NetComm®
Broadband Solutions

Quick Start Guide

AM5066

RAVEIII USB 56K Modem

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Introduction

Hassle-free installation for instant fastspeed connection, the NetComm Rave II 56K USB modem delivers unparalleled high speed and a reliable 56K connection. Powered packed with advanced features, it satisfies all your communication and telephony requirements. Installed in seconds, you do not require any external power supply and it offers USB Plug & Play installation.

- Bus Powered. Does not requires any external power supply
- USB Hot Swappable Plug & Play installation
- Compact design for all notebooks and desktops.

Minimum System Requirements

- PC with 1 GHz processor and 256Mbytes of System Memory (RAM) or better.
- One free USB Port.
- 50Mbytes hard disk space (System files and modem drivers only).
- CD-ROM drive.
- Windows® 98 Second Edition / Windows® Me / Windows® 2000 / Windows® XP.

Package Contents

The following items should be contained in your Rave II 56K USB Modem Package:

- Rave II 56K USB Modem (5V DC 100mA)

- Drivers, Manuals and Utility software

- Telephone cable

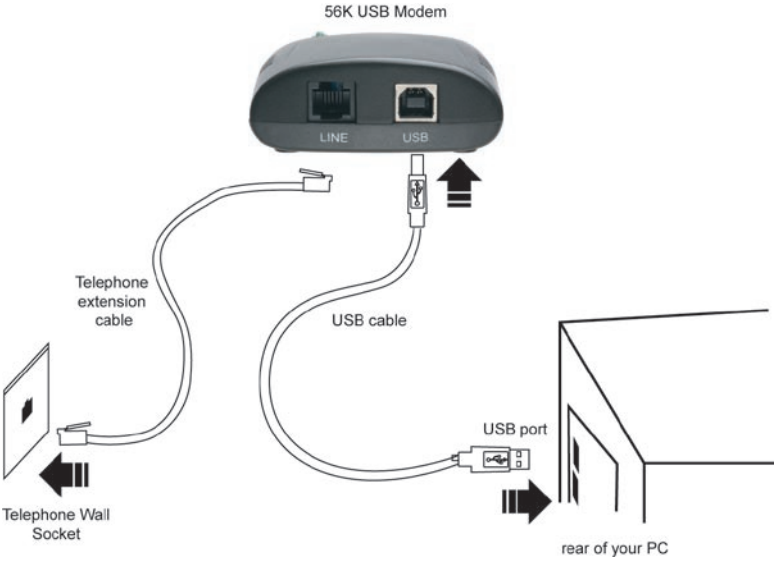
- USB Cable

- This Quick Install Guide and a Package Contents Note

Check the contents of your package and, if any parts are missing or damaged, please contact NetComm.

Step 1: Connecting the Modem to Your Computer

The 56K USB Modem is a 'plug-n-play' device. You may connect your modem to your computer anytime without having to power down your system. Connect as follows and your Operating System will automatically detect the new hardware and prompt you for its driver.



1. Turn off your computer.
2. Take the modem out of its packaging.
3. Connect the provided USB cable to the back of the USB modem.
4. Connect the other end of the USB cable to a free USB Port socket at the back of your computer.
5. Plug the telephone line into the socket on the back of the USB modem marked LINE then plug the other end of the cord into the wall socket.
6. Power on your computer.
7. This completes the setting up of your 56K USB Modem hardware. Please proceed to the next section for information on Installing The Modem Drivers in Windows 98SE/ME/XP/2000.

NOTE : **You need to have an account from an Internet service provider in order to connect to Internet.**

This completes the modem connections. Please proceed to Step 2.

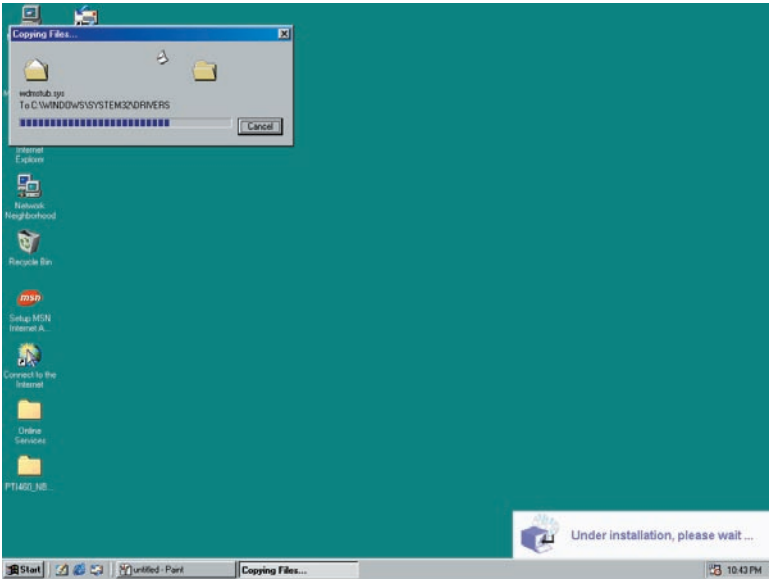
Step 2: Installing Your Modem Driver

A. Windows 98:

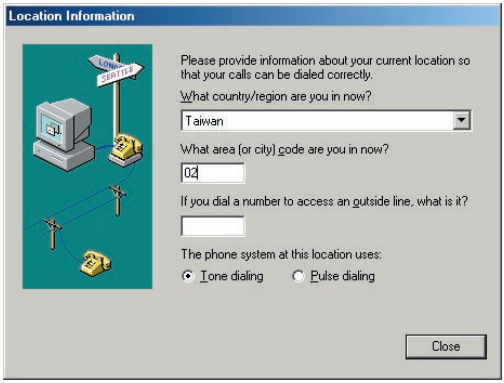
- **Driver Installation :**

1. Power on your computer to start Windows 98. Windows 98 will detect the newly-installed modem and a "Add New Hardware Wizard" window will appear. Click "Cancel" to close the hardware wizard, then place your Driver CD into the CD-ROM drive.

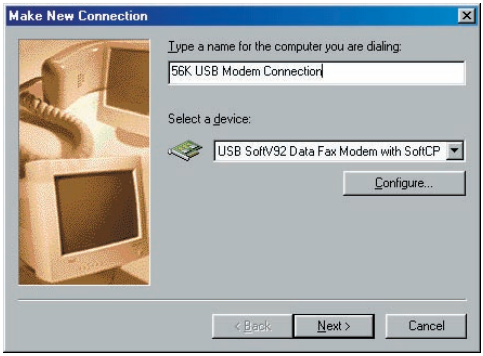
2. Windows system will automatically install the device driver and copy all the necessary files to your system. An "Under Installation, please wait .." icon will appear indicates the files copying process.



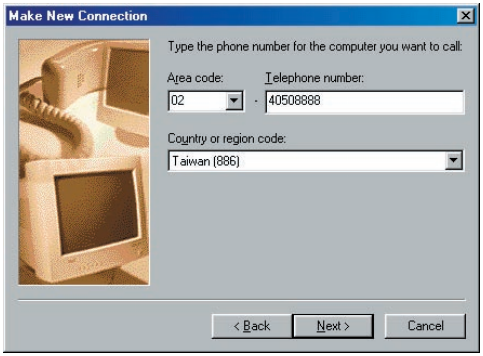
3. A "Location Information" wizard will pop-up. Fill in your location information then click "Close" to continue.



4. A "Make New Connection" wizard will pop-up during the driver installation process. Manually enter a name for the computer you are going to dial then click "Next" to continue.

