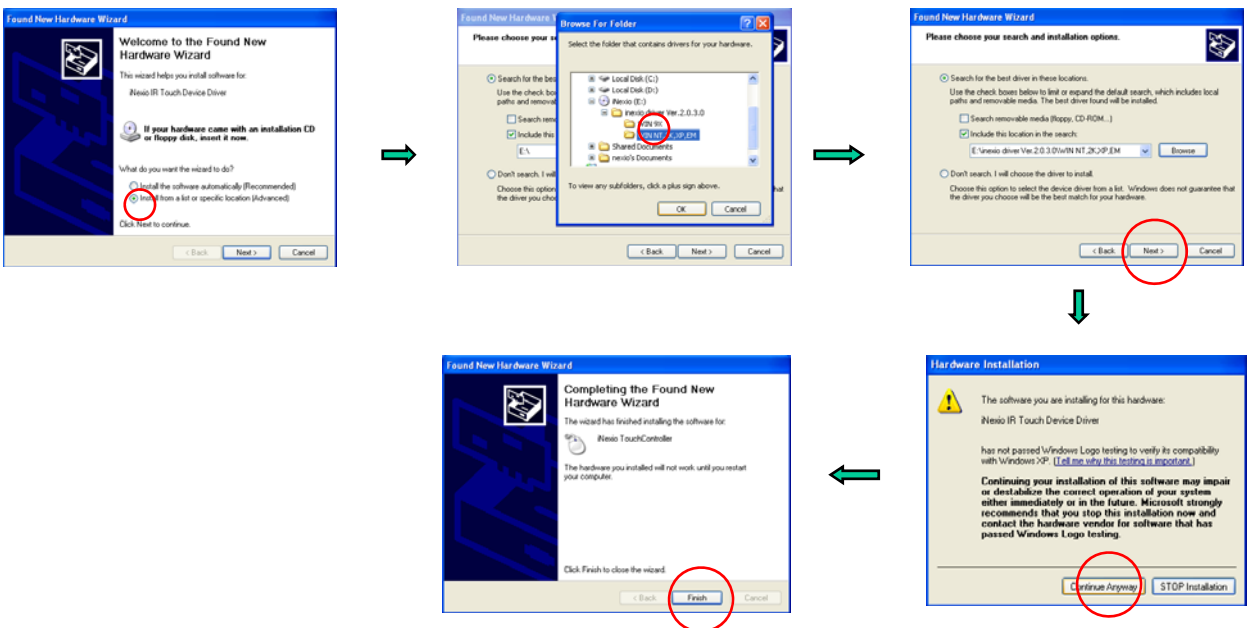
Uninstalling iNexio Touch Driver

1.　　　Click on Start - Programs - iNexio - Uninstall iNexio Touch Driver
2.　　　Select [Remove] and click [Next]
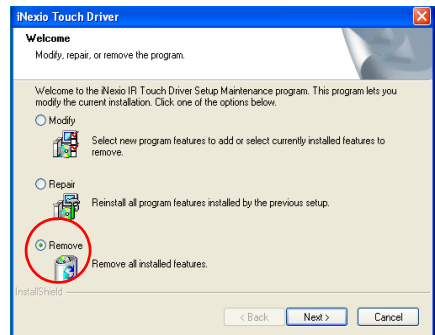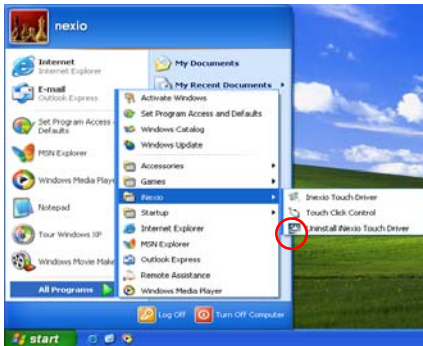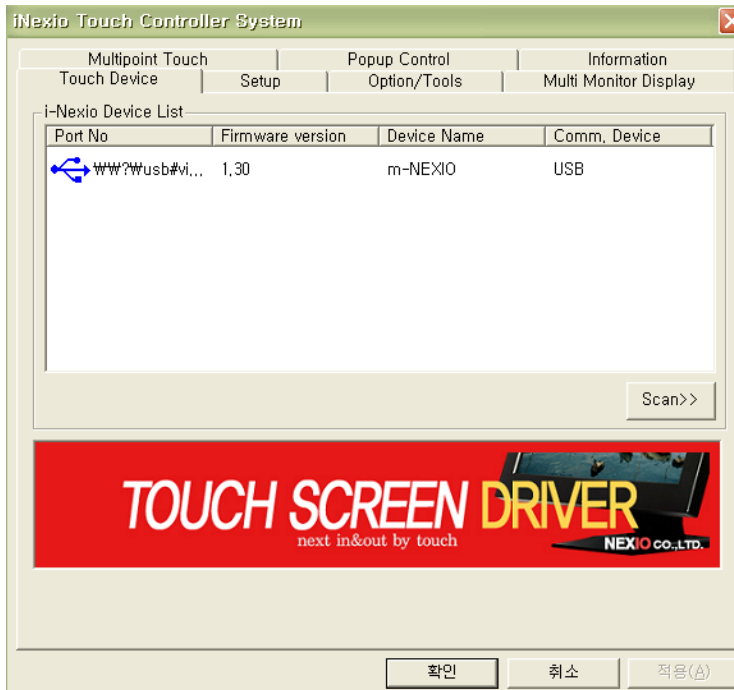

