



eTurboWare

For Windows95/98/Me

User's Guide

突破 光電科技股份有限公司
eTurboTouch Technology Inc.

2001/12/19

The information in this document is subject to change without notice. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without the express written permission of eTurboTouch Technology, Inc. eTurboTouch may have patents or pending patent applications, trademarks, copyrights, or other intellectual property rights covering subject matter in this document. The furnishing of this document does not give you license to these patents, trademarks, copyrights, or other intellectual property except as expressly provided in any written license agreement from eTurboTouch.

The information provided in this document is intended as a guide only. For the latest detailed engineering specifications, please contact your eTurboTouch Systems Application Engineer. eTurboTouch Technology is committed to continually improving product designs, as a result, product specifications may be subject to change without notification.

Copyright

©2000-01 eTurboTouch Technology, Inc. All rights reserved.

Trademark

eTurboTouch, the eTurboTouch logo, are registered trademarks of eTurboTouch Technology Incorporated. Microsoft and Windows are registered trademarks of Microsoft Corporation.

2001/12/19

Contents

1. Preface.....	5
<i>Introduction.....</i>	<i>5</i>
<i>Installation.....</i>	<i>6</i>
<i>Uninstall the Software.....</i>	<i>6</i>
<i>Support Services.....</i>	<i>7</i>
2. Using eTurboWare.....	8
<i>Using eTurboWare.....</i>	<i>8</i>
<i>Controller List.....</i>	<i>9</i>
<i>Calibrating Your Screen.....</i>	<i>10</i>
<i>2-Point Calibration.....</i>	<i>11</i>
<i>5-Point Calibration.....</i>	<i>12</i>
<i>25-Point Calibration.....</i>	<i>13</i>
<i>Draw Test Window.....</i>	<i>14</i>
<i>Touch Setting.....</i>	<i>15</i>
<i>Touch Mode.....</i>	<i>16</i>
<i>Right Click Tool.....</i>	<i>16</i>
<i>Touch Sound.....</i>	<i>17</i>
<i>Double Click.....</i>	<i>17</i>
<i>25pt Parameters.....</i>	<i>17</i>
<i>eTurboWare Mouse Icon.....</i>	<i>18</i>
<i>On-Line Help.....</i>	<i>18</i>
<i>Exiting the eTurboWare.....</i>	<i>19</i>
3. Troubleshooting.....	20
<i>Important Notice.....</i>	<i>20</i>
<i>Q & A.....</i>	<i>21</i>

1. Preface

The eTurboTouch touch panel is the most intuitive pointing device available for the PC series of computers and monitors. Touch panels make using computers as simple as touching the screen. It is ideal for a variety of applications, including entertainment, training systems, information, point-of-sale, factory automation, laboratory and medical instrumentation, interactive selling demonstrations, educational programs and so on.

To use the Touch panel with your host computer or device, you have to install controller, the touch panel and the corresponding software. For the instruction of installing touch panel, refer to *Sensor Kit Installation Guide*. For the hardware connections for your controller, please refer to the *Controller reference guide*.

Introduction

eTurboWare converts the data from the touch panel to emulate input from a mouse device. eTurboWare for Windows is the software for the eTurboTouch touch panel. It provides full touch panel functionality for all applications running under Microsoft Windows 9X, Windows NT and WindowsMe.

After you finished installing eTurboWare, you can select and drag objects using the touch panel. To make a selection, simply touch the screen slightly.

This manual provides the following information and will be described later by chapters.

- Install this software
- Use the touch panel (control panel) to customize your work environment
- Troubleshooting

.. Important: Before installing software, you must complete the appropriate hardware connections for your controller and touch panel.

Installation

To install the eTurboWare for Windows9X and WindowsMe, please follow the steps below:

1. Make sure that there are no other applications open.
2. Insert the eTurboWare CD into your CD-ROM drive.
3. Run “install.exe” from the CD.
4. The setup program starts. Please follow the onscreen instructions to install the application software.
5. After the installation is finished, please **restart** your system to let Windows detect and load driver automatically.

When you installed a brand-new controller, you have to do 2-point calibration first before the first reboot. Please use mouse or keyboard to finish the work.

