

# PulseIR User Manual for Windows OS

## Quick Start User Manual for Windows OS



### Installation

#### Default Operation

PulseIR system is a plug and play HID-USB Device which automatically manages device drivers, eliminating any manual installation or upgrading of the drivers.



If you have Norton Antivirus program running, this may prevent proper installation drivers. If you encounter problems, please disable Norton Antivirus temporarily while PulseIR device is being connected.

Connecting the PulseIR unit to a USB connector will automatically display the following message on the bottom taskbar.



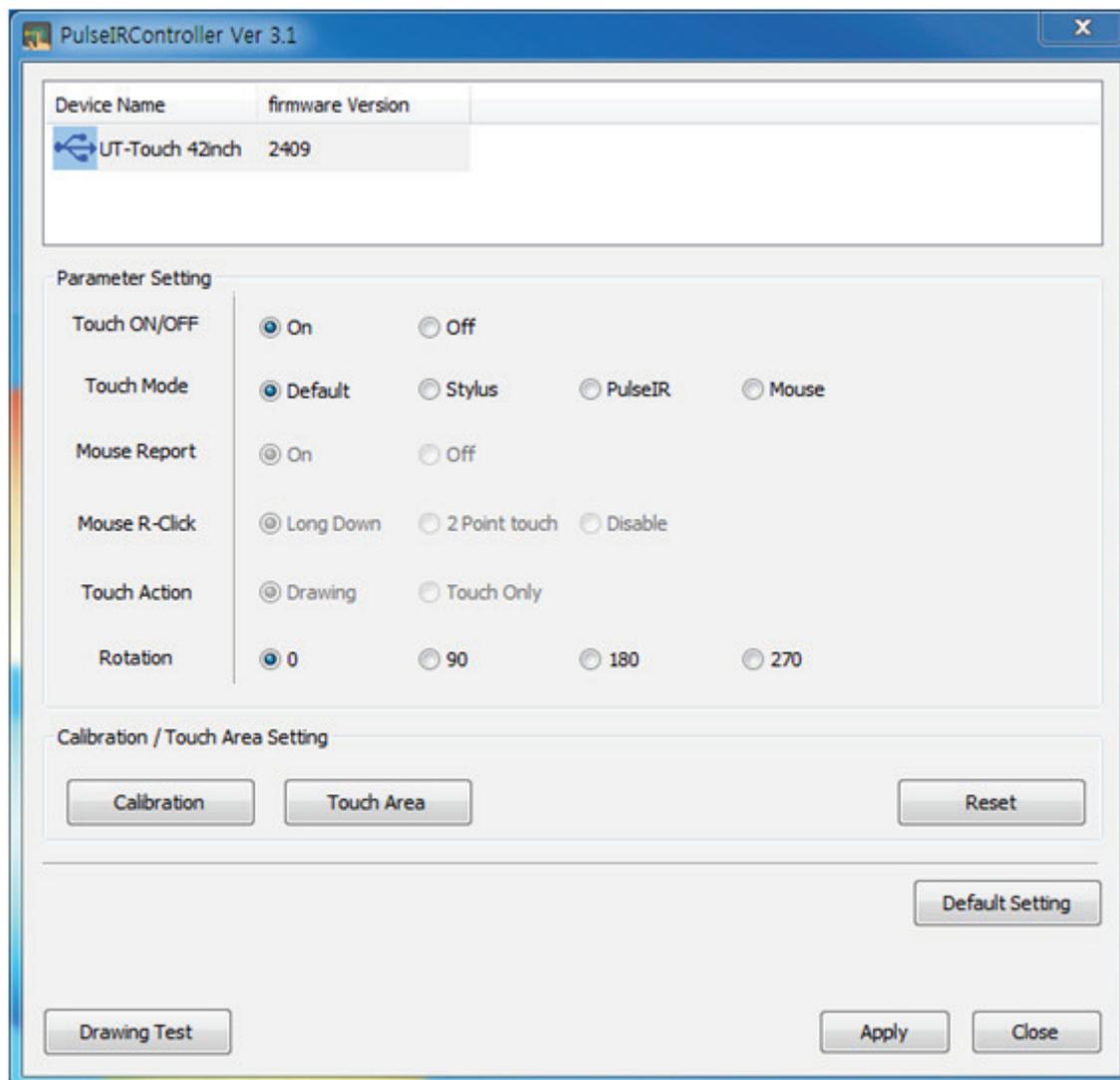
In Windows OS a PulseIR touch screen is detected as a standard HID pointing device as shown below.



 Upon connection to a USB port, PulseIR system initializes. DO NOT touch the screen while the "new device found" message box displays – for approximately 3 seconds.

## Using PulseIR Utility Programs

Download PulseIR Touch Utility package for Windows. Extract the files and launch *PulseIRController* application.