Control Panel

1.　　　Double-click the 'iNexio Driver" icon on the screen or Click on Start
　　　　- Programs - iNexio - iNexio Touch Driver

Chapter 3

Nexio Device Setting & Information

Shows the Port No., Firmware Version, Device name, Comm. Device
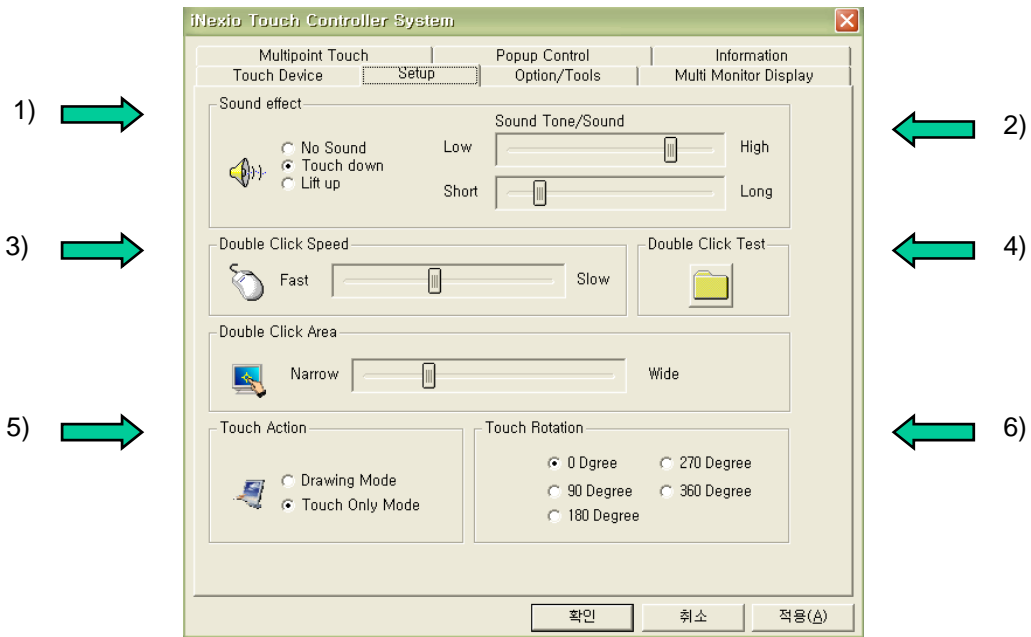
Chapter 4

Control Panel

Setup

Multipoint Touch

Option/Tools

Popup Control

Popup Control Menue

Multi Monitor Display

Setup

1) Sound effect

No Sound	No Sound
Touch down	Sound occurs when you touch down
Lift up	Sound occurs when you lift up

Touch down Mode

Touchdown Mode enables you to create an immediate button action as soon as you touch the screen. In Touchdown Mode, you cause a button down at the cursor location, with a short pause and then a button up. You can leave your finger on the screen but only a single touch is registered until you lift your finger off the screen and touch down again.

