# **Onetouch Technologies Co., Ltd.**



# **CA Drivers Manual**

# Windows® 2000, XP, 98se, ME RS-232, USB, PS/2

Rev 6.20

**Document Revision and Copyright** 

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# Installation notes: BEFORE YOU PROCEED!

As the CA controllers and drivers become more and more sophisticated, it is now more important than ever that your system is set-up properly. Please review the following to insure that your system is ready.

Onetouch controllers are universal by design. This means that the controller may be configured for any number of touch screen types as well as communication and power settings. Please check your CA controller board to insure that the user configurable configuration settings are set correctly your application. You may find the users manual for each of Onetouch controller board at: <u>www.onetouch.com.tw</u>. Select the products tab and then proceed to the appropriate CA controller product.

Make sure that you do not have another manufacturer's touch screen controller driver installed on your system. Many touch screen manufacturer's un-install programs do not completely remove all components of there drivers. Please review the associated drivers' manuals and/or contact the driver manufacturer to learn how to completely remove their driver programs from your system. In most cased this information is available from the manufacturer's web site.

Onetouch drivers use your display driver software settings to accurately configure various touch screen driver setup files. Make sure that your display and your display driver cards are installed properly before installing any CA touch screen controller drivers. If your display's are not configured and working properly prior to loading the CA controller drivers, the CA controllers will not function properly.

Now that you have double checked your system settings and have verified that your system is working properly, proceed with the CA controller driver installation procedure.

## Installing the CA driver:

1) Connect the CA controller(s) to your computer. (See your user's manual for details). If this is a multi-monitor application make sure all controllers are connected before you install the CA driver.

\* You will have to install the driver for each instance of a Serial or PS/2 controller. \*\* You will only need to install the driver once for multiple USB

controllers.

2) Turn on your computer.

If you are using a CA-xx USB Windows will load a temporary driver. Wait until Window's completes this process.

3) Run the "Setup.exe" program which was provided with the Onetouch driver's disk or from the directory which contain your CA driver files.

Note: If Windows asks if you want to allow an unsigned driver to be installed: accept, and continue.

Welcome to Onetouch installation screen will appear. Follow the directions on the screen. Click "Next"

	Instructions 1. Select the controller t 2. Select controller inter	ype. face type.
Onetouch.	Controller Type	ler
Welcome Accept HEULA Select Controller	Controller Interface	Autodetect
Configure Install	C USB	
10/12 BIT Serial	C PS/2	

Onetouch. Welcome Accept HEULA Select Controller Configure Install	Press the PAGE DUWN key to see the rest of the agreement End-User License Agreement (EULA) PLEASE READ THE LICENSE AGREEMENT END-USER LICENSE AGREEMENT FOR HAMPSHIRE IMPORTANT: READ CAREFULLY: This Hampshire End- User License Agreement ("HEULA") is a legal agreement between you (either an individual or a single entity) and Hampshire Company, Inc. for the Hampshire software product identified above, which hiculdes computer software and may include associated media, printed materials, and "online" or electronic documentation (" SOFTWARE PRODUCT"). The SOFTWARE PRODUCT also includes any updates and supplements to the original SOFTWARE PRODUCT provided to you by Hampshire. Any software provided along with the SOFTWARE PRODUCT that is associated with a separate end-user license agreement is licensed to you under the terms of that license agreement by installing, copying, downloading, accessing or otherwise using the	
	I accept all of the terms of the above License Agreement	i)

### **Onetouch End User License Agreement:**

In order to proceed with the installation process you must agree to Onetouch's license agreement.

Onetouch drivers are available at no charge to Onetouch touch screen controller board or chip customers only. Any unlawful use of Onetouch drivers is in strict violation of the United States and international copyright laws. Please contact Onetouch if you have any questions regarding the license agreement.

USING A ONETOUCH DRIVER WITH ANY THIRD PARTY TOUCH SCREEN CONTROLLER IS STRICTLY PROHIBITED

Click "Next"

# Select CA controller type:

The 12 or 10 bit controller radio button is automatically selected for you.

If you are using a CA touch screen controller for RS-232 you may select the auto detect button to find your controller and set the appropriate settings. See next page for selecting the communication interface.

