Lucent Mars 3 PCI Modem

User's Manual

Each Type	User Guide
A Class Machinery	This machinery is registered for its utilization of electromagnetic wave for business that the sellers or the users shall exercise care, and when it is sold or purchased for mistake, please replace it with one that is for family use.
B Class Machinery	This machinery is registered for its utilization of electromagnetic wave for family that the sellers and the residential areas can also use this in all areas.

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The contents of this User's Manual may be changed or altered without prior notice due to the improvement or change of later products. Therefore, please make notice that there may be part that is not the same as the content of the Manual and the method of using the product.

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I. Functions of Hardware

This product provides the maximum speed of 56,000 bps (maximum of 33,600 bps in up-roading) in up-roading when data communicating, and this is an improvement of about 1.5 ~ 2 times faster than the modem that provides the existing 28,800 bps or 33,600 bps.
It is an appropriate product for sending and receiving of large capacity of multimedia information which requires a fast speed and it will give you satisfaction in utilizing your internet or PC communication.

Simultaneous support of V.90 that is ITU-T standard and K56 flex of Lucent Company
Providing maximum speed of 56,000 bps when downloading of data
Providing maximum speed of 33,600 bps when downloading of data
Providing maximum send/receive speed of 33,600 when communicating 1:1
Supporting the Hayes compatibility expansion AT command set
Providing Class1, Class2 fax send/receive of 14,400 bps

The international scale and specifications that this modem supports are as follows.

1. Data Mode
   Maximum Speed: 56,000 bps (33,600 bps when up-loading)
   Support Protocol: ITU-T V.90, V34, V32bis, V32, V22bis, V22, V.23, V.21, Bell 212A&103
   Error Control Protocol: V42LAPM, MNP 2~4
   Compressed control Protocol: V.42bis, MNP CLASS 5

2. Fax Mode
   Maximum Speed: 14,400 bps
   Fax Control Protocol: V.17, V.29, V.27ter, V.21ch2 GROUP3
   Fax Command Set: EIA class 1

3. Interface
   PCI Interface

II, System Requirements

1. Operation System Requirement

This product is a modem that uses PCI interface, and is designed to operate only in the OS with the support of Plug and Play. Therefore, it operates only on Windows 95, Windows 98 and Windows NT, the OS that supports PnP, but not on the real mode DOS. However, it operates on the DOS mode in the Windows system.

2. Hardware Requirement

This product can be used in a PC that is appropriate for PC 97 standard of Microsoft or better. The minimum specification requires a CPU with main board and Pentium MMX 200 that is equipped with extra PCU Slots. It is not guaranteed for a normal operation in the specification not meeting the above-mentioned minimum requirement. Also, the normal operation is not guaranteed on the CPU that does not use MMX technology even when the clock is over 200.

III. Installation of MODEM

This product is a embedded modem that uses the PCI Interface that, unlike the modem that has BUS method is the ISA type, it has to be used after it is installed in the PCI slot of the internal PC main body and then execute as the followings

※ Those who are confident in computer assembly may skip this section.

1. Automatic setting of Modem Port

This product supports the PnP installation that there is no attachment of any adjustment on the modem board.
However, it may be installed on the riser slot that is vacant on the main board.

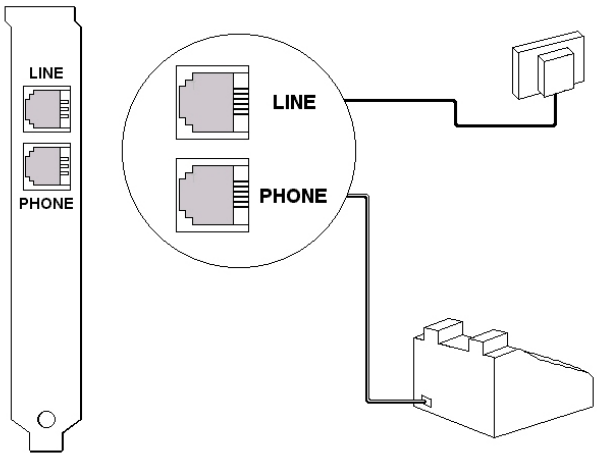
2. Installation of Modem

① First, pull down the power of PC. The main board and power of recent time is mostly ATX that the complete pull off of power can prevent the damages to the other parts.
② And, open the cover of PC to look inside, then the main board is located and the other peripheral equipment cards are inserted.
③ Then, look for the empty PCI slot. And remove the guide by the nuts of guide that is fixed.
③ And, install modem and tighten the nuts to securely. At this time, take caution not to force it too much, which may damage the main board or modem.

3. Telephone Line Connection

In the side of modem as shown on the below picture, there is a terminal that is marked for Line and Phone.

Connection may be done by connecting the line that comes from the telephone of the family home to the line terminal, and the telephone is connected to the phone terminal.
By doing so, the telephone is not operative while the modem is in operation, and the phone is usable when the computer is turned off.



< Connecting Line and Phone >

IV. Driver Installation

Since the interface of this modem is PCI modem, the installation procedure for slot is slightly different than the existing ISA method. The installation method is classified into two ways.

① When OS is already installed, and

② When OS is newly installed or re-installed while a modem is installed

Install from Window 98

1. When OS is already installed

In such case, install PCI modem to start the operation system, the screen that has new hardware can be seen.

※ The following content to be described has the basis in Windows 98.

By pressing the **[next]** button, **[Add New Hardware Wizard]** as shown in the <Picture 1> is executed to have the screen that is to search the driver is on.

<Picture 1> New Hardware Addition Engine

A slightly different shape of message for Windows 95 for users is shown as the below picture. In such case, select the **[Control panel provided by the hardware manufacturer]** from Windows 95.

<Picture 2> Screen seeking driver

When forward by pressing **[next],** the screen for searching the position of driver is shown as below.

<Picture 3> Screen asking for the position of driver

The above <Picture 3> designates the location of driver. Normally, the driver supplied from CD-ROM or floppy disc. Designate the location by inserting CD-ROM or floppy disc. Obviously, in the Windows 95, designate the driver position by similar method but not by the same message.

<Picture 4> Finding Equipment

Then the message that it is ready is shown. When pressing the **[next]** button**,** the installation started with copying the necessary file.
When copying the file is done, a message that driver installation is completed as shown in <Picture 5>. Press the **[finish]** button and the installation is completed.

