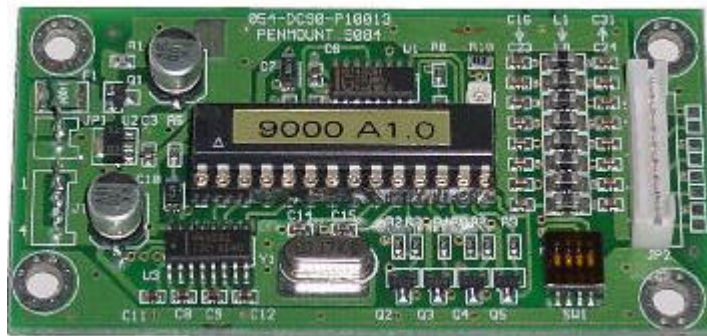


PenMount 9084 Setup and Users Manu

DMC9000 For Windows95 V2.0



PenMount 9084 control board is the new control board from Salt, its touch screen controller is DMC9000 that interfaces analog resistive touch screens to a personal computer through its COM port. PenMount 9084 control board is designed to have a small mechanical size in order to be located inside the system easily. Together with PenMount driver counterparts on various, PenMount 9084 control board becomes the most popular touch screen solution worldwide. It's designed to have LED one board to show the touch status and also bundled with three interface cables, customer only needs to power in 5V to 12V DC power to the board, and via RS-232 interface to computer system, PenMount touch screen solution is in your hand.

Resolution: 10 bit (1024*1024)

PenMount 9084 Control Board Features:

Design for best touch performance and easy configuration

Design for best cost arrangement

Supporting 1024*1024 pen device resolution

Built-in 10-bit A/D converter inside the DMC9000

Fast conversion and transmission, 19200 baud rate fixed

Upgraded noise handling mechanism (3 level scheme)

Fixed and high speed sampling rate

4-wire and 8-wire touch screen supported

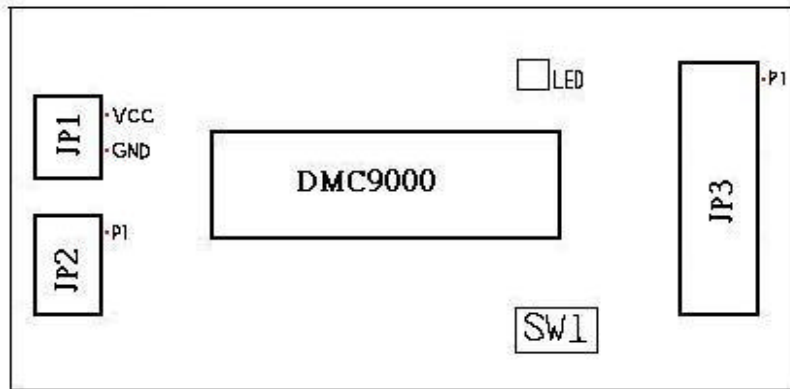
RS-232 interface supported

5V to 12V power input

Power protection fuse to protect the circuit

Touch activated indication LED on board

PenMount 9084 Control Board Description



JP1:

Power cable: 5V to 12V DC power

JP2:

RS-232 cable connector: PIN1: RTS

PIN2: TXD

PIN3: RXD

PIN4: GND

JP3: Touch Screen cable, for 4-wire or 8-wire touch screen

SW1: always set at "ON" for 4-wire or 8-wire touch panel

PenMount 9084 Control Board Hardware Installation

1. *Connect the RS-232 cable to JP2 on the control board.*
2. *Connect the RS-232 cable's DB-9 female connector to a nine pin serial COM port on the back of the computer.*
3. *Connect the touch screen to the controller using one of the controller interconnect cables (4-wire or 8-wire).*
4. *Connect the DC power cable to JP1. (5V to 12V)*

PenMount Windows95 Driver Installation

PenMount Windows95 driver supports Windows 95 system. PenMount Windows 95 driver file detailed contents is list below:

INST32I.EX
SETUP.EXE
_ISDEL.EXE
OS.DAT
LANG.DAT
_SETUP.DLL
SETUP.INS
DATA.TAG
SETUP.INI
_SYS1.HDR
_SYS1.CAB
_USER1.HDR
_USER1.CAB
SETUP.LID
SETUP.BMP
DATA1.HDR
DATA1.CAB
LAYOUT.BIN
CONFIG.INI
README.TXT

There are several functions in PenMount Windows 95 drivers:

PenMount monitor

After PenMount Windows95 driver installed, the PenMount monitor icon will appear on the menu bar of the system. It is easy for user to call PenMount utilities or functions on line.

Auto-detecting the serial port

When install PenMount Windows 95 drivers, the system automatically detects the COM port, IRQ and Base address that touch screen connected to. The auto-detecting function works just fine with COM 1 to COM 4. There are three ways to detect the com port. The first is by 'DETECT' button, it only detect com1 and com2 port. The second is by 'ADVANCE DETECT' button, it is for user who does not know which com port touch screen connected to, this 'Advance Detect' function could detect automatically. The third is by 'User Define' button, user could also input data by keyboard. For the detail explanation, refer to the installation procedures in this chapter.

Beep sound

Two kinds of beep sound could be selected, short or long beep sound.

Initialization PenMount controller

This makes sure the PenMount controller chipset initialized properly.

Hiding cursor

For some special application programs, cursor can be hidden.

Cursor offset

For some applications, user can offset the cursor.

Right button selectable

This emulates mouse right button function on touching.