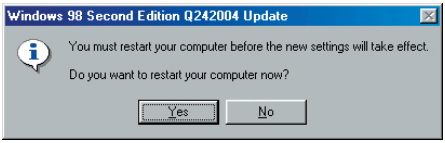


5. Manually enter the phone number to dial then click "Next" to continue. Check your ISP for the correct phone number and setting.

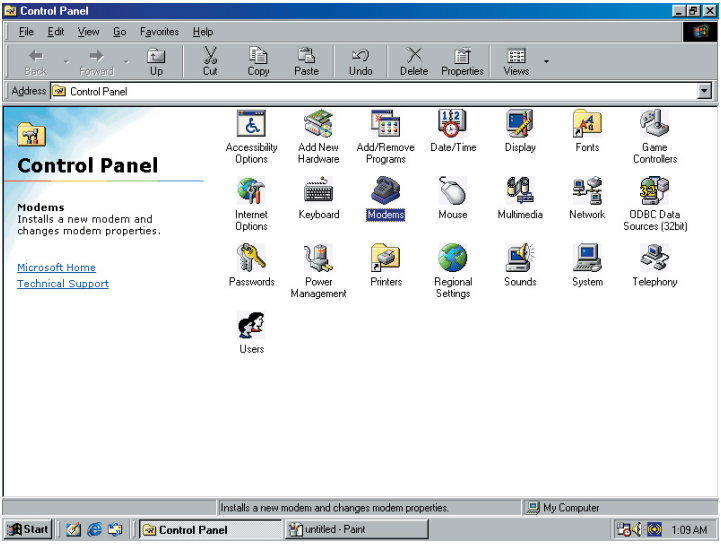


6. The Setup Wizard will ask you to review your settings before it starts to copy necessary files to your system. Click “Finish” if you are confirmed with your setting, or click “Back” to make any necessary changes.

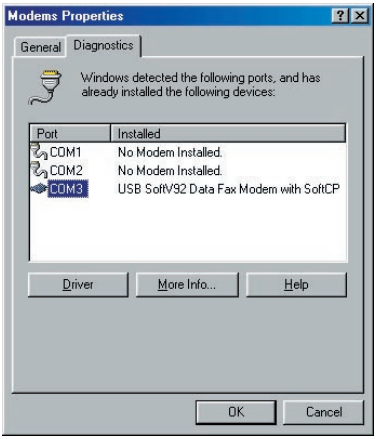
7. You must restart your computer before the new setting will take effect. Click “Yes” to restart your Windows 98 system. After the Reboot and Restart process of your window system, the Modem driver installation process will complete automatically at the same time.



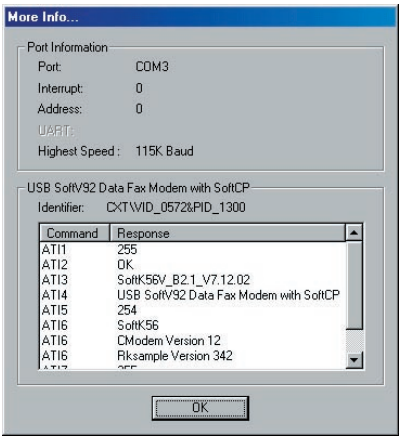
8. Move your cursor as following sequence: “Start” > “Settings” > “Control Panel” and double click on the “Modem” icon.



9. The following window will pop-up. Click the “Diagnostics” tab and select the “USB SoftV92 Data Fax Modem with SoftCP” from the list then click “More Info..”.

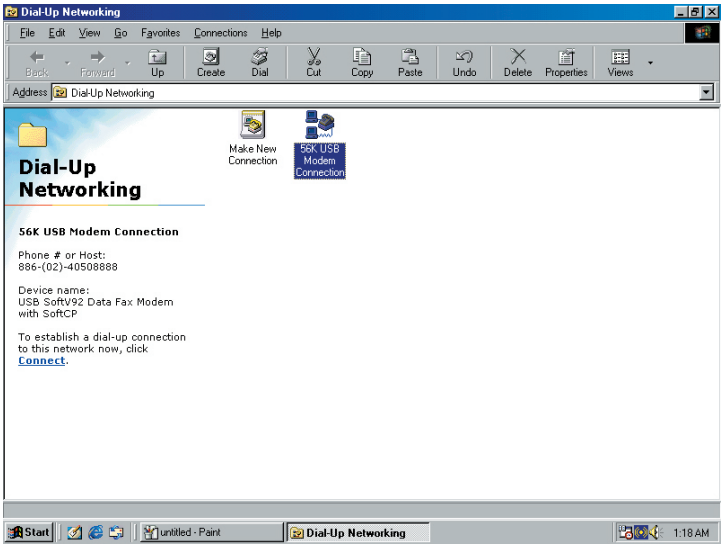


10. The following window will pop-up. The USB modem will responding to AT command set if the driver is properly installed and functioning correctly. Click “OK” to close the diagnostic process.

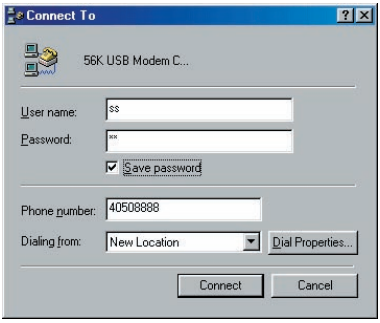


• Testing your Internet connection

1. Move your cursor as following sequence: “Start” >“Programs” > “Accessories” > “Communications” > “Dial-Up Networking”. The following window will pop-up. Double click on the “56K USB Modem Connection” icon.

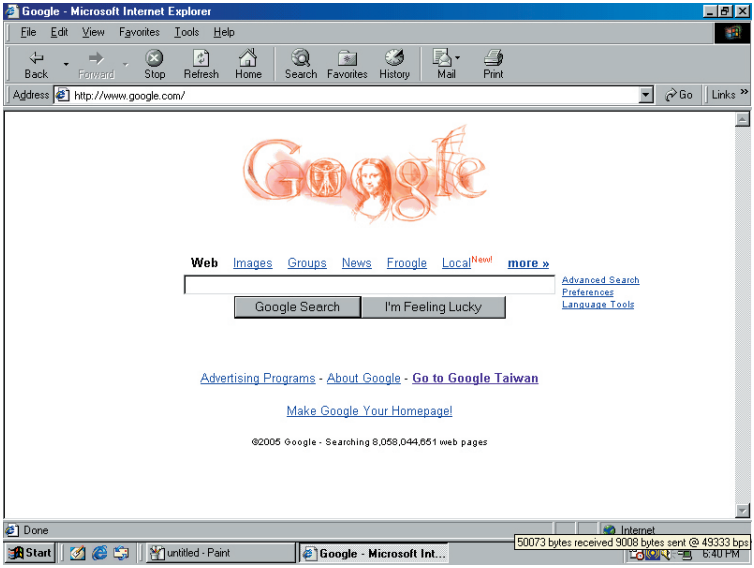


2. The following window will pop-up. Manually enter your “User name” and “Password” which provided by your ISP, then click “Connect”.

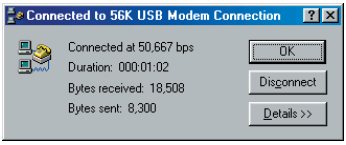


3. The following connection and authentication icon will pop-up.

4. Launch your web browser, and enter the Google Web Address: “www.google.com” in the address field then press “Enter”. The following Google website index page will display on your screen. This shows your 56K Modem connection is correctly set and access to the Internet is now available.