To configure a touch screen device, first locate the device on device listing table at the top of the screen. If more than one touch screen is connected, all PulseIR devices will be listed here. Click on a device icon to view the current settings for that device.

## Touch On/Off

This function enables and disables the touch detection for special testing and set-up needs.

## Touch Mode

Mode	Purpose
Default	Automatic setting for Windows OS – Full Multi-Touch support in Window 7
Stylus	Supports <i>stylus</i> operation in Window Vista and 7
PulseIR	Multi-Touch support via TUIO for Window XP and CE
Mouse	Single-Point Mouse mode



### When Switching Operating Systems

The configuration settings are preserved by the on-board controller of the touch screen. When changing from one OS to another (e.g., from Windows to Mac OS), open the PulseIRController application from the new OS, and click "Default Setting" button. Click on "Apply" button then wait while the warning not to unplug the USB connector is shown. When ready, the touch screen will function normally in the new OS environment.

## Mouse Report (Apply only PulseIR Mode)

When "Mouse Report" function is turned off, the touch screen transmits only the multi-touch point data without the mouse inputs. This is used in special cases where the application confounds the two input signals.

## Mouse R-Click (Apply only in Mouse Mode)

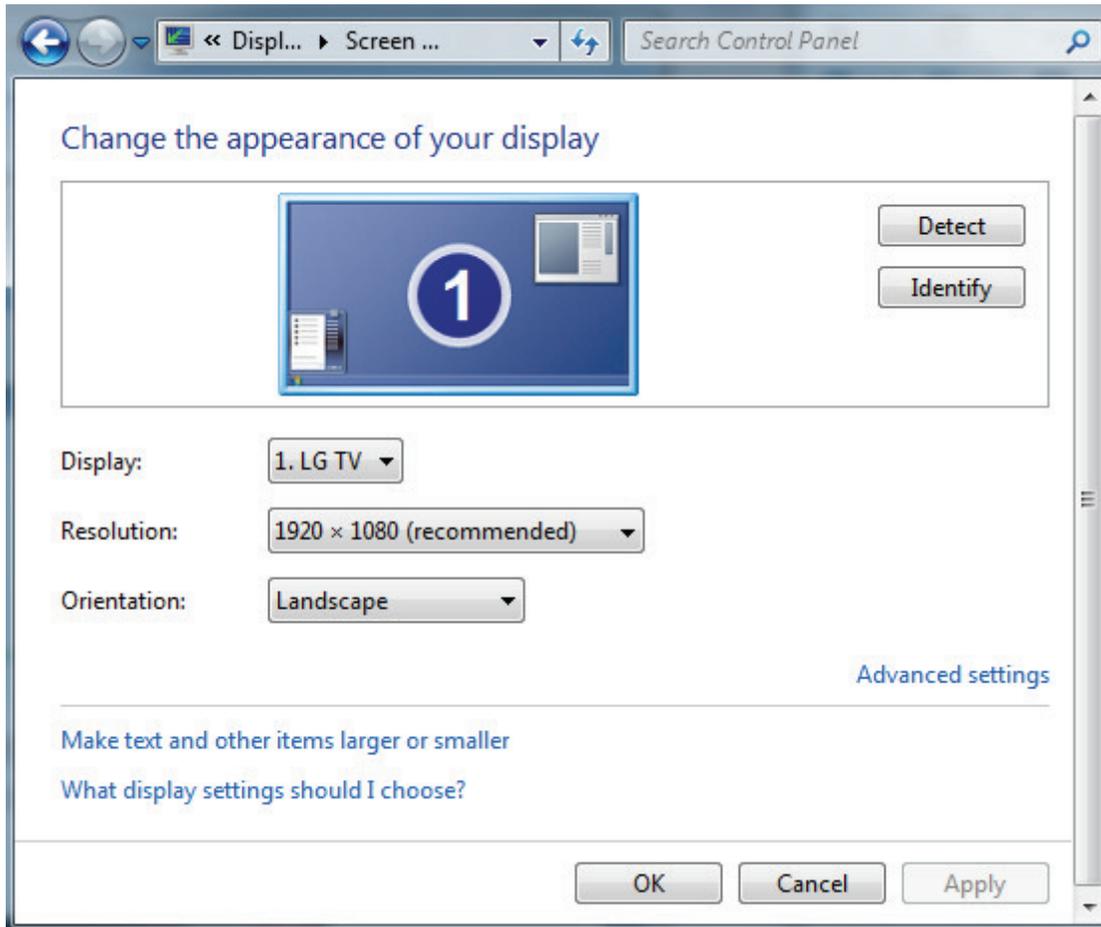
Setting	Effect
Long Down	extended touch triggers the Mouse R-Click event
2 Point Touch	two or more point touch triggers the Mouse R-Click event
Disable	do not support Mouse R-Click event

## Touch Action (Apply only in Mouse Mode)

Setting	Effect
Drawing	Touch and Drawing support
Touch Only	For simple touch detection only – No continuous tracing for drawing and scripting

## Touch Rotation

For special mounting configuration relative to display orientation. If the touch screen is attached to the display in normal orientation, the rotation of the display is controlled by Windows "Display Setting" dialog box. Select a desired Orientation for display placement and the touch screen will automatically adjust.