Double click speed and width adjustment

Drawing test

Uninstall utilities

Use this to remove PenMount Windows95 driver from system

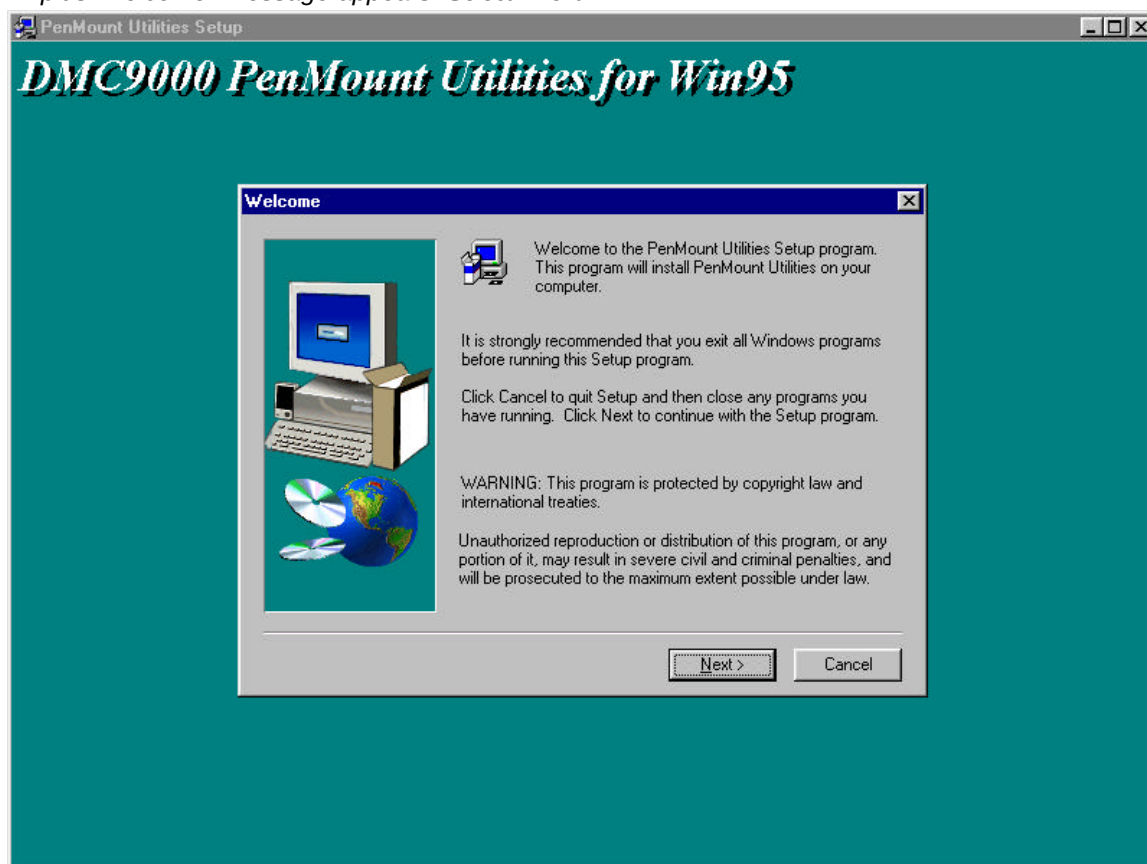
PenMount Windows 95 Driver Installation

To install the software to your computer, you must have Windows 95 system running and a PenMount

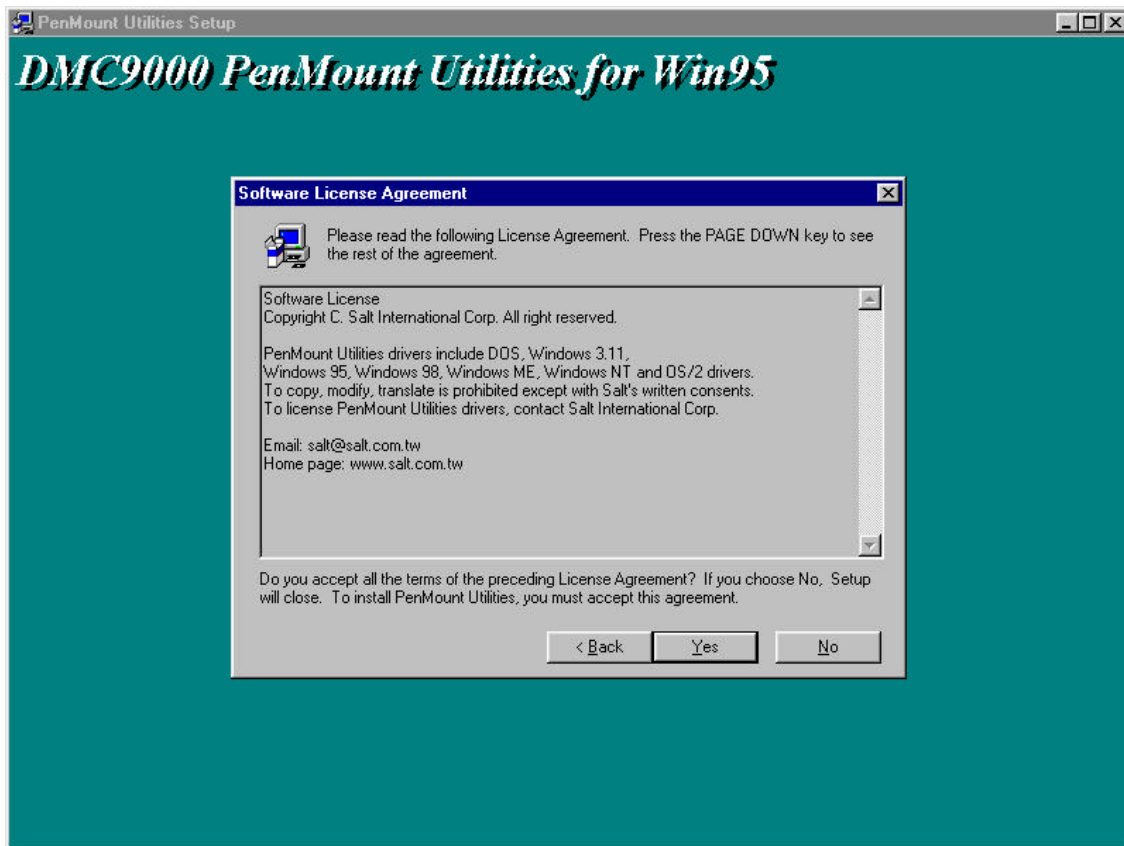
Windows 95 driver. If you have an older version PenMount Windows95 driver installed in your system, remove it first.