<Picture 5> Installation Completed

The hardware driver installation of modem is now finished.

2. OS is newly installed or re-installed

The following is the description for operation system that is newly installed or re-installed.

The following case is registered by the unknown equipment which is evident from looking at the [Device manager] in the [system] of [control Panel]. By deleting it and re-booting, a message that new hardware is found is shown.

Then install the drive by way of **"1. When OS is already Installed"**.

Install from the Windows 2000

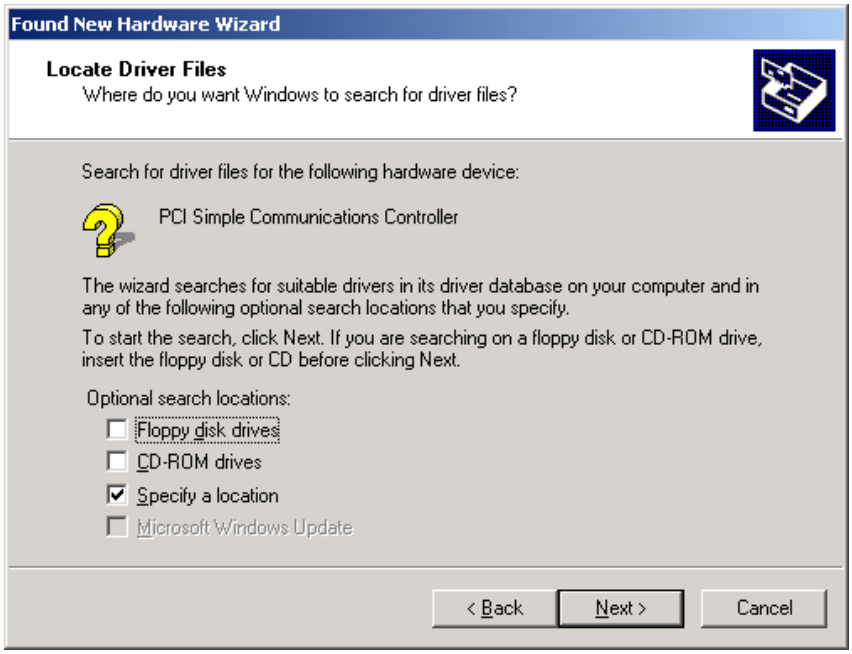
1. By installing and booting of the card, the PnP reads the new card as follows.
   Press **[NEXT]** the below to continue.

<Picture1> New Hardware addition engine

2. As shown in the below, find PCI Device from the PnP and select 'Search for proper driver for installation (recommend)(S)'.

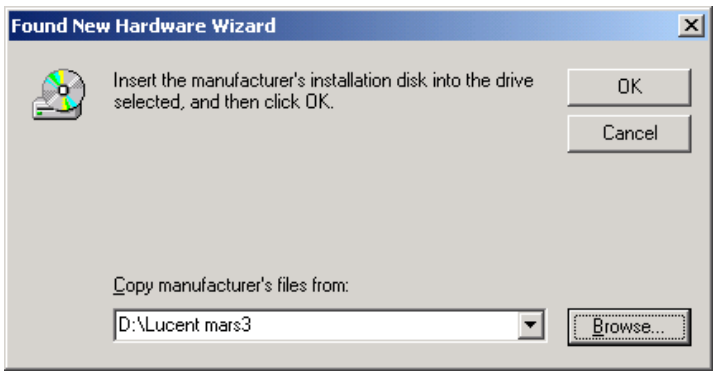
<Picture2> New Hardware Addition Engine

3. When a screen asks the path of drive as shown below, press 'Specify a location'.



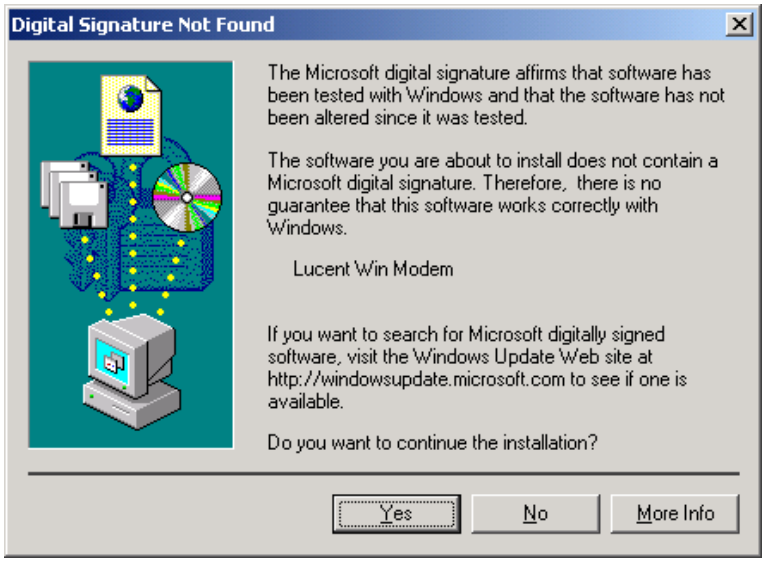
<Picture 3> Screen searching the driver Installation path

4. Path name of the installation file may be inserted directly or designated by the user or it is designated.



<Picture 4> Screen Found the Initial File

5. Search for 'Lucent Win Modem' driver as shown below. Continue installation here.



<Picture 5> Screen Found Driver

6. When the file necessary in installation is copied in the system, the installation of modem is complete.

<Picture 6> Completion of New Hardware Search Engine

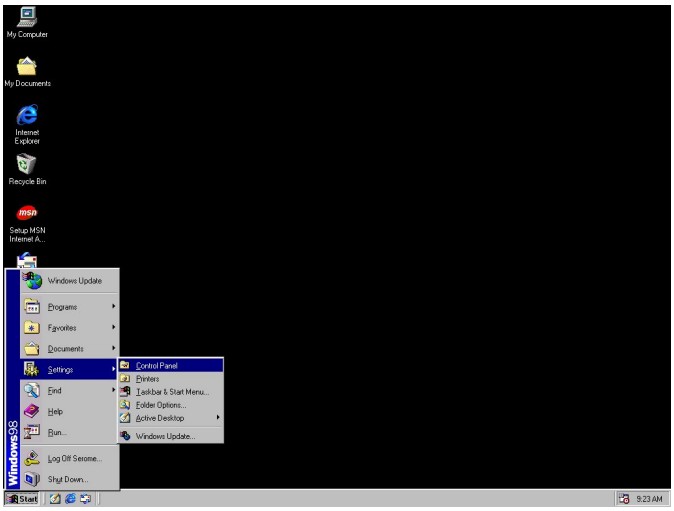
7. Re-boot and use it after completing the new hardware search engine.

