



ShadowSense Troubleshooting Guide

AN-HW-003

DOCUMENT REVISION HISTORY

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| 1.4 | Nov\14\2016 | Marina Mira | Added footer Updated section 5.0 Added section 7.0 |
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DESCRIPTION

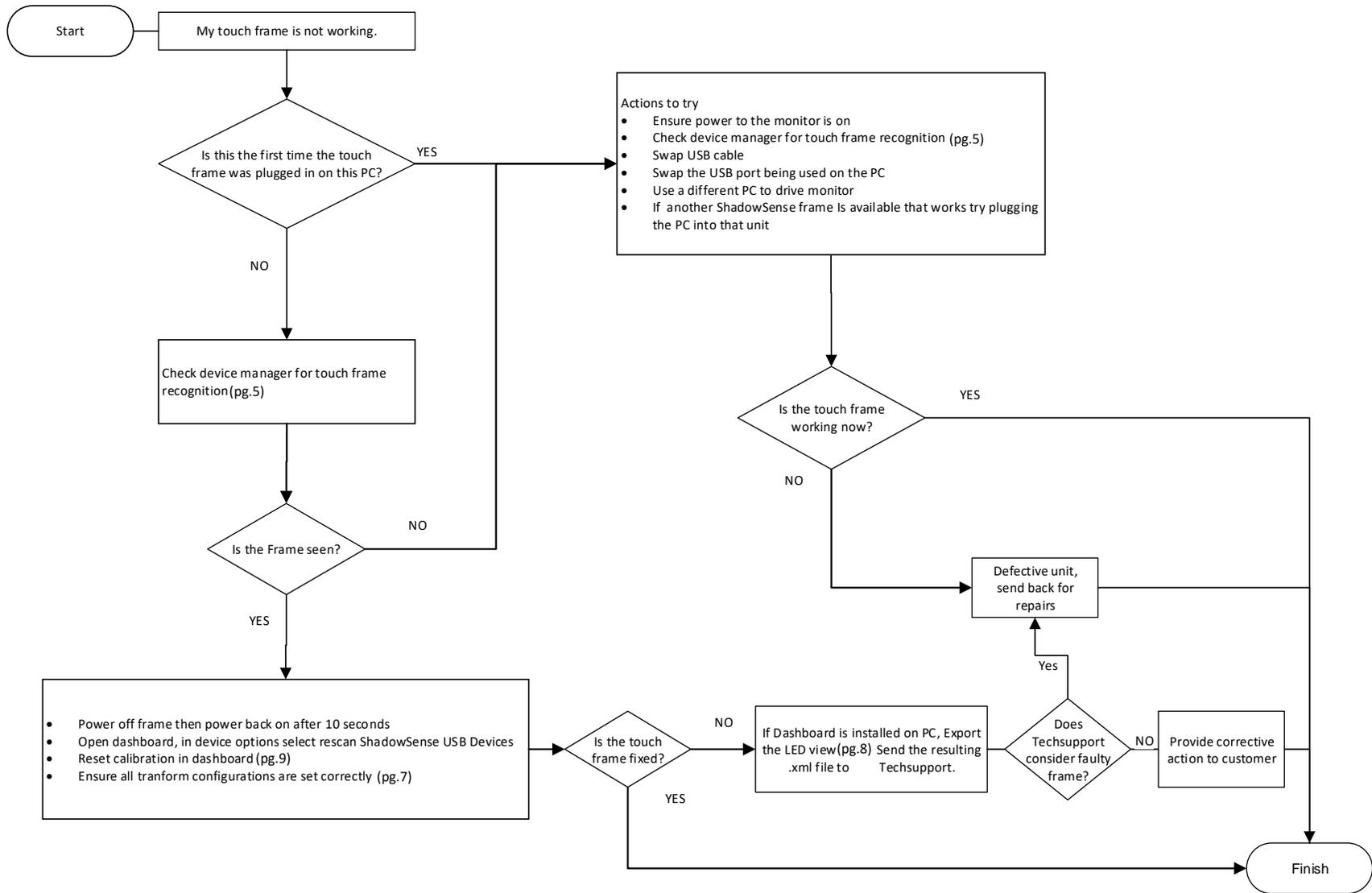
This document lists the common issues experienced by users of ShadowSense™ touch frames and it lists step-by-step procedures for fault finding and debugging the touch frame.

The document is divided up based on the most common problems users will experience and contact tech support about.

1.0 Touch Does Not Work

If the touch frame is not working, refer to the flow chart on the next page for step-by-step instructions on how to resolve issues or determine if the unit needs to be repaired.

Do not use this flow chart if the end user has been upgrading or downgrading firmware. The end user should not be upgrading or downgrading firmware without the help of an experienced support person. The touch screen is tested prior to shipping and should work right out of the box without the use of Dashboard.



1.1 Device Manager Touch Frame Recognition

One of the first things that should be done when troubleshooting a touch frame is to check if the ShadowSense frame is being recognized in Windows® **Device Manager**. The **Device Manager** can be found by searching **Device Manager** in the Windows search bar or under *Control Panel*. Open it and you should get a window that looks like the image in Figure 1.