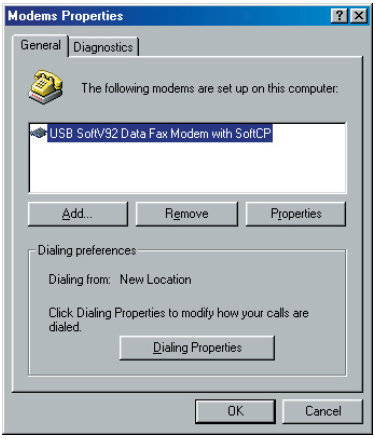


5. Once you have successful connected to the Internet, a connected icon will automatically appears in you Window System task bar. This icon will lit when receiving or transmitting data from or to the Internet. Double click the connection icon and the following window will be shown. Click “Disconnect” tab to end up the Internet connection.



• Uninstalling the Driver

1. To uninstall the 56K Modem form your system, click “Start” > “Settings” > “Control Panel” and double click on the “Modems” icon. The following window will pop-up. Click “Remove” tab. The uninstall wizard will guides you and remove all the necessary files from your system.

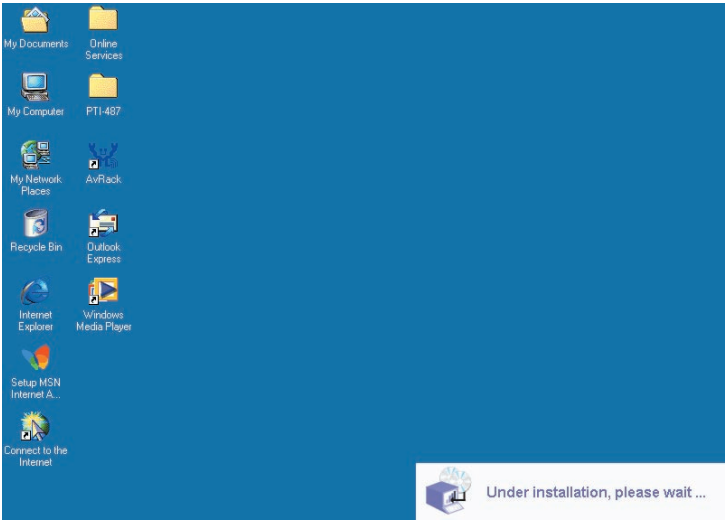


B. Windows ME:

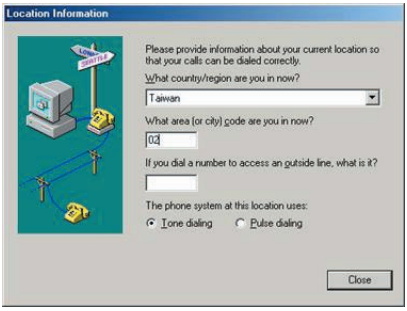
• Driver Installation :

1. Power on your computer to start Windows ME. Windows ME will detect the newly-installed modem and a "Add New Hardware Wizard" window will appear. Click "Cancel" to close the hardware wizard, then place your Driver CD into the CD-ROM drive.

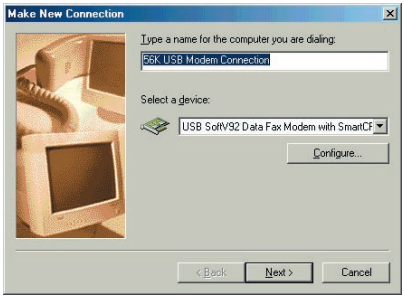
2. Windows system will automatically install the device driver and copy all the necessary files to your system. An "Under Installation, please wait .." icon will appear indicates the files copying process.



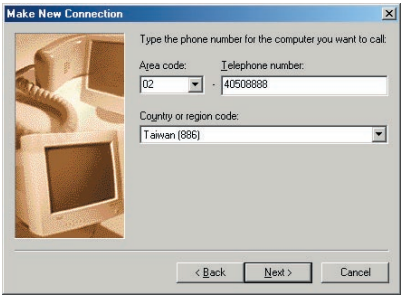
3. A “Location Information” wizard will pop-up. Fill in your location information then click “Close” to continue.



4. A “Make New Connection” wizard will pop-up during the driver installation process. Manually enter a name for the computer you are going to dial then click “Next” to continue.



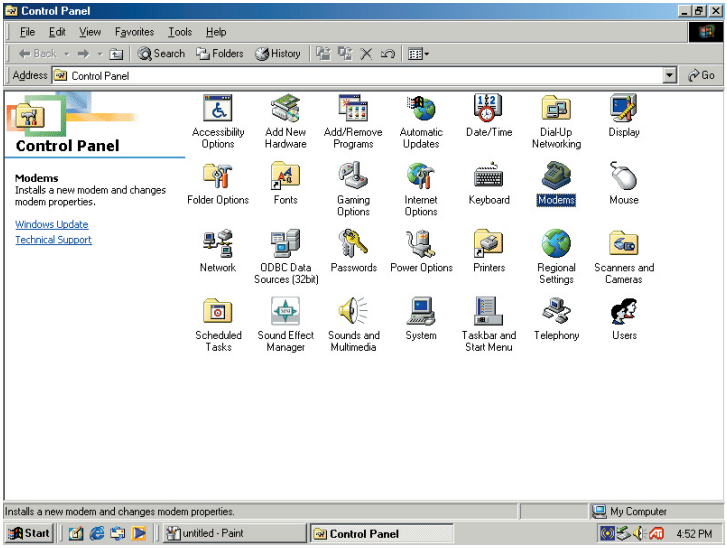
5. Manually enter the phone number to dial then click “Next” to continue. Check your ISP for the correct phone number and setting.



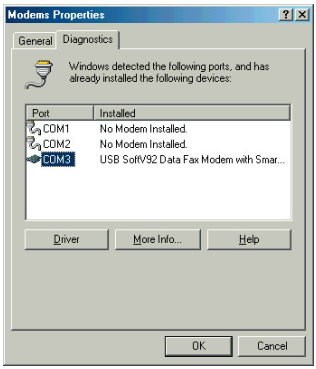
6. The Setup Wizard will ask you to review your settings before it starts to copy necessary files to your system. Click “Finish” if you are confirmed with your setting, or click “Back” to make any necessary changes.

7. An “Install Finish !!” wizard will pop-up. Click “OK” to complete the Auto Installation process.

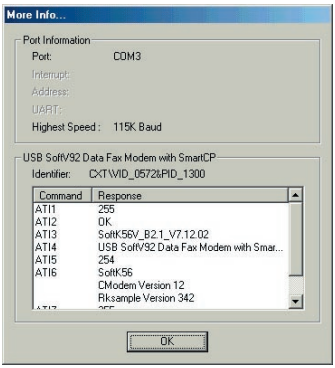
8. Move your cursor as following sequence: “Start” > “Settings” > “Control Panel” and double click on the “Modem” icon.



9. The following window will pop-up. Click the “Diagnostics” tab and select the “USB SoftV92 Data Fax Modem with SmarCP” from the list then click “More Info..”.

