
AnyDATA.NET USB Modem (User Manual)



AnyDATA CDMA Module Series Reference Design Specification
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1. About ANYDATA.NET USB MODEM

1.1 Product Description and Feature

In today's fast-moving economy, the need to remain connected is essential. The world most compact AnyDATA EVDO USB modem, (ADU-E100A), offers the appropriate solution to home and mobile connectivity using antenna diversity that enables better connectivity and data speed in poor signal environment and internal antenna technology. It provides extensive and reliable wireless data communication at speed up to 2.4Mbps downlink and 153kbps uplink, The AnyDATA EVDO USB modem connects to USB port and application software effortlessly integrates into a Windows based PC as well as notebook computer.

- EVDO technology based on Qualcomm MSM6500 chipset
- Support CDMA EVDO and 1Xrtt
- High speed wireless data up to 2.4Mbps downlink and 153kbps uplink
- Receive/Send SMS during DATA operation
- Internal antenna supporting diversity
- 4 multi-color LEDs
- Support USB 2.0 interface with PC
- Battery included, 1500mAh
- Support RUIM card

1.2 Technical Specification

Technical Standard	<ul style="list-style-type: none"> - CDMA EVDO - CDMA 1xRTT - TCP/IP and PPP - IS-637A - IS-707-A - IS-837, IS-856, IS-866, IS-890-
RF Technology	<ul style="list-style-type: none"> - Antenna Diversity - Internal Antenna
Electrical	<ul style="list-style-type: none"> - Sensitivity : Lower than -104dBm - Transmit Power : 320mW(25dBm) max. - 4 Multi-color LED indicators
Input Power	<ul style="list-style-type: none"> - External Power : DC 4.5V to 5V - Battery : 4.2V Li-Ion, 1500mAh
Interface	<ul style="list-style-type: none"> - Mini-B type USB - DC Power Jack - External Antenna Port
Current Consumption	<ul style="list-style-type: none"> - Traffic Mode : 800mA max. at 5V - Idle Mode : 110mA - Sleep Mode : 9mA
Antenna	<ul style="list-style-type: none"> - Two WIFA antenna
Data Speed	<ul style="list-style-type: none"> - Download : 2.4Mbps max. - Upload : 153kbps
System Requirement	<ul style="list-style-type: none"> - Windows 2000/XP - USB Port - Above 64MB RAM
Frequency	<ul style="list-style-type: none"> -Rx :462.5 ~ 467.470MHz -Tx :452.5 ~ 457.475MHz
Size	<ul style="list-style-type: none"> - 100mm(L)*56mm(W)*14mm(H) without battery - 100mm(L)*56mm(W)*25mm(H) with battery
Weight	<ul style="list-style-type: none"> - 61g without battery - 124g with battery
Software Spec	<ul style="list-style-type: none"> - CDMA2000 High rate packet data air interface - CDMA 1xRTT, IS-95A/B - IS-637A - IS-707-A - IS-837, IS-856, IS-866, IS-890-
Environmental	<ul style="list-style-type: none"> - Operating Temperature : -20 ~ 50

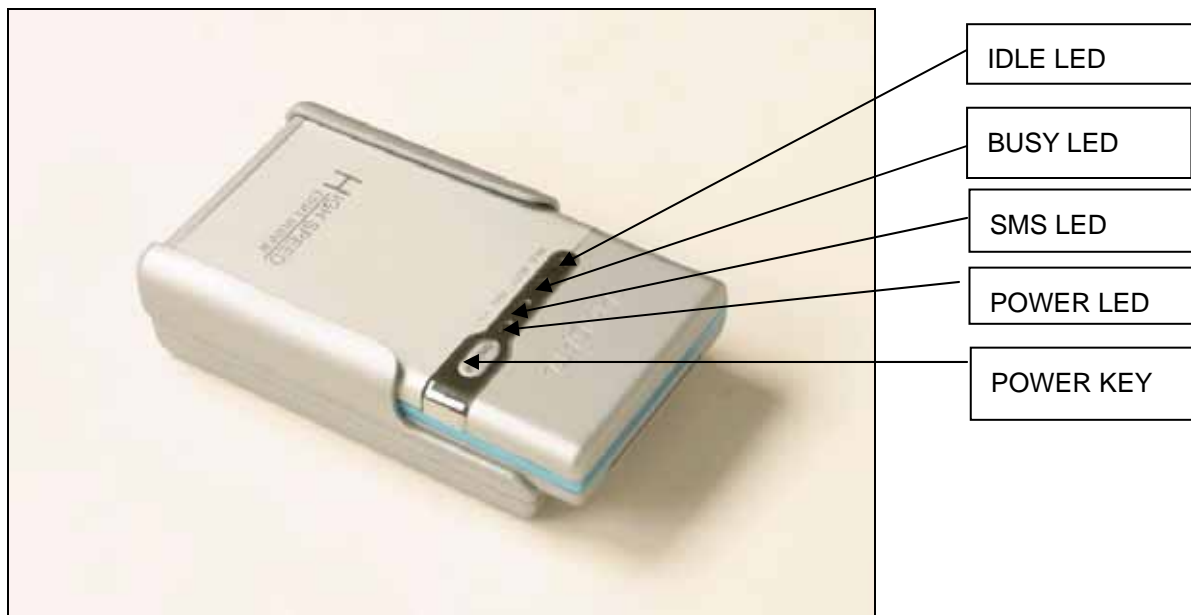
2. Getting Started

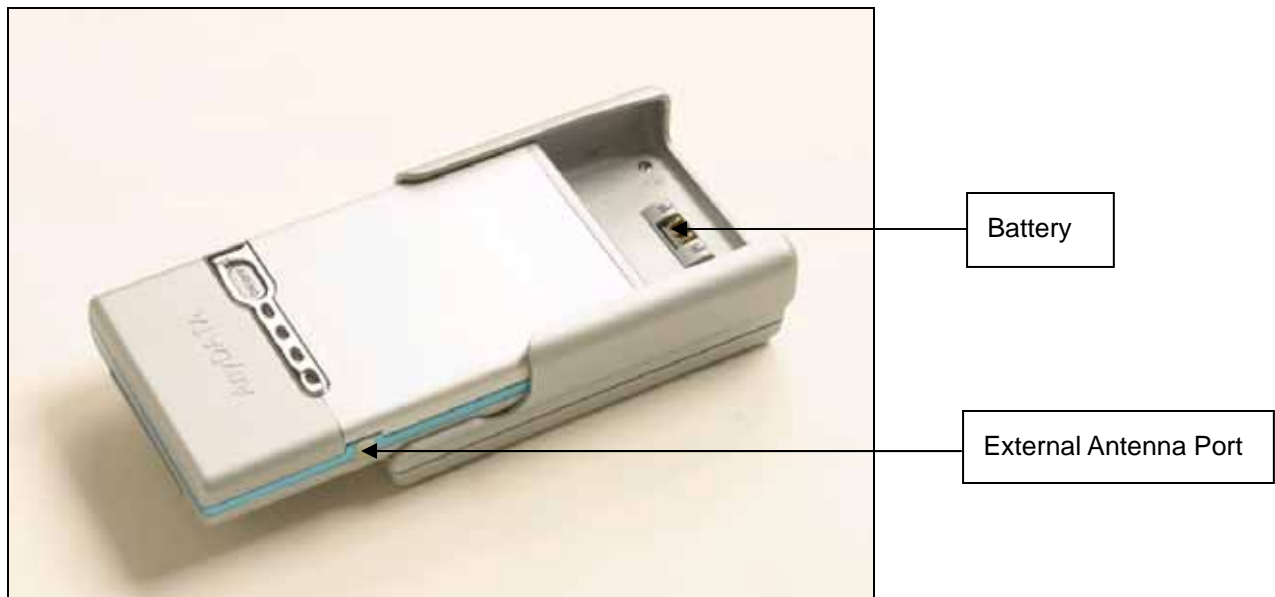
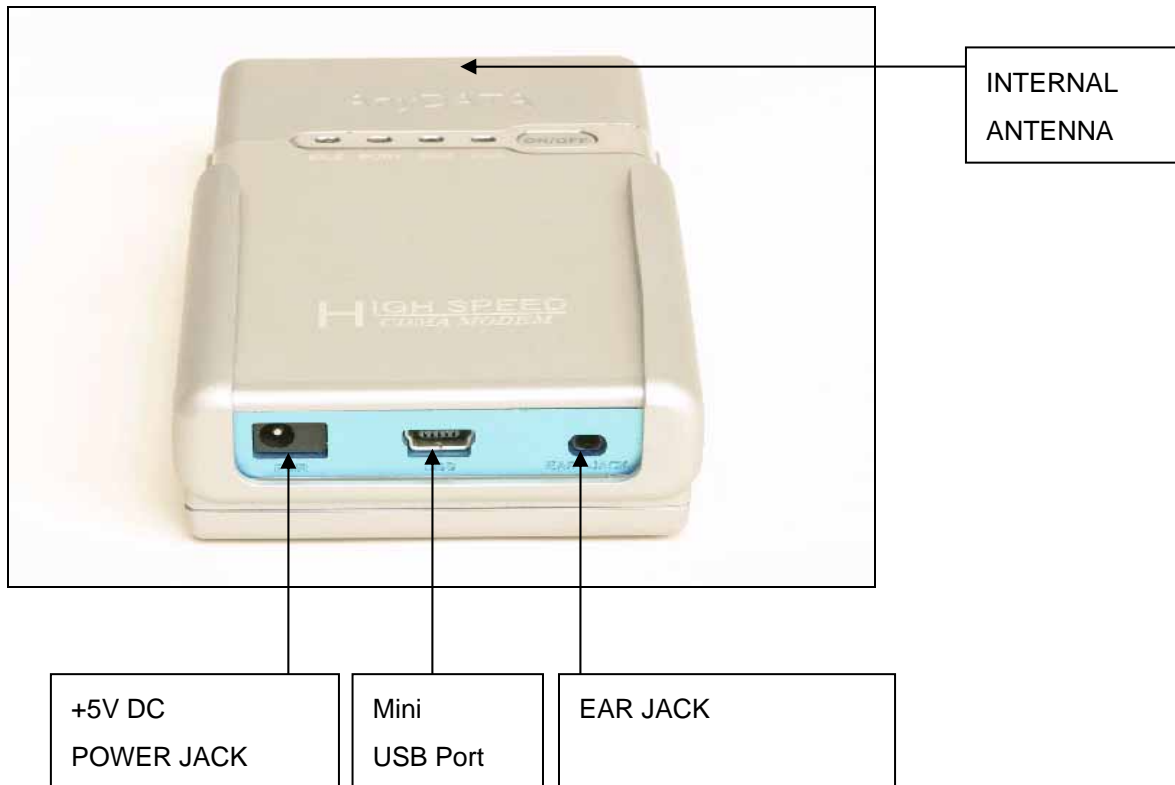
In order to use ANYDATA.NET USB MODEM following must be satisfied:

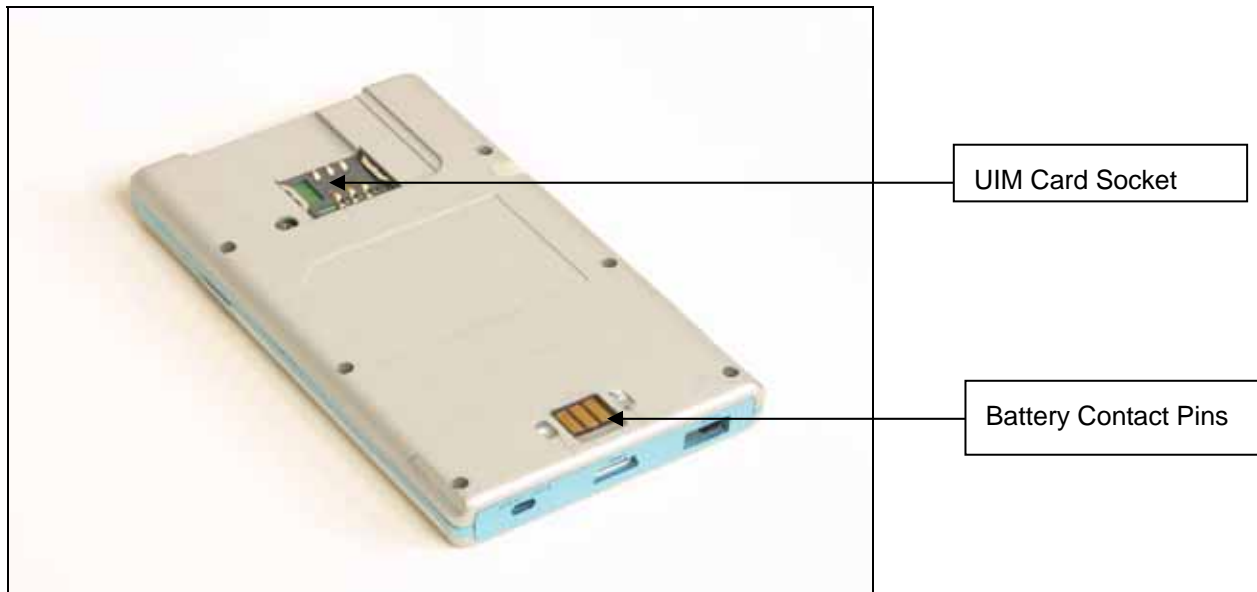
- 1) Easy Wireless Net Software and ANYDATA.NET USB MODEM Driver has been installed on the computer.
- 2) Have a proper user name and password from the local CDMA operator.
- 3) ANYDATA.NET USB MODEM must have been certified from the operator.

<CAUTION> PLEASE CONNECT THE BATTERY AND EXTERNAL POWER SUPPLY TO INSURE MAXIMUM PERFORMANCE OF THE MODEM. IF USING THE MODEM WHILE ON-THE-ROAD, PLEASE KEEP BATTERY INTACTED WITH THE MODEM. AND MAKE SURE THE BATTERY IS FULLY CHARGED BEFORE THE USAGE. WHEN THE BATTERY CAPACITY IS LOW, MAKE SURE TO CHARGE IT BEFORE CONTINUING TO USE.

2.1 USB Modem Components







<Caution>

When dismounting the battery, push the bottom of modem upward to slide easily out from the battery cradle.

2.1.1 LED indicator Information

1) POWER :

- Blue : Use battery power only
- Blink : Low battery warning
- Red : Use external DC and not installed battery.
- Violet : Use external DC and installed battery
- Blink : In charging state
- Off : In power off state

2) IDLE (Service/Mode) :

- Blue : Service in 1xEVDO mode
- Blink : Searching serving network in 1xEVDO mode
- Cyan : Service in hybrid mode
- Blink : Searching serving network in hybrid mode
- Green : Service in 1x mode
- Blink : Searching serving network in 1x mode
- Off : Forced offline mode

3) BUSY (Traffic)

- Blue : Data call connected - Data throughput exceed to
1200Kbps in 1xEVDO mode 70Kbps in 1x mode
- Cyan : Data call connected - Data throughput between
600Kbps to 1,200Kbps in 1xEVDO mode 30Kbps to 70Kbps in 1x mode
- Green : General call connected, Or data call connected - Data throughput under
600Kbps in 1xEVDO mode 30Kbps in 1x mode
- Blink : Incoming or outgoing call initiated and still attempt to connect
- Off : Not in connected state

4) SMS

- Yellow : Exists message in inbox
- Blink : New message arrived in inbox
- Off : Empty inbox

2.1.2 Other Components

1) Internal Antenna

Two antenna for diversity reception are already installed in the case

2) +5V DC Power Jack

+5V main power supply to USB modem and is used for charging

3) Mini USB Port

Connected to desktop or notebook computer

4) Ear Jack (Not Supported)

5) Battery Contact Switch

6) External Antenna Port

Used to improve signal reception and transmission

7) UIM Card Socket

8) Battery Contact Pins

3. Program Installation

3.1 Introduction

This section describes step-by-step method to install ANYDATA.NET USB MODEM and Easy Wireless Net Software.

Note : Must install the software before connecting ANYDATA.NET USB MODEM to PC/Notebook.

3.2 Minimum System Requirement

3.2.1 PC Hardware

Recommend to use PC/Notebook at speed of 300 MHz or higher.

Minimum 233 MHz speed required, * Intel Pentium/Celeron products,
AMD K6/Athlon/Duron products or compatible processors

Recommend to use 128MB RAM or higher

Minimum 64MB of memory must be used,

but in this case the performance will be degraded and certain features will be limited.

At least 100 MB of free hard disk space is required.

Motherboard or PCI card that supports USB.

Video adaptor with Super VGA (800 x 600) or higher resolution and Monitor

CD-ROM or DVD Optical Drive

Keyboard and Mouse

3.2.2 Operating System

Windows XP Home or Professional (with Service Pack 2)

Windows 2000 (with Service Pack 3 for optimal performances)

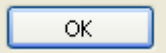
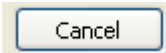
< Recommended parameters >

Windows Update : Keep your computer up to date

3.3 Installing Easy Wireless Net Software.

1) Double click "setup.exe" from the supplied CD.

2) Select the desire language as shown below.

3) Press  button to proceed. By pressing  button,

the installation of Easy Wireless Net Program will stop.



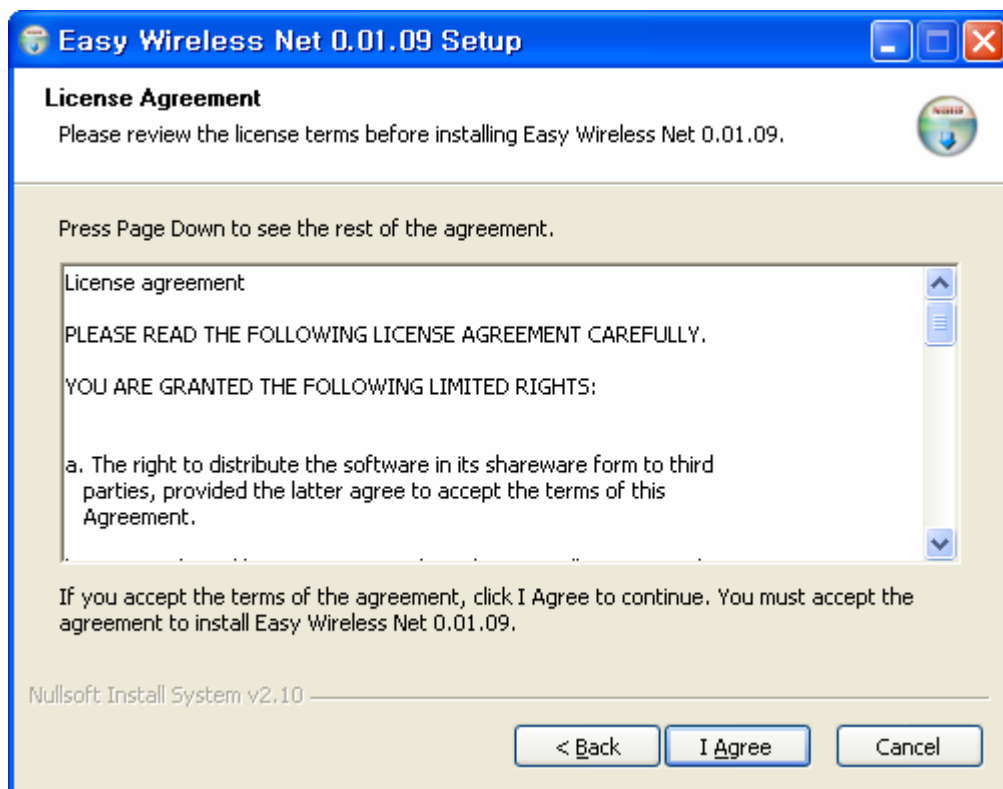
4) Welcoming message for using Easy Wireless Net Program window will appear.

5) Press  button to proceed.



6) Next window is related to License Agreement. Please read carefully.

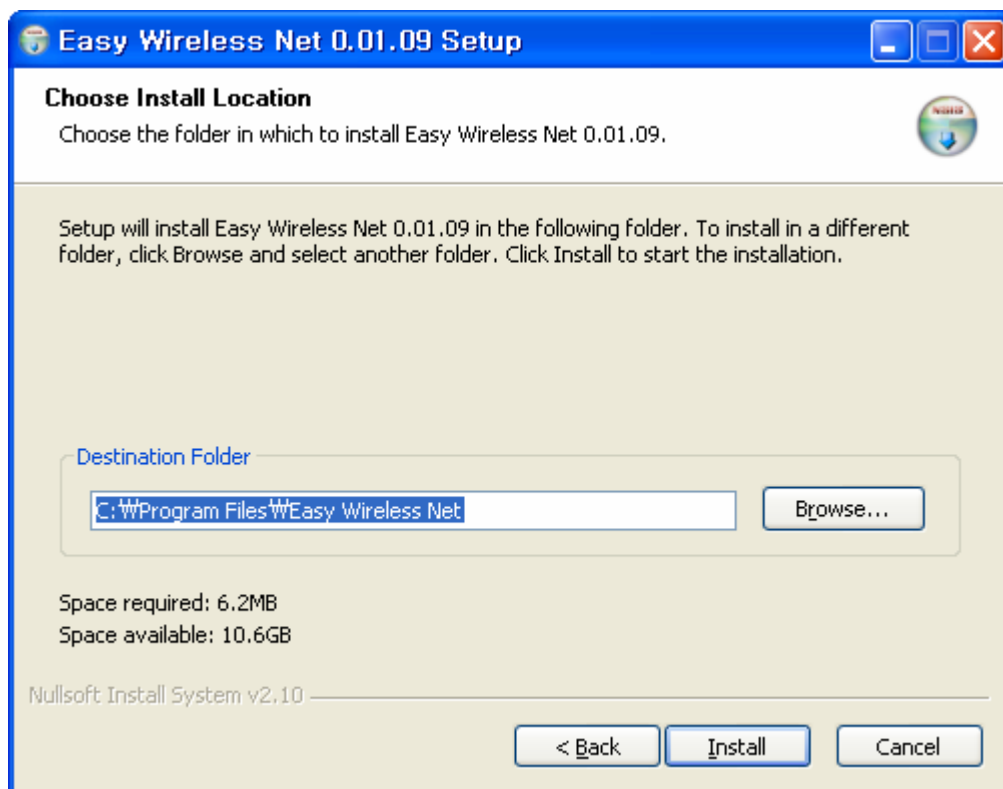
7) Press "I Agree" button to advance to the next step.