Uninstall the Software

The Uninstall program removes all software components from your computer. These components include driver files, directories, program folders, and folder items. The Uninstall program also removes all entries from the system registry files.

To uninstall the program:

1. Make sure there is no eTurbo’s application open.
2. Click on Start –Programs –eTurboWare –Uninstall eTurboWare.
The path will be different if you performed a custom installation and chose a custom name for the program group.
3. Follow the onscreen instructions to remove the program.

.. **Note:** If you have a serial or PS/2 controller, you must restart your system once the Uninstall is complete. The driver remains in use until you restart the system.

Support Services

eTurboTouch provides technical support to help you solving the problem that you might encounter. Before you contact to our service center, please write down,

- The type of the sensor that you have
- The version of the driver
- The firmware version for the controller
- Description of the problem briefly

Preparing the above information can save the time to help you solving the problem. You can contact to us by giving a phone call, sending a fax, or electronic mail.

Tel: 886-3-4623889

Fax: 886-3-4611237

Website: www.eturbotouch.com.tw

E-mail Address: touch@eturbotouch.com.tw

2. *Using eTurboWare*

You can change the software settings for your system, such as changing the calibration methods, touch modes, cursor options, hardware, and diagnostic tools to suit your preferences.

To make sure you can invoke command with a touch, two steps listed below should be done.

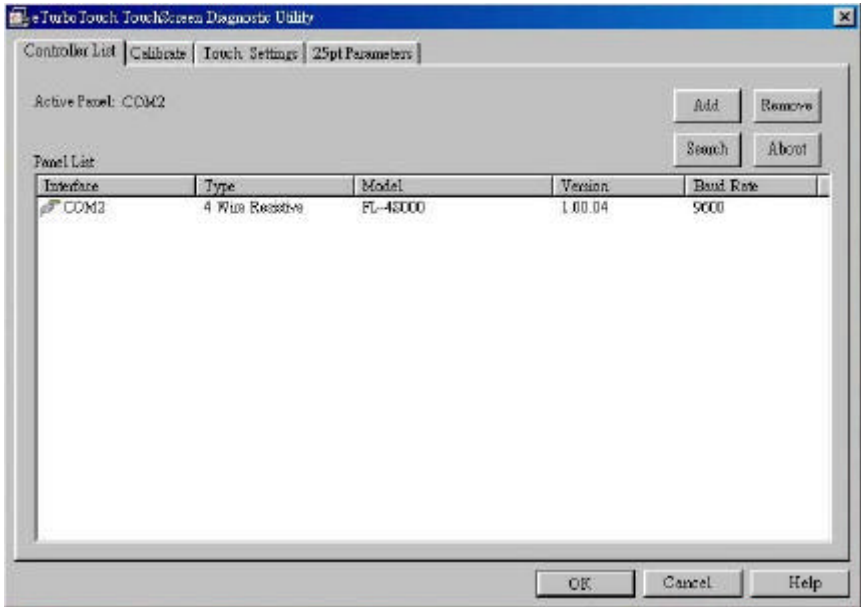
- Calibrating your screen, refer to page 10
- Configuring your mouse, refer to page 15 – *Touch Setting*

Using eTurboWare

To open eTurboWare, please click Start – Program – eTurboWare and choose eTurboWare For Window 95.



The Diagnostics Screen will be shown as the following. There are four main items that you have to pay attention – Controller List, Calibrate, Touch Setting and 25pt Parameters.



Controller List

When you open the eTurboWare, the first that you will see is the Controller List dialog box. It is used to find the interface for communication such as RS232 COM Port Setting for your sensor.

- Interface -** It shows the current active panel that your computer is connected. It is recommended to use COM1 for installing your sensor.
- Type -** Shows the type (4 wire resistive, 6 wire resistive or others) of the sensor.
- Model -** Shows the model name of your sensor
- Version -** Shows the version number of the firmware.
- Baud Rate -** The standard baud rate for the controller is 9600, which is generally acceptable for most applications.

In addition, there are four buttons – Add, Remove, Search and About in the right side of the dialog box.

- Add -** To check how many devices installed on your computer,

click this button. The software will detect automatically and show the result in the dialog box.