Onetouch's standard driver supports all Onetouch Capaticive touch screen controllers.

Click "Next" (If autodetect is used it will automatically take you to the next screen)

	Instructions     I. Select the controller typ     2. Select controller interfa	pe. ce type.
netouch.		
	Controller Type	
	12 or 10 Bit Controlle	r
Welcome	Controller Interface	
Accept HEULA	Serial (RS/232)	Autodetect
Select Controller	-	
Configure	C USB	
Install		
10/12 BIT	C PS/2	
Serial		
	1	

Dnetouch.	Instructions Touch screen driver installation configuration is now complete. Press "Finish" to install the touch screen driver.
Welcome Accept HEULA Select Controller Configure	The touch screen tray application automatically recalculates coordinates when the screen(s) are resized or rotated. The process runs in the background and is configurable by right-clicking the Dnetouch System tray icon.
Installing Touch Sci Installation F 9600 bps	reen Driver

# Automatically detect a serial CA controller:

Selecting the "autodetect" option will automatically detect all of the CA, RS-232 touch screen controller products. USE AUTODETECT FOR RS-232 (SERIAL) COMMUNICATION ONLY.

or,Select Serial ( $\dot{\text{RS-232}}$ ) to manually configure the communication settings.

If you are using a USB controller select USB. DO NOT USE AUTODETECT FOR USB.

If you are using a PS/2 controller solution, select the PS/2 controller interface option to load the appropriate device driver. DO NOT USE AUTODETECT FOR PS/2.

## Manual serial controller set up:

To manually install your CA serial controller select the "Serial" communication radio button and then select "Next" to manually select Enter the appropriate settings.

If you have a custom controller from Onetouch that is set to some other baud rate. Select the appropriate baud rate here.

If you are using the CA capacitive controller select the "Capacitive Controller" box to enable the capacitive controller functions in the control panel.

Select "Next"

Onetouch.	Instructions 1. Select the communication port that your touch screen controller is connected to. 2. Select the baud rate that your touch screen controller is configured for.	
	COM Port	С гом 5
Welcome	C COM 2	С сом 6
Accept HEULA	C COM 3	C COM 7
Select Controller	C COM 4	с сом в
Configure	Baud Rate	Advanced
Install	C 2400 💽 9600 (default)	IRQ 👻
10/12 BIT Seriel	C 4800 C 19200	Base 💌
COM 1 9600 bps	Capacitive Controller Check the box if you have a Capacitive Controller Capacitive Controller	



## Completing the installation process:

Once the installation process is complete, Click "Finish"

Reboot your computer when prompted to do so.

#### Notes:

When your computer reboots, the touch screen will be functional. However, it will not be calibrated. You must calibrate the touch screen by running the calibration routine before the touch screen will work properly.

See next page for calibration options.



# Configure and calibrate your touch screen:

Use the CA control panel to configure and calibrate your touch screen.

The control panel ludes settings for: Touch screen display selection Calibration Click Settings Touch Settings Capacitive Settings

To run the CA control panel:

Run the Onetouch CA control panel: Start> Programs> Onetouch CA Control Panel

If you do not interact with the control panel within 10 seconds the Onetouch calibration program will automatically be launched to allow you to calibrate the touch screen.

# **Configuring for Multi-monitor:**

If you do not have a multi-monitor application, skip to the next section.

A graphic representation of the monitors installed on your system will be displayed. NOTE: Microsoft® does not support multi-monitor for Win98.

Select the image of the display whose properties you would like to adjust. Once a monitor image is selected all subsequent configuration settings will be associated with that monitor.

Once you have configured one of the monitors, select the other display images to adjust its associated properties.



Screen Selection	Calibration Click Set	ttings   Touch Settings   Capaciti	ve
	Touch (or click) the ca the tou Administrator A	libration target to calibrate ch screen. ccess is Required.	
	Configure	Test	
Configure	e the calibration type and offset	Test touch screen calibration	n.

# Calibration Tab:

Before you start using your touch screen you must calibrate it to your monitor. This process is used to align the touch screen overlay to specific points displayed on your screen.