Follow up below steps to install the PenMount Windows 95 driver:

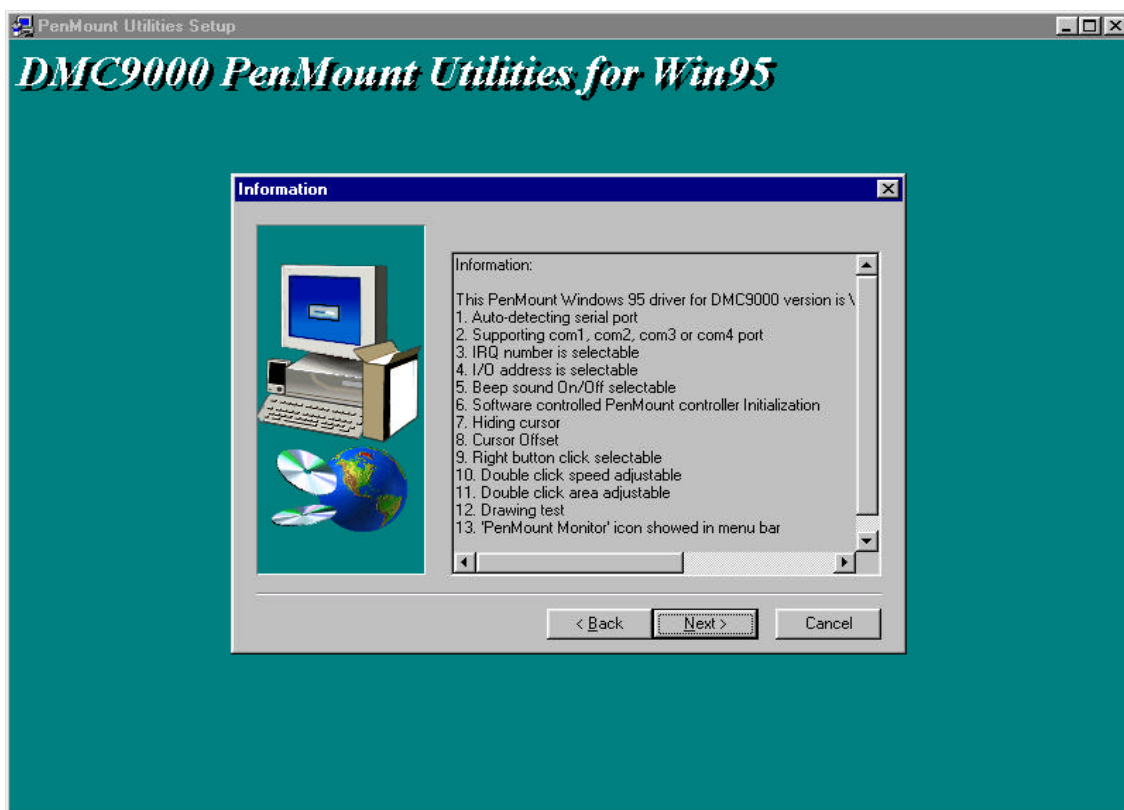
1. From the "Start" menu, select "Run".
2. There is one entry "setup.exe" in PenMount Windows95 driver. Or use browse to find it.
3. The screen displays PenMount logo, copying "installation wizard" and ' PenMount Utilities" screen plus "welcome" message appears. Select "Next".



4. The next screens are "Software License Agreement" and "Information", select "Yes" and "Next".

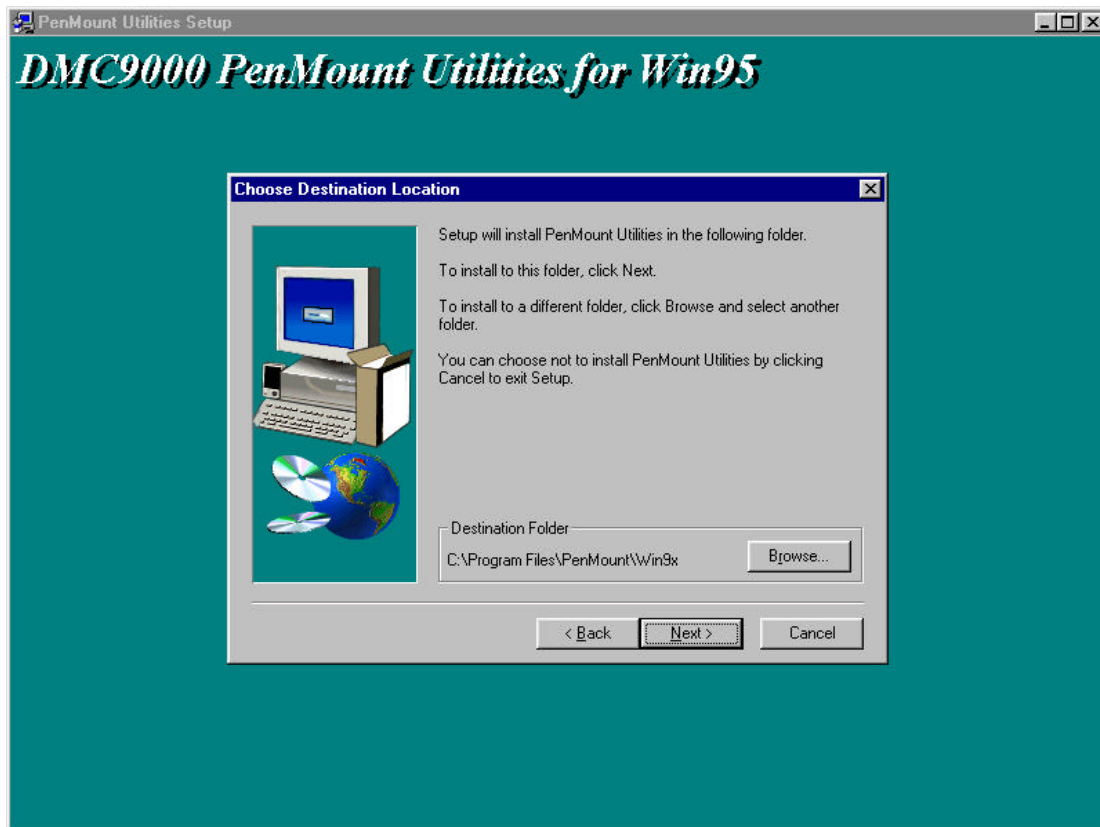


5. The next screen is "Choose Destination Location". It is for Setup installing PenMount Utilities in the folder: C:\Program Files\PenMount\Win9x, Select "Next" or modify the folder name you like to use.