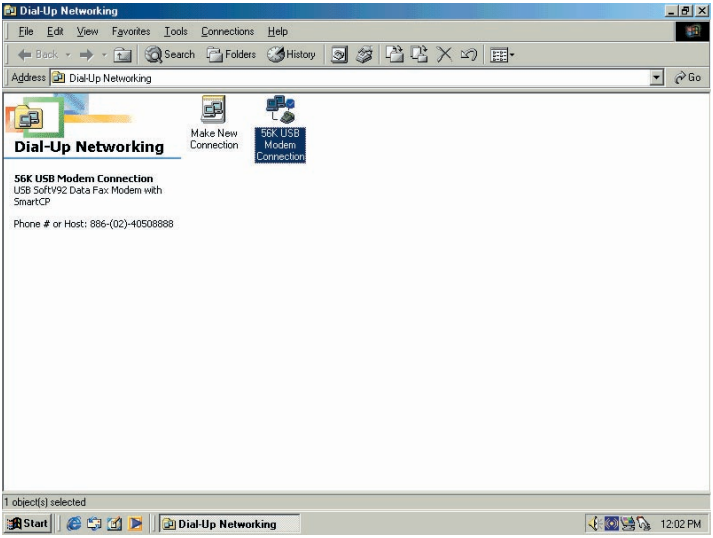


10. The following window will pop-up. The USB modem will responding to AT command set if the driver is properly installed and functioning correctly. Click “OK” to close the diagnostic process.

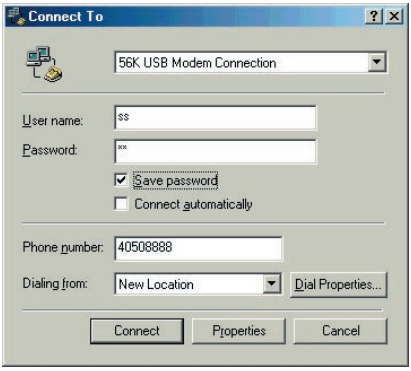


• Testing your Internet connection

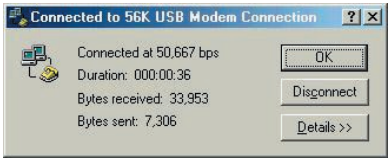
1. Move your cursor as following sequence: “Start” > “Settings” > “Dial-Up Networking”. The following window will pop-up. Double click on the “56K USB Modem Connection” icon.



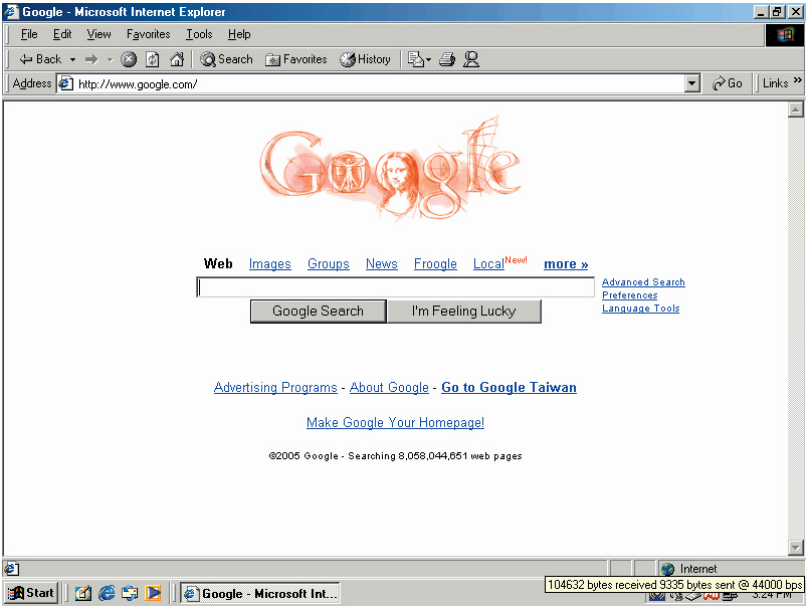
2. The following window will pop-up. Manually enter your “User name” and “Password” which provided by your ISP, then click “Connect”.



3. The following connection and authentication icon will pop-up.



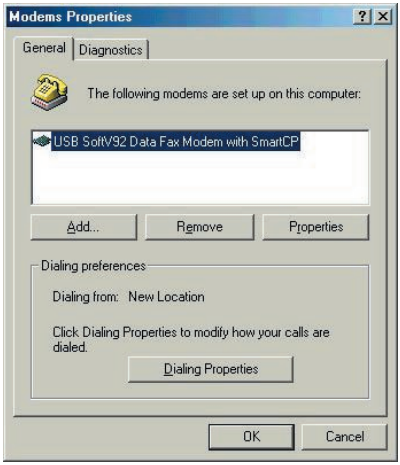
4. Launch your web browser, and enter the Google Web Address: “www.google.com” in the address field then press “Enter”. The following Google website index page will display on your screen. This shows your 56K Modem connection is correctly set and access to the Internet is now available.



5. Once you have successful connected to the Internet, a connected icon will automatically appears in you Window System task bar. This icon will lit when receiving or transmitting data from or to the Internet. Double click the connection icon and the following window will be shown. Click “Disconnect” tab to end up the Internet connection.

• Uninstalling the Driver

1. To uninstall the 56K Modem form your system, click “Start” > “Settings” > “Control Panel” and double click on the “Modems” icon. The following window will pop-up. Click “Remove” tab. The uninstall wizard will guides you and remove all the necessary files from your system.



C. Windows XP :

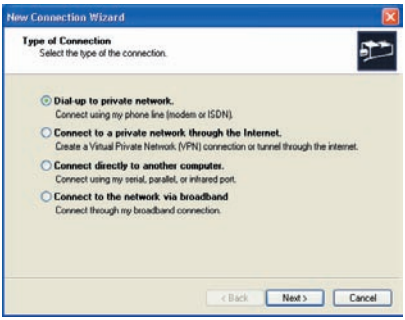
• Driver Installation :

1. Power on your computer to start Windows XP. Windows XP will detect the newly-installed modem and a "Found New Hardware Wizard" window will appear. Click "Cancel" to close the hardware wizard, then place your Driver CD into the CD-ROM drive.

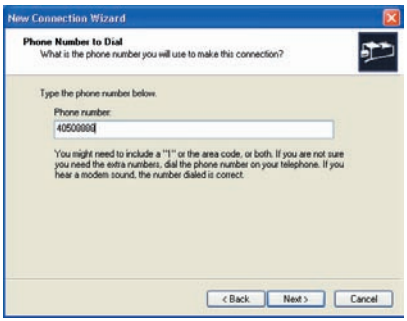
2. Windows system will automatically install the device driver and copy all the necessary files to your system. An "Under Installation, please wait .." icon will appear indicates the files copying process.

3. A “Location Information” window will pop-up. Follow the instruction and manually fill in all the necessary items then click “OK” to continue.

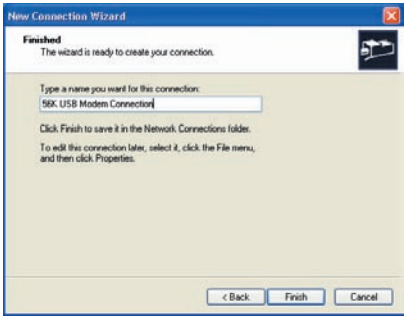
4. A “New Connection Wizard” will pop-up during the driver installation process. Click “Dial-up to private network” then click “Next” to continue.



5. Manually enter the phone number to dial then click “Next” to continue. Check your ISP for the correct phone number and setting.