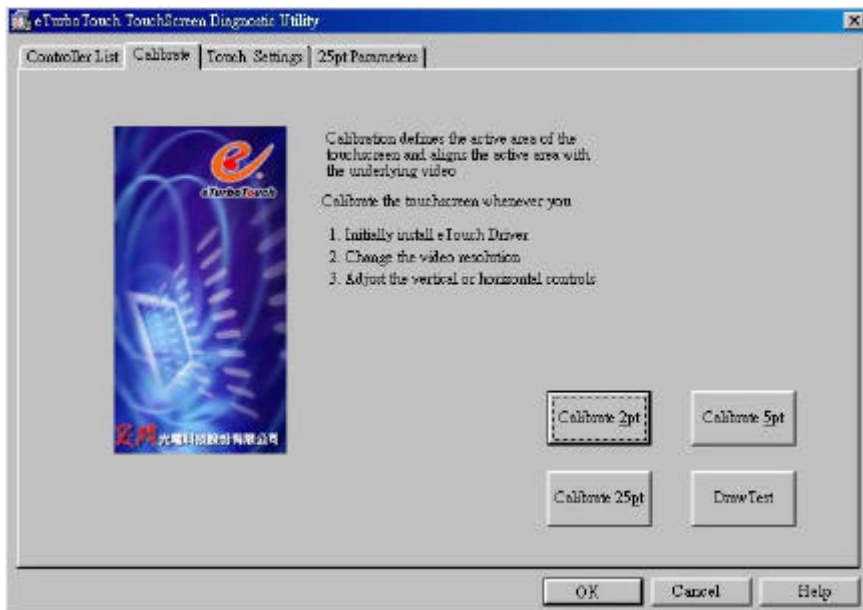
- Remove -** This button allows you to remove current device setting on the dialog box.
- Search -** Search button allows you to search which I/O interface that you are using for devices.
- About -** This button shows the current version information for eTurboWare.

Calibrating Your Screen

To make the touch panel to locate the correct position for each touch, you have to do calibration after the hardware and software installation.

When should you calibrate the screen:

- The first time you run eTurboWare, you have to do 2 points calibration first.
- Each time you change the video resolution (for example 640x480 or 800x600) or video mode of your monitor.
- Any time you change the size of the video image by adjusting the horizontal and vertical controls on your monitor.
- If the cursor does not follow the movement of your finger (pointing device), or can not reach the edges of the screen.



2-Point Calibration

To have a 2-point calibration, please

1. Select **Calibrate** Tag from the Diagnostic dialog box. There are four buttons that you can choose on the right side of the dialog box.
2. Click on the “Calibrate 2pt” button. The screen with 2 points for your calibration appears.



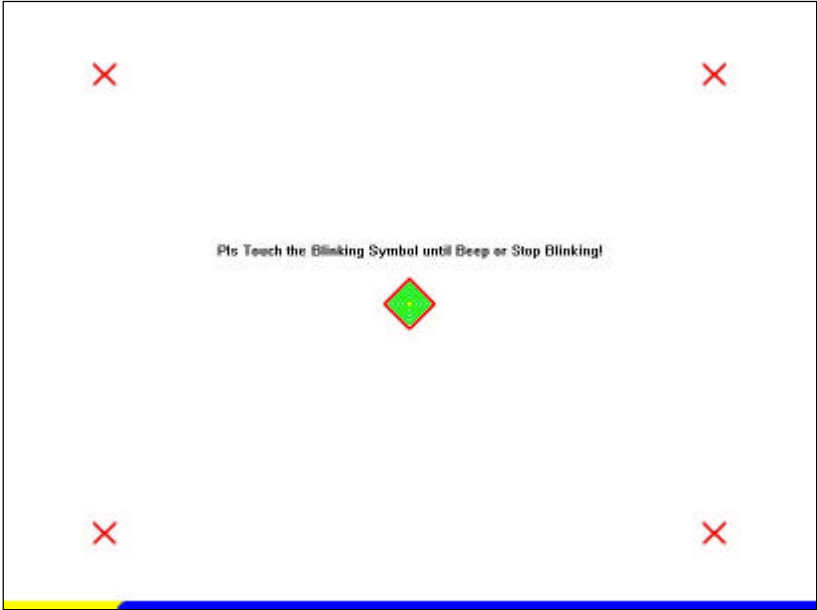
3. Touch on the blinking one with your finger or pointing device for a while. If it is OK, the point will change into green “X” and keep steadily.
4. Now, finish the second point calibration.
5. You have done the panel mapping.

