INNOMTEK USB Modem (ICU-E640)

User Guide

(Draft Version 0.6)

Safety Precautions

Do not use the INNOMTEK usb modem in areas where blasting is in progress, where explosive atmospheres may be present and obey all signs and instructions. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

Do not use the INNOMTEK usb modem in any aircraft. When operating, the INNOMTEK usb modem can cause interference with various onboard systems. Using it in aircraft is both illegal and dangerous.

Do not use the INNOMTEK usb modem in hospitals. In such areas it must be powered off. Follow any regulations or rules in force.

Do not use the INNOMTEK usb modem while driving; park the vehicle first.

Meet any special regulations in force in any area and always switch off your wireless modem whenever it is forbidden to use it.

Exposure to Radio Frequency (RF) Signals

The ICU-E640 is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission (FCC) of the U.S. Government.

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1. Introduction

INNOMTEK USB modem (ICU-E640) is a wireless modem that connects to high-speed third generation (3G) CDMA wireless networks. It can support 2Mbps speed at most under 1xEVDO networks, and 144Kbps speed at most under CDMA2000 1X networks. However, the actual speed could vary depending on the network condition.

Package Contents

INNOMTEK USB modem, install CD

Feature Summary

High-speed wireless connectivity (1xEVDO, CDMA2000 1X)

Compatible with IS-95A/B

Capability of receiving/sending text messages (2-way SMS)

Phonebook

USB Interface

System Requirements

USB port , CD-ROM driver , Pentium 150MHz or higher

Windows 2000 and XP

More than 10MB hard disk space

Dial-up networking bound to TCP/IP

How to Insert A Modem

Put the INNOMTEK USB modem into USB port smoothly, otherwise it may be broke down.

This device is only approved for use in Notebook PC's with horizontal USB ports, and the antenna must be positioned in the vertical position.

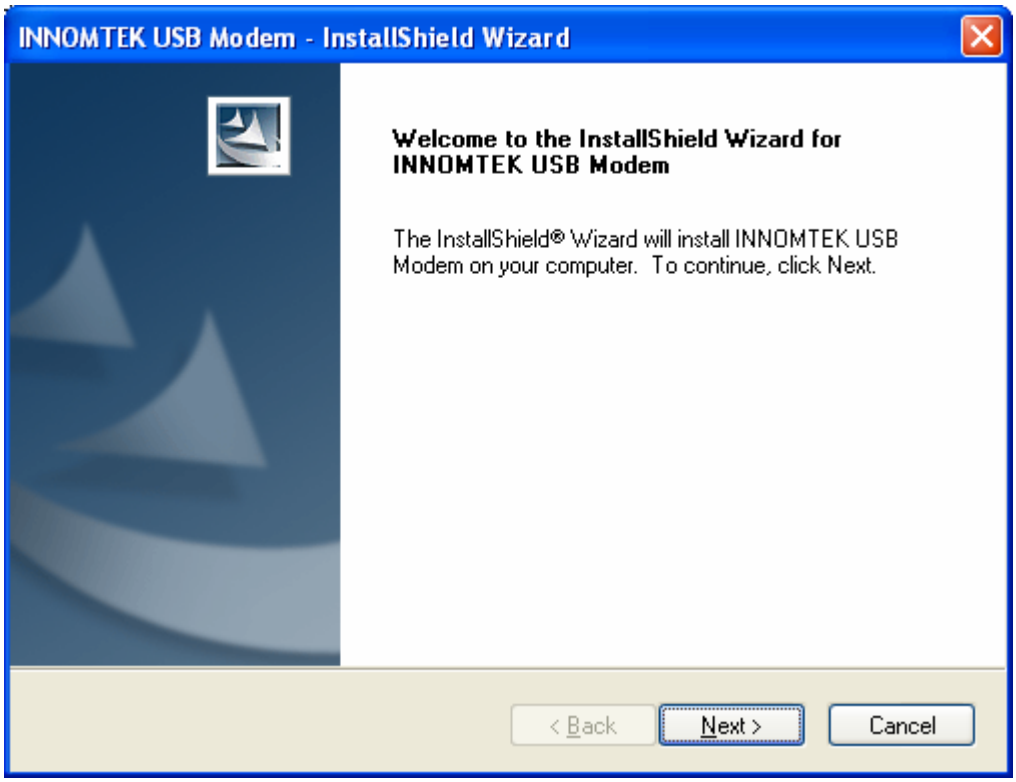
2. Installation Procedures

To install the INNOMTEK USB modem software;

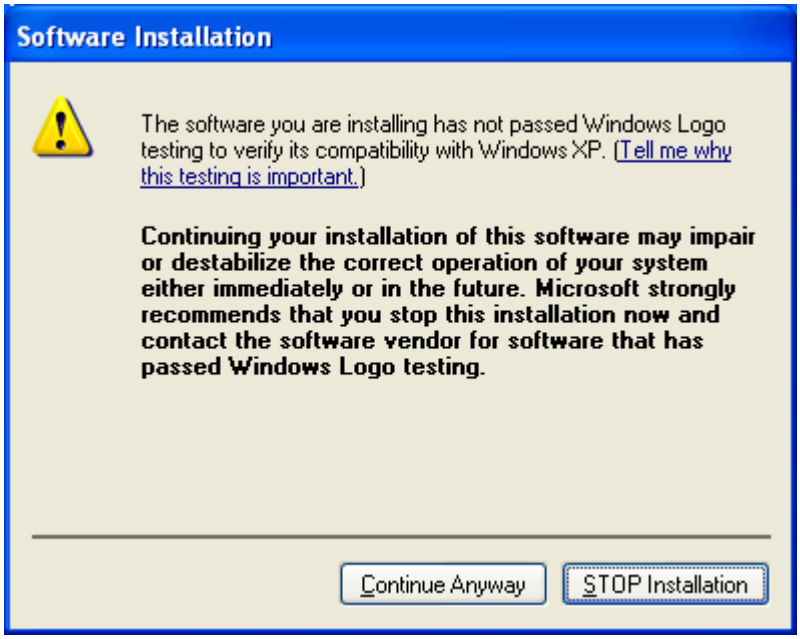
Note: Do not insert the INNOMTEK USB Modem before installing the software

1. Insert the installation CD into your CD-ROM drive to install the INNOMTEK USB modem software