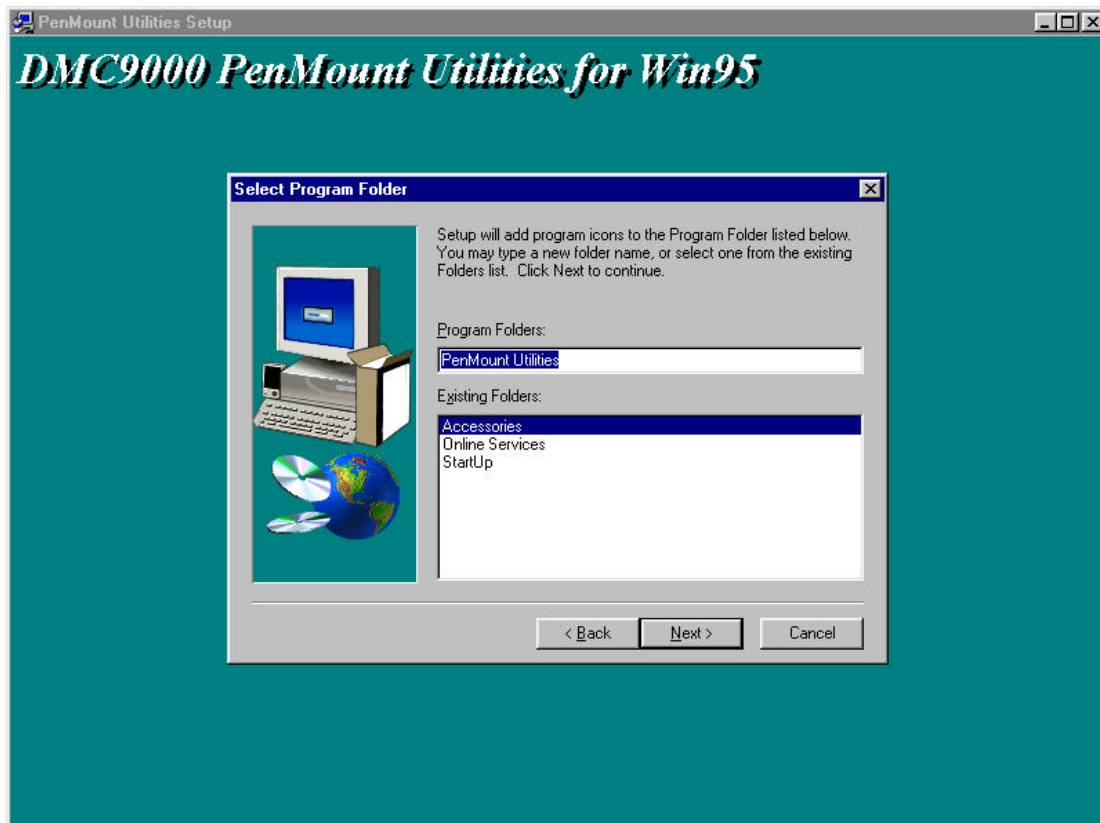


6. The next screen is "Select Program" folder, the default is set at "PenMount Utilities", select "Next"

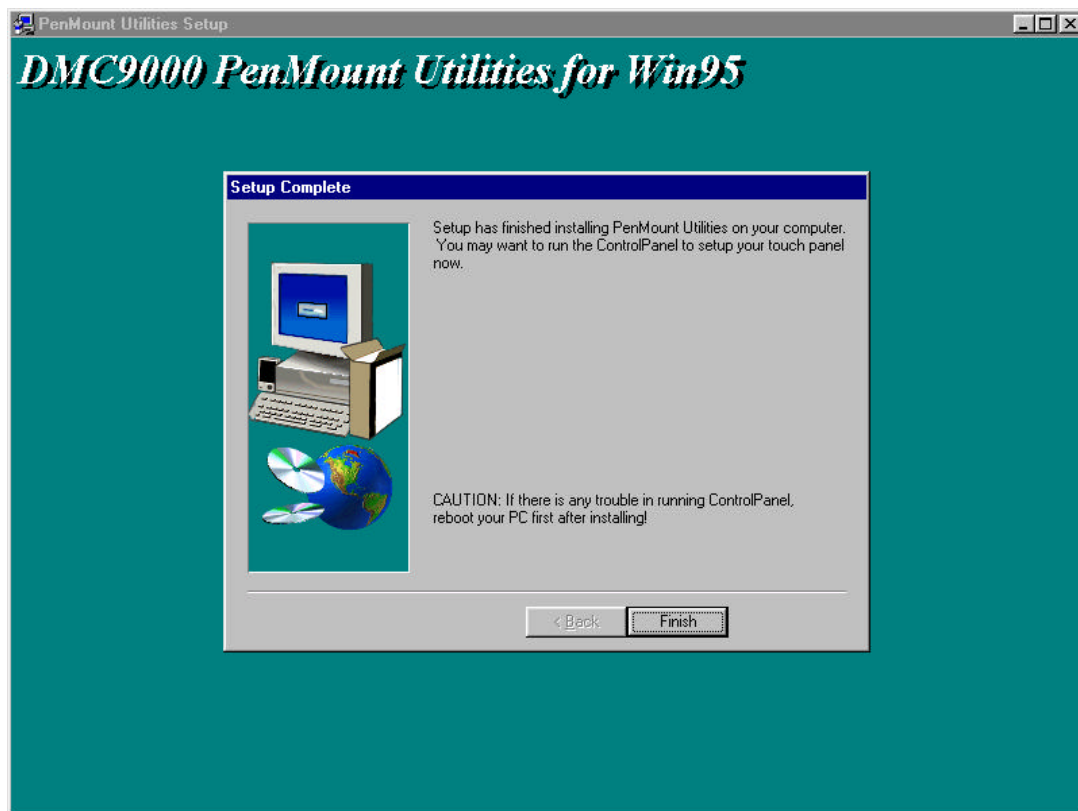
or change it.