Touching the screen is equivalent to pressing and releasing the mouse button. The action occurs as soon as you touch the screen. This mode is best for button based applications(like a calculator)

Lift up Mode

Lift up Mode enables you to position the cursor where you want before creating a button action. In Lift up Mode, the cursor will follow your finger for more accurate touch. When you want to select an item, lifting your finger off the screen will cause a button down, short pause, and then a button up to occur.

Touching the screen is equivalent to moving the mouse position. The button down/button up action occurs when you remove your finger from the screen. This mode is useful for applications requiring greater accuracy because it lets you carefully position the cursor prior to acting on it.

2) Sound Tone/Sound   The frequency (Tone) and the Duration of the sound can be adjusted
by moving the appropriate slider with the touch screen or mouse, or
by using the keyboard arrow keys.

3) Double Click   Speed   Define how fast you need to touch and the space in which you must
** & Area**   touch in order to produce a double-click.

4) Double Click Test   Enables you to test the double-click speed and area.

5) Touch Action

Drawing Mode   Drawing mode is most useful for draw, paint, illustrator, and
graphics applications. In Drawing Mode, a touch is equivalent to
pressing and holding down the mouse button. This is considered the
easiest mode to use with immediate reaction to touch. Lifting off is
equivalent to releasing the mouse button.

Touch Only Mode   Drawing or dragging is not supported in this mode.

6) Touch Rotation   In case of putting the touch screen not properly on the display(e.g. upside
down), you can select proper degree to adjust the touch(cursor) position.

Multipoint Touch
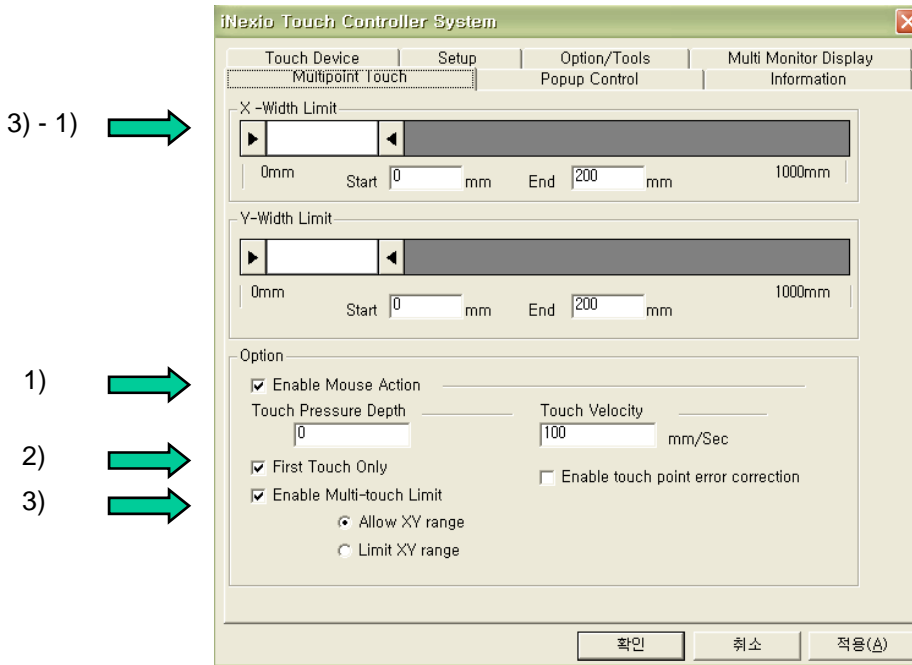
1) Enable Mouse Action As a basic option, touch action can be recognized on all windows program. By disabling this option, the touch is no longer recognized on all windows program. You can also use the Popup Control Menu(Refer to the page 20) to enable the function again.

2) First Touch Only As a basic option, the first touch point is not disturbed by second touch while the first touch object remains on the touch screen.

3) Enable Multi-Touch Limit The size of a touch object can be adjusted in connection with 3) - 1) X Y Limit

     Allow XY range : Recognized within the size of X Y limit

     Limit XY range : Recognized without the size of X Y limit

3) – 1) iNexio Touch Driver has the area recognition function on Single & Multi point touch. With the X-Width Limit / Y-Width Limit function, the size of a touch object can be adjusted on X Y limit in connection with 3) Enable Multi-Touch Limit.