8) Next window displays asking proper path for installing the program.

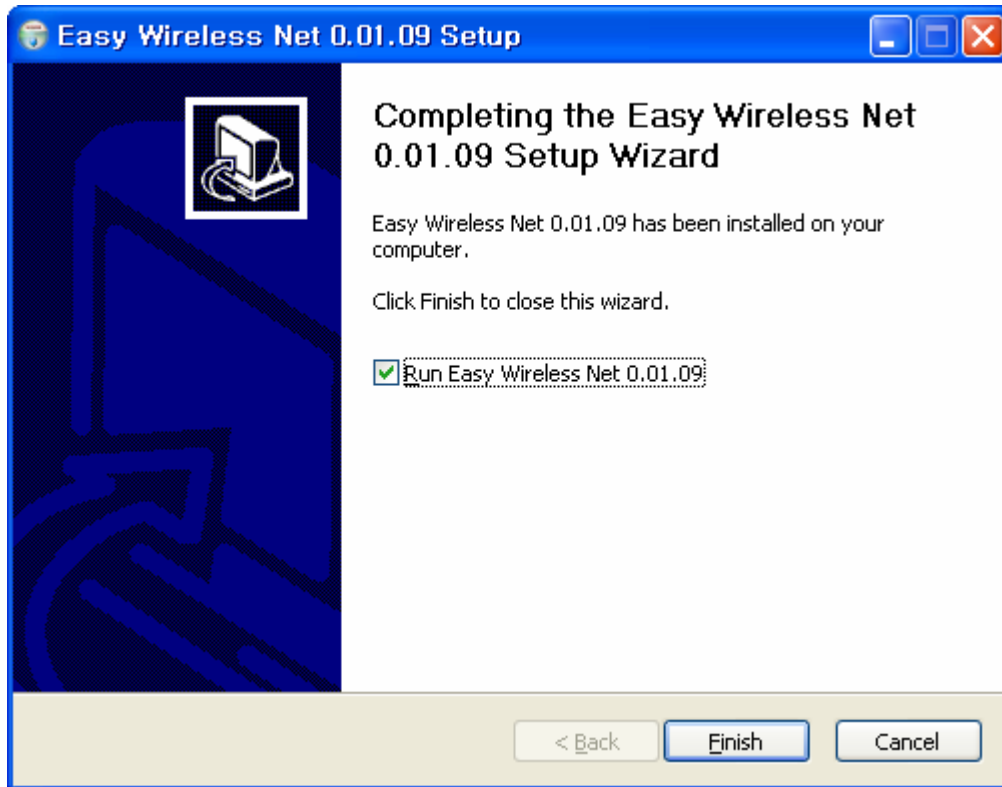
Default path is "C:\Program Files\Easy Wireless Net".

9) Press  button to install the program.



10) When program has been successfully installed, following window will display.

11) Press  button for ending the program installation.



This is installing the Easy Wireless Net Program.

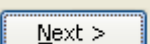
<Remark>

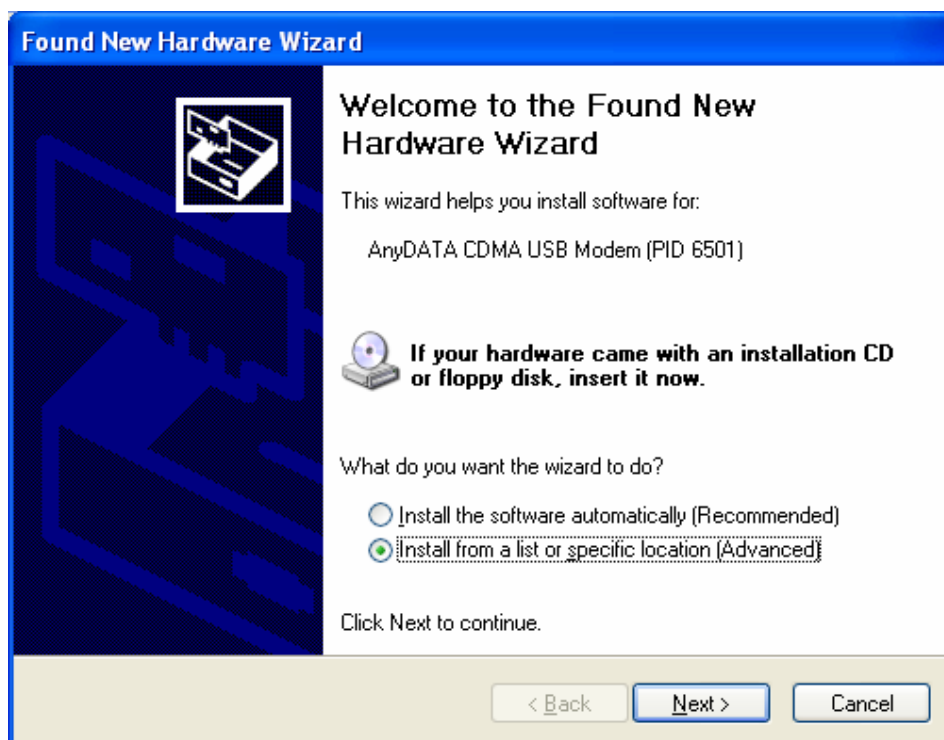
If modem is not connected to PC/Notebook and device driver is not installed, then the program will not launch even after completion of installation program.

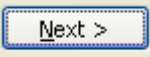
3.4 Connecting to ANYDATA.NET USB MODEM and Driver Installation and Uninstallation.

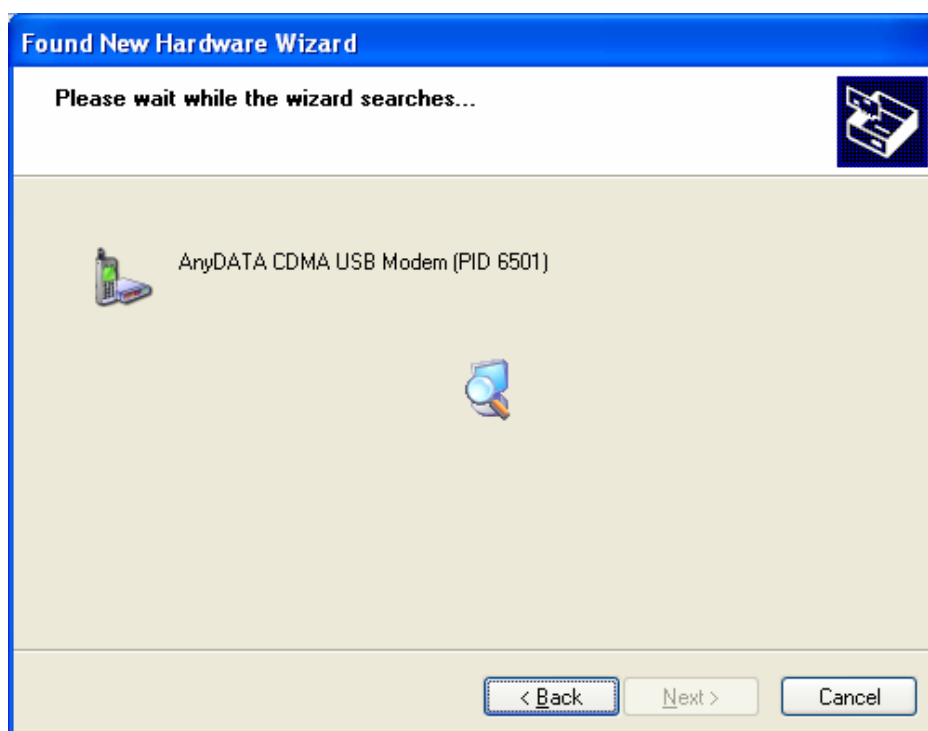
3.4.1 Proper connection and Driver Installation

- 1) Connect the modem and PC's USB port with supplied USB cable.
- 2) Installing "AnyDATA USB Modem Driver" window will appear.
Select "Install from a list or specific location (Advanced)".

3) Press  button to proceed.



- 4) A window that displays a proper path of Driver will appear.
- 5) Select from the CD's path "[YourCDRomDirve]:\Driver\" folder for appropriate OS.
- 6) Press  button to proceed.
- 7) A window that searches "AnyDATA CDMA USB Modem Device."

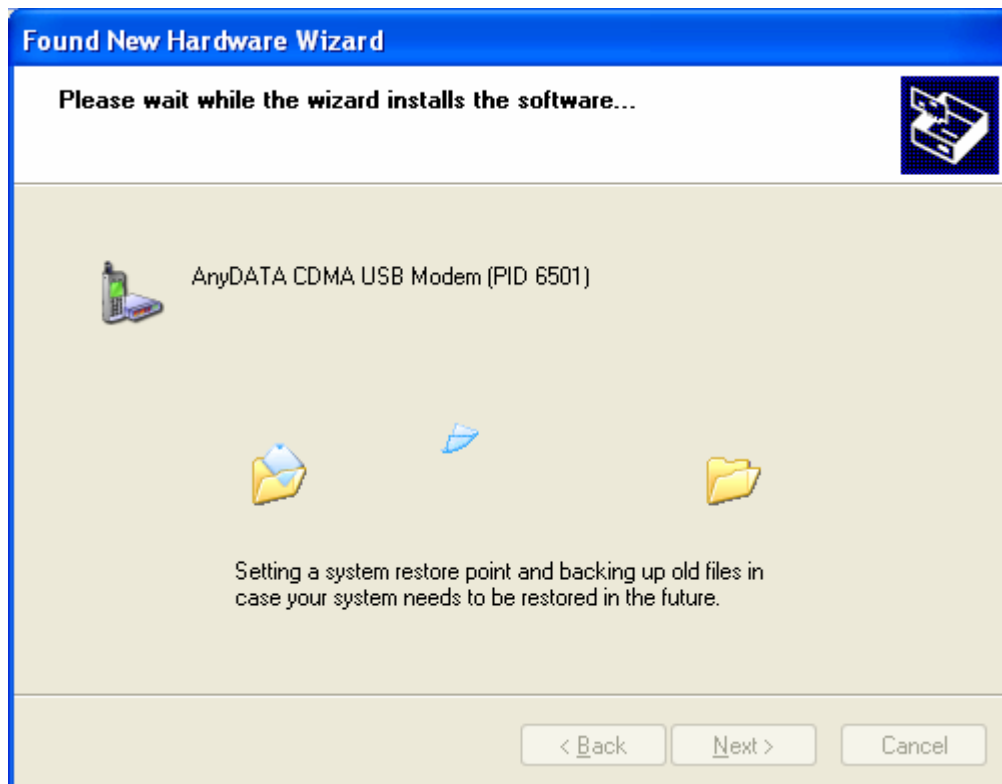


8) If found "AnyDATA CDMA USB Modem" it will ask for the installation.