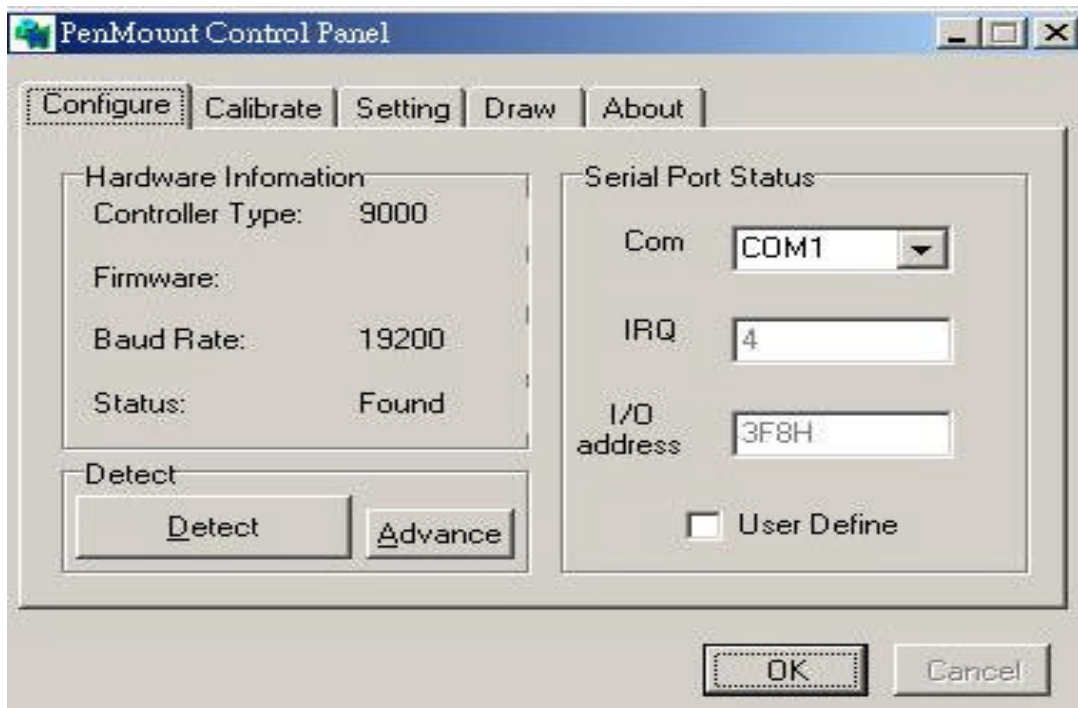
7. The screen is showing "Start Copying Files", select "Next" for starting copy files to system.



8. The screen now is "Setup Complete". Select "Finish".



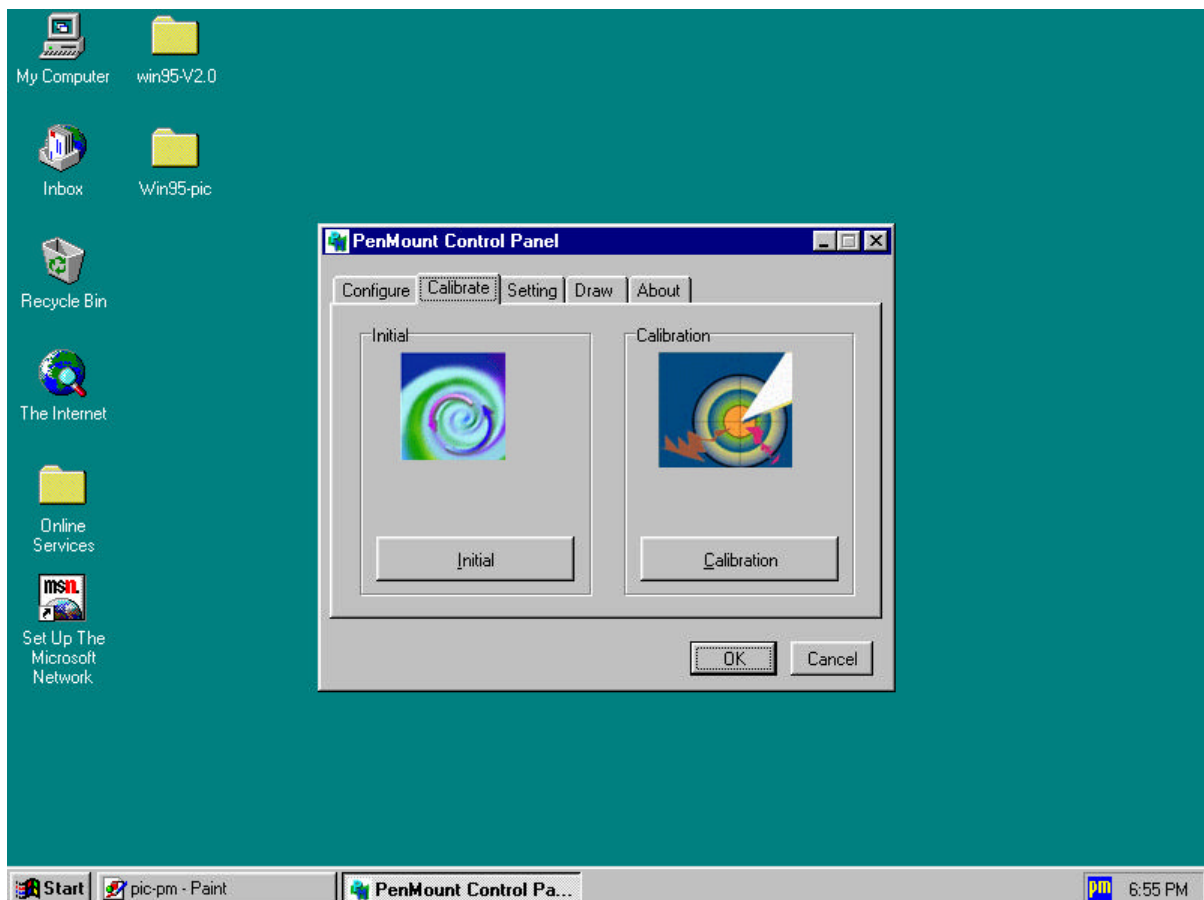
"PenMount Control Panel" is on the screen now. Functions are explained below. Set the 'Configure' for correct Com port, IRQ number and base address now.



If your touch screen is connected to com1 or com2 port, you could use 'DETECT' button to do auto-detecting the com port. If you do not know which com port connected, 'Advance' detect button could support you to find the correct data. Before selecting this 'Advance Detect' button, you have to STOP all other programs first, otherwise it maybe cause other programs out of control. The third way is input the data directly by selecting 'User Define' button.

After selecting, the system will ask to reboot. Reboot the system, PenMount touch screen is working now.

After reboot system, do Calibration, select 'PenMount Control Panel' from 'PenMount Utilities' that is in 'Programs', or select the 'PM Control Panel' from 'PM' icon in menu bar. See below PenMount Windows 95 Driver Functions on how to do calibration.