Touch Pressure Depth : Will be removed while updating(User not allowed to use).

Touch Velocity : Will be removed while updating(User not allowed to use).

Enable touch point error correction Velocity : Will be removed while updating(User not allowed to use)

Option/Tools

1)

2)

3)

4)

5) – 1)

5) – 2)

iNexio Touch Controller System

Multipoint Touch		Popup Control		Information
Touch Device	Setup	Option/Tools		Multi Monitor Display

Right Button

Right Click Tool

☐ Always show right click tool

Touch Calibration

Calibration

☐ Infra-red touch

Auto calibration

Drawing Test Tool   3)-1)

○ Multi-point   ● Single-point

3)-2)

Touch Test

Multitouch View >>

Fine Coordinate Correction

X Offset   0,000000   %
Y Offset   0,000000   %

UP   Reset

LEFT   ↖⁺   RIGHT

DOWN

X Zoom   100,000000   %
Y Zoom   100,000000   %

X Zoom-   X Zoom +   Reset

Y Zoom -   Y Zoom +

확인   취소   적용(A)

1) Right Button

Right Button tool allows a Windows right mouse button simulation on the touch screen. A representation of a typical two-button mouse is displayed in a small window on the desktop, when this application is run. The Right Button shows the left button shaded, indicating that the left button is active. Any touch on the desktop or an application will produce a left button click consistent with the Button settings in the Control Panel.

A touch in the Right Button will change the shading to show the right mouse button active. Now any touch on this monitor on which Right Button is running will produce a right button click.

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2) Touch Calibration   The calibration process aligns the touch screen with the underlying video. Specifically, calibration defines the dimensions of the active area of the touch screen and locates the center of the touch screen. If the screen is not calibrated, the active area of the touch screen may not be aligned properly or may be unnecessarily small in size.

Once calibrated, the information is saved by the touch screen for each video resolution. Therefore, you only need to recalibrate the touch screen the first time you change to a particular video resolution.

Calibration process is running automatically based on the resolution. For more accuracy, follow the below instruction and also refer to the 5)-1), 2) Fine Coordinate Correction function on page 13.

1.   Click [Calibration] button. Calibration targets appear on the screen. A circle guides you through the calibration process pointing to the appropriate target.

2.   Touch the touch screen and position your fingertip to the center of the circle

3.   Repeat for additional calibration target(s).

4.   If you accidentally touched the screen in the wrong place during calibration, you will distort the touch screen calibration. Test to make sure you are satisfied with the calibration results.

**3) Drawing Test Tool**   **3) – 1) Single - Point**

After selecting the Single – Point, you can see the below picture on clicking the Touch Test button and test with your finger on the touch screen (This program is for Drawing Test purpose and be available in Drawing Mode only).
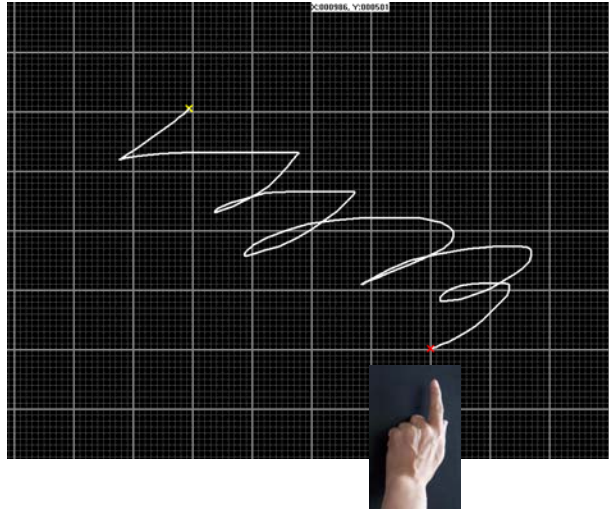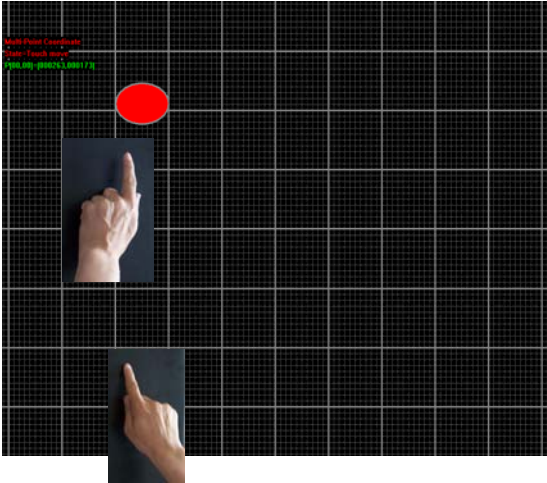

3) – 2) Multi - Point

After selecting the Multi-Point, you can see the below picture on clicking the Touch Test button and test with your fingers or palms simultaneously on the touch screen.