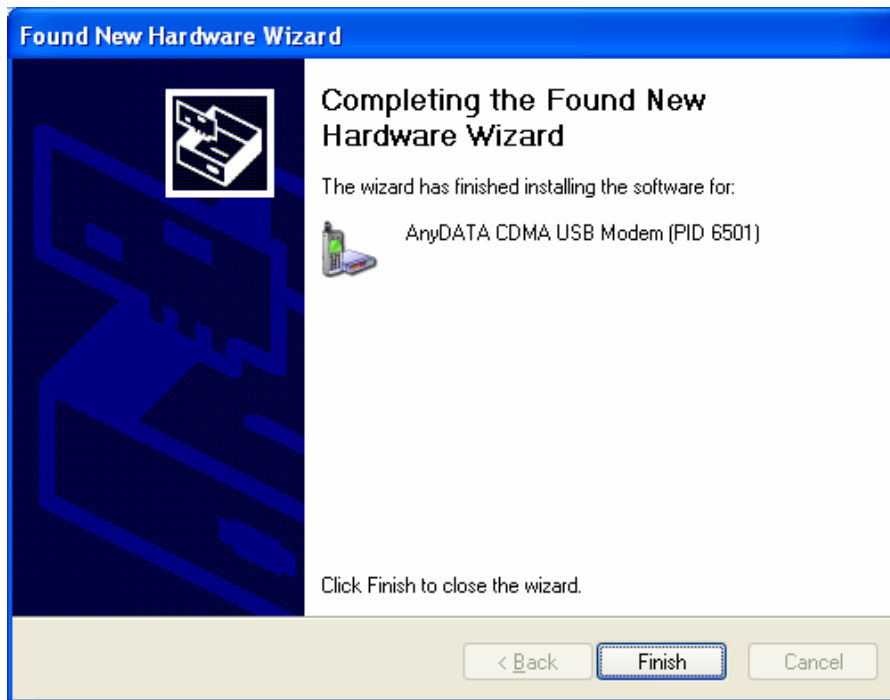
9) Press  button to move to the next step.



10) Process of installing "AnyDATA CDMA USB Modem" Driver.



- 11) If the installation of “AnyDATA CDMA USB Modem” has been completed, following window will appear.

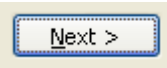


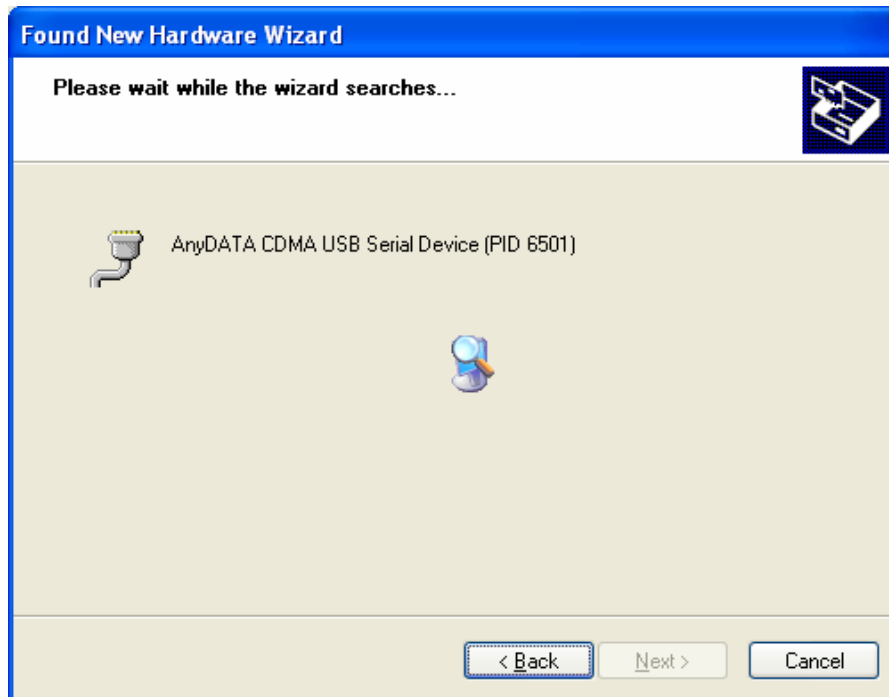
- 12) Next, it will install “AnyDATA CDMA USB Serial Device” Driver.
13) Select “Install from a list or specific location (Advanced)”.

- 14) Press  button to proceed.

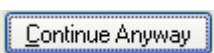


- 15) Select the proper path from the CD window will appear.
- 16) Select from the CD's path "CDRomDirve:\Driver\" folder for appropriate OS.

- 17) Press  button to move to next step.
- 18) Window that searches "AnyDATA CDMA USB Serial Device" will appear.



- 19) When "AnyDATA CDMA USB Serial Device" has been found, it asks for the installation.

- 20) Press  button to proceed.



21) If the installation has done properly, this window will appear.

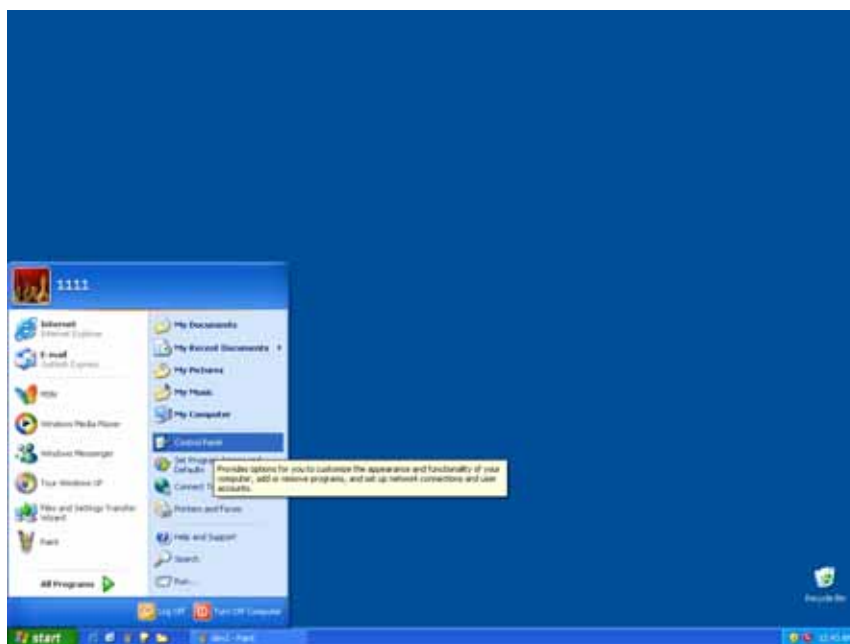


This will complete the driver installation.

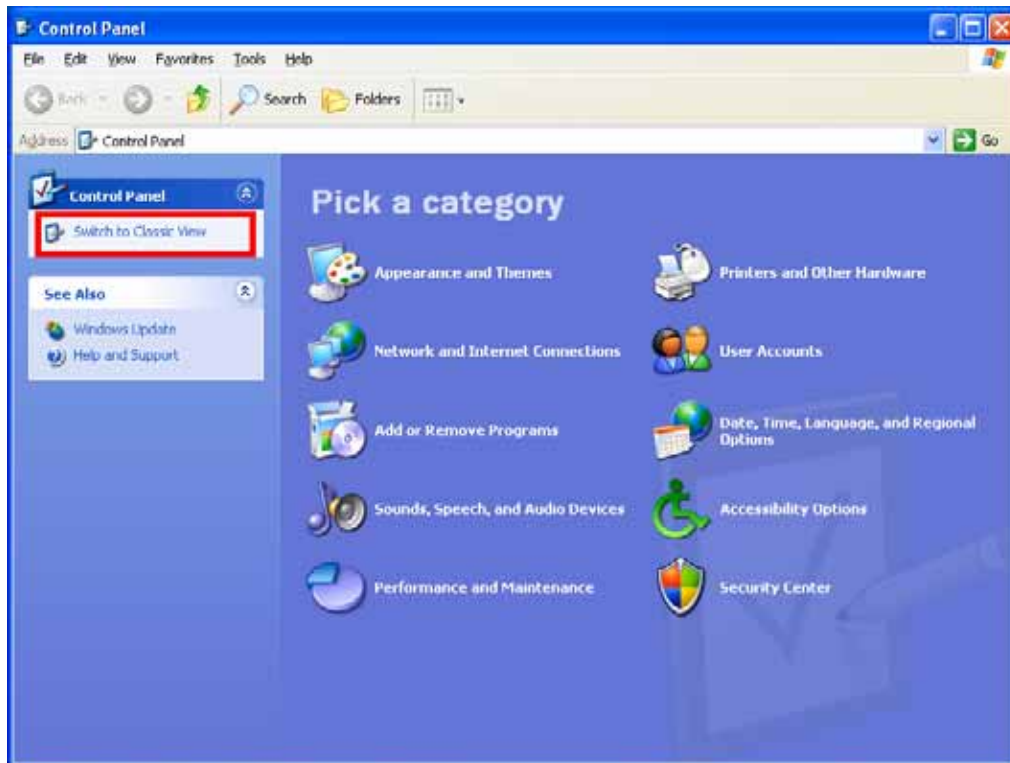
3.4.2 Checking the proper installation of the Driver

If the Driver has been installed properly, it is possible to check the proper operation from Control Panel.