V. Confirm the Installation of MODEM

Confirm from Windows 98

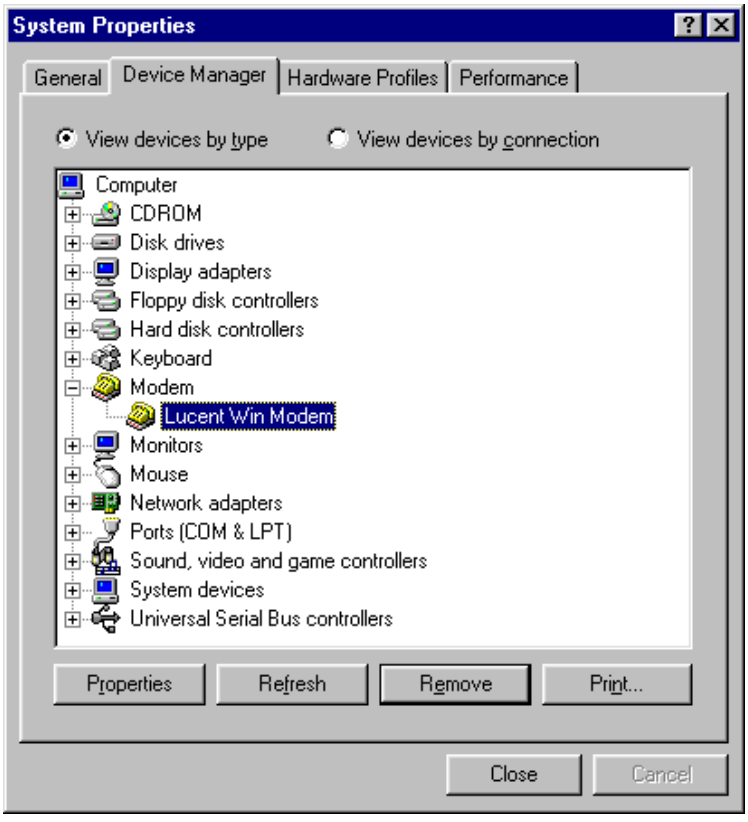
1. Setting of Modem at [manager]

Click the **[system]** button of **[control panel]** as follows, and then look at the **[Device Manager]**.



<Picture 1> Opening Control Panel

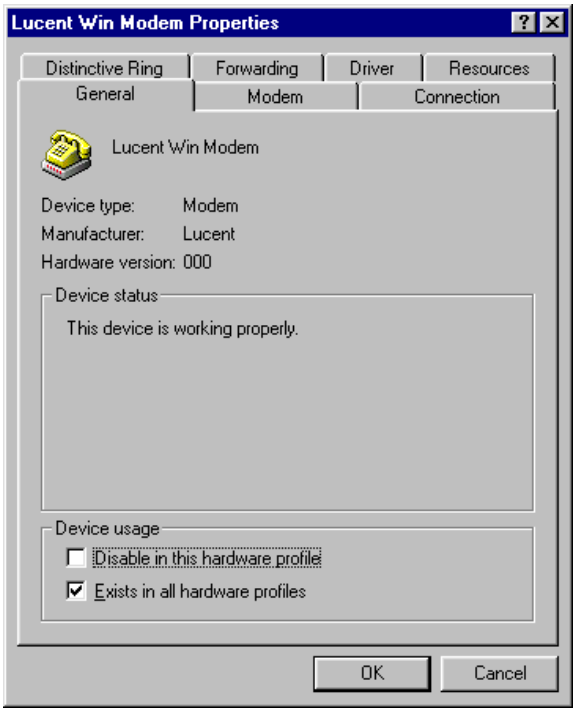
The modem has to be installed as the following picture.



<Picture 2> Manager

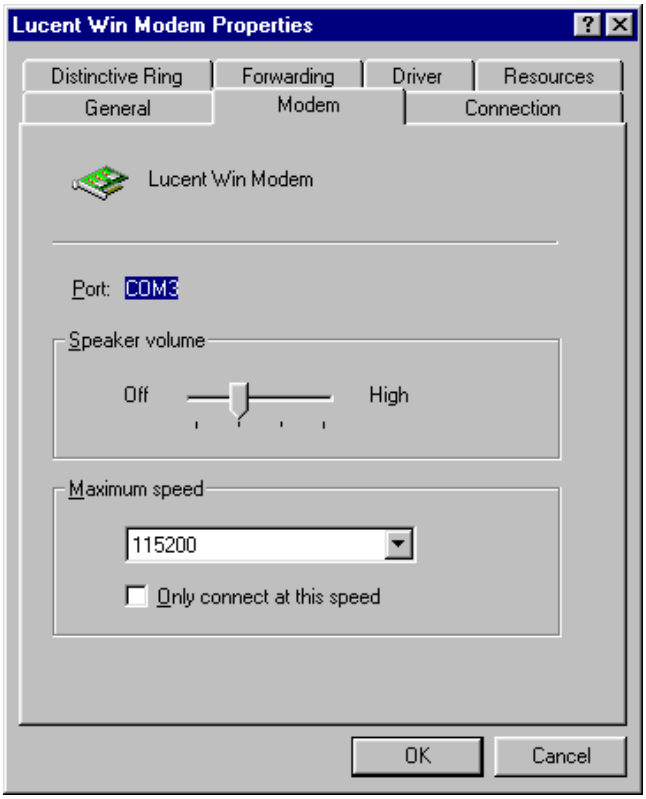
In order to install the hardware of modem, look at the registration information of “Lucent Win Modem”. There are several items in it.

It may be confirmed whether the modem is operated in accordance with <Picture 3>.