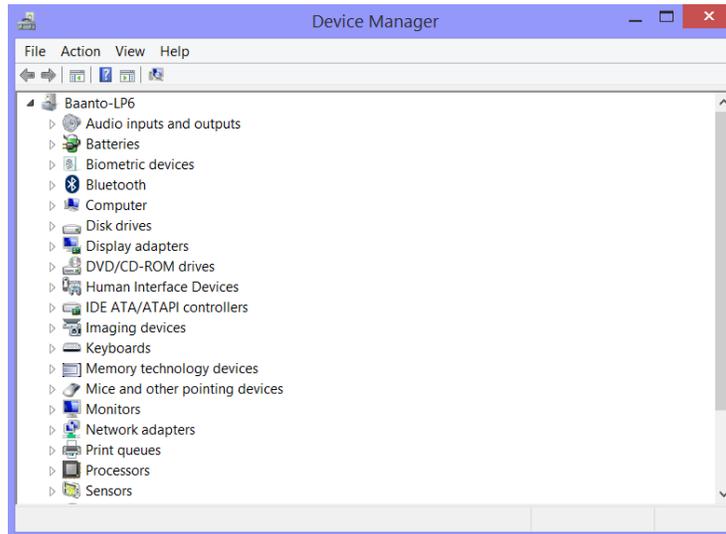


Figure 1: Device Manager window

Once the **Device Manager** has been launched the user must check under **Human Interface Devices (HID)** as well as **Mice and other pointing devices** to see if there are any entries. Figure 2 shows the device manager when a ShadowSense touch frame is connected to a PC and Figure 3 shows the same PC without a ShadowSense touch frame. As can be seen there are five different human interface devices in addition to one HID compliant mouse under mice and other pointing devices.

As per the USB specification, all ShadowSense touch screens can be identified via the Vendor ID (VID) and Product ID (PID). The following table describes the values for the products.

| | |
|-----|--------|
| VID | 0x2453 |
| PID | 0x0100 |

Based on the version of Windows being used (7, 8 or 10) not all of the entries will be same as shown in the figures. The important point is to note that some combination of entries are shown when the touch screen is connected to the PC and the same entries disappear if the frame is disconnected.