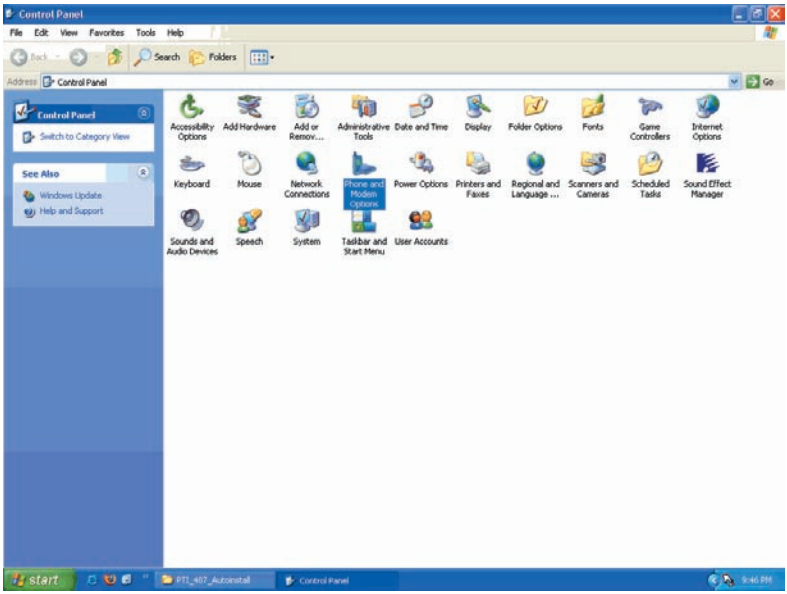


6. Type a name you want for this connection then click “Finish”.

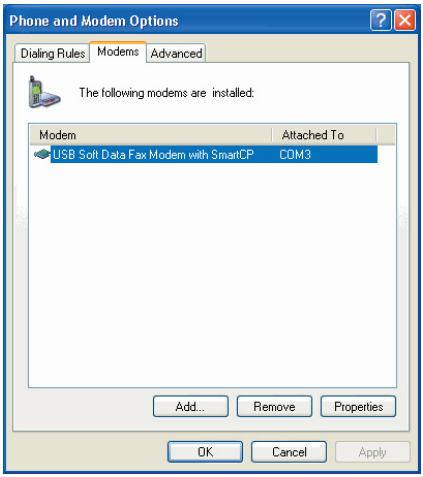


7. An “Install Finish !!” wizard will pop-up. Click “OK” to complete the Auto Installation process.

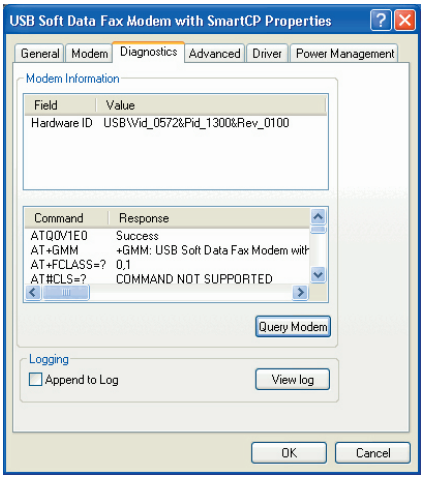
8. Move your cursor as following sequence: “Start” > “Settings” > “Control Panel” and click “Phone and Modem Options”.



9. The following window will pop-up. Click the “Modems” tab and select “USB Soft Data Fax Modem with SmartCP” from the list then click “Properties”.

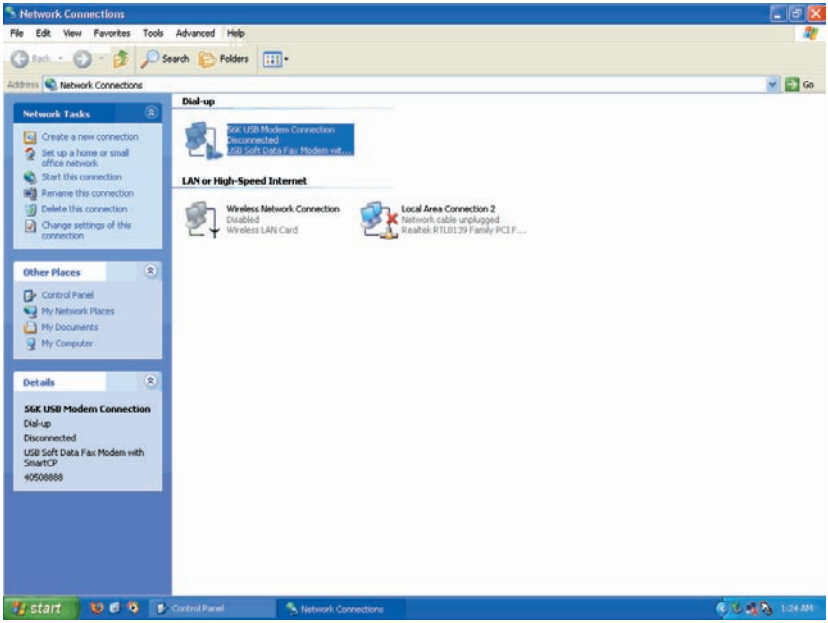


10. The following window will pop-up. Click the “Diagnostics” tab then click “Query Modem”. The USB modem will responding to AT command set if the driver is properly installed and functioning correctly. Click “OK” to close the diagnostic process.

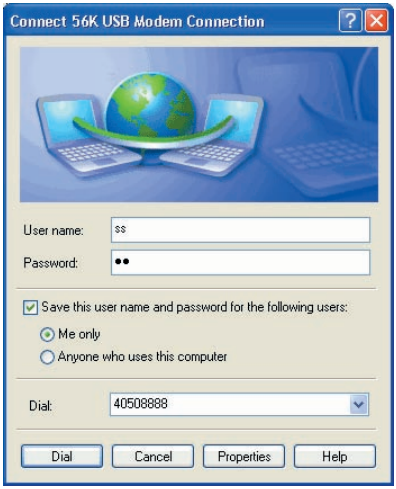


• Testing your Internet connection

1. Move your cursor as following sequence: “Start” > **“Settings” > “Network Connections” then click on “56K** USB Modem Connection”.

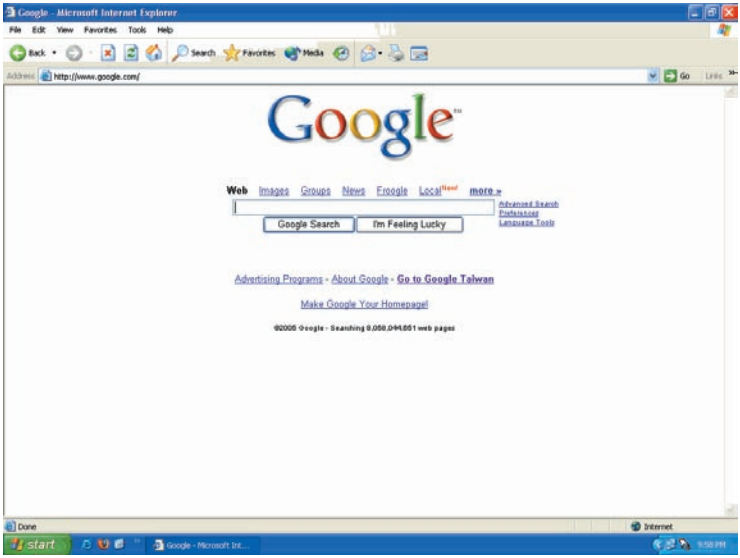


2. The following window will pop-up. Manually enter your “User name” and “Password” which provided by your ISP, then click “Dial”.



3. The following connection and authentication icon will pop-up.

4. Launch your web browser, and enter the Google Web Address: “www.google.com” in the address field then press “Enter”. The following Google website index page will display on your screen. This shows your 56K Modem connection is correctly set and access to the Internet is now available.