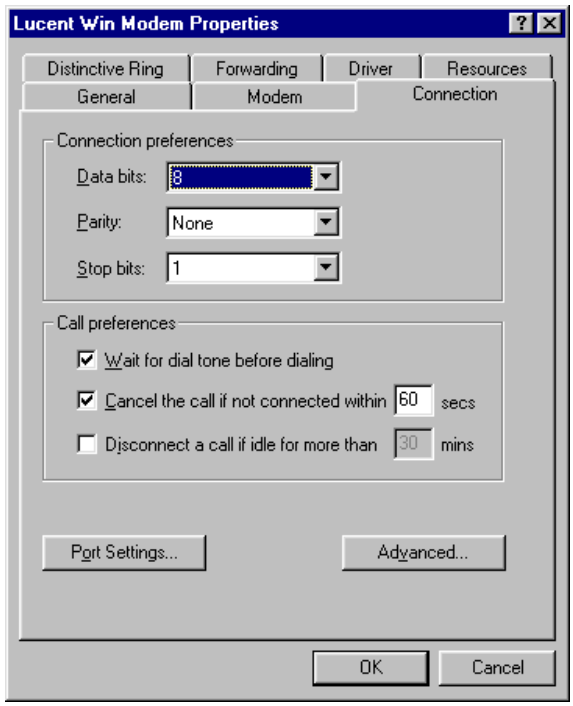
<Picture 3> Registration Information

The modem maximum speed and the volume of connection sound can be adjusted as shown in the <Picture 4>.



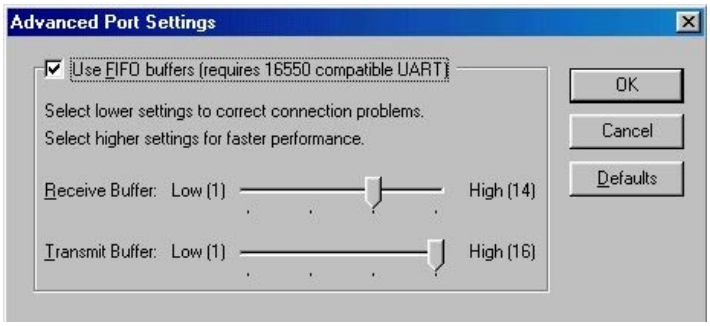
<Picture 4> Registration Information

As shown in the <Picture 5>, it may be set in accordance with the condition of communication network, but generally it is recommended to set with the basic value.



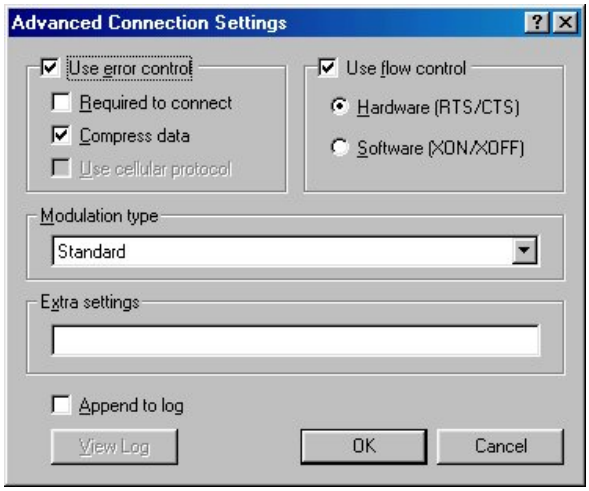
<Picture 5> Modem Registration Information

The following is the screen that shows when pressing the 'Port Settings' on the above screen that 16550 FIFO set may be made here.

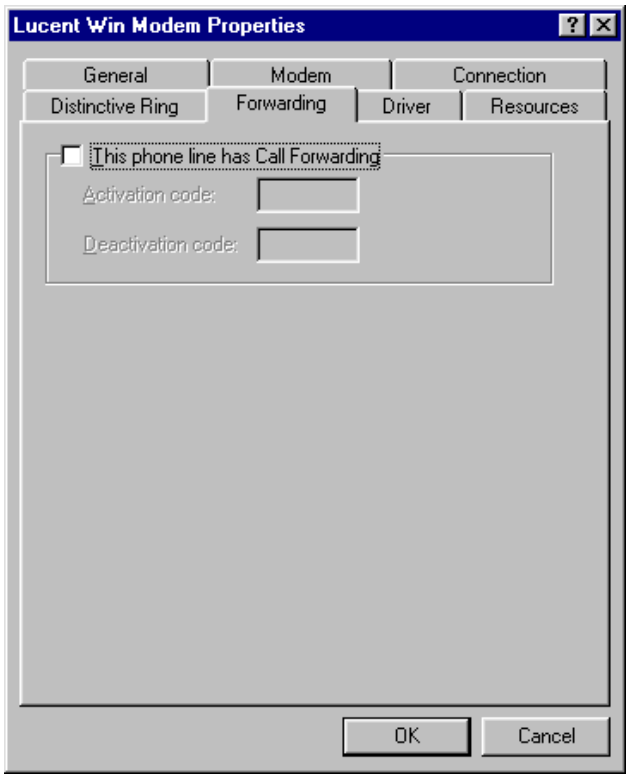


<Picture 6> Modem Registration Information

<Picture 6> and <Picture 7> are screens that are shown when **[Port Settings..]** and **[Advanced..]** are pressed in the <Picture 5> screen and these also are left at the basic value.



<Picture 7> Modem Registration Information

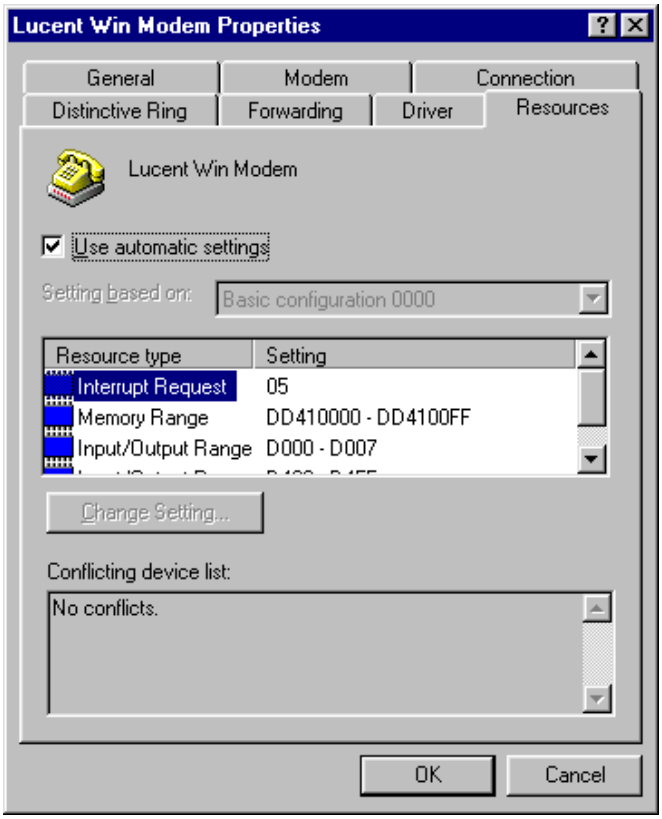


<Picture 8> Modem Registration Information

The following picture may show the information on the upgrade of driver or present version information.

