TSCB-9516

Drivers Installation Guide

Copyright Notice

This document is copyrighted Novemeber 2001, by Advantech Co., Ltd. All rights are reserved. Advantech Co., Ltd. reserves the right to make improvements to the products described in this manual at any time without notice. No part of this manual may be reproduced, copied, translated, or transmitted in any form or by any means without the prior written permission of Advantech Co., Ltd. Information provided in this manual is intended to be accurate and reliable. However, Advantech Co., Ltd. assumes no responsibility for its use; nor for any infringements of the rights of third parties which may result from its use.

Acknowledgments

TSCB-9516 is a trademark of Advantech Co., Ltd. IBM and PC are trademarks of International Business Machines Corporation. MS-DOS is a trademark of Microsoft Corporation. All other brand and product names mentioned herein are trademarks or registered trademarks of their respective holders.

Part No. 20030000A0 Printed in Taiwan 1st Edition November 2001

Contents

Chapter 1	Introduction	2
Chapter 2	Installation for Windows 95/98	4
2.1	95/98 Installation Steps	
Chapter 3	Installation for Windows NT	8
3.1	Win NT Installation Steps	
Chapter 4	Installation for Windows 2000	12
4.1	Win 2000 Installation Steps	
Chapter 5	Installation for Windows 3.1 & DOS	16
5.1	Win 3.1 and DOS Drivers Installation	
5.2	Identify the communication port and IRQ number	
5.3	Calibration	17
5.4	Initializing the PenMount driver	17
5.5	Demonstration	17
5.6	PenMount DOS driver functions	

Advantech Co., Ltd. www.advantech.com



Introduction

Chapter 1 Introduction

The touch screen drivers for different operating systems are included in the "HMI Products Drivers Utilities" CD-ROM. You could install the touch screen drivers from the utility CD-ROM or a floppy disk drive. If you want to install the drivers from a floppy disk, you need to copy the drivers from the utility CD-ROM first.

Touch screen drivers for DOS, Windows 3.1/95/98/2000 and Windows NT are now supported. The touch screen drivers for the supported OS are under the following path:

Windows 95, 98 driver: \Touchscreen-DRV\TSCB-9516\Win9x\

Windows NT driver: \Touchscreen-DRV\TSCB-9516\WinNT\

Windows 2000 driver: \Touchscreen-DRV\TSCB-9516\Win2000\

Windows 3.1 & DOS driver: \Touchscreen-DRV\TSCB-9516\Win31&DOS\

Note:

Following the installation procedures, "D" represents the CD-ROM or floppy disk drive which includes the touchscreen drivers



Driver Installation for Windows 95/98

Chapter 2 Installation for Windows 95/98

2.1 95/98 Installation Steps

- 1. A. Select Start menu and then click Run
 - B. Type D:\Touchscreen-DRV\TSCB-9516\Win9x\setup.exe
 - C. Press OK
 - D. Follow the instructions for the setup processs Adapter

Run	? ×
<u> </u>	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
<u>O</u> pen:	D:\Touchscreen-DRV\TSCB-9516\Win9x\setup.exe
	Run in separate memory space
	OK Cancel <u>B</u> rowse

- 2. A. Click the Detect button
 - B. Press OK and the system will reboot

-Hardware Infomati	on	_ ⊡Serial Por	rt Status
Controller Type:	Unknow	Com	
Firmware:	1000	Com	
Baud Rate:	Unknow	IRQ	5
Status:	Not Loaded	I/O addross	2E8H
Detect		address	
Detect	Advance		User Define

- 3. A. After the system reboots, click Start, Programs, Pen Mount Utili ties, PenMount Control Panel
 - B. Select the Calibrate tab
 - C. Click the Calibrations button on the right

PenMount Control Pane	4	- 🗆 🗙
Configure Calibrate	Setting Draw About	
Initial	Calibration	
		-
initial	<u>Calibration</u>	
	OK Ca	ancel

- 4. A. Use a soft stylus to press the little red dot located above the finger icon
 - B. Repeat the process according to the sequence: top, right, bottom, and left



5. Press OK

PenMount Control Panel	
	Calibration
Initial	Calibration
<u>.</u>	OK Cancel



Driver Installation for Windows NT

Chapter 3 Installation for Windows NT

3.1 Win NT Installation Steps

- 1. A. Select Start menu and then click Run
 - B. Type D:\Touchscreen-DRV\TSCB-9516\WinNT\setup.exe
 - C. Press OK
 - D. Follow the instructions for the setup process

Run	? ×
<u> </u>	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
<u>O</u> pen:	D:\Touchscreen-DRV\TSCB-9516\WinNT\setup.exe
	Run in separate memory space
	OK Cancel <u>B</u> rowse

- 2. A. Click the Detect button
 - B. Press OK and the system will reboote

Hardware Information	(Serial Port Status
Controller Type:	9512	IRQ:
Firmware:	1.00	0x05
i minitaro.	1.00	1/0 Address:
BaudRate:	19200	0x02e8
Status:	Active	COM Port:
		COM4
Detect		

- 3. A. After the system reboots, click Start, Programs, Pen Mount Utili ties, PenMount Control Panel
 - B. Select the Calibrate tab
 - C. Click the Calibrations button on the right

Configure Calibrate Se	etting Draw&Statistics About	
_ Initialize	Calibrate	
	SetDirection	
<u>Initialize</u>	<u>C</u> alibrate	
	OK Cancel	Anniu

- 4. A. Use a soft stylus to press the little red dot located above the finger icon
 - B. Repeat the process according to the sequence: top, right, bottom, and left