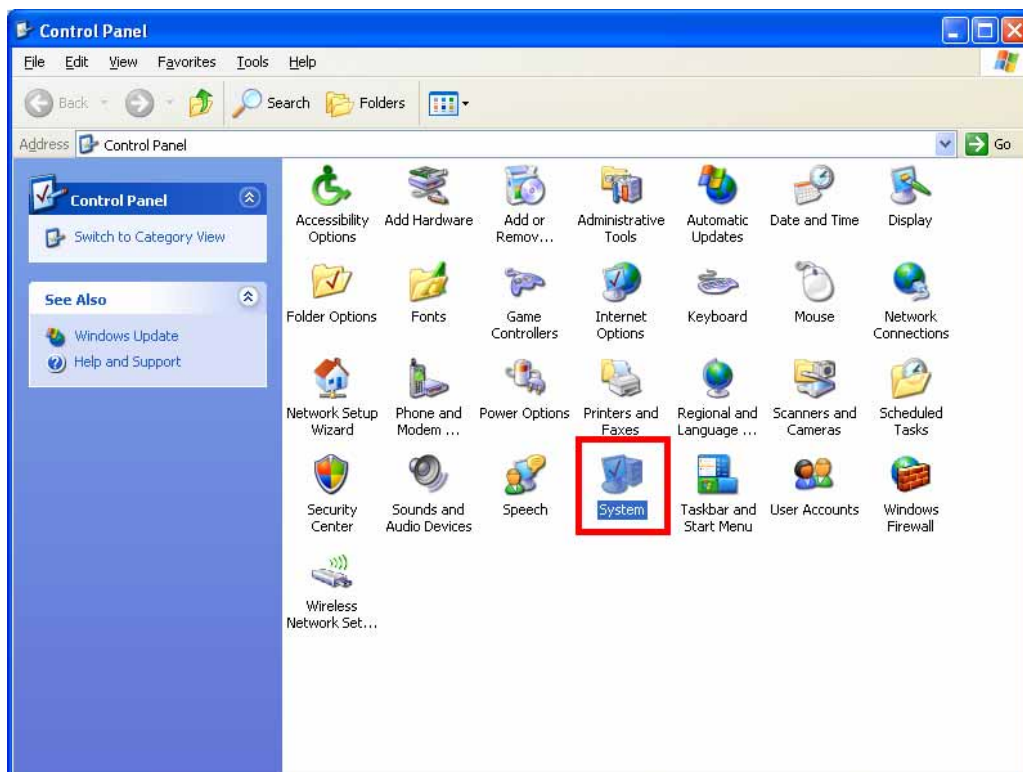
1) Start Control Panel.



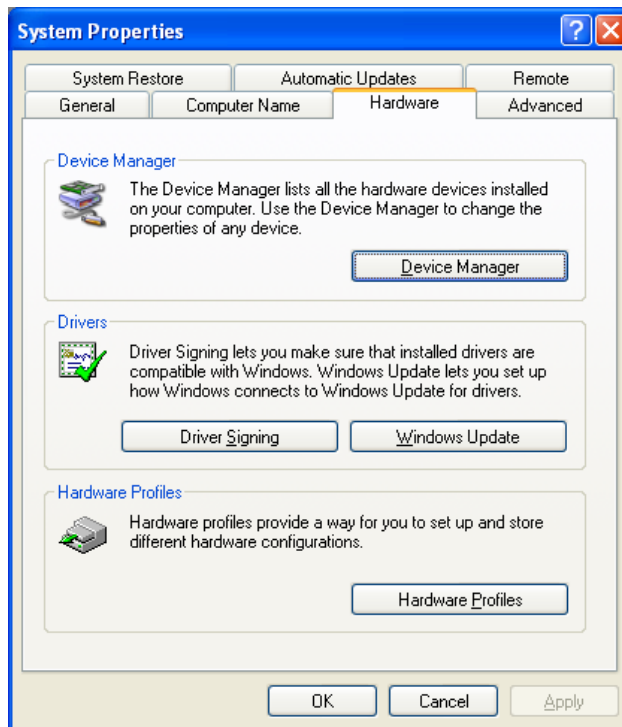
2) Select "Switch to Classic View."



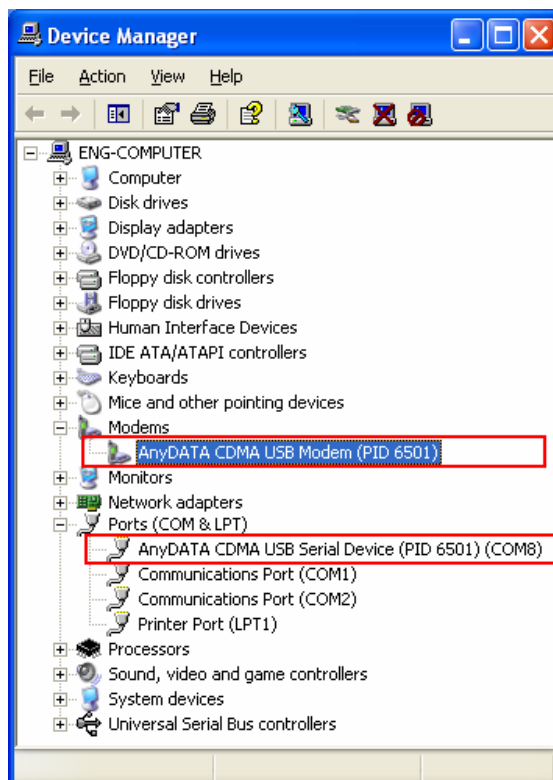
3) Select System.



4) Select “Device Manager” from Hardware Tab.



5) As shown in below with red boxed that shows “AnyDATA CDMA USB Modem” and “AnyDATA CDMA USB Serial Device,” the Driver has been successfully installed.



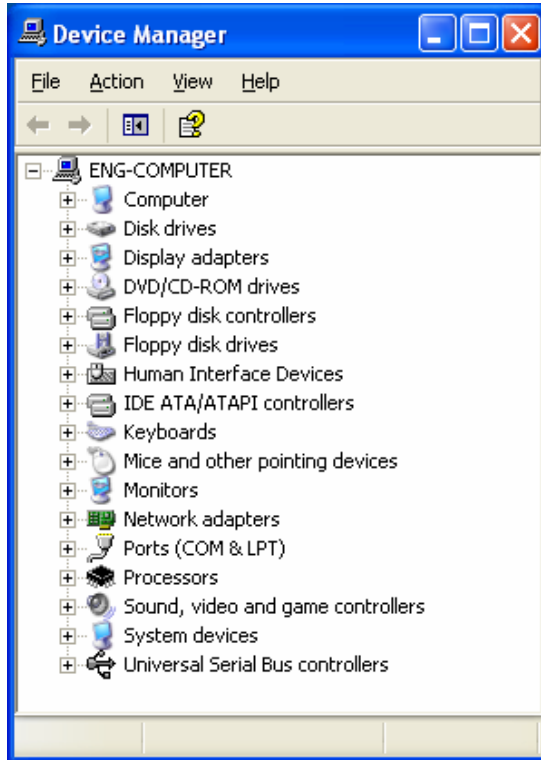
Note:

Please pay attention and write down the COM number in “AnyDATA CDMA USB Serial Device (PID 6501) “(COM8)”. In this case it was COM8, but it might be different for other installations.

This COM port number will be used in the “Easy Wireless Net” program for selecting proper port.

3.4.3 Uninstallation

When disconnecting USB cable from ANYDATA.NET USB MODEM and the USB port, the driver will be automatically uninstalled.



4. Using Easy Wireless Net Program

4.1 Running the program

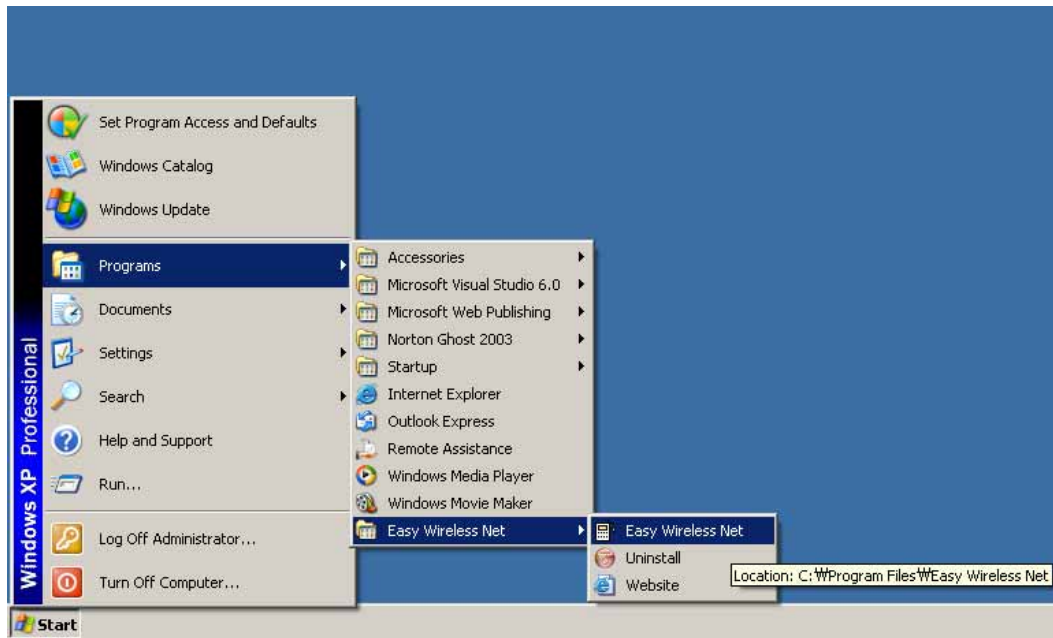
There are 2 (two) ways to run the installed Easy Wireless Net program.



As shown below, either pressing shortcut icon on the Desktop or pressing



this program.



4.2 Exiting the program

From the Easy Wireless Net program, by pressing  button will quit the program.



Note:

If DUN is running or SMS is transferring, the program will end after the completion of these commands.