<Picture 9> Driver Information

From the below picture, resource of system that the modem has can be known.
When receiving customer support services with problems, this information may be useful.



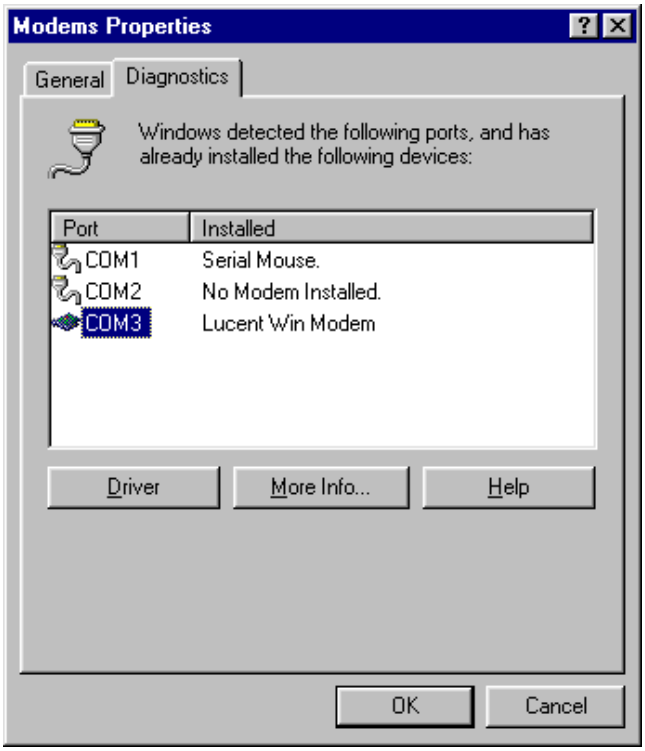
<Picture 10> Resource Information

2. Modem Setting from the [control panel]

Now look at the **[control panel]**.
Search for modem and refer to the item, then the screen like <Picture13> is shown.

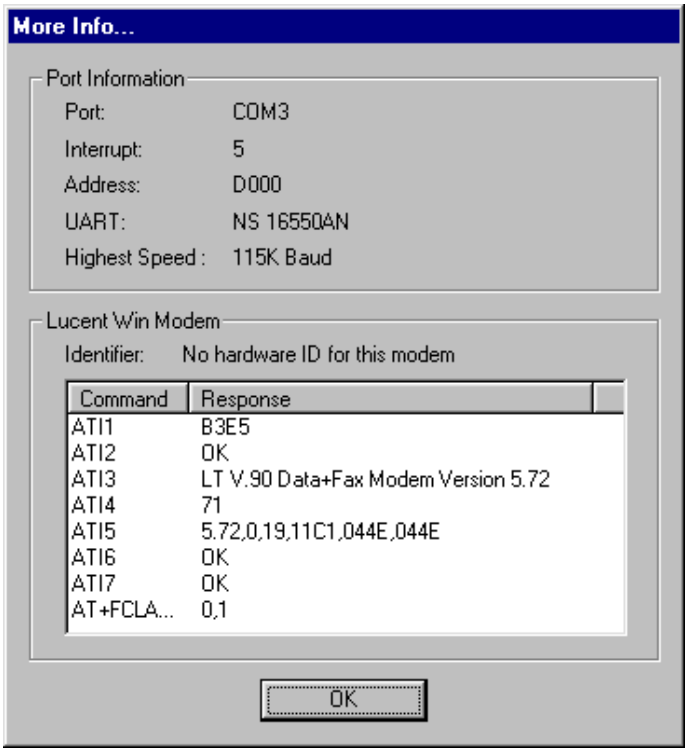
<Picture13> General Information

Confirm the modem in this screen.
And, click **[diagnostics]** tap, then the screen like <Picture 14> is shown.



<Picture14> Diagnostics Information

After positioning the mouse cursor to the COM port that modem is installed as shown in the <Picture 14>, click the **[More info]** button. Then, the screen like <Picture15> is shown momentarily.



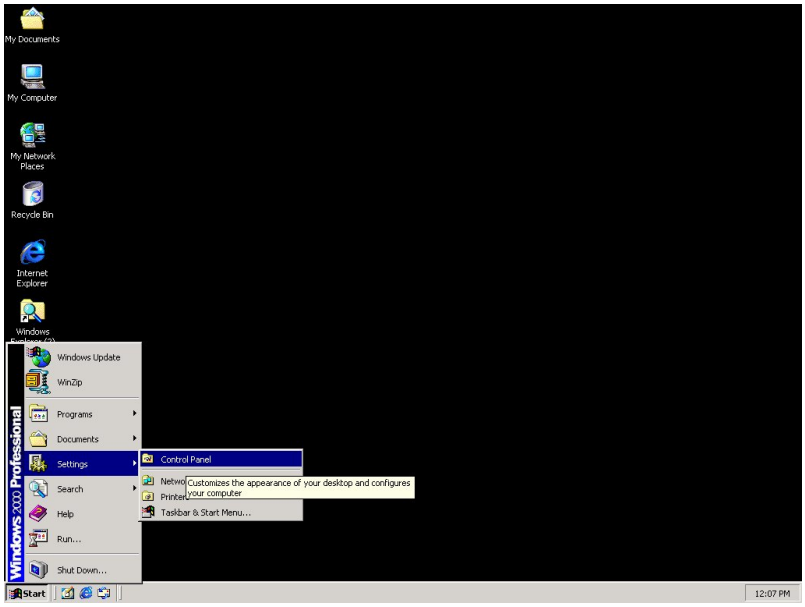
<Picture15> Modem Additional Information

If reading is normally made in this screen, the purchased product is normally installed and is in an operable condition.