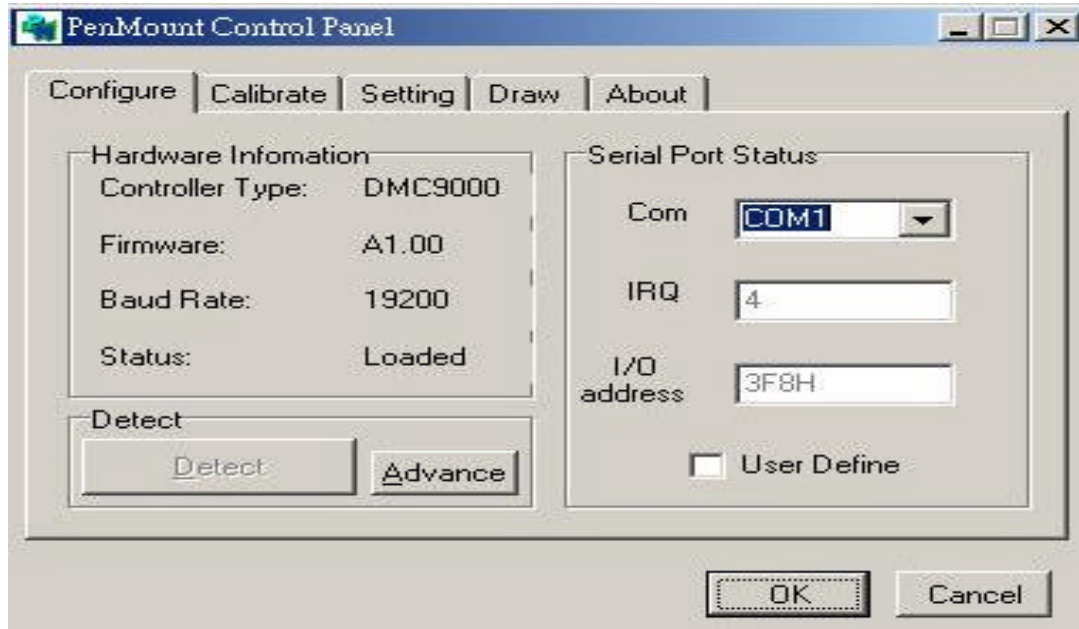


PenMount Windows 95 Driver Functions

A. PenMount control Panel

Configure

It is for setting hardware connecting, especially for RS-232 port, IRQ number and based address.



There are several functions on this configure:

Controller Type:

It shows the PenMount controller type, DMC9000

Baud Rate:

For DMC9000, baud rate is fixed at 19200.

Detect:

It is for detecting the connected port either in com1 or com2 only.

Advance:

This function is to detect com1 to com4 port, it will detect the com port and IRQ number in sequence.

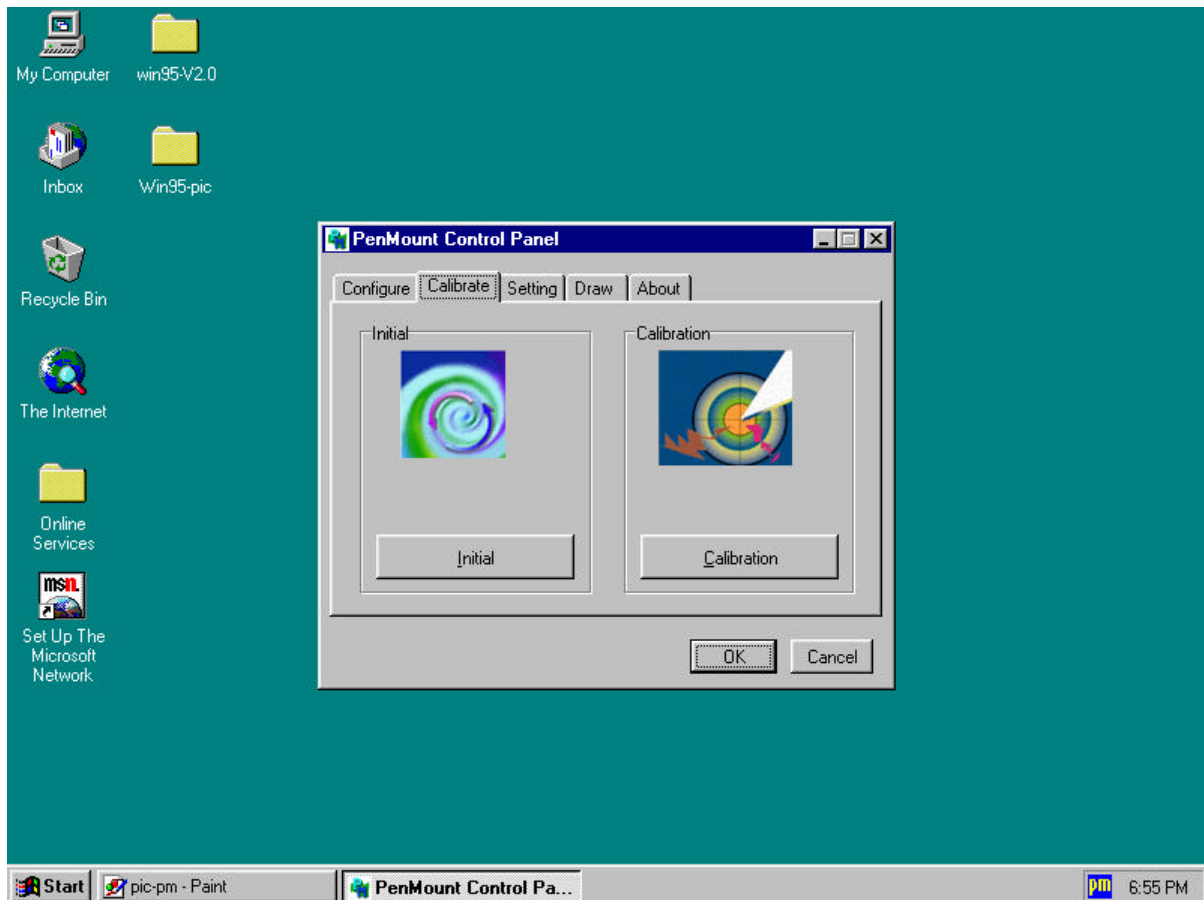
You have to STOP all other programs running before you select "Advance" detecting.

User Define:

To input the data from keyboard

Calibrate

"Initial" and "Calibration" function is available here.