The below pictures show simple contents developed by Nexio applying Multi-Point Touch. Upon touch, the part of area cognition and multi-points are shown in red circle. You can test with the 3) -1) option of object size limit on page 12.
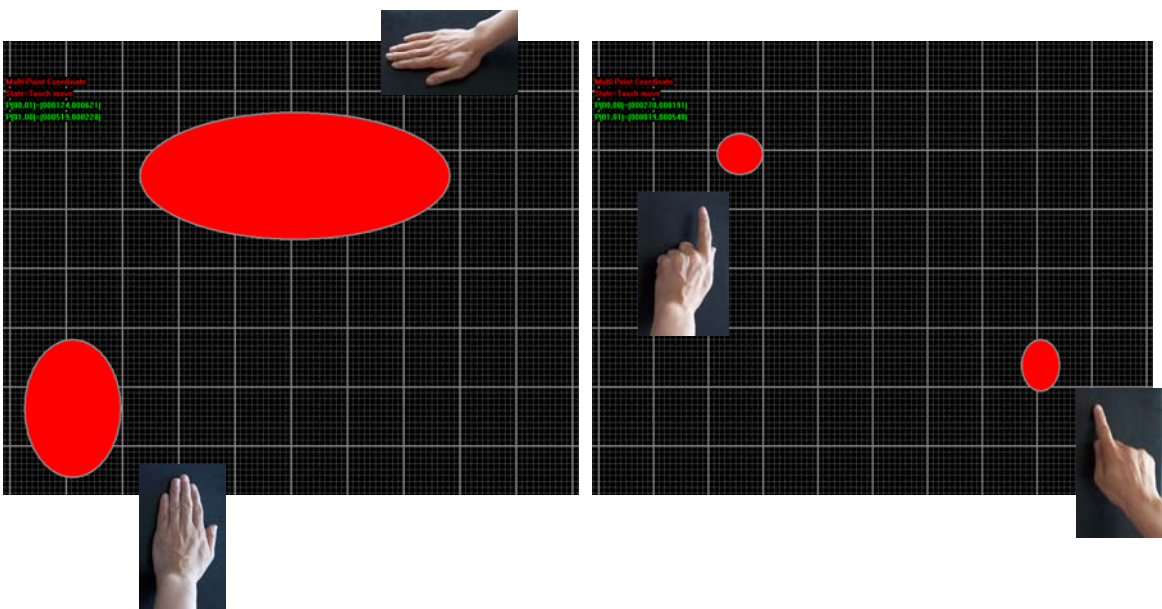
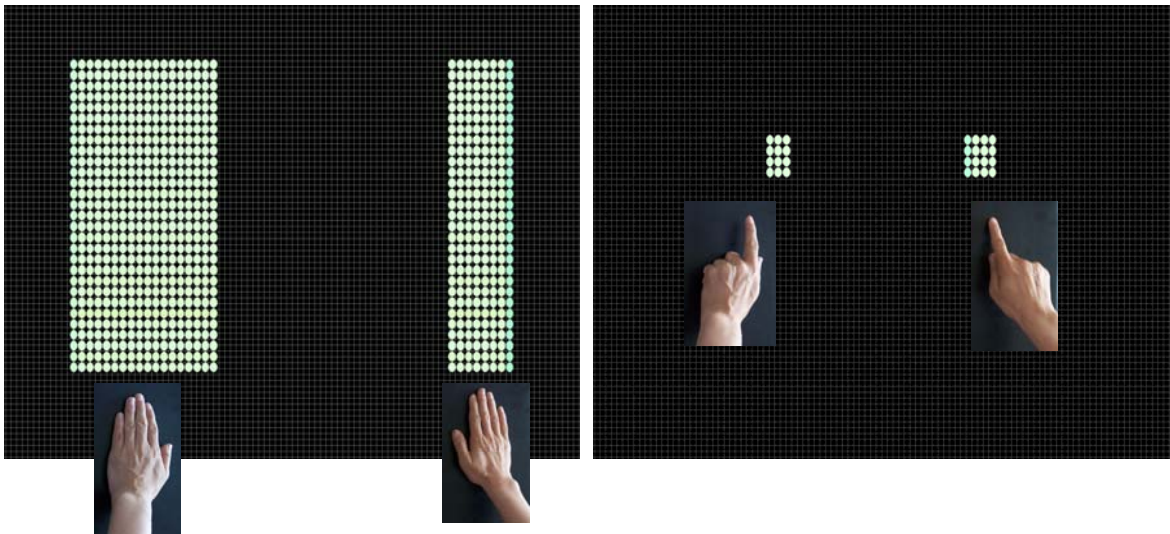* Additional Information on Multi – Point Touch Test