Confirm from the Windows 2000

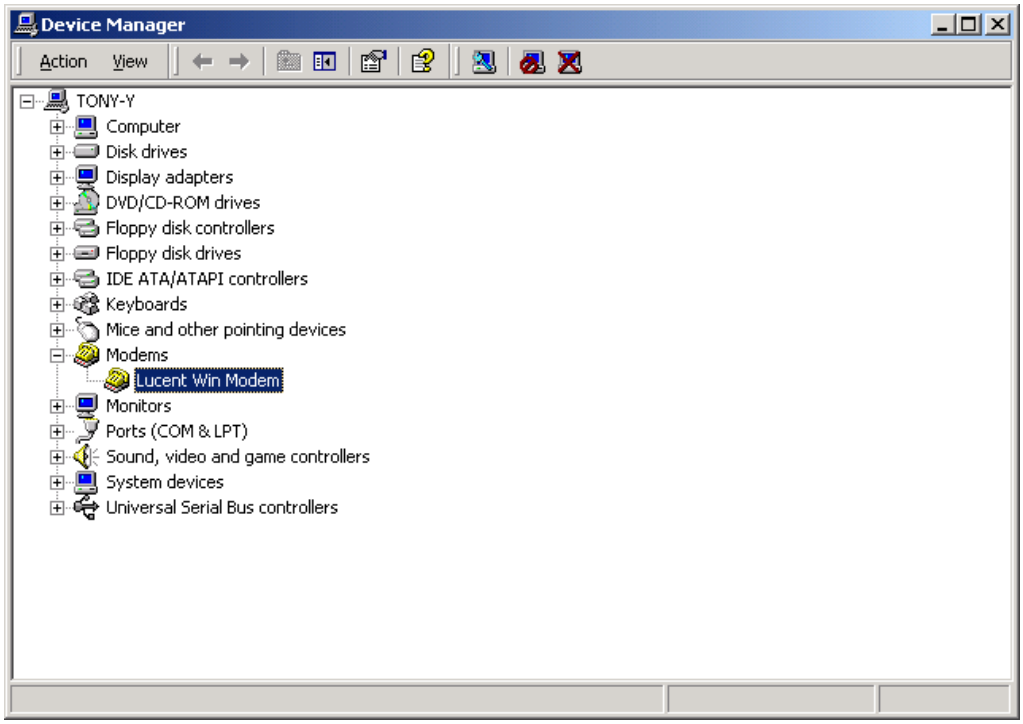
1. Modem Set at the [Device Manager]

Click the **[System]** of **[Control Panel]** as shown in the below, look at the 'Device manager (D) of **[Hardware]** tap.



<Picture 15> Opening Control Board

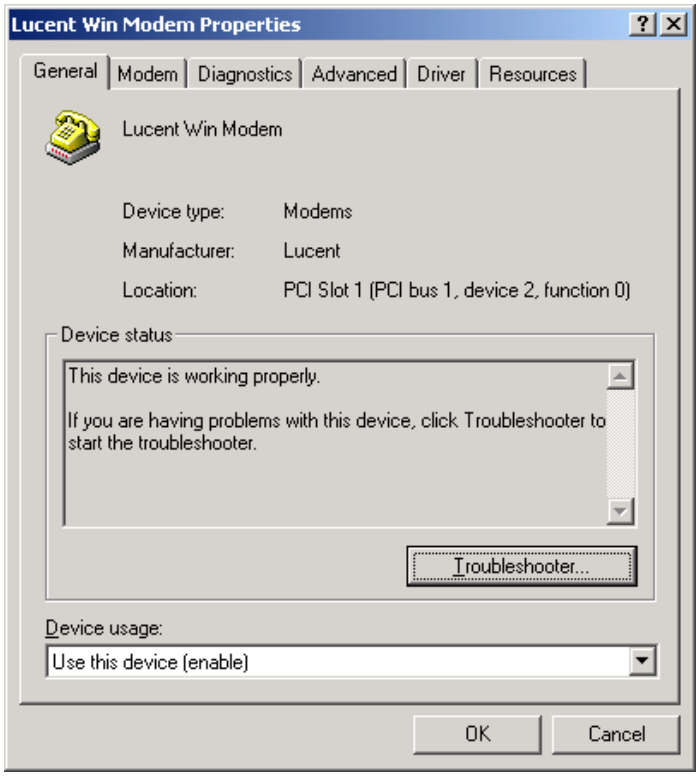
Modem has to be set as in the below picture.



<Picture 16> System Manager

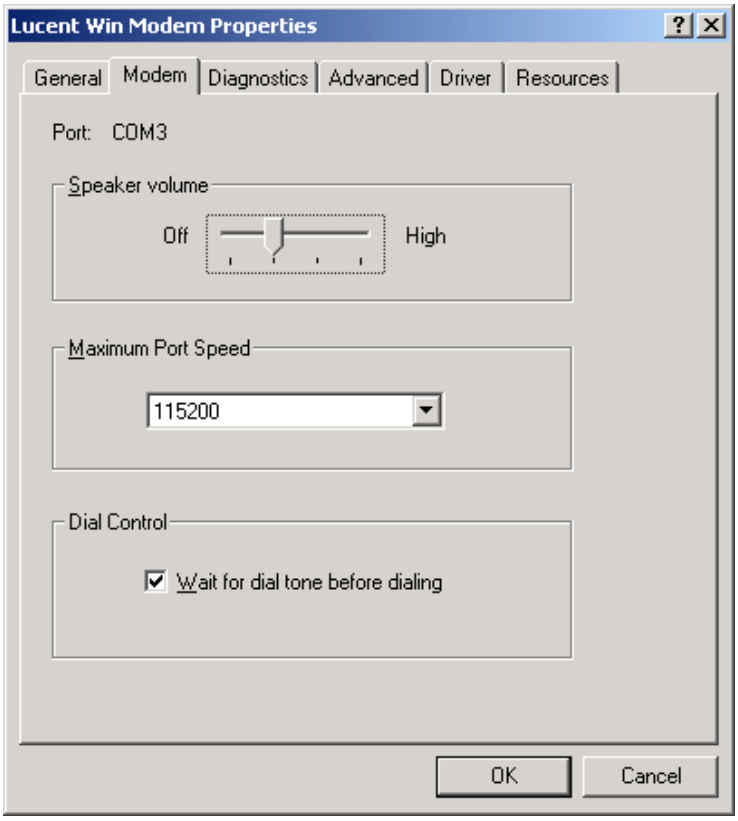
In order to have hardware set of modem, double click the "Lucent Win Modem" to see the registration information. There are several items inside.