4.3 Screen Display of Easy Wireless Net

4.3.1 Executed Screen



Try(Minimise) & Exit

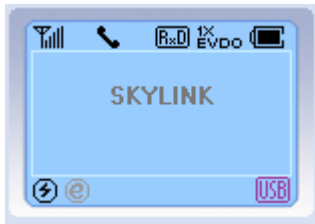
Information LCD

Voice Volume Control
































Voice, SMS, Phonbook
Config, Connect EYDO

Action Window

4.3.2 Window for information and input



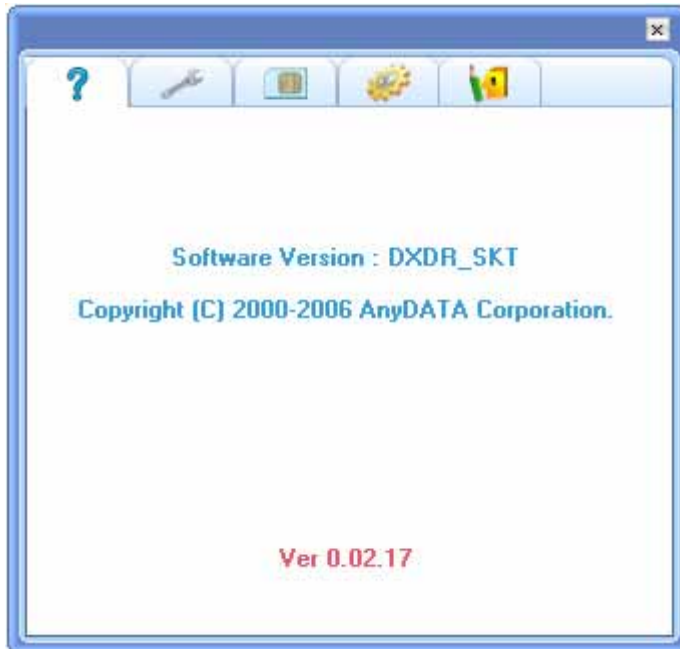
4.3.3 Description of each icon

Display	Function
	RSSI Signal Strength Indicator
	Calling Possible
	Calling not Possible
	New message arrived.
	Voice Mail arrived.
	Voice Mail and New Message arrived.
	Rx Diversity Mode.
	Supports Hybrid mode
	Only 1X mode available
	Only EVDO mode available
	Battery Indicator
	Battery Fully charged
	Using external power source
	USB connected
	Charging through USB
	Charge completed by USB
	Roaming
	Connected to the Modem
	Either the cable is disconnected to the modem or improper port connection.
	Internet connected
	Internet disconnected
	connected to the Internet button.
	Disconnecting to the Internet
	Setup Easy Wireless Net
	Voice call menu.
	SMS menu
	Phonebook Menu
	Sending message.
	Make a call
	Call will be disconnected.
	Displayed number will be erased.

4.3.4 Setting Environment

[About] Tab


Display the software version.

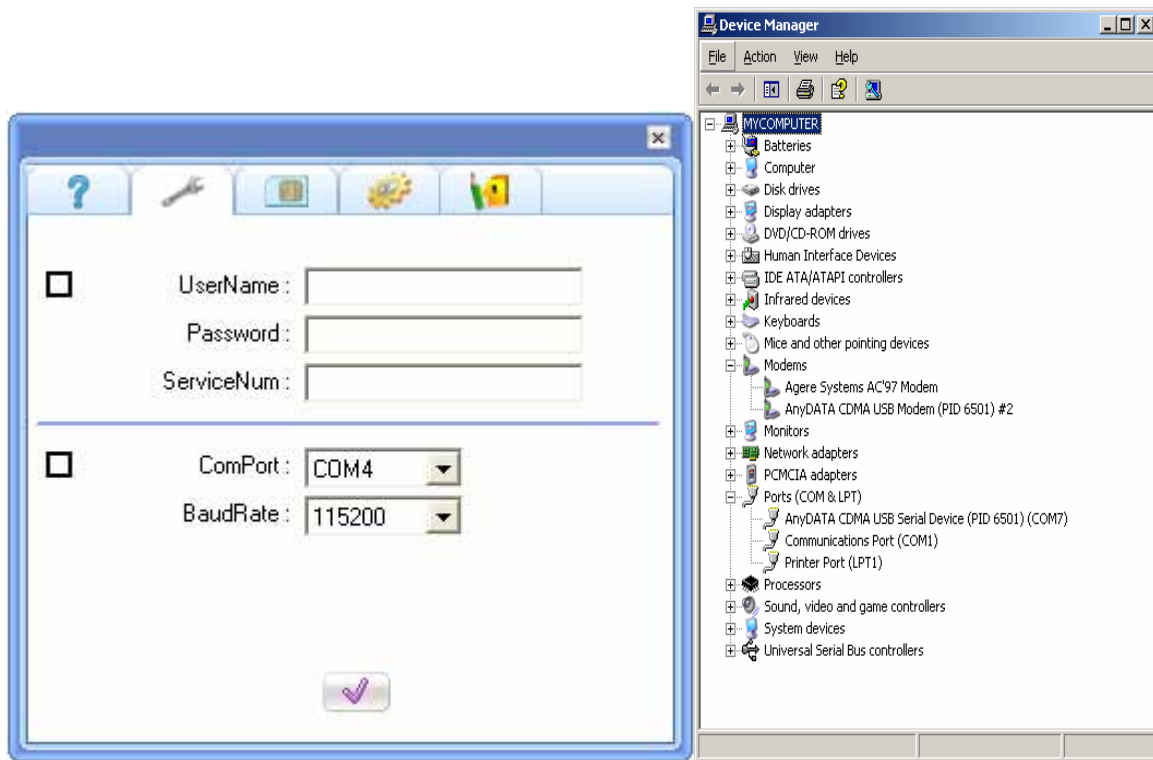


[Basic] Tab

The basic configuration for connect to the network using EV-DO modem.

All values are set automatically, however if wants to change the value then check appropriate

☒ box/boxes in the left and press  button to take effect.



UserName : [None]

Password : [None]

ServiceNum : (SKYLINK Internet Number)

ComPort : Port Select Option (Auto Scan) – [See the Device Manager]

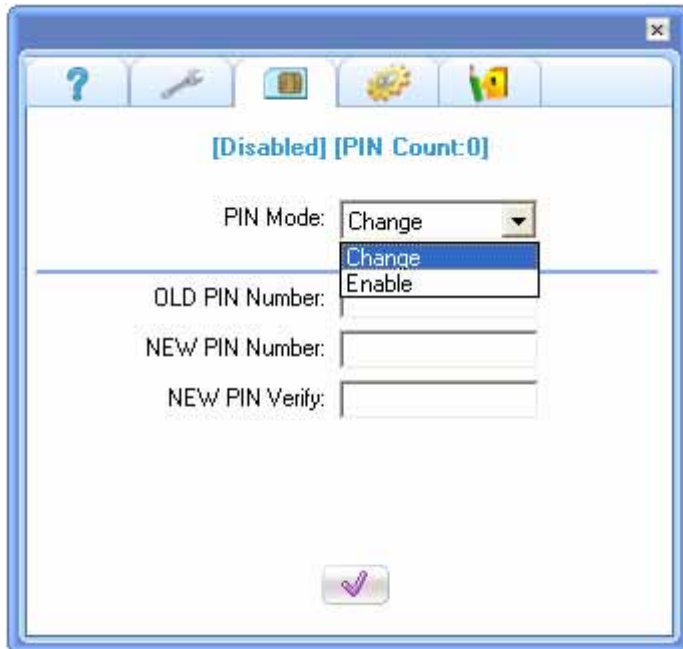
BaudRate : 115200

[RUIM Card] Tab

When changing information of the RUIM Card.

When changing information, must know PIN information.

Three times are incorrect and when, it does not use.




The screenshot shows a software window titled "[Disabled] [PIN Count:0]". The window has a toolbar at the top with icons for help, settings, and other functions. The main area contains the following fields:

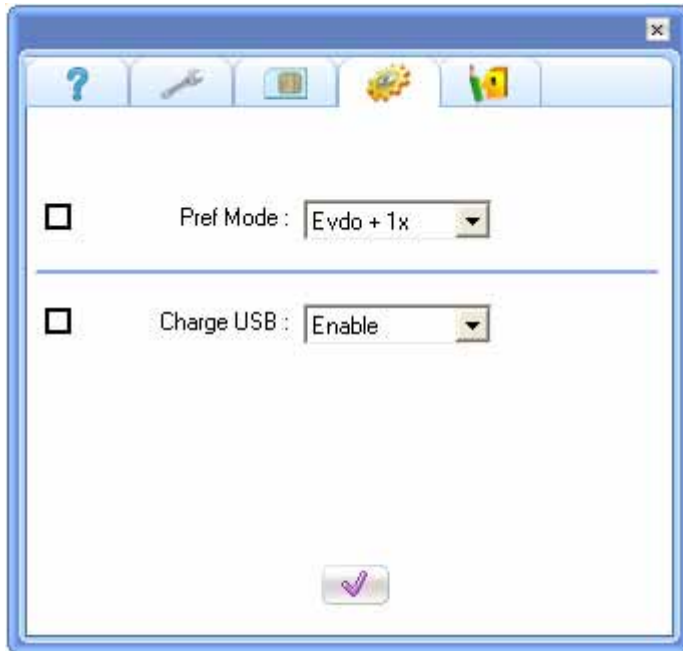
- PIN Mode: A dropdown menu currently showing "Change". The dropdown is open, showing "Change" and "Enable" as options.
- OLD PIN Number: A text input field.
- NEW PIN Number: A text input field.
- NEW PIN Verify: A text input field.

At the bottom center of the window, there is a button with a checkmark icon.

[Advance] Tab

This part is to change the important parameter for EV-DO modem.

If wants to change the value then check appropriate ☒ box/boxes in the left and press  button to take effect.



Pref Mode:

Place to select a mode from 1x, EVDO and 1xEVDO.

[Note] Basically the modem supports all modes if the network supports them. However, if RUIM Card is not supported and any one of the mode is not supported by the network, then it is not possible to get connected in selected mode.

Charge USB

Enable : It is possible to charge the battery with USB cable.

By selecting this option, the battery will be charged by USB cable that has been connected to PC/Notebook.

Disable : Do not use USB charging feature.

By selecting this option, the battery will not be charged by USB cable.

The modem will use power from the battery.


<Caution>

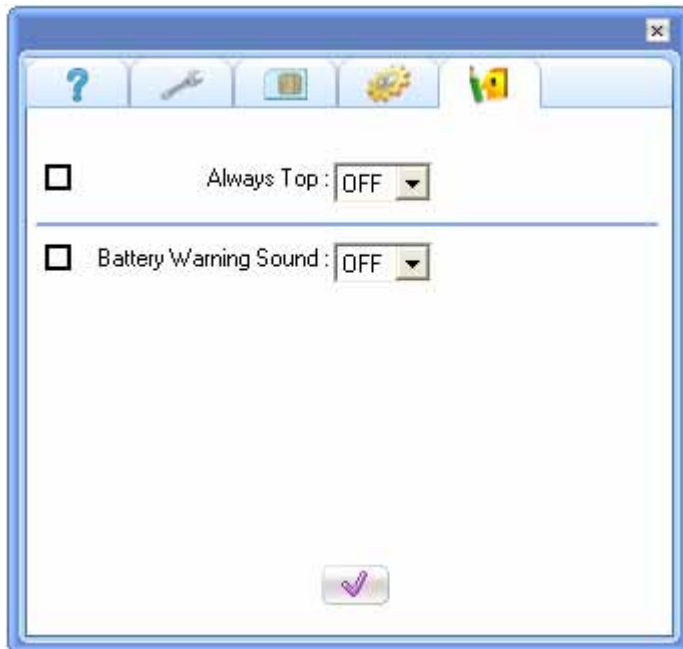
Please never dismount or change the battery when USB charging status is set at Disable and the USB modem power is On.