However, if the installation requires mounting the touchscreen in different orientation relative to the display, then this *Rotation* setting can be used changed to suit the need.

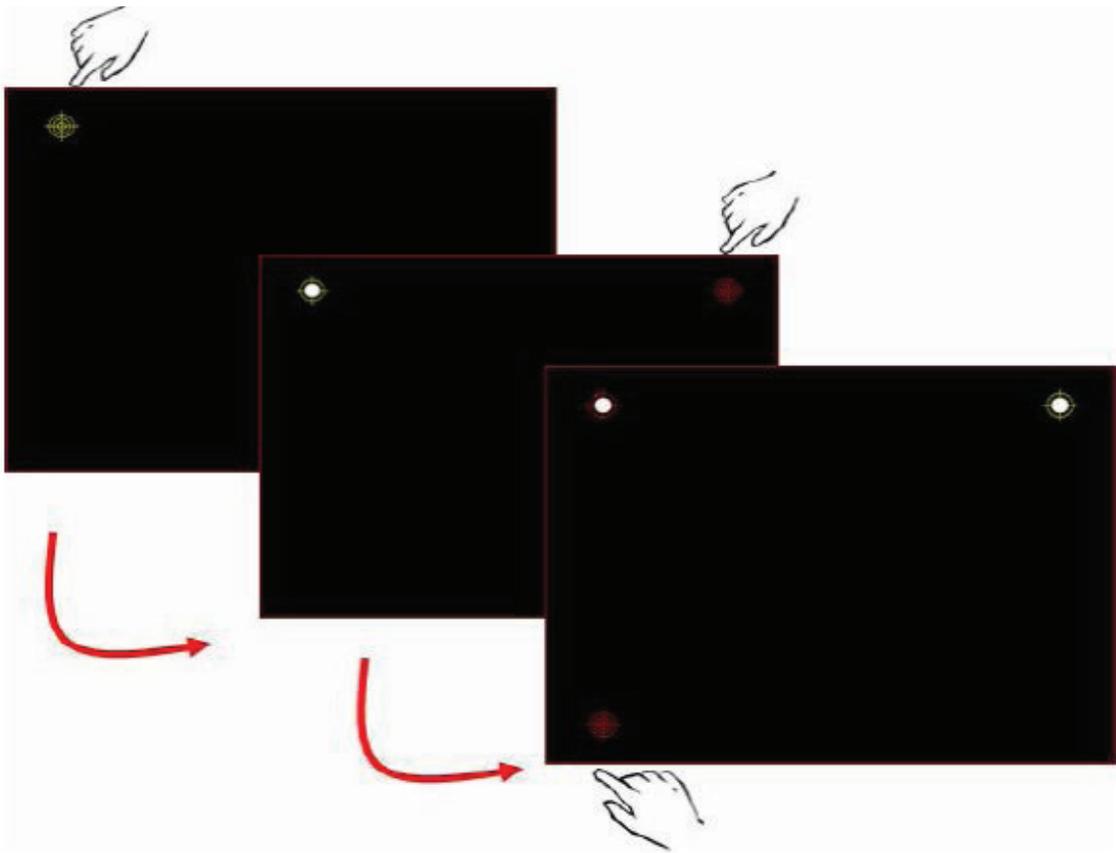
### Calibration/Touch Area Setting Functions

All PulseIR touchscreens are custom fit to the frame and require no calibration as long as the touch and display areas are matched. For special situations, "Calibration," "Touch Area" and "Reset" buttons enable custom touch point alignment and area adjustments.

Function	Button	Description
Touch Coordinate Adjustment	Calibration	Corrects touch coordinate misalignment
Touch Area Adjustment	Touch Area	Use to limit touch detection to a sub-section only
Reset to Default	Reset	Resets coordinate and area adjustments