It may be confirmed for normal operation of the modem as shown in the <Picture17>.



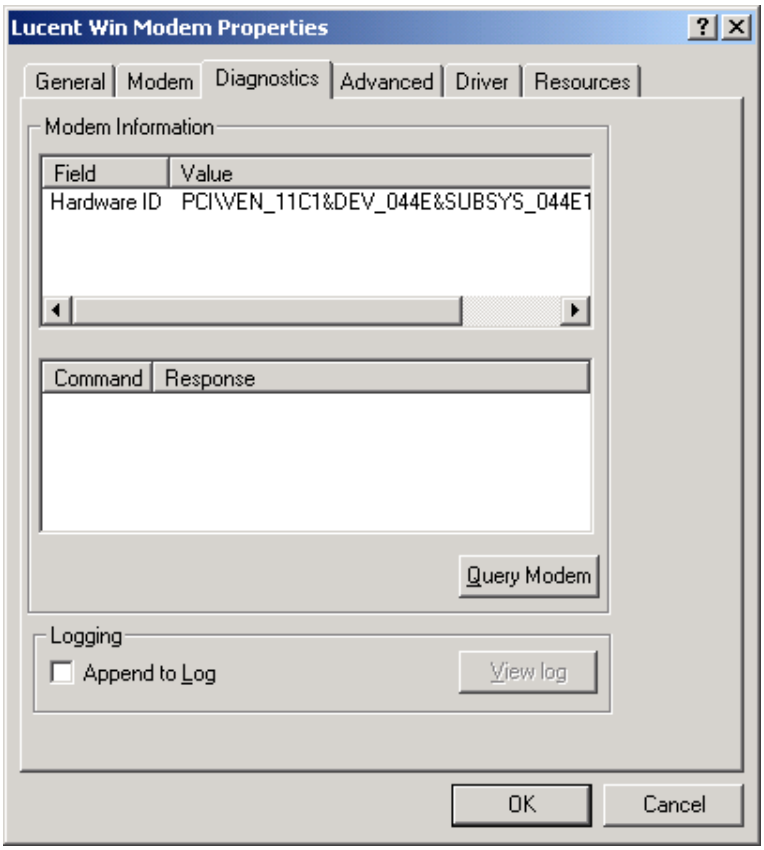
<Picture17> Registration Information

The maximum speed and the scale of connection sound of modem can be adjusted as shown in the <Picture 18>.



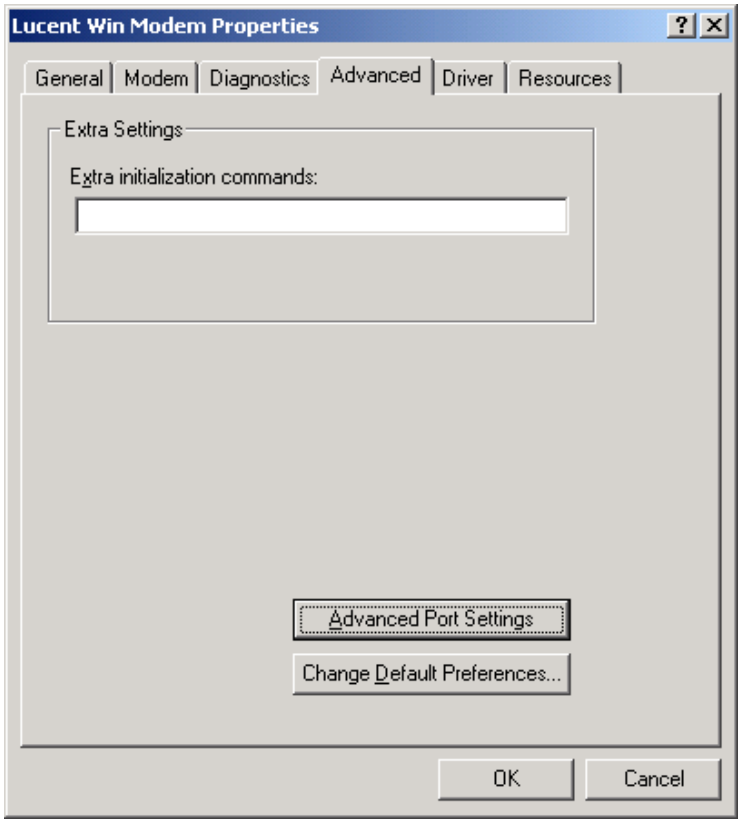
<Picture18> Registration Information

<Picture 19> is indicative of hardware support that the modem takes in this system, and when the modem is normally installed, the following diagnosis is shown as in the below picture when 'Query modem 'is pressed.



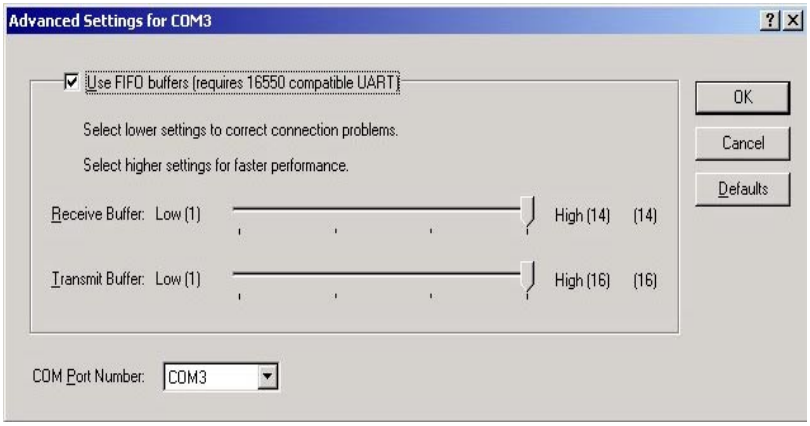
<Picture19> Modem Registration Information

The below picture is a part that shows the high quality function of the modem with which it can insert the initialize command for the modem.