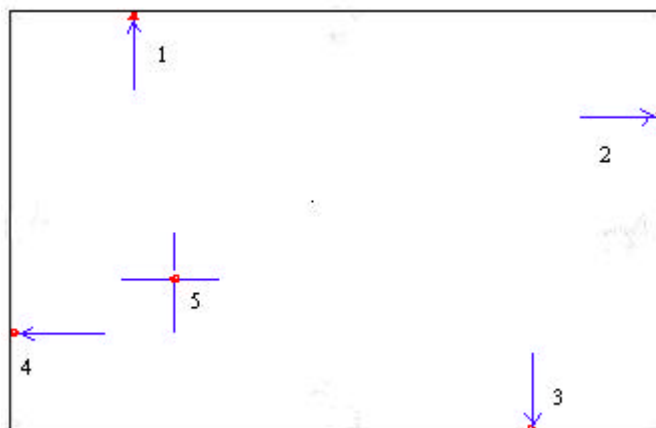


Initial:

To re-initial PenMount touch screen controller

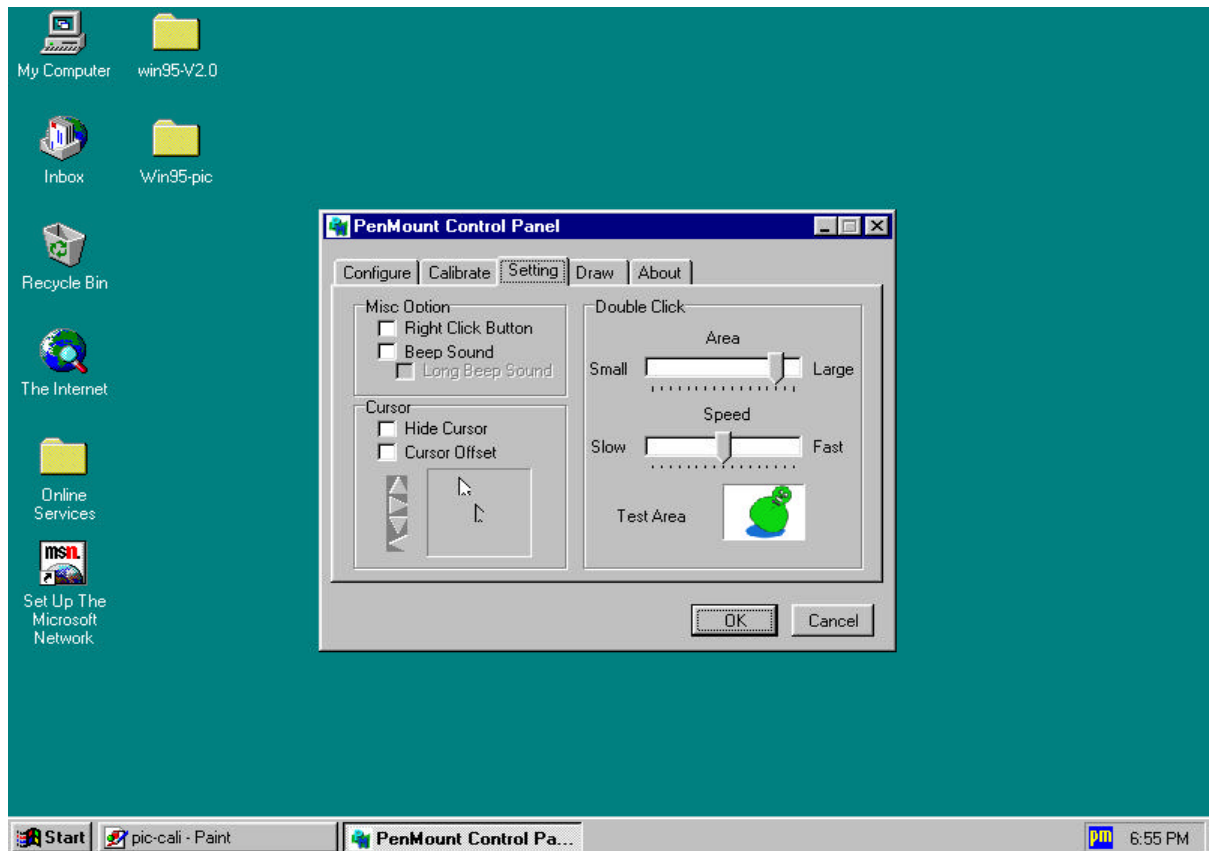
Calibration:

To adjust the display with touch panel, click "Calibration" and follow the calibrate point to do calibration, there are five points on screen for calibration.



Setting

For setting cursor, turn on/off beep sound, change mouse button and offset touch area, speed,...etc.



There are several functions on this setting:

Misc. Option:

Here is for setting "Right Click Button" and turn on/off "Beep Sound" and "Long Beep Sound".

Cursor:

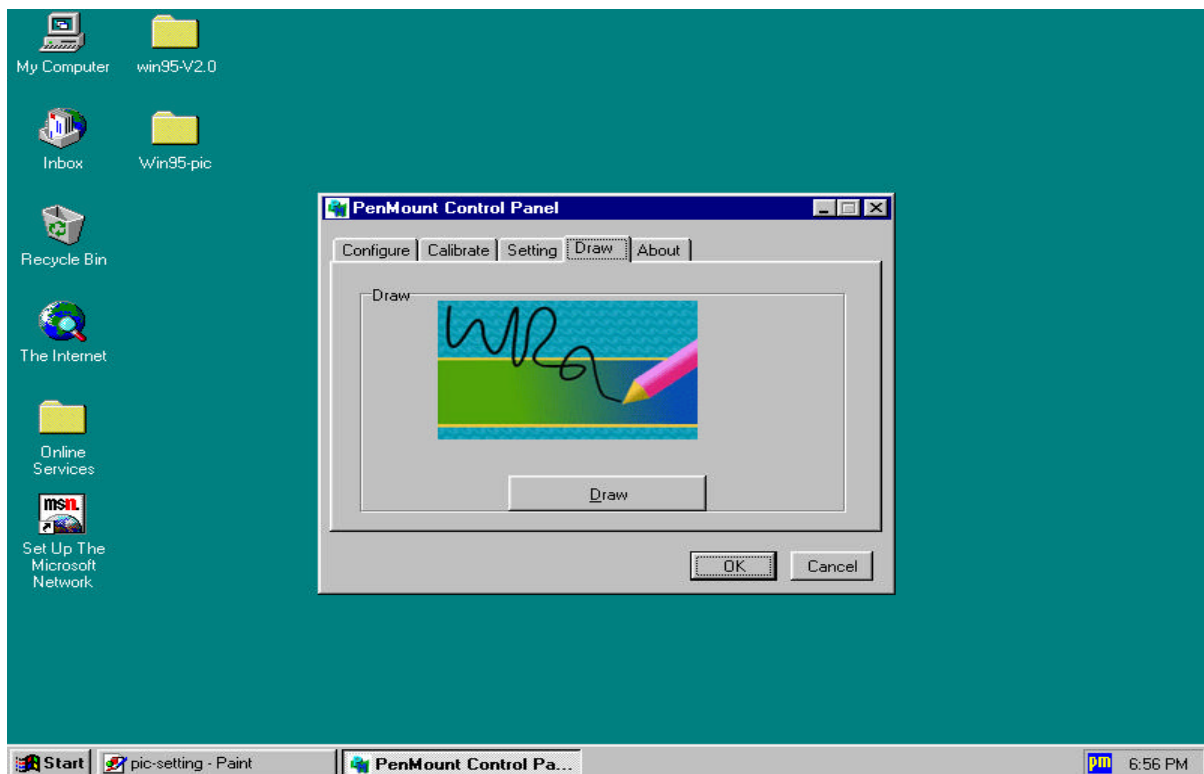
To set the cursor either "Hide Cursor" or "Cursor Offset". For cursor offset, use arrow key to offset cursor displayed location.