Chapter 3 Installation for Windows NT

5. Press OK

PenMount Control Panel	
Configure Calibrate Setting	Draw About
Initial	Calibration
0	
Initial	Calibration
	OK Cancel



Driver Installation for Windows 2000

Chapter 4 Installation for Windows 2000

4.1 Win 2000 Installation Steps

- 1. A. Select Start menu and then click Run
 - B. Type D:\Touchscreen-DRV\TSCB-9516\Win2000\setup.exe
 - C. Press OK
 - D. Follow the instructions for the setup process

Run	? ×
<u> </u>	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
<u>O</u> pen:	D:\Touchscreen-DRV\TSCB-9516\Win2000\setup.exe
	Run in separate memory space
	OK Cancel <u>B</u> rowse

- 2. A. Click the Detect button
 - B. Press OK and the system will reboote

Hardware Information Controller Type: Firmware: BaudRate: Status:	9512 1.00 19200 Active	Serial Port Status IRQ: Dx05 I/O Address: Dx02e8 COM Port: COM4
Detect		🗖 UserDefine

- 3. A. After the system reboots, click Start, Programs, Pen Mount Utili ties, PenMount Control Panel
 - B. Select the Calibrate tab
 - C. Click the Calibrations button on the right

2
ing Draw&Statistics About
Calibrate
SetDirection
Calibrate
OK Cancel Apply

- 4. A. Use a soft stylus to press the little red dot located above the finger icon
 - B. Repeat the process according to the sequence: top, right, bottom, and left



5. Press OK

PenMount Control Panel	
Configure Calibrate Setting	Draw About
Initial	Calibration
Initial	Calibration
	OK



Driver Installation for Windows 3.1 & DOS

Chapter 5 Installation for Windows 3.1 & DOS

5.1 Win 3.1 and DOS Drivers Installation

- 1. A. Insert the driver CD to CD-ROM drive.
 - B. Type

"\Touchscreen-DRV\TSCB-9516\Win31&DOS\install"

- C. A pop-up window will display "Salt International Corp. PenMount Install Utilities. Press ENTER key to allow PenMount install the drivers to drive C or use keyboard to key-in the hard disk drive that you plan to install the driver." Press ENTER.
- D. The pop-up window will ask "Do you want to modify your Autoexec.bat to initilaize PenMount? (Y/N)" Choose "Y" to gener ate the initializing instruction in the autoexec.bat files.
- 2. A. Click the Detect button
 - B. Press OK and the system will reboote

5..2 Identify the communication port and IRQ number

A. For first time installation, or to change PenMount Touch Screen's COM port, use PMDETECT (e.g. C:\PENMOUNT\PMDETECT) to check the COM port and IRQ number automatically. The screen will then show:

PenMount is initialized successfully! Create file "pmouse.cfg". Success. PenMount internal settings: Comm. Port: COM<n> IRQ<n>

B. PMDETECT program is able to skip IRQ detecting if you do not need to detect a specified IRQ number. For example, if you do not need to detect IRQ5, the command is : C:\PENMOUNT\PMDETECT -N5

If you do not need to detect IRQ5 and IRQ9, the command is:

C:\PENMOUNT\PMDETECT -N5 -N9

5.3 Calibration

- A. To adjust touch screen mapping properly for the display, use PM.BAT (C:\PENMOUNT\PM) to do calibration..
- B. Choose "1" DO CALIBRATION (adjust screen mapping).
- C. The message on the pop up window asks you to select video mode number. Select by keyboard to start the calibration, touch the uppercenter point, then right-center point, bottom-center point and leftcenter point in sequence. After calibration, the data will show in the screen. Press any key to continue the progress.
- D. After the calibration, suggest you to test touch screen and display mapped results by choose "3" DRAWING TEST under PM.BAT

5.4 Initializing the PenMount driver

 A. If you don't have the initialization commands in AUTOEXEC.BAT, initialize the PenMount controller before you use the PenMount Touch Screen. C:\PENMOUNT\PMINIT

The display will show the initialization message :

PenMount V7.06 Copyright(c) SALT International Corp. Test:COM<n> IRQ<n> (<n> is the number after PMDETECT done) PenMount communication settings: COM<N> IRQ<n> Baud

Rate: <xxxx>

5.5 Demonstration

To demonstrate or test touch screen operation, select "3" DRAWING TEST in PM.BAT file of Utility Directory. Drawing on screen.

The other demonstration program called "ICECREAM.EXE" in the "PENMOUNT" directory can also be applied.

Now, the PenMount DOS driver is installed.

TSCB-9516 Drivers Installation Guide Advantech Co., Ltd. www.advantech.com

5.6 PenMount DOS driver functions

There are several functions in the PenMount DOS driver. The user is able to change the settings of the following utilities:

1) Show Current Setting

- A. The current setting data could be found from PM.BAT file.
- B. The procedure to get the status is C:\PENMOUNT\PM
- C. Choose "2" to SHOW CURRENT SETTINGS

2) Beep Sound On or Off

- A. Beep sound is able to set ON or OFF with parameter.
- B. Enable Beep Sound command is C:\PENMOUNT\PMOUSE /S
- C. Disable Beep Sound (Default) command is C:\PENMOUNT\PMOUSE

3) Getting current touch's data

- A. To get the touching data, use "PMGET.EXE" utility. This utility is only available for COM 1 or COM 2 port. C:\PENMOUNT\PMGET <COM port>
baud rate>
- B. User will see the touching point address in the pop-up window.