As the above picture shows on multi–point touch test, when touch points are at the same axis of X or Y coordinates, the second touch point is not shown. This is purposely programmed not to recognize the second touch point in this contents. But as the below picture shows on 4) Multitouch View contents on page 13, the second touch is shown even at the same axis of X or Y coordinates.
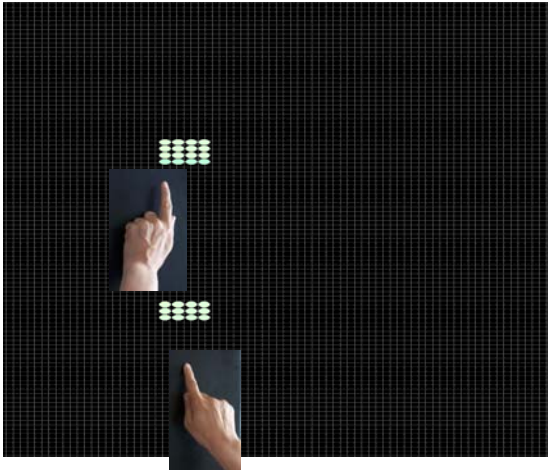
4) Multitouch View   The below pictures are shown when you click the Multitouch View button on selecting either Multi – Point or Single – Point and you can test with your fingers or palms simultaneously on the touch screen

This contents are reference to the contents developer with API(Application Program Interface) as the test shows the area of LED sensors that are recognized upon touch.

* Additional Information on Multi – Point Touch Test

As the below picture shows, there are virtual images beside the real touch points when fingers are positioned at different X or Y coordinates. These virtual images are moving in a regulation according to the real touch point. The contents developer, therefore, should refer to this virtual image regulation.
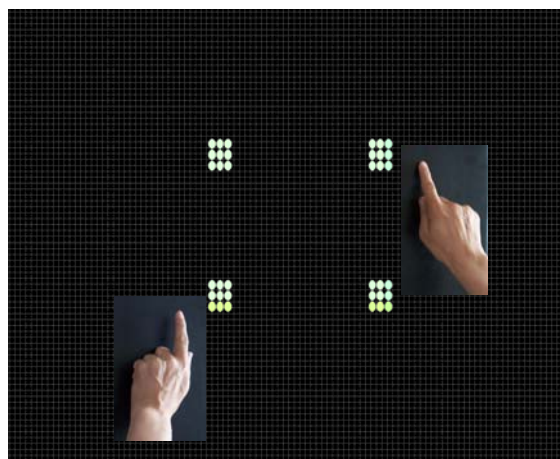
4) – 1) Fine Coordinate Correction

After you calibrate the touch screen, the cursor should be located directly underneath your finger when you touch the screen. However, you may prefer to offset the cursor slightly above your touch so you can see the cursor and point more easily and precisely to small objects.

Touch Cursor Shift option lets you define the distance between your fingertip and the position of the cursor on the screen.

Offsetting the cursor is helpful when selecting small items, such as single letters in word processing, check boxes, or radio buttons.

Click [Up][Down][Left][Right] to make X or Y offset.