Double Click :

This area is for double click adjustment and test area, move the button of "Double Click Area" and "Double Click Speed" to have good performance of double click. "Test" area is for test the double click performance, once double click on this "Test" area, the tumbler will swing to and fro.

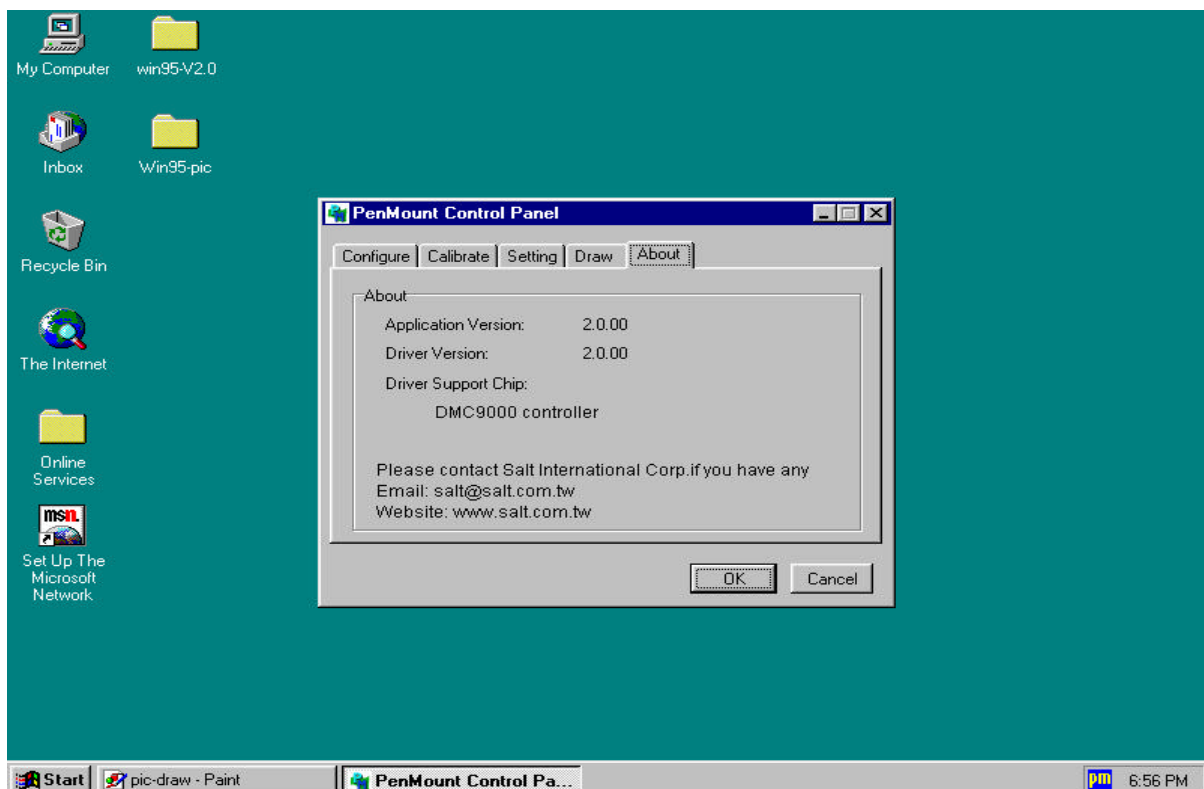
Draw

Test or demonstrate PenMount touch screen operation, also the touch location is shown on the display, touch "DRAW" to start.



About

It shows information about PenMount controller and this driver version.



B. PenMount monitor

The "PenMount monitor" icon, see below the icon picture, will be shown in the menu bar of Windows 95 system when turn on "PenMount Monitor" from "PenMount Utilities".

There are several functions on PenMount monitor :



Initial :

To reset PenMount controller chipset. Normally, user does not need to reset the controller chipset, PenMount Windows 95 driver will check the controller chipset automatically.

Right Click Button:

When select this function, there is a mouse icon shown in the right-bottom place of screen. It shows 'left button' being as default for normal use, touch this mouse icon to change the next touch to be 'Right Button' function. After one touch, the mouse icon will change to 'Left Button' automatically. If user needs to use right button again, user has to touch the mouse icon again for changing the button function.

Hide Cursor:

To hide cursor. The cursor will be disappeared until turn off this 'Hide Cursor' function.

Cursor Offset:

Adjust the cursor offset from 'SETTING' of PenMount Control Panel. Mouse cursor will be offset as per setting.

Beep Sound:

On or off beep sound.

Exit:

Close the PenMount Monitor function.

C. How to uninstall PenMount Windows 95 driver

Before you uninstall PenMount Windows95 driver, please 'EXIT' the 'PenMount monitor' in menu bar first.

From 'PenMount Utilities' of 'Programs', select 'Uninstall' utility, computer will ask you "are you sure you want to completely remove 'PenMount Utilities' and all its components"? Select 'Yes' to remove PenMount Windows95 driver.

After reboot system, PenMount Windows95 driver is removed from system.