This might damages the modem or disconnection might occur.

If battery is not charging, please check environment settings in dialer program for USB charging mode.

[User] Tab

If wants to change the value then check appropriate ☒ box/boxes in the left and press  button to take effect.



Always Top :


Program it does to appear always top.

Battery Waning Sound :



Battery warning it uses.

4.3.5 Connecting to the Internet


Must set proper UserName, Password, and ServiceNum in the above settings.

Then press  button, it will automatically connected to the Internet.



If the modem is trying to connect or connected to the Internet, this  icon will appear as shown above. If it cannot connect to the Internet, then  icon will appear.

4.3.6 Disconnecting to the Internet

When user is ready to disconnect from the Internet, press  button to end the connection.

Please check the following if abrupt disconnection of modem occurred:


- 1) Did I intentionally disconnect USB modem?
- 2) Are cables properly connected?
- 3) Did I intentionally change Port number in environment settings?
- 4) Did I quit/exit the program?


4.3.7 Sending and Receiving calls

Press  button.



Press calling number then press  button to try to make a call.

By pressing  button, the call will be disconnected.

When pressing  button, all displayed number will be erased.

4.3.8 Sending and Receiving SMS


Press  button.

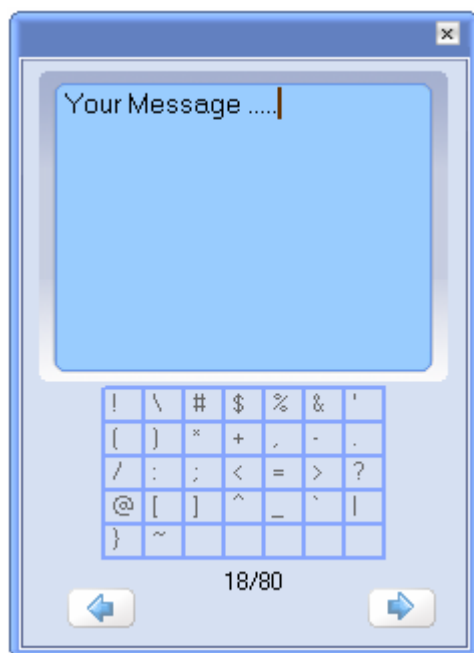




As seen in above, there will be three buttons
(new message, sent message, and received message from the left).
Pressing each button will transfer to appropriate screen.

4.3.8.1 Writing New Message

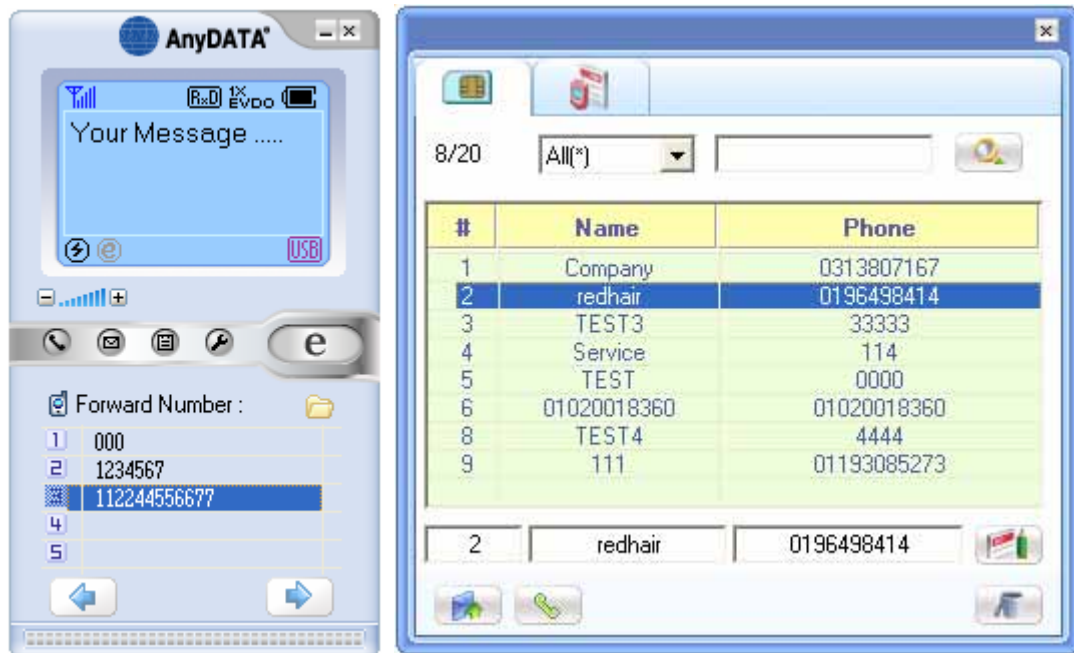
- 1) By pressing "Write Message" icon, the new window will appear for inserting the message.
- 2) Write the message in the window then press  button to move to the next step.



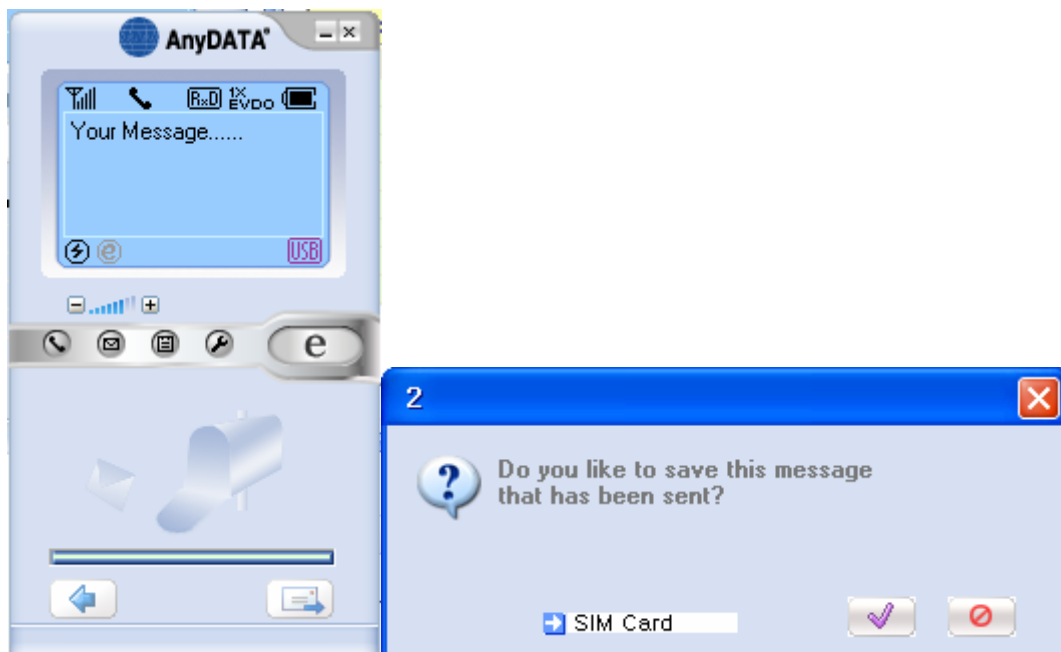
Note: By pressing special characters that is highlighted, that character will be written on the message window.

- 3) Input a phone number/numbers for sending SMS. It is possible to add upto 5 numbers.

By pressing a Phonebook, a separate window will appear to select phone numbers.

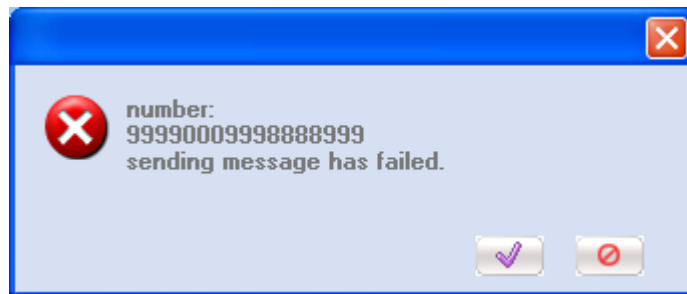


- 4) After inserting phone numbers, press  button to move to the next step.
- 5) After selecting the number, press  button to send the message.







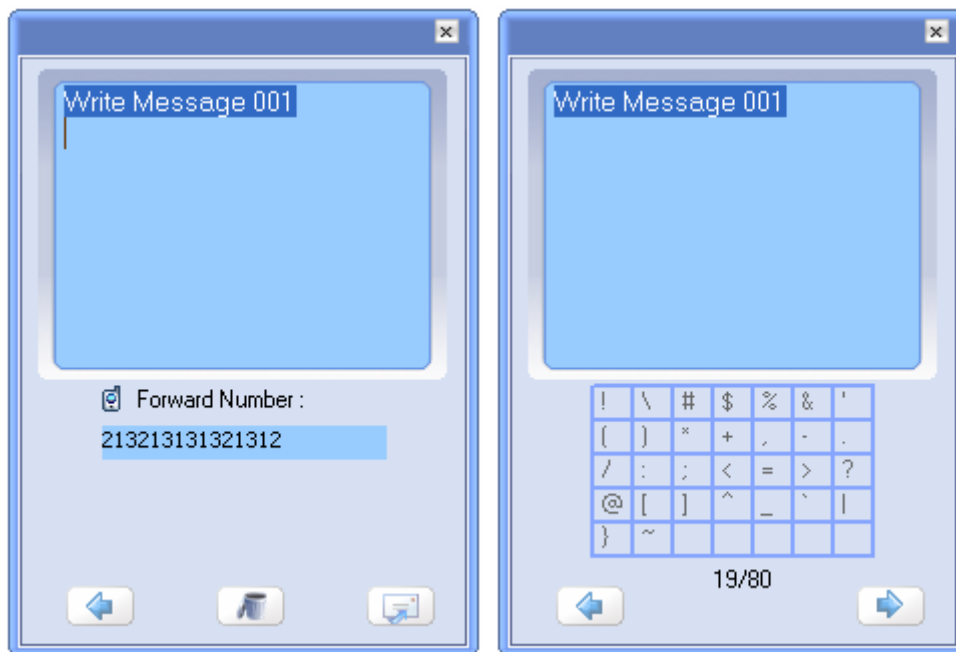
Sending Message has Failed.





4.3.8.2 Viewing sent message

- 1) By pressing "OutBox" icon, you will see a screen as below.
- 2) All sent messages will be shown.
- 3) Select the message then press  button to delete this message.
- 4) Select the message then press  button to display all the contents in the window.