Optical Point

Touch(Cursor) Point
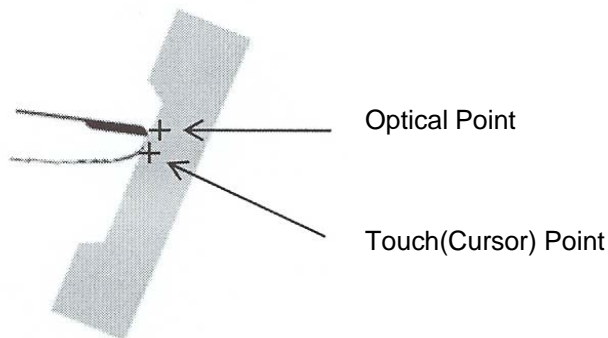
4) – 2)

Sometimes the screen image extends beyond the edge of the monitor bezel. In these cases, it may be difficult to touch items at the left and right edges of the screen. Normally monitor has auto scaling function itself. 4)-2 function is required to adjust the auto scaled image for more accuracy.

Click [X Zoom -(or +)][Y Zoom -(or +)] to adjust the screen image.

Popup Control
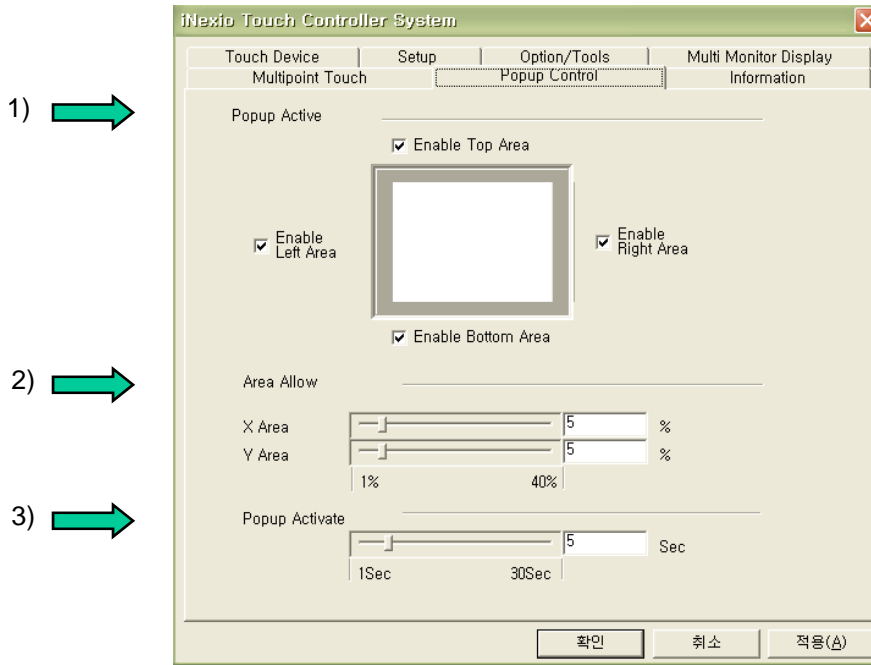
1) Popup Active   You can define the position of Popup Control Menu appearing on the screen.

2) Area Allow   You can define the range of Popup Control Menu appearing on the screen.

3) Popup Activate   You can define the appearing time of Popup Control Menu on the screen.

* The Popup Control Menu appears on the screen when you touch your finger or any objects on the defined position and remove after the defined time of 3) Popup Activate (Refer to the page 20).