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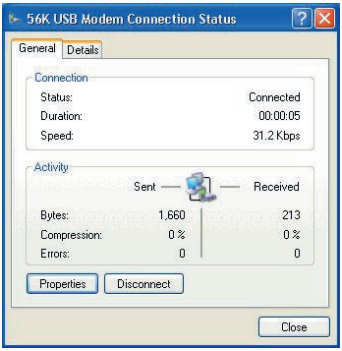
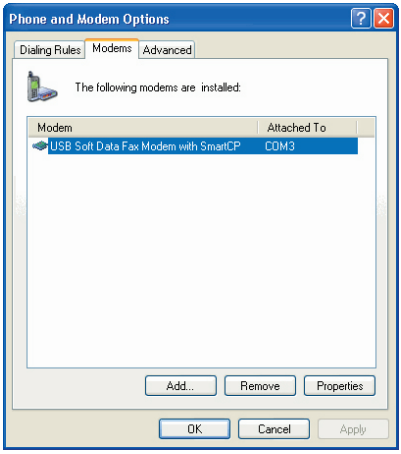


• Uninstalling the Driver

1. To uninstall the 56K Modem form your system, click “Start” > **“Settings” > “Control Panel” > “Phone and** Modem Options”. The following window will pop-up. Click “Modems” tab and select the modem type from the list then click “Remove”. The uninstall wizard will guides you and remove all the necessary files from your system.



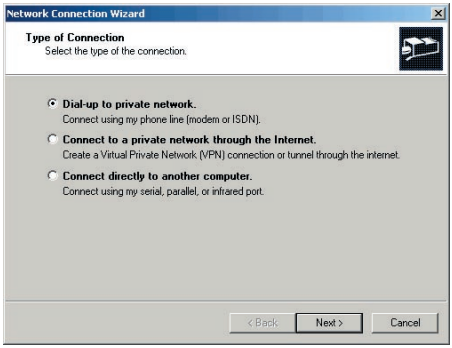
D. Windows 2000 :

• Driver Installation :

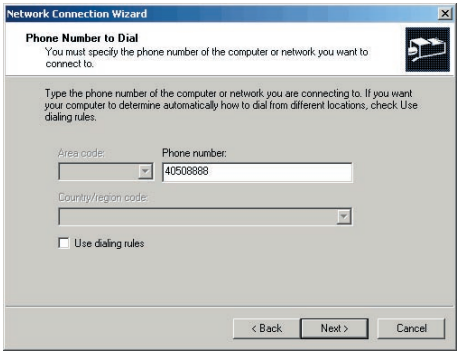
1. Power on your computer to start Windows 2000. Windows 2000 will detect the newly-installed modem and a “Found New Hardware Wizard” window will appear. Click “Cancel” to close the hardware wizard, then place your Driver CD into the CD-ROM drive.

2. Windows system will automatically install the device driver and copy all the necessary files to your system. An “Under Installation, please wait ..” icon will appear indicates the files copying process.

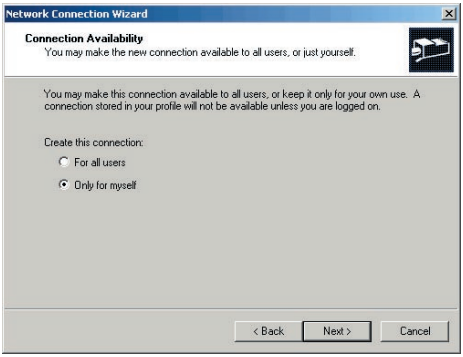
3. A “Network Connection Wizard” will pop-up during the driver installation process. Click “Dial-up to private network” then click “Next” to continue.



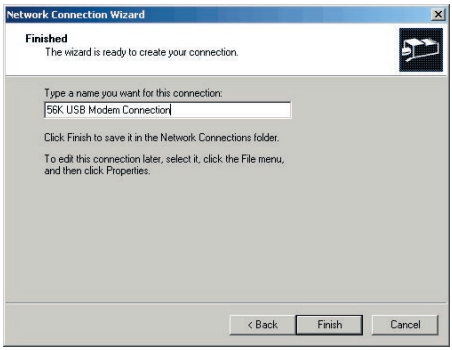
4. Manually enter the phone number to dial then click “Next” to continue. Check your ISP for the correct phone number and setting.



5. You may make this connection available for all users, or keep it only for your own use. Select “For all users” or “Only for myself” then click “Next” to continue.

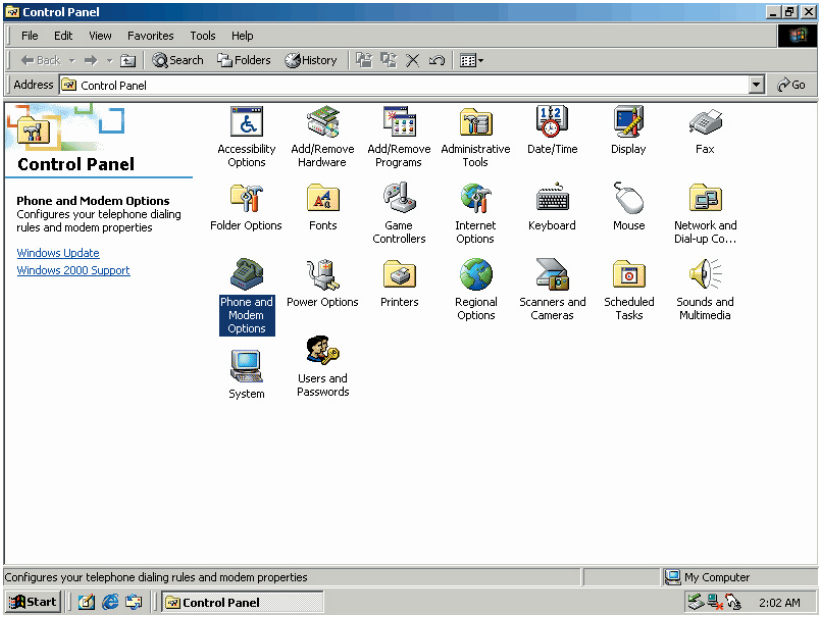


6. Type a name you want for this connection then click “Finish”.

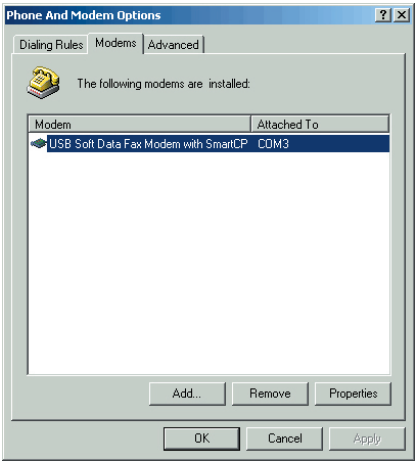


7. An “Install Finish !!” wizard will pop-up. Click “OK” to complete the Auto Installation process.

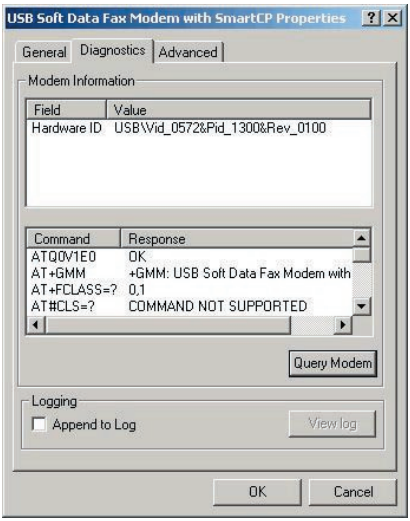
8. Move your cursor as following sequence: “Start” > **“Settings” > “Control Panel” and click “Phone and Modem** Options”.



9. The following window will pop-up. Click the “Modems” tab and select “USB Soft Data Fax Modem with SmartCP” from the list then click “Properties”.