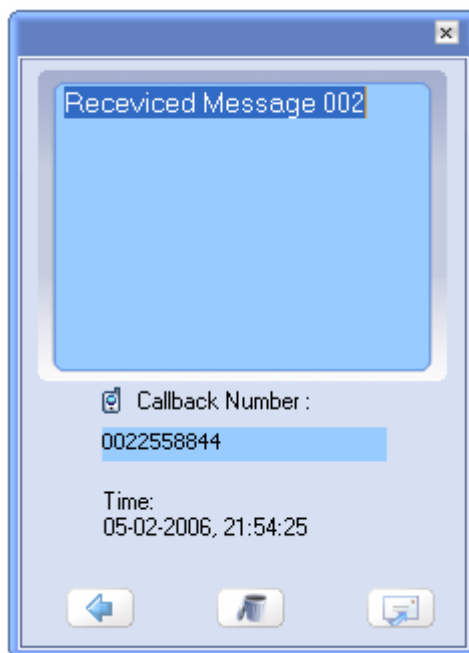
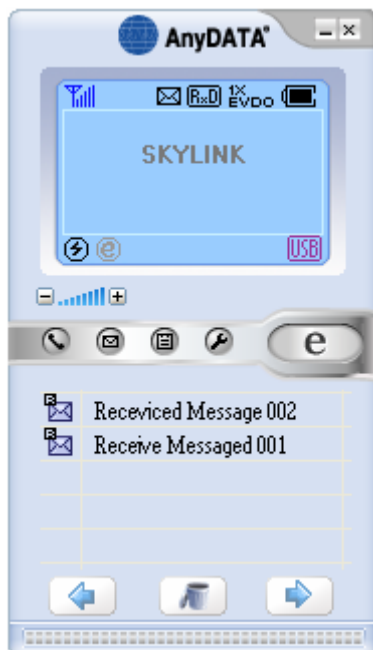
- 5) By pressing  button, the selected message will be ready to send to a new number.


	message read.
	Unread message.
	Sent message.



Note: Description of icons.

4.3.8.3 Viewing received or saved message

- 1) By pressing "InBox" icon, you will see a screen as below.
- 2) All received messages will be shown.
- 3) It will indicate whether the message was read or not.
- 4) Select the message then press  button to delete this message.
- 5) Select the message then press  button to view the whole contents in the display.



By pressing  button, the selected message will be ready to send to a new number.

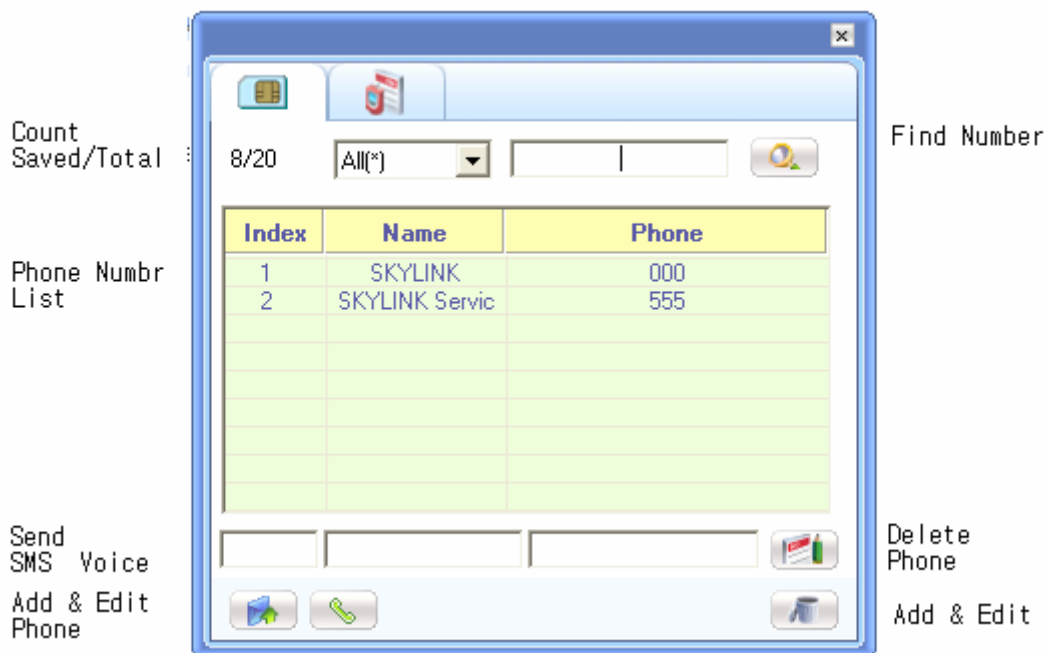
	Message read.
	Unread message.
	Sent message.

Note : Description of icons.

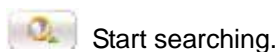
4.3.9 Phonebook

This is a feature to store phone numbers that uses often into RUIM and to make calls accordingly.

By pressing Phonebook  button, following window will appear.



[8/20] Maximum number of Phone numbers can be stored and currently saved phone numbers.

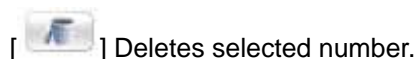
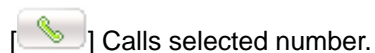
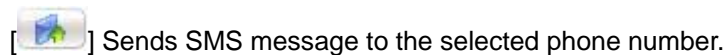


All : Find and display any characters that matches from the Phone Number into a Phone Number List

Index : Finds a phone number based on the index.

Name : Finds all names that contain any one of the letter to be searched.

Phone : Finds all numbers that contains any one of the number to be searched.



Saves Phone Number into the recorded Index number.

If the same Index number already exists then requires editing of the contents.

5. Troubleshooting

Q: I cannot connect to the Internet?

A: Please check “environment setting” of program for correct ID, password and Service number. For proper ID, password and Service number, please contact service provider for more information.

Q: The Internet connection speed is too slow.

A: Please check whether the modem is set at 1X mode. If USB modem is set at 1X mode, then the Internet is not connected as EVDO mode. EVDO icon must be appeared in the display to assure that it has been connected as an EVDO mode.

Q: The Internet connection is poor and frequently it gets disconnected.

A: The CDMA frequency is at unstable state. Try to move to a different place then use it again. Also, if you touch or block the USB modem with hand/body contact, the modem connection speed degrades. Please be careful not to touch the modem with your hand or any part of the body.

Q: Can I leave the external power adopter in the electric socket even after the battery is fully charged?

A: Yes, it is safe to leave adopter in the electric socket even after the battery is fully charged if you are using genuine battery and adopter from the manufacturer.

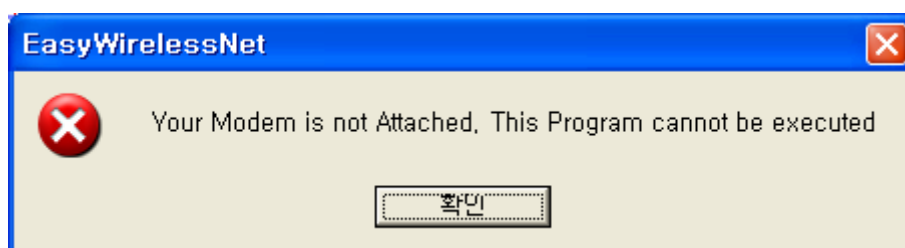
Q: No matter how long I pressed the power button, the power does not get turned off.

A: Please check whether the external power is connected or not. If external power adopter is connected then the power will not be tuned off.

Q: All of the display on the program’s screen shows as prohibited icons.

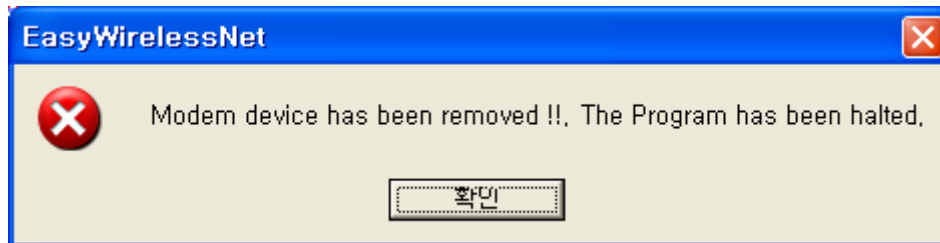
A: Please check whether the port is properly set for communicating between computer and the modem in the “environment setting” category.

Q: After the installation of the program, the program does not run and displays following message



A: This means that USB modem and the compute are not connected properly. Please double check whether USB modem is connected properly to the computer.

Q: During the running of the program, following message appears and the program halts.



A: The actual connection of USB modem and computer has been disconnected. Please check whether the cable is dismounted, cable is disconnected or USB modem power has been turned off. Then try to reconnect the modem.

Q: Cannot make a call

A: If you see a [EVDO] icon in the display, call cannot be made. Please change mode other than [EVDO] mode then try to make a call. There are three different icons in that field, [1X], [1X/EVDO] and [EVDO].

Q: How many people can I send SMS messages at once?

A: It is possible to send maximum of 5 people at once.

Q: The program has ended but the USB modem power is turned off.

A: The power of USB modem is not controlled by the program. The point USB modem turns on automatically is when USB cable is connected to the PC/Notebook. In order to turn off the modem, press ON/OFF button for at least 5 seconds.

Q: I tried to turn-on the modem by pressing ON/OFF button but unsuccessful.

A: Please dismount the battery and disconnect the USB cable, then remount the battery and connect the USB cable. If the power is still not on, please contact A/S center for further information.

Q: Easy Wireless Net program displays “DB xxxx Error” message and terminates.

A: Easy Wireless Net program uses MDB format type of database file. This type of format is preinstalled when using Windows XP, Windows 2000 OS in a computer. However, this type of database file has been removed by some other program.

Need to update following two (2) files from Microsoft site:




























1. MDAC : <<http://www.microsoft.com/downloads/details.aspx?FamilyID=6c050fe3-c795-4b7d-b037-185d0506396c&DisplayLang=en>>





2. Jet Engine 4.0:
<<http://www.microsoft.com/downloads/details.aspx?FamilyID=2deddec4-350e-4cd0-a12a-d7f70a153156&DisplayLang=en>>

6. Quick Guide

6.1 Display Indicators.

The display may show the following icons to indicate the USB modem's status or function.

Display	Function
	RSSI Signal Strength Indicator
	Calling Possible
	Calling not Possible
	New message arrived.
	Voice Mail arrived.
	Voice Mail and New Message arrived.
	Rx Diversity Mode.
	Supports Hybrid mode
	Only 1X mode available
	Only EVDO mode available
	Battery Indicator
	Battery Fully charged
	Using external power source
	USB connected
	Charging through USB
	Charge completed by USB
	Roaming
	Connected to the Modem
	Either the cable is disconnected to the modem or improper port connection.
	Internet connected
	Internet disconnected
	connected to the Internet button.
	Disconnecting to the Internet
	Setup Easy Wireless Net
	Voice call menu.
	SMS menu
	Phonebook Menu

	Sending message.
	Make a call
	Call will be disconnected.
	Displayed number will be erased.

Thank you.