5-Point Calibration

To have a simple mapping with linearization compensation, execute 5-point calibration to get the result. When you select this function, 5 points display on your screen. Please touch on it in a while until it changed color into green (means calibration of that point is OK) and then release your finger or pointing device.

To have a 5-point calibration, please

1. Select **Calibrate** Tag from the Diagnostic dialog box. There are four buttons that you can choose on the right side of the dialog box.
2. Click on the “Calibrate 5pt” button. The screen with 5 points for your calibration appears. The center point blinks to push you to do the calibration.



3. Touch on the blinking one with your finger or pointing device for a while. If it is OK, the point will change into green “X” and keep steadily.
4. Follow the instruction on the screen to touch every point..
5. When you finish these steps, you have done the panel mapping.

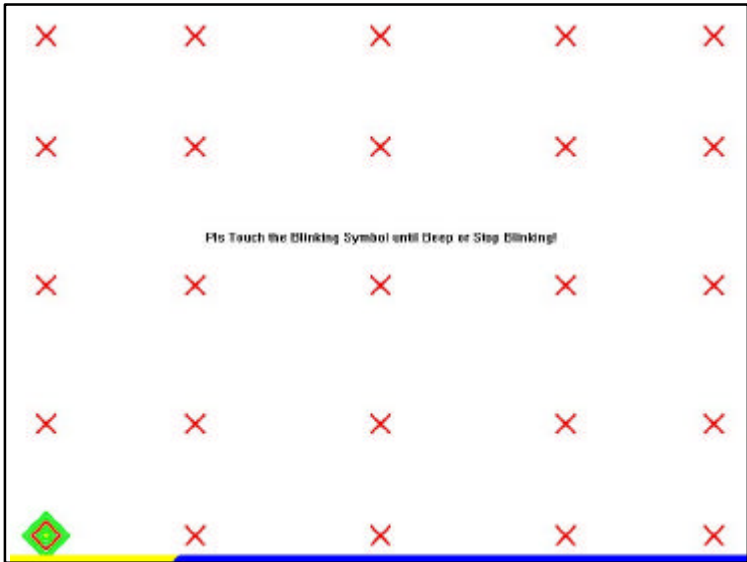
25-Point Calibration

This command defines the X and Y axis position for a touch. When you select this command, 25 points with black background will display on your system screen. The point to the left-bottom side will blink to ask you to do the calibration. Please touch on it by your finger or any point device in a while until it changed from blinking into steady “X”. For calibration, you have to touch 25 points one by one.

.. Note: As this command is used for compensation if the touch panel got some problem of bad linear, it is not recommended to invoke it.

For 25-point calibration was done by factory as a default setting, in general, you do not need to execute this action again. Yet, if you really want to do, please follow the steps below:

1. Select **Calibrate** Tag from the Diagnostic dialog box. There are four buttons that you can choose on the right side of the dialog box.
2. Click on the “Calibrate 25pt” button. The screen with 25 points for your calibration appears.

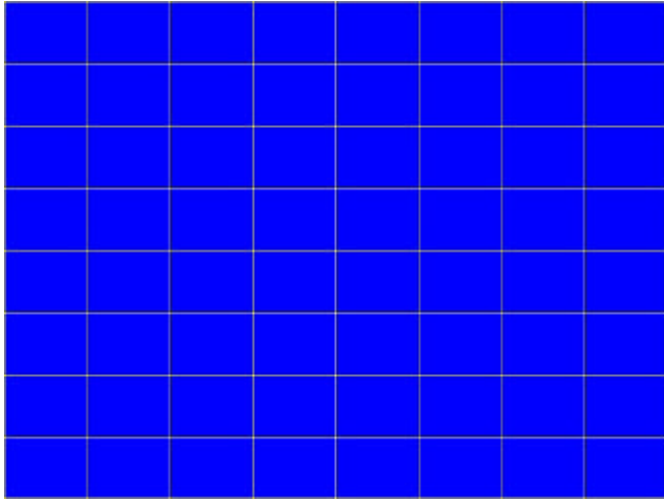


3. Touch on the blinking one with your finger or pointing device for a while. If it is OK, the point will change into green “X” and keep steadily.
4. Follow the instruction on the screen to touch every point.
5. When you finish these steps, you have done the panel mapping.