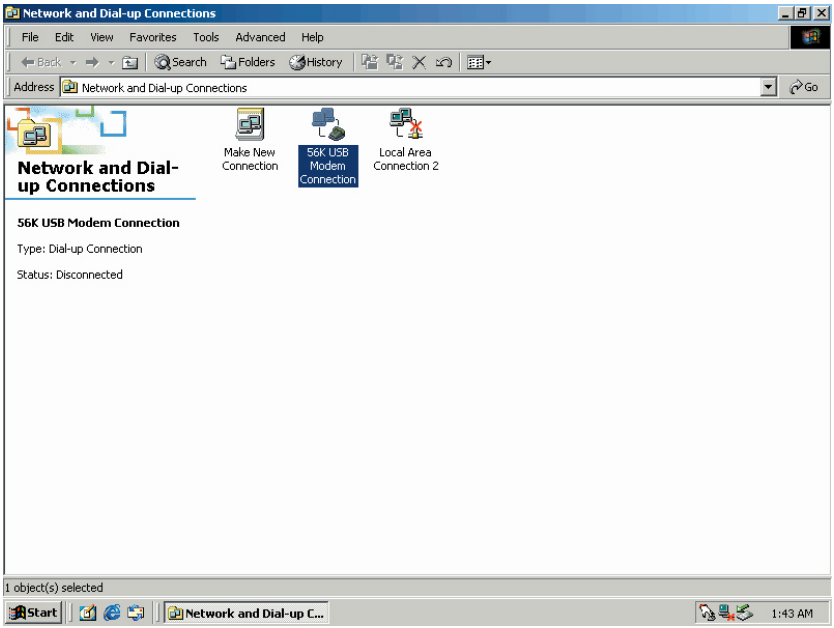


10. The following window will pop-up. Click the “Diagnostics” tab then click “Query Modem”. The USB modem will responding to AT command set if the driver is properly installed and functioning correctly. Click “OK” to close the diagnostic process.

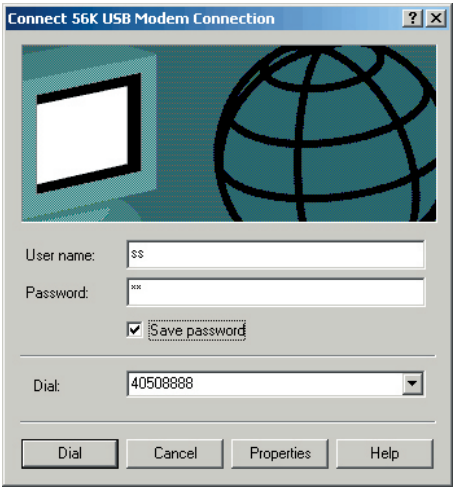


• Testing your Internet connection

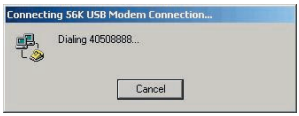
1. Move your cursor as following sequence: “Start” > **“Settings”> “Network and Dial-up Connections” then click** on “56K USB Modem Connection”.



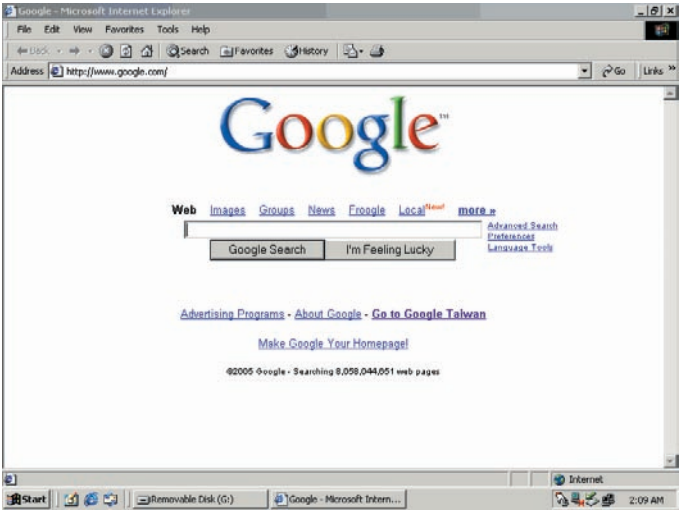
2. The following window will pop-up. Manually enter your “User name” and “Password” which provided by your ISP, then click “Dial”.



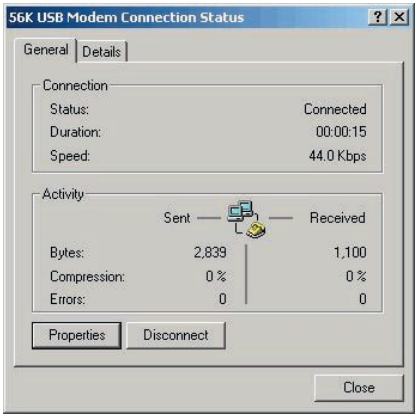
3. The following connection and authentication icon will pop-up.



4. Launch your web browser, and enter the Google Web Address: “www.google.com” in the address field then press “Enter”. The following Google website index page will display on your screen. This shows your 56K Modem connection is correctly set and access to the Internet is now available.

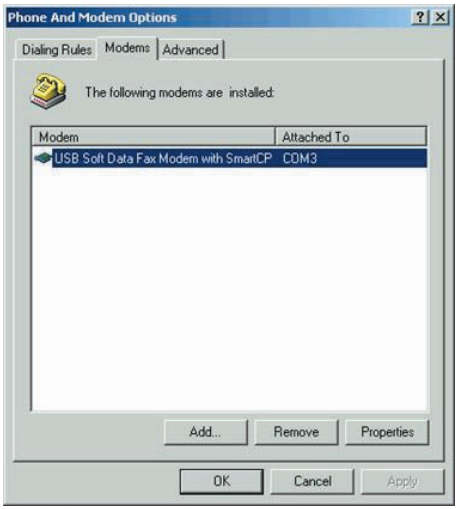


5. Once you have successful connected to the Internet, a connected icon will automatically appears in you Window System task bar. This icon will lit when receiving or transmitting data from or to the Internet. Double click the connection icon and the following window will be shown. Click “Disconnect” tab to end up the Internet connection.



• Uninstalling the Driver

1. To uninstall the 56K Modem form your system, click “Start” > “Settings” > “Control Panel” > “Phone and Modem Options”. The following window will pop-up. Click “Modems” tab and select the modem type from the list then click “Remove”. The uninstall wizard will guides you and remove all the necessary files from your system.



Troubleshooting

- **Windows doesn't detect Modem**

1. Check whether the Modem is properly plug into a free USB port through the provided USB cable to your computer.
2. Check whether the Power LED of the USB Modem is lighting once connected to your computer.

- **There is no dial tone**

1. Ensure that the telephone cable is securely connected at both ends.
2. Ensure the telephone cable is plugged into the correct jack on the modem.
3. Unplug the telephone line cable from the computer, and connect it directly to a telephone from the wall outlet. Check for a dial tone. If there is none, the problem is in the telephone line or system. Call the service provider.
4. Check whether the Modem driver is properly installed.

- **Modem is calling, but no connection is established**

1. Call again later.
2. Try the direct outgoing line to ensure proper telephone service.
3. Check the number you are dialing is correct.
4. Your ISP is busy. Try to call again later.

- **Error report of "No Dial-tone"**

1. Wait until the telephone line is free.
2. Test the telephone line with an ordinary phone set to ensure the line is in service.

- **The modem disconnects during a connection**

1. Ensure that the telephone cable is securely connected at both ends.
2. Ensure that call-waiting is disabled.
3. Another phone extension in the house might have been picked up.