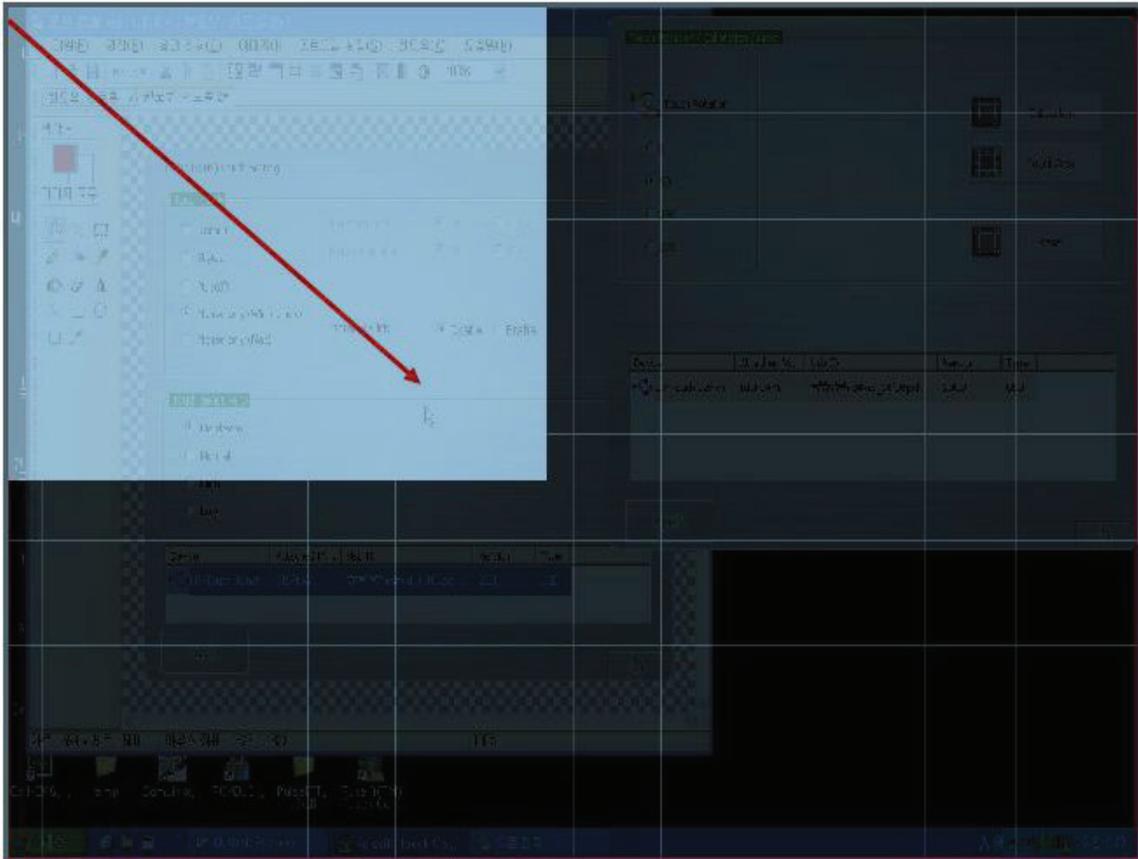
#### Calibration Setting

This is the Touch coordinate calibration screen. Simply touch the 4 red target points in the sequence they are presented.



### Touch Area Setting

Below is Touch Area Setting screen. Drag a rectangular area from top to bottom diagonally. Touch detection will be active only within this area. Touch points outside of this rectangle will be ignored.



## Default Setting Button

Resets the touch screen to default mode according to the OS.

## Apply Button

Programs the touch screen controller with newly selected settings.

### Warning Message

When applying changes, the following message box appears and the USB port automatically resets. It is important that you do not unplug the USB connector. Wait until this message box disappears before using the touch screen.



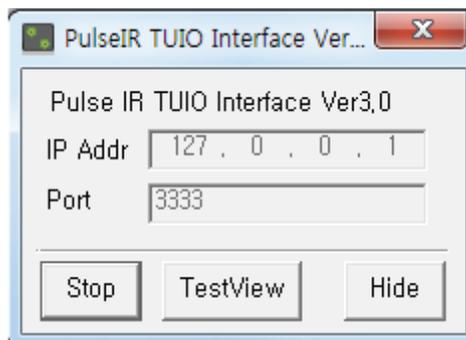
## Using PulseIR TUIO Tool

In Window 7, the touch screen will automatically operate as a Multi-Touch input device as default mode. In Windows Vista and XP however, the OS does not have built-in multi-touch support. Hence TUIO industry standard protocol for multi-touch devices must be used to demonstrate multi-touch capability. TUIO Tool is provided for this purpose.

### Assumption

- We assume that the user already has a basic understanding of TUIO protocol and functionality.
- The Touch Screen must be set in "PulseIR Touch Mode" by using PulseIRController tool described above.

## Launch TUIOInterface Tool



### Start Button

Click on "Start" Button. This activates the (device) client component of TUIO. Any application that contains the (application) server component of TUIO can now detect and use multi-touch data signal.

### TestView Button

The screen displays touch points from the TUIO device. This view is used to verify the multi-point touch detection. Use ESC key to exit this view.

To run a TUIO-enabled application, keep the TUIOInterface tool running. Start the touch-driven application (e.g., Nuiteq Snowflake). The multi-touch feature should now be working.

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