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Pupup Control Menu
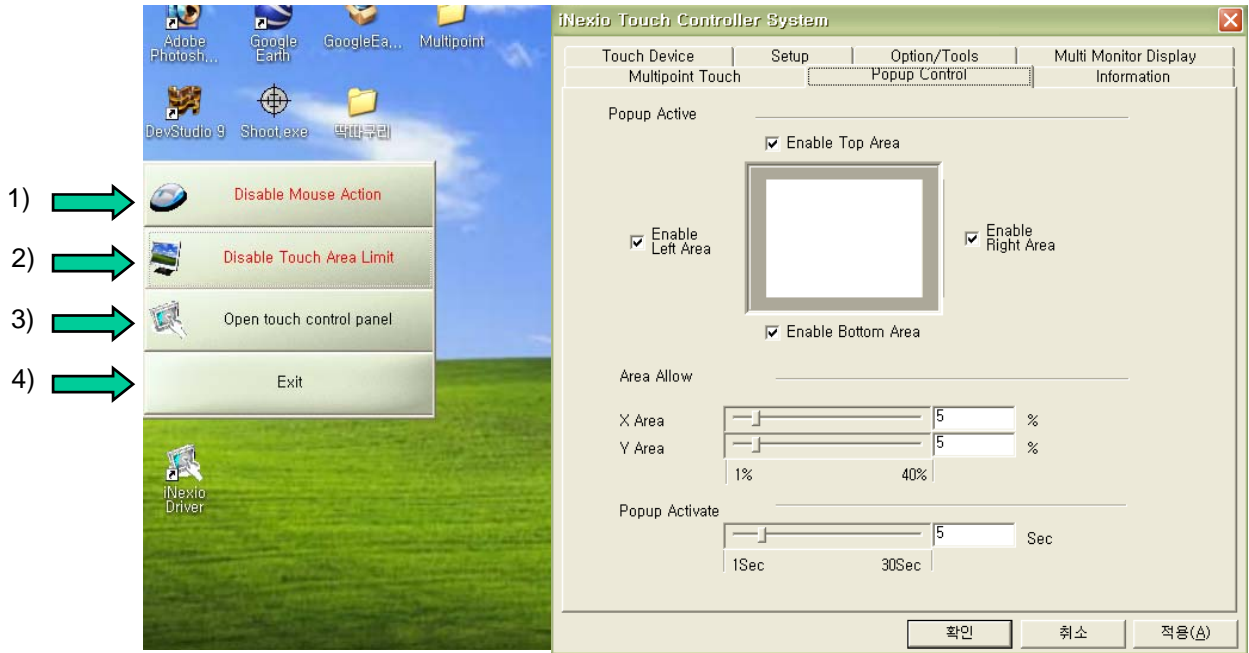

1)	**Disable Mouse Action**	On selecting(click), the touch action is not recognized on all programs on the screen. On re-selecting(re-click), the option will be disabled.
2)	**Disable Touch Area Limit**	On selecting(click), the defined touch object size is ignored.
3)	**Open Touch Control Panel**	Control Panel is appeared on the screen.
4)	**Exit**	Popup Control menu is disappeared.

Multi Monitor Display
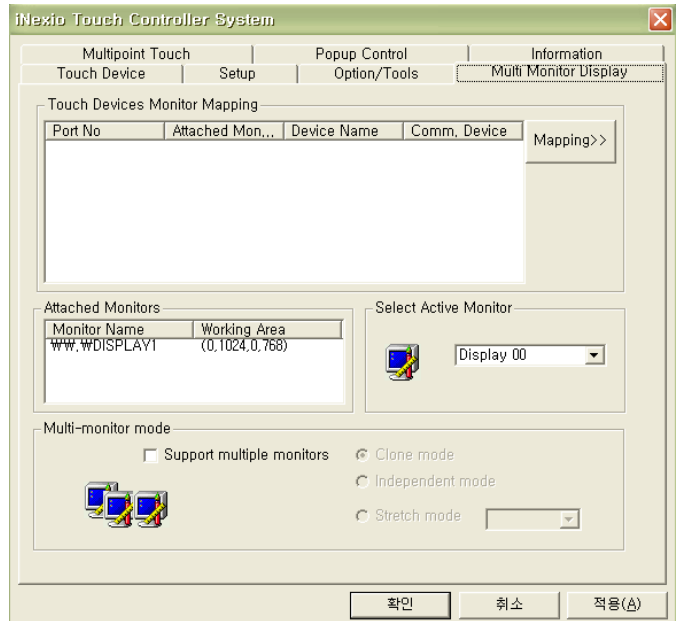
Mapping Multiple Monitors

You must map each touch screen to a monitor using the [Mapping] button. You must do this in order to individually calibrate and configure each touch screen connected to your system. Once you have properly mapped the touch screens, you set the current touch screen by selecting the icon of the desired monitor.

Clone mode & Independent mode

In the clone mode, one of the monitor is selected as the primary one. All other monitors usually have the same image as the primary monitor.

In the clone and independent mode, all screens show same image and the touch screen on each monitor functions independently.

Stretch mode

The stretch mode makes all screens combine for a single image. In this mode the touch screen on each monitor functions as a single image.