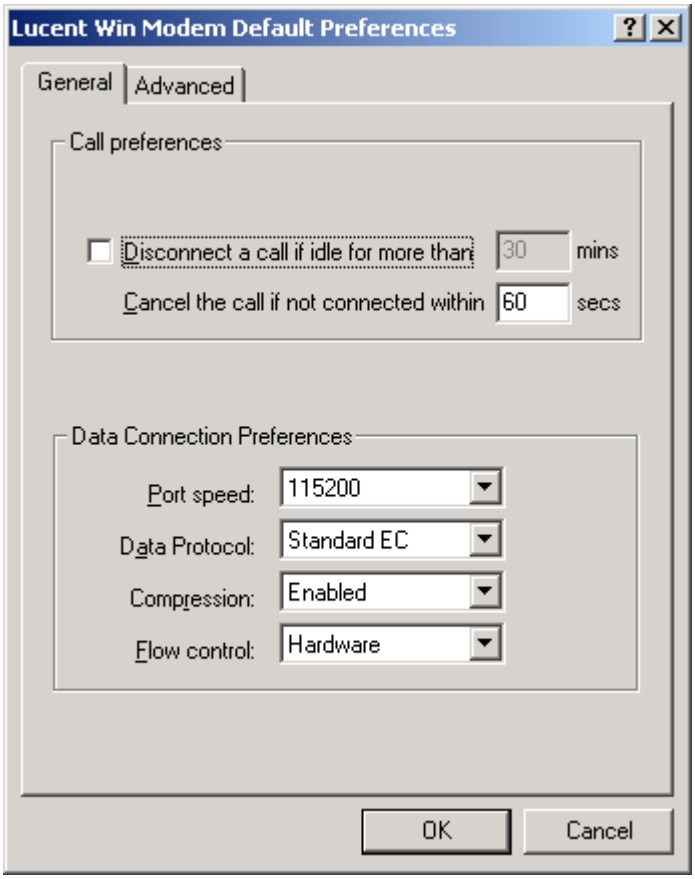
<Picture20> Modem Registration Information

The following is the screen that is shown on the above screen when 'Advanced Port Settings' is pressed and it can be set at 16550 FIFO.



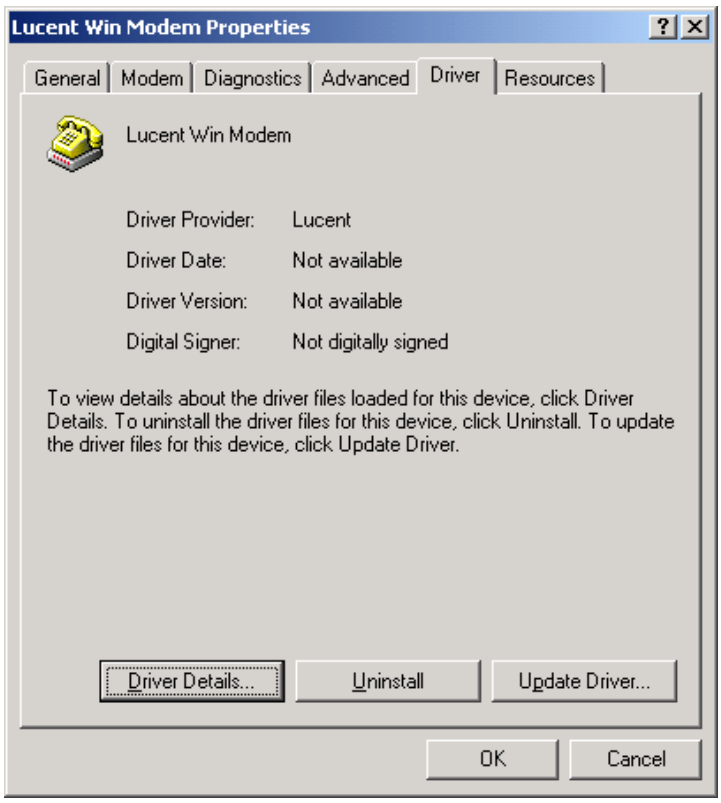
<Picture21> Modem Registration Information

The following picture is the screen that shows when 'Change default Preferences' is pressed, and the values of 'General' and 'Advanced' is set at the basic value in general.



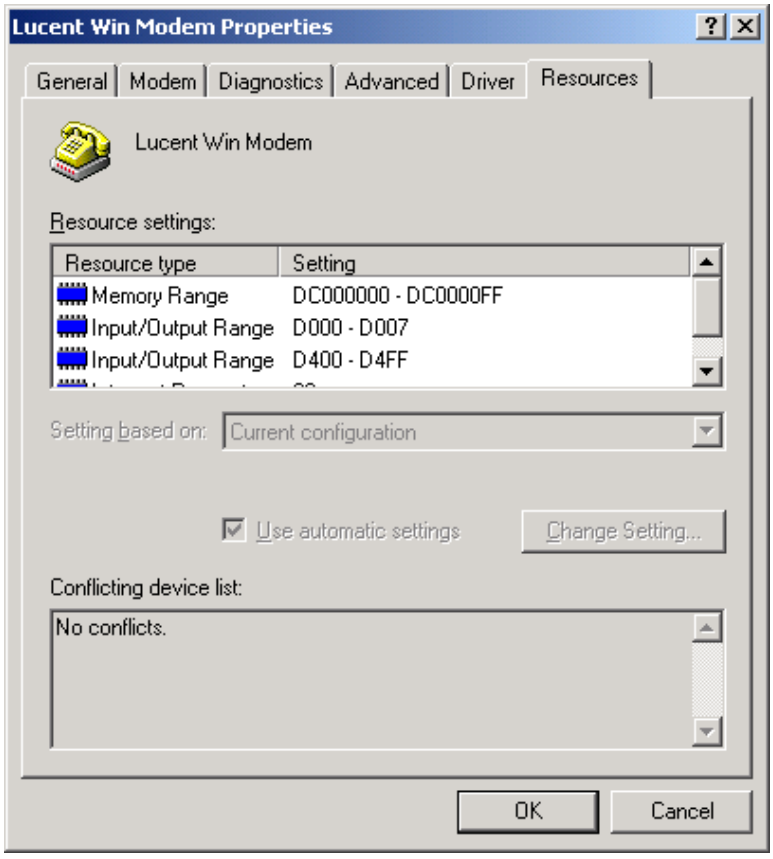
<Picture22> Modem Registration Information

The next picture may upgrade the driver or remove the current version information or driver.



<Picture 23> Modem Registration Information

The resource of system that the modem has can be known from the below picture.
This may be valuable when you receive customer support for your problems in the future.



<Picture 24> Modem Registration Information