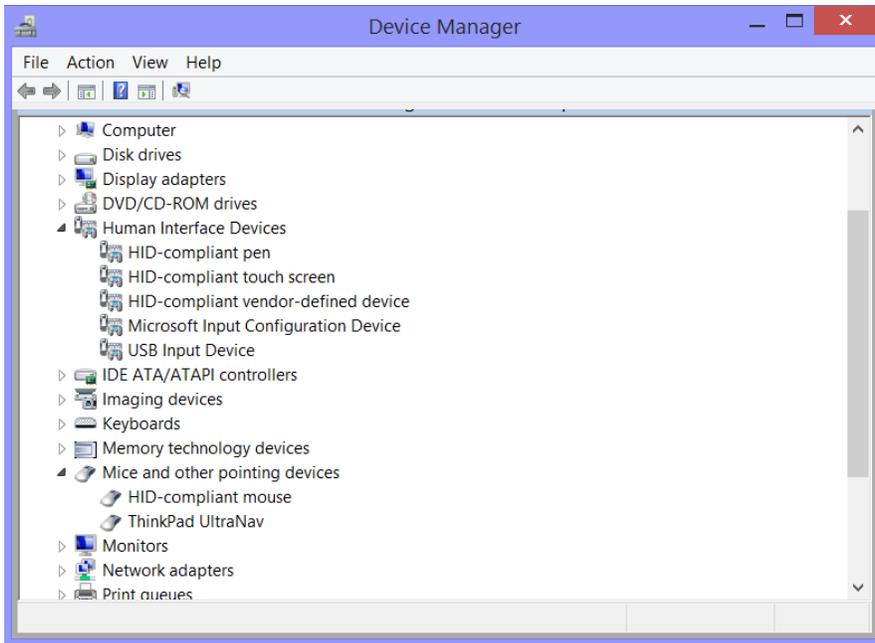


Figure 2: Device Manager window with ShadowSense frame connected

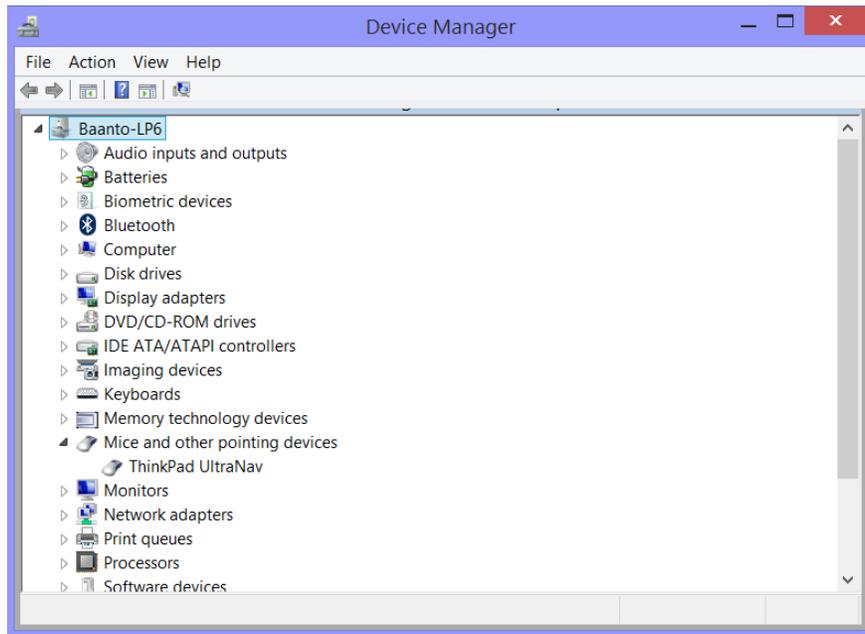


Figure 3: Device Manager window with no ShadowSense frame connected

1.2 Resetting Configuration Parameters

In order to reset the configuration parameters for the ShadowSense touch frame the Dashboard application must be launched. Once Dashboard is open, the user must go into the configuration view where the following screen shown in Figure 4 will show up. Click the reset button in the bottom right of the window. This resets most of the parameters back to the default for the ShadowSense frame.

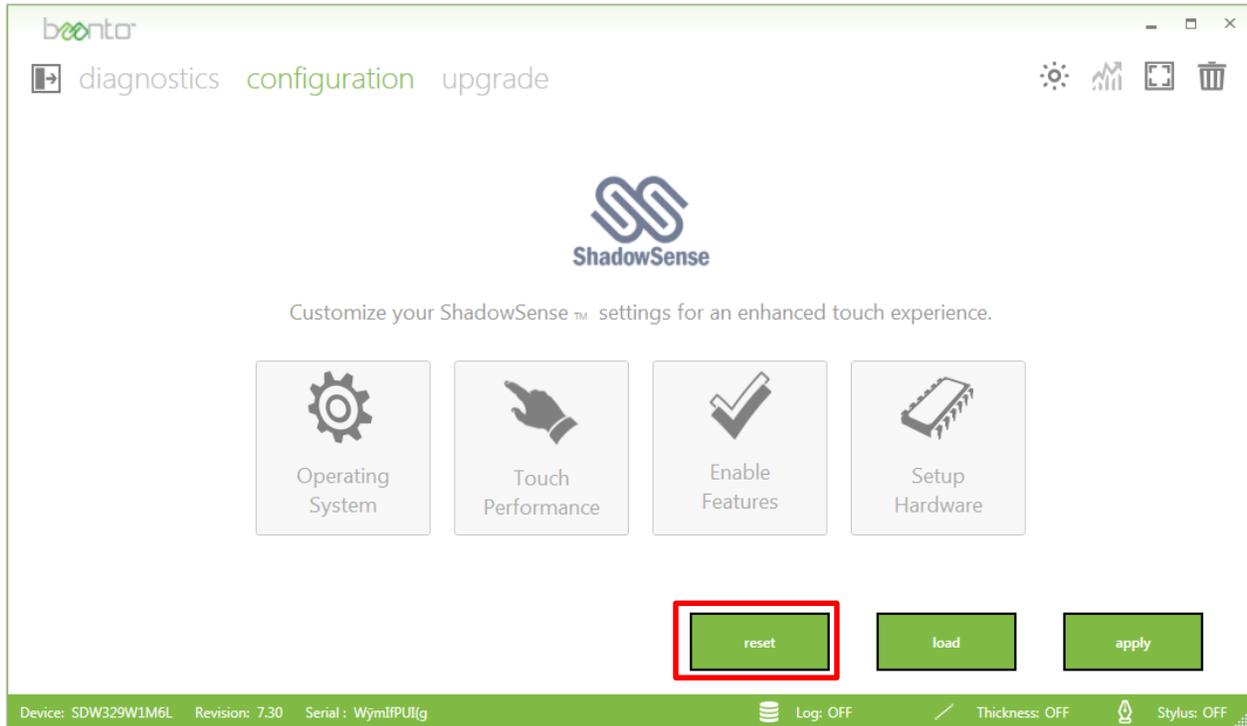


Figure 4: Dashboard configuration tab

There are a few parameters that are not automatically reset when the reset button is clicked. In **Operating System** make sure **Apple Settings** is disabled and the **Screen Rotation** is set to landscape. The last parameter to check is in **Setup Hardware** and is called **Touch Regions Mask**. Make sure that all four regions are disabled.

1.3 Exporting LED View

In order to export the **LED View** for diagnostics, Dashboard must first be launched. The next step is to open the main menu in the top left corner of the window. Next the user must select **File Options** then **Export LED View** from the drop down list. This will generate an .xml file that can be sent to tech support for further system diagnostics.

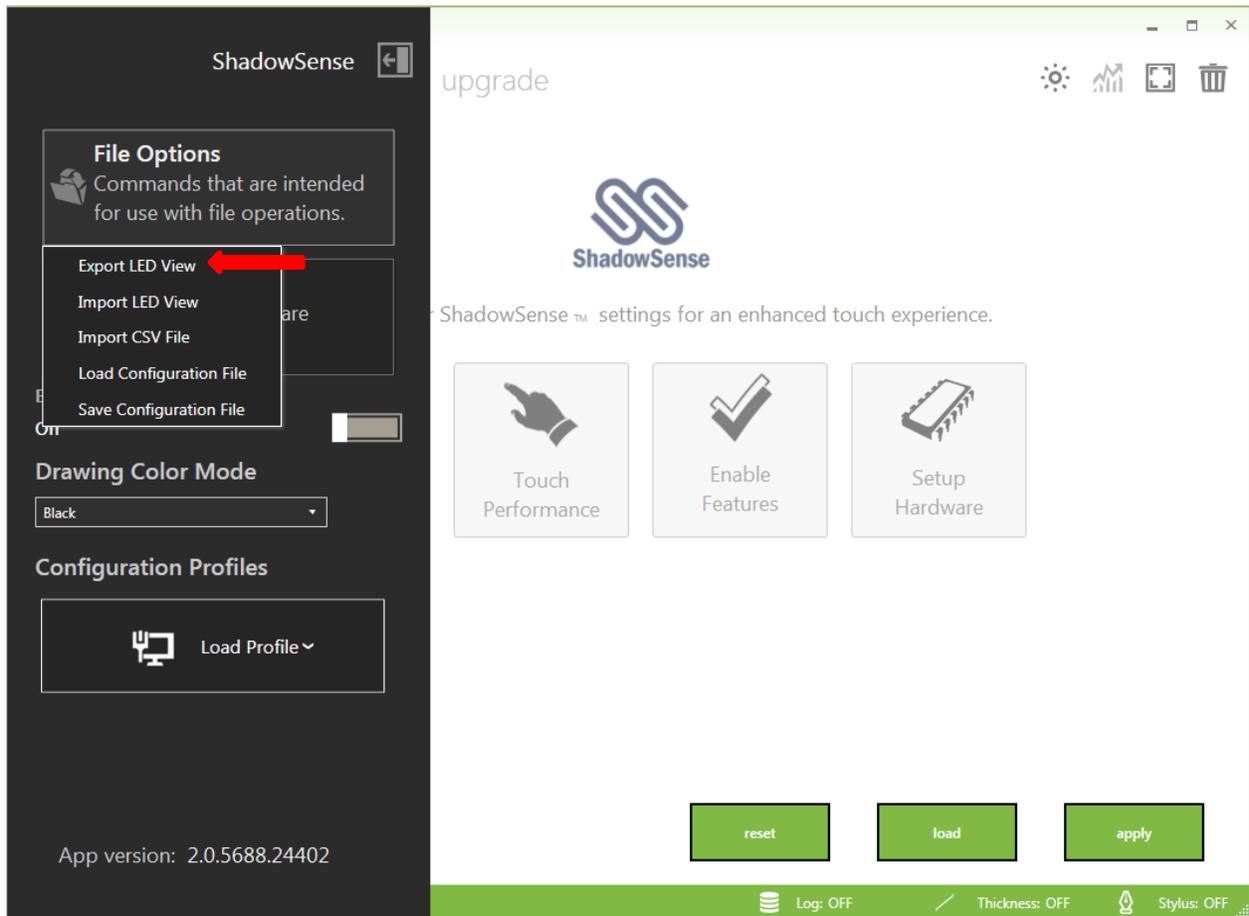


Figure 5: Export LED View in main menu of Dashboard

2.0 Resetting the Calibration

Regardless of the OS the touch screen is used with, it is important to do the calibration on a Windows PC as that is the only OS that supports the Dashboard application.

- 1) Before doing any calibration, connect the touch frame to a Windows PC and open up **Tablet PC Settings** located inside the **Control Panel**.
- 2) Notice the **Tablet PC Settings** icon will not show up in the control panel if the touch frame is not powered up or USB is disconnected. If you are using a laptop with a touch screen this icon will always appear since the PC is always connected to a touch screen.
- 3) From the **Display** drop down menu select the touch monitor. Ensure the **Reset** button is greyed out. If the **Reset** button is not disabled, click the **Reset** Button and then click **Apply**. This will reset the Microsoft touch calibration on the PC for the corresponding touch monitor.

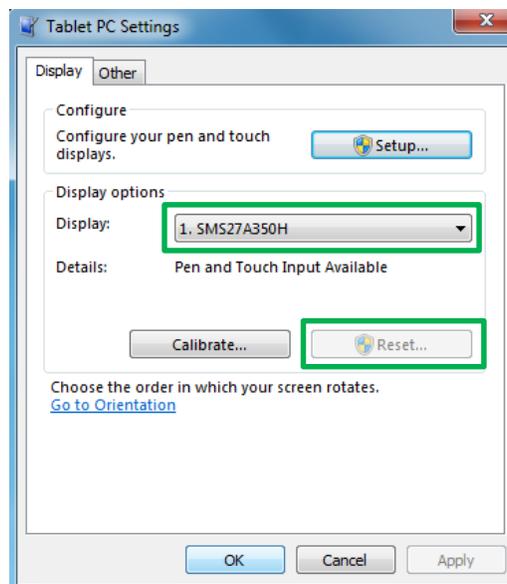
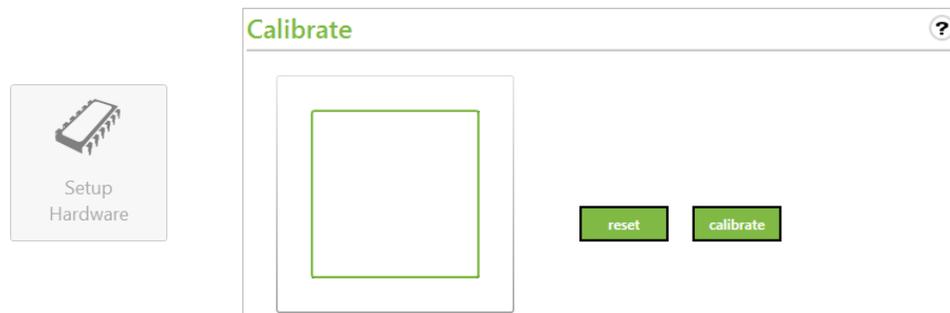


Figure 6: Tablet PC Settings

- 4) Open up Dashboard. Select the **Setup Hardware** button from the configuration view. Browse to the **Calibrate** section.



- 5) Click on Calibrate. If prompted for confirmation, click OK.
- 6) Touch and hold your finger on the center of the cross hair shown below. Hold finger on glass for 5 sec.



- 7) After 5 sec the circle will disappear and you will see a green dot. Move to the next circle. Do this for the four circles.
- 8) If for any reason you make a mistake click the back button using the mouse and redo the specific touch point.



Note: It is normal for the green dots to not be aligned up with the cross hair shown on the circle, Dashboard will measure this offset and use it to calibrate the screen.

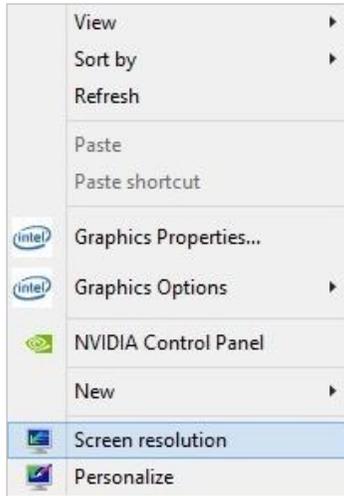
- 9) Enter the full screen view by pressing the ESC Key on the keyboard or select the full screen view icon  from the top right side of Dashboard.

Refer to the Application Note **AN-FW-008 Calibration Process** for detail instructions on how to calibrate the screen with the new GUI.

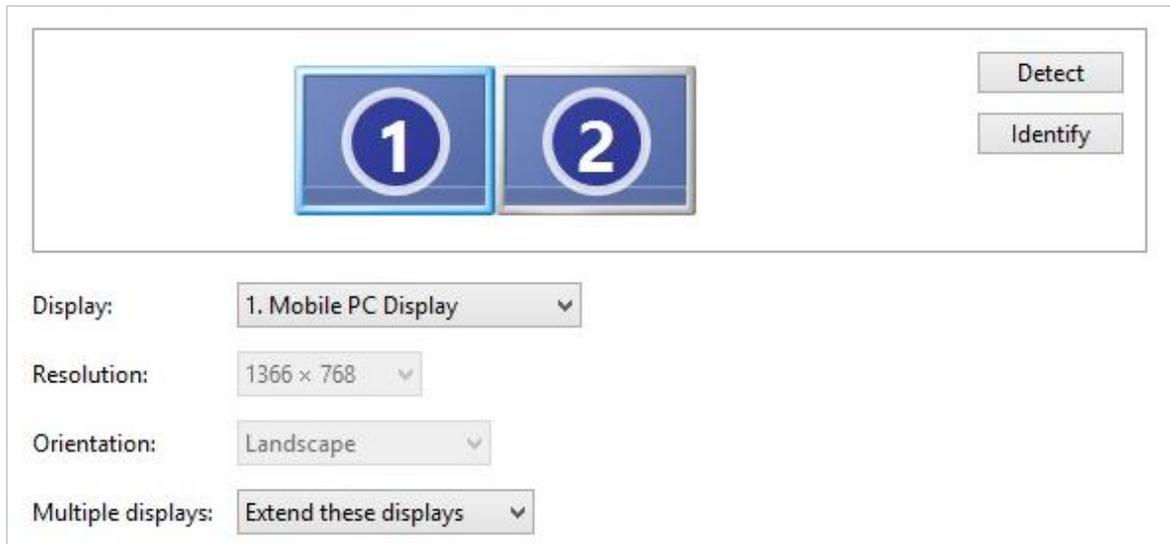
3.0 Dual Monitor Setup with a Single PC

In Windows® 7, 8 and 10, it is easy to add a second monitor to the same PC. This section will show how the user can add a secondary touch monitor to the same PC.

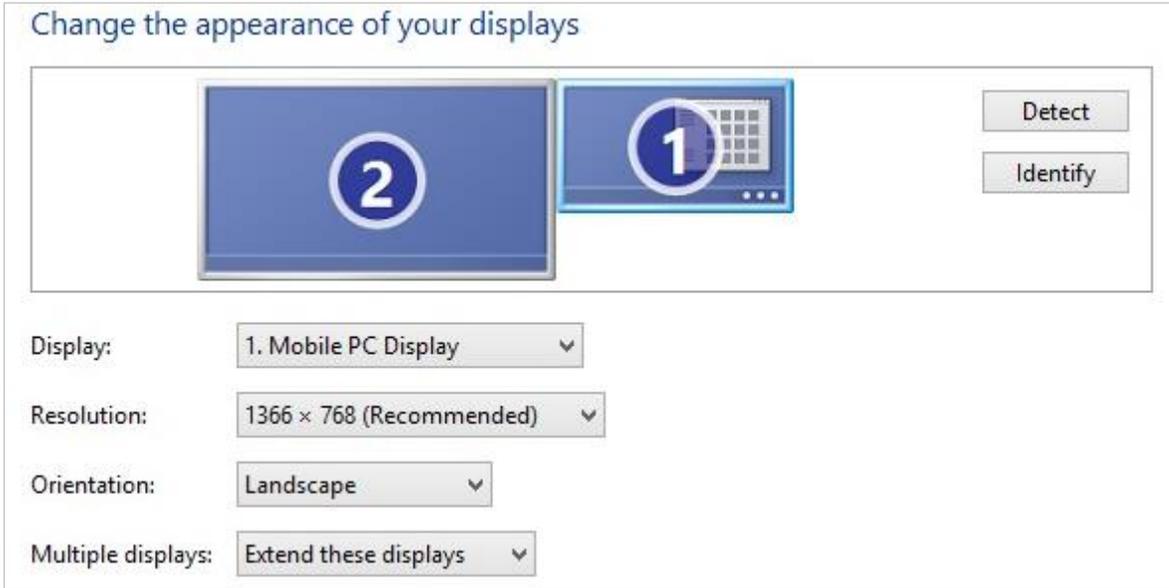
- 1) Connect the second touch monitor to the PC via a VGA, DVI or HDMI port. Connect the USB cable corresponding to the touch monitor to the PC. Right click on the desktop and select **screen resolution**.



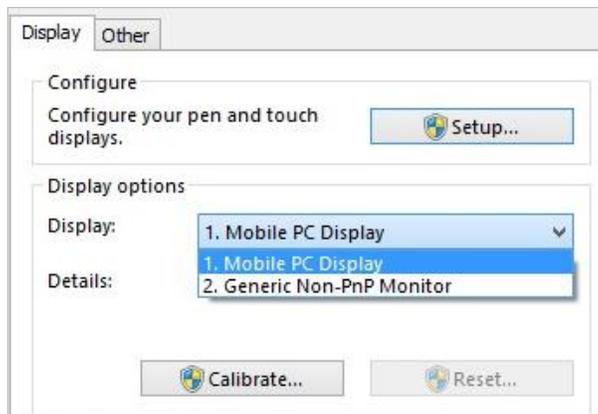
- 2) Notice the second screen will be shown as number 2 on the PC. For **Multiple displays** select **Extend these displays** from the drop down menu.



Hit the **apply** button and click **OK**. This will extend the desktop on the secondary monitor. You may want to open up **screen resolution** again to verify the change. In our setup the primary monitor is a laptop screen (Number 1) while the secondary monitor (Number 2) is a 65" touch monitor. Here you can independently adjust the resolution of the secondary monitor. Click **OK** when done.



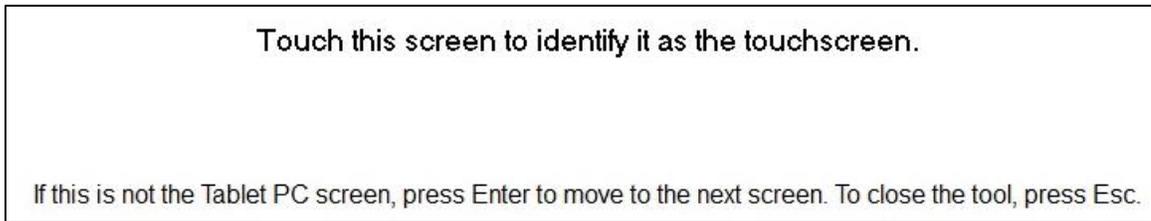
- 3) Next we assign the touch to the respective monitors. Open the **Tablet PC Settings** from the control panel.
- 4) Notice the secondary monitor will show up as number 2 in the **Display** drop down box. Select the second display and ensure the **reset** button is greyed out. This will ensure that on the secondary monitor Microsoft calibration is off.