- **Data is not transmitted or received for unusually long periods of time**

1. Re-dial the call. (The telephone line connection may be poor.)
2. Try another ISP number, the server could be busy.

Specifications

Key Features

- USB Interface 1.1
- ITU-T V.92* Data/Fax modem
- Quick Connect, Modem-on-Hold ** and 48Kbps PCM upstream supported for ITU-T V.92
- Automatic detection between data/fax calls
- Line quality monitoring and re-train
- Enhanced ADPCM/PCM voice operation with concurrent DTMF detection
- Surge Protection Circuitry

Chipset Solutions

- Based on ST Microelectronics Pegasus Discrete DAA chipset configuration

Data Mode Features

- 56Kbps Internet connectivity via ITU V.90, V.92 standard
- DTE rate of up to 460,800 bps (via Virtual UART)

Data Modem Standards

- V.92, V.90 : 56Kbps
- V.34bis : 33.6Kbps
- V.34 : 28.8Kbps
- V32bis : 14.4Kbps
- V.32, V.23, V.22bis, V.22, V.21
- Bell 212A, Bell 103

Data Compression

- V.44, V.42bis, MNP 5

Error Correction

- V.42 LAPM, MNP 2-4

Fax Modulation

- V.17 : 14.4Kbps
- V.29 : 9,600bps
- V.27ter : 4,800bps

Fax Control / Protocol

- Class 1.0 commands, V.21 channel 2
- Group 3 fax mode

USB Features

- Complies with USB Specifications rev1.1
- Complies with USB COM Class rev 1.1
- Complies with USB Data Class rev 1.1
- Supports Suspend/Resume
- Bus Powered, does not require external power supply
- OnNow Power Management (D0, D2, D3)

Driver Support

- Windows® 98SE
- Windows® 2000
- Windows® Millennium
- Windows® XP

Connector On-Board

- 1 x USB Series A Cable
- 1 x RJ11 telephone sockets for Phone

Note: *** V.92 feature is subjected to ISP support**
**** Requires software application support**

Appendix A: Cable Connections

This cable information is provided for your reference only. Please ensure you only connect the appropriate cable into the correct socket on either this product or your computer.

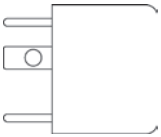
If you are unsure about which cable to use or which socket to connect it to, please refer to the hardware installation section in this manual. If you are still not sure about cable connections, please contact a professional computer technician or NetComm for further advice.

RJ11 connector and cable

An RJ-11 connector is the small, modular plug used for most analog telephones. It has six pin slots in the head, but usually only two or four of them are used.

RJ-11 Connector Pin Assignment	Normal Assignment
1	Signal Ground
2	CTS
3	RXD
4	TXD
5	+5 Volts In
6	Signal Ground

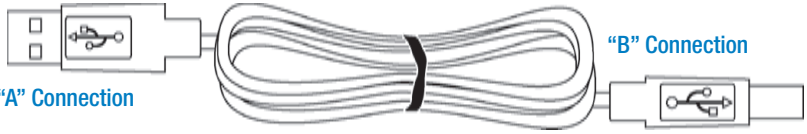
605 to RJ-11 adapter



The 605 to RJ-11 adaptor is provided to comply with the older 610 Telstra wall socket. The 605 to RJ-11 adapter may be used to convert the supplied RJ-11 cable, if the older connection is required.

USB cable

A typical USB cord has an “A” connection (“upstream” to plug into the computer) and a “B” connection (“downstream” to plug into the device).



By using different connectors on the upstream and downstream ends, cable connection is simplified. The “B” connection will fit a into the “B” socket of any USB device. Similarly, any “A” connector can be plugged into any “A” socket, such as on a computer.

If it is a new device, the operating system auto-detects it and asks for the driver disk. If the device has already been installed, the computer activates it and starts talking to it. USB devices can be connected and disconnected at any time.

Appendix B: Registering your NetComm Product

All NetComm Limited ("NetComm") products have a standard 12 month warranty from date of purchase against defects in manufacturing and that the products will operate in accordance with the specifications outlined in the User Guide. However some products have an extended warranty option (please refer to packaging). To be eligible for the extended warranty you must supply the requested warranty information to NetComm within 30 days of the original purchase by registering on-line via the NetComm web site at:

www.netcomm.com.au

Contact Information

If you have any technical difficulties with your product, please do not hesitate to contact NetComm's Customer Support Department.

Email: support@netcomm.com.au

Fax: (+612) 9424-2010

Web: www.netcomm.com.au

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NetComm Limited reserves the right to change the specifications and operating details of this product without notice.

NetComm is a registered trademark of NetComm Limited.

All other trademarks are acknowledged the property of their respective owners.

Customer Information

ACA (Australian Communications Authority) requires you to be aware of the following information and warnings:

(1) This unit shall be connected to the Telecommunication Network through a line cord which neets the requirements of the ACA TS008 Standard.

(2) This equipment has been tested and found to comply with the Standards for C-Tick and or A-Tick as set by the ACA. These standards are designed to provide reasonable protection against harmful interference in a residential installation.

Product Warranty

The warranty is granted on the following conditions:

1. This warranty extends to the original purchaser (you) and is not transferable;
2. This warranty shall not apply to software programs, batteries, power supplies, cables or other accessories supplied in or with the product;
3. The customer complies with all of the terms of any relevant agreement with NetComm and any other reasonable requirements of NetComm including producing such evidence of purchase as NetComm may require;
4. The cost of transporting product to and from NetComm's nominated premises is your responsibility; and,
5. NetComm does not have any liability or responsibility under this warranty where any cost, loss, injury or damage of any kind, whether direct, indirect, consequential, incidental or otherwise arises out of events beyond NetComm's reasonable control. This includes but is not limited to: acts of God, war, riot, embargoes, acts of civil or military authorities, fire, floods, electricity outages, lightning, power surges, or shortages of materials or labour.
6. The customer is responsible for the security of their computer and network at all times. Security features may be disabled within the factory default settings. NetComm recommends that you enable these features to enhance your security.

The warranty is automatically voided if:

1. You, or someone else, use the product, or attempts to use it, other than as specified by NetComm;
2. The fault or defect in your product is the result of a voltage surge subjected to the product either by the way of power supply or communication line, whether caused by thunderstorm activity or any other cause(s);
3. The fault is the result of accidental damage or damage in transit, including but not limited to liquid spillage;
4. Your product has been used for any purposes other than that for which it is sold, or in any way other than in strict accordance with the user manual supplied;
5. Your product has been repaired or modified or attempted to be repaired or modified, other than by a qualified person at a service centre authorised by NetComm; and,
6. The serial number has been defaced or altered in any way or if the serial number plate has been removed.

Limitations of Warranty

The Trade Practices Act 1974 and corresponding State and Territory Fair Trading Acts or legalisation of another Government ("the relevant acts") in certain circumstances imply mandatory conditions and warranties which cannot be excluded. This warranty is in addition to and not in replacement for such conditions and warranties.

To the extent permitted by the Relevant Acts, in relation to your product and any other materials provided with the product ("the Goods") the liability of NetComm under the Relevant Acts is limited at the option of NetComm to:

- Replacement of the Goods; or
- Repair of the Goods; or
- Payment of the cost of replacing the Goods; or
- Payment of the cost of having the Goods repaired.

All NetComm ACN 002 490 486 products have a standard 12 months warranty from date of purchase. However some products have an extended warranty option (refer to packaging). To be eligible for the extended warranty you must supply the requested warranty information to NetComm within 30 days of the original purchase by registering on-line via the NetComm web site at www.netcomm.com.au.

NetComm reserves the right to request proof of purchase upon any warranty claim.

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Broadband Solutions

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