Draw Test Window

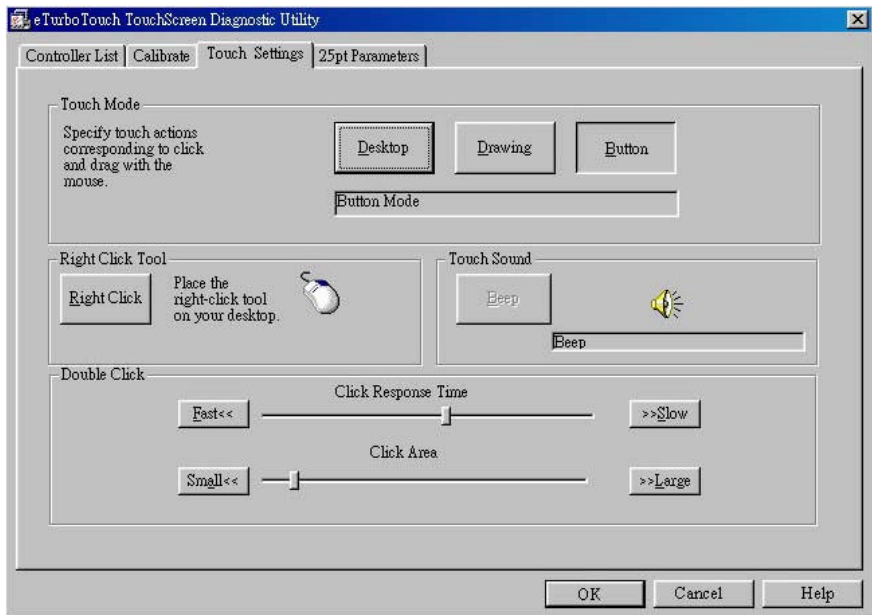
The Draw Test Window is provided for you to do simple test of finger touch. You can draw lines with your finger or any pointing device.

To exit this window and back to the Diagnostic dialog box, please press <ALT> +<F4> simultaneously.



Touch Setting

You might want to configure some settings after installing eTurboWare. Touch Setting allows you to set your touch mode, Right Click Tool, Touch Sound and Double Click.



Touch Mode

There are three selections for the Touch Mode,

- Desktop Mode** - It is useful for general-purpose desktop applications. In Desktop mode, a touch positions the cursor much like a mouse. Holding the touch is equal to pressing and holding the mouse button. Lifting the touch off is equal to releasing the mouse button.
- Drawing Mode** - Drawing mode is useful for draw and graphics applications. In Drawing mode, a touch is equal to pressing and holding down the mouse button. Lifting off your touch is the same as releasing the mouse button.
- Button Mode** - In Button mode, touching the screen is equal to pressing and/or releasing the mouse button.

Right Click Tool

This command applies the right mouse button function for a touch. The limitation is that it can be used just once. If you want to apply the function for next use, you must choose this command again.

Touch Sound

Defines the sound type for every finger touch.