- 5) Assign touch to the right monitor by selecting the Setup button under configure.



- 6) The message shown below will appear on the primary monitor. Press enter to display the message on the secondary monitor then touch the second display to identify it as a touch screen.



- 7) Click the **OK** button. The second monitor is now setup as a touch monitor.

4.0 Turning off Flicks

Windows® 7, 8 and 10 offer gestures called flicks with tablet touch screens. These allow the user to quickly navigate and perform shortcuts on smaller touch screens. On larger touch screens these gestures are more of a nuisance and not really desired. This section will talk about how to disable flicks.

- 1) Open up **Pen and Touch** settings located inside the Control Panel.
- 2) Select the **Flicks** tab.

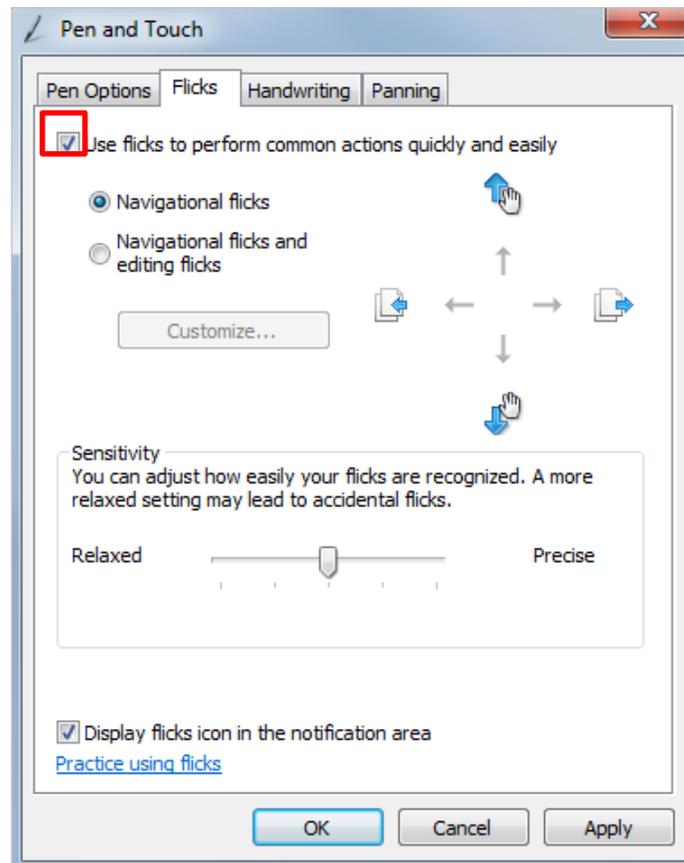
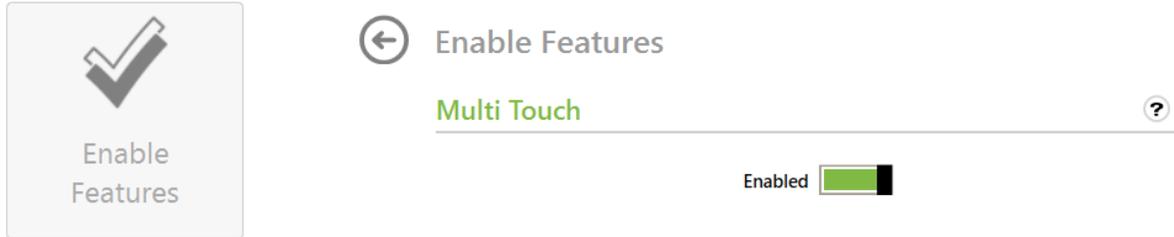


Figure 8: Pen and Touch window

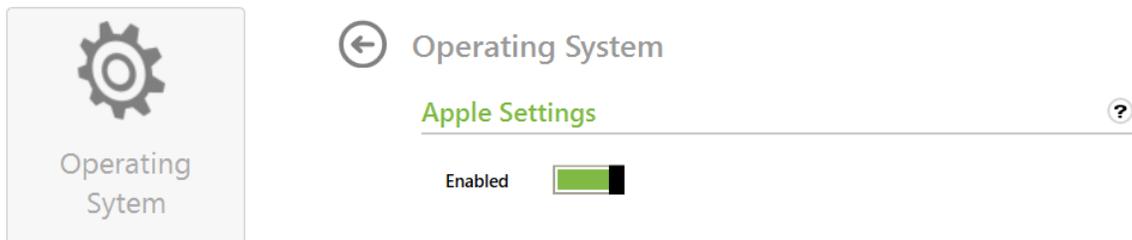
- 3) Un-check the box '**Use flicks to perform common actions**'
- 4) Click the **Apply** button and then the **OK** button.

5.0 Configuring for Use with a Mac

To use the ShadowSense frame on a Mac OS, you must first disable multi-touch, as Mac OS can only recognize a single touch at a time, similar to a mouse. To do this, open up Dashboard and select the **Enable Features** button from the configuration view. In this tab you will want to switch the **Multi Touch** parameter to “Disabled”. This is done by clicking the slider.



If the ShadowSense frame is used on a Mac OS system with a version of 10.9 or earlier, there can be an offset between the touch location and where the mouse cursor is reported. This offset is due to a difference in the co-ordinate system between Mac and Windows PCs. To fix this, select the **Operating System** button from the configuration view. Here you will find the **Apple Settings**, enable this feature by clicking the slider.



6.0 Unable to Run Dashboard

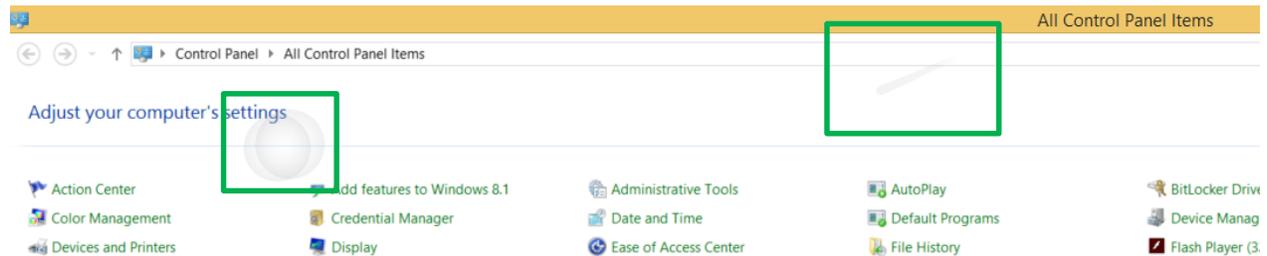
Dashboard requires .NET Framework 4.5 in order to run. If you are unable to run the Dashboard after installing it you must ensure the framework is installed on your PC. This can be done by first locating the Dashboard directory that was created during the initial installation. In this directory you will find a folder called “Redist”. This folder should contain 3 files as shown in the following image.

| Name | Date modified | Type | Size |
|---|----------------------|-------------|-----------|
|  dotNetFx45_Full_x86_x64 | 2015-04-15 12:02 ... | Application | 68,359 KB |
|  vcredist_x64 | 2012-04-23 11:06 ... | Application | 5,585 KB |
|  vcredist_x86 | 2012-04-23 11:06 ... | Application | 4,955 KB |

Once the Redist folder is open and the 3 files can be seen, they must all be installed. These installers are smart and will let you know if they are needed on your machine.

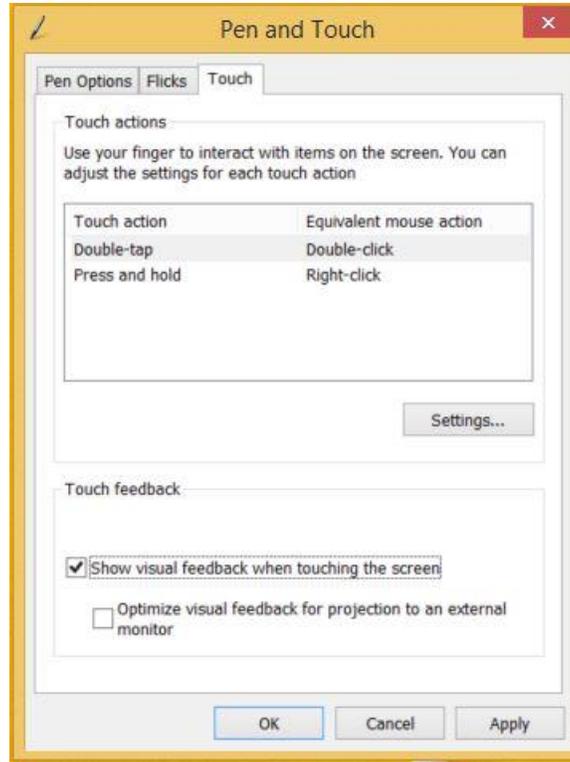
7.0 Touch Visual Feedback

The touch point on the screen can be shown in two different ways. It can appear as a disappearing streak indicating the touch is moving on the screen or as a translucent bubble to show when the touch is still, as shown below. This configuration allows the user to clearly track their movements on the screen, however; it is more difficult to identify when there is a misalignment in touch calibration.



Touch points can also be represented by a small diamond. Although this image is smaller, it allows the user to clearly see when the screen needs to be calibrated.

To change from one configuration to the other go to Control Panel and select **Pen and Touch**. In the **Pen and Touch** window, select the **Touch** tab. Under **Touch Feedback**, check the **Show visual feedback when touching the screen** box for the disappearing streak and bubble or leave it unchecked for the diamond. The **Touch Feedback** box is shown below.



8.0 Baanto Tech Support

If you have bought the item directly from Baanto please contact techsupport@baanto.com for issues not listed in this document. You may also contact your local sales representative for immediate help.