Configure: The configure button will allow you to set the calibration variables used to most accurately calibrate you touch screen to your display. See "Calibration Options" below for details on the available options.

Test: This is a simple drawing program that allows you to test your calibration to insure that you have accurately calibrated your touch screen to your display.

# Calibration "Configure" Button:

Three point calibration: Quick calibration of a known good touch screen overlay. No correction. May be used to evaluate inherent touch screen linearity.

Four Point Calibration (Default): Will compensate for skew, and some edge linearity anomalies. Best general calibration.

Seven Point Calibration: More accurate than 3 point calibration. Helps calibrate screen to the edges. No correction.

Twenty point calibration: Provides the highest level of touch screen linearization and skew correction. Should be used to get the best possible calibration. May also be used to extend the life of a failing touch screen.



Onetouch Toucl	n Screen Contr	ol Panel Re	v 6.20cs	
Screen Selection	Calibration Click	< Settings   To	uch Settings   Capa	acitive
	Touch (or click) th the Administra	e calibration ta touch screen tor Access is R	rget to calibrate required.	
	Configure		Test	
Configure	e the calibration typ and offset.	be Test	touch screen calibra	ition.
÷		ОК	Cancel	Apply

#### SELECT THE LARGE TARGET TO CALIBRATE



Once you have selected the parameters for calibration in the "Configure" button select "OK" and touch or click the large calibration target to begin the calibration process.

## **Calibration Routine:**

As each target is displayed on the screen TOUCH and hold the center of each target as directed by the text displayed adjacent to each target.

Touch the center of each target as accurately as possible. Onetouch calibration targets have been specially developed to assist you in calibrating your touch screen as accurately as possible.

Touch and hold the center of each calibration target until it shrinks and the "Hold" text changes to "Release".

The calibration screen will automatically time out and return you to the control panel if the first point in not touched within 10 seconds. This time-out feature insures that you can exit the calibration screen in the event that you have a miscalibrated the touch screen or the touch screen has been damaged or disconnected from the host computer. П



## In Process Calibration Test:

This is the last screen displayed in the calibration process.

Touch the screen and notice if the calibration target is displayed under your finger or stylus. If the target appears directly under your finger, select the "Accept" button.

If the target does not appear directly beneath your finger or stylus, select the "Cancel" button, reconfigure your calibration options and recalibrate until you get an acceptable calibration. You may adjust the "Offset", or try the 4 point and/or 20 point calibration.

Select "Accept" to apply and record your calibration data. Select "Cancel" to return to the calibration tab. Once you return to the calibration tab, select, "OK" or "Apply" to save your settings.

Special Note: If you have multiple monitors return to the "Screen Selection" tab and select another monitor to calibrate following this same process for each monitor.

## **Drawing Test:**

Once you have calibrated your touch screen, you may select the "Test" button located on the calibration tab of the control panel.

This is a simple drawing program that you may use to determine if you touch screen is working properly.

Draw on the screen with your finger or stylus and notice if the screen is displaying your drawing accurately.

Click or touch "Quit" to exit the drawing test screen.

Drawing Test

Clear Quit

netouch Touch Screen Control Panel Rev 6, 20a	
Screen Selection   Calibration Click Settings   Touch Settings   Capacitiv Right-Click Settings	7
Right-Click Area 0 0.00 35	J est.
Double-Click 0 25.00 36 Area <>>>Double-Click>>>Speed <	
OK Cancel	Apply

# **Click Settings:**

#### **Right Click Area**

The event area should be set to an area that is slightly larger than the activator tip. If the activator is a finger tip, the right click area should be as big as your finger tip.

#### **Right Click Options**

Onetouch developed the "timed hold" right click mouse event. This allows the user to initiate a "right click" by holding down a touch point for a specified period of time. Check the "Enable right click emulation" box to enable the right click option, then, set the "Right-Click Delay" value to the preferred time needed to produce a right click event.

#### **Double Click Area**

Set the area that will allow for a double click event. This area should be set to an area that you can accurately touch multiple times.

#### **Double Click Speed**

Set this to allow a sufficient amount of time needed to perform a double touch in the specified area.

Click or touch "Apply" to apply your selection. "OK" to apply and exit the control panel.

## **Touch Settings :**

Touch Sound: Check "Enable touch sound" to enable a beep when the touch screen is touched.

Normal: Emulates a standard mouse. Selecting "Normal" will allow for single click, double click, drawing, dragging and right click option (if right click is enabled).

Touch down will allow for a click event to take place at touch down. You will not be able to draw or drag if this option is selected.

Touch Up: Touch sent only at touch up. Disables right click and double click functions.

Click or touch "Apply" to apply your selection. "OK" to apply and exit the control panel.

Touch Mode	nd
C Touch down	Air reacures are available (deradity) Touch sent only at touch down. All other features are available
C Touch Up	Touch sent only at Touch-Up. This disables the right mouse click option

These cont The control	rols should be used with the capacitive touch screen controller only. Iler MUST be calibrated prior to using these controls.
Ca	pacitive Controls Disabled
	Sensitivity Adjustment
	Sensitivity (Percentage of Base)
	More Sensitive
	Less Sensitive
	Settings must be tested before saving
	Test Settings   Save Settings
	Test Settings Save Settings

## Capacitive Tab Disabled :

A CA-C controller must be installed!

If you do not have an Onetouch CA capacitive touch screen controller connected to your system or you have not calibrated the CA-C controller this tab will be inoperable.

To enable this tab you must have a CA capacitive controller connected to you system and you must calibrate the panel.

# For Capacitive Applications Only:

You must calibrate your capacitive controller before using the capacitive tab options. Failure to calibrate the touch screen first will disable all capacitive tab functionality.

#### Sensitivity Settings

Use this adjustment to fine tune the pressure required to activate the capacitive touch screen. Experiment with these settings to identify the correct setting for your capacitive touch screen.

### Test Settings Button:

Press this button to temporarily save and then test the sensitivity adjustments you make. Changes will not be permanently saved until you select "Save Settings".

### Save Settings

Once you have modified the sensitivity settings to meet your requirements, press the "Save Settings" button to save the settings to RAM. The changes will become permanent until you modify them again.



### Uninstalling the Driver :

1) Open Add/Remove Programs (Start Menu -> Settings -> Control Panel>Add/Remove Programs)

2) Select "Touch Screen Controller Uninstall" from the list. This will run the Onetouch uninstall program.

3) Click "Remove" button

Or, run the Onetouch un-install program file: tsun10.exe. This file is located in the "common" directory of the files you received from Onetouch Technologies Co., Ltd .

4) Read the Message Box, accept.

5) Reboot the system when prompted

# **Troubleshooting :**

Check these first: 。

Touch screen connections:

Check your touch screen overlay connection to make sure that it is connected to your CA controller properly. Refer to the CA controller user's manual for the proper pin-out for your controller. <u>www.onetouch.com.tw</u>

Driver not installed

A USB controller will operate in a default mode when first plugged in; however, it will not be calibrated. You must install the Onetouch CA driver to calibrate the touch screen as well as, enable all other Onetouch CA features.

Issue	Cause	Solution
Touch screen does not respond.	<ol> <li>Controller is not plugged in.</li> <li>Touch screen not plugged in.</li> <li>Driver has been uninstalled.</li> <li>Hardware failure.</li> </ol>	<ol> <li>Check connections between the touch screen and the controller, as well as between the controller and computer.</li> <li>Plug the controller into a different port</li> <li>Reinstall the CA driver.</li> <li>Contact Onetouch Technologies Co., Ltd .</li> </ol>
Touch screen moves, but it does not follow the stylus	<ol> <li>Controller not calibrated.</li> <li>Driver Not installed.</li> <li>Touch screen is not plugged in correctly.</li> </ol>	<ol> <li>Run the calibration through Onetouch CA Control Panel</li> <li>Install the CA driver</li> <li>Verify the Touch screen pin-out.</li> </ol>
When calibrating an "Error in Calibration" message appears.	<ol> <li>The driver is not installed correctly.</li> <li>The touch screen is not connected correctly.</li> </ol>	<ol> <li>Verify the pin-out of the controller matches the pin- out of the touch screen</li> <li>Uninstall the driver then reinstall the driver.</li> </ol>