Double Click

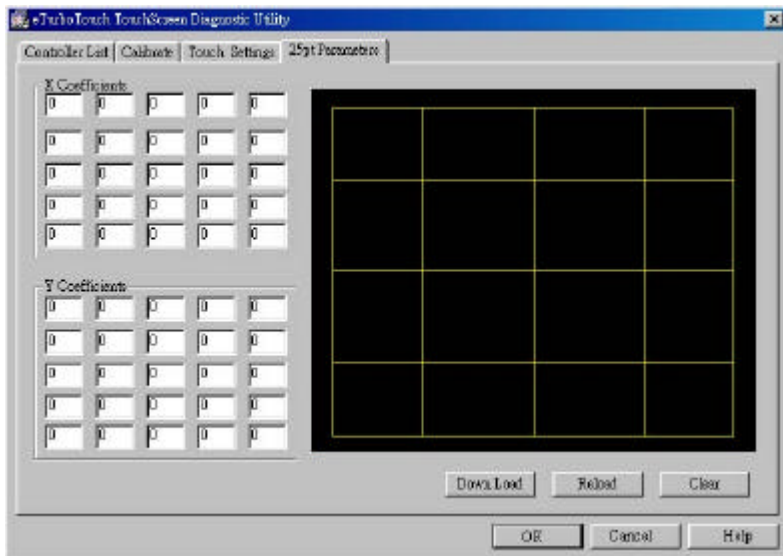
Click Area -

Defines the area (range) in which you must touch the screen for your system to interpret your actions as a click. Adjust it to the right to set the range for each touch be larger; adjust it to the left to set the range for each touch be smaller.

Click Response Time - Defines how quickly you must touch the screen for your system to interpret your actions as a click. Adjust it to the right to set the speed for each touch be slower; adjust it to the left to set the speed for each touch be faster.

25pt Parameters

This command provides the hardware information of X and Y coefficients.



Download – Adapt the previous saved information.

Reload – The information that you erased by clicking on Clear button can be reloaded with this button.

Clear – Erase current information.

eTurboWare Mouse Icon

A floating mouse icon to the right-bottom of the desktop can be invoked by choosing eTurboWare Monitor command.



Click on the mouse icon. There are three commands that the mouse icon offers.



Right Button - This button can apply the right mouse button function for a touch. The limitation is that it can be used just once. If you want to apply the function for next use, you must choose this command again.

Button - This command shows a floating mouse icon to the right-bottom of the desktop.



Exit - Closes the eTurboMonitor function. The mouse icon on the right-bottom will disappear.

On-Line Help

eTurboWare will offer an on-line help for your reference whenever you want to know the detailed information about each commands.

Exiting the eTurboWare

When you finish all the setting adjustments, you can exit the Diagnostic dialog box. Choose **OK** to make all the settings take effect. Or select **Cancel** to give up all the settings.

3. *Troubleshooting*

This chapter will provide you some notice and specific information for your reference.

Important Notice

- If you have to do a 25-point calibration, please do the 5-point calibration first and clear the hardware information recorded in the controller. To do this, click the Hardware Information icon – choose “Clean” – click “Download” and quit.
- If you have rotated the sensor for some reason, before using it, please execute 2-point calibration. The 2-point calibration will not affect 5-point and 25-point calibration unless re-calibrated.
- The power for controller is supplied by keyboard PS/2 power. For Wind9X OS, when the system goes into suspend mode, it can be waken up by mouse or keyboard but can not be waken up by a touch (which can call back the system when goes into display protection). To avoid such problem, please provide another DC-5V to the controller.
- For LCD video rotation, it is not necessary to do re-calibrate with 2-point. The LCD video coordinate is separate from touch coordinate.
- The driver/utility v1.05 is compatible with firmware 1.00 and later. Before you install a new driver /utility to your system, please check the controller firmware’ s version. Choose About Touch button from the Controller List dialog box to get the firmware and driver version information.
- The touch panel provides less 1.5accuracy fail message. The 1.5% length of sensor active area and 1.5% wide of sensor active area offset is acceptable. However, the calibration accuracy will affect this result and sensor size. Besides, the larger offset distance will appear.

- Before you install a new driver into your system, please remove the old version first if it exists on your system. The new driver will not replace the old one but create another folder instead.

Q & A

Q: The eTurboWare can not be closed by your touch.

A: As the application utility window (main screen) will interrupt the comport, we strongly recommend – do not launch the application software without a mouse or keyboard installed. Otherwise, you might not close the software properly.

Q: I change a new controller for my touch panel. What thing should I take care?

A: For a brand-new controller, please do 2 points calibration first. Due to the new one has not any data of your touch panel, you have to launch 2 points calibration by using a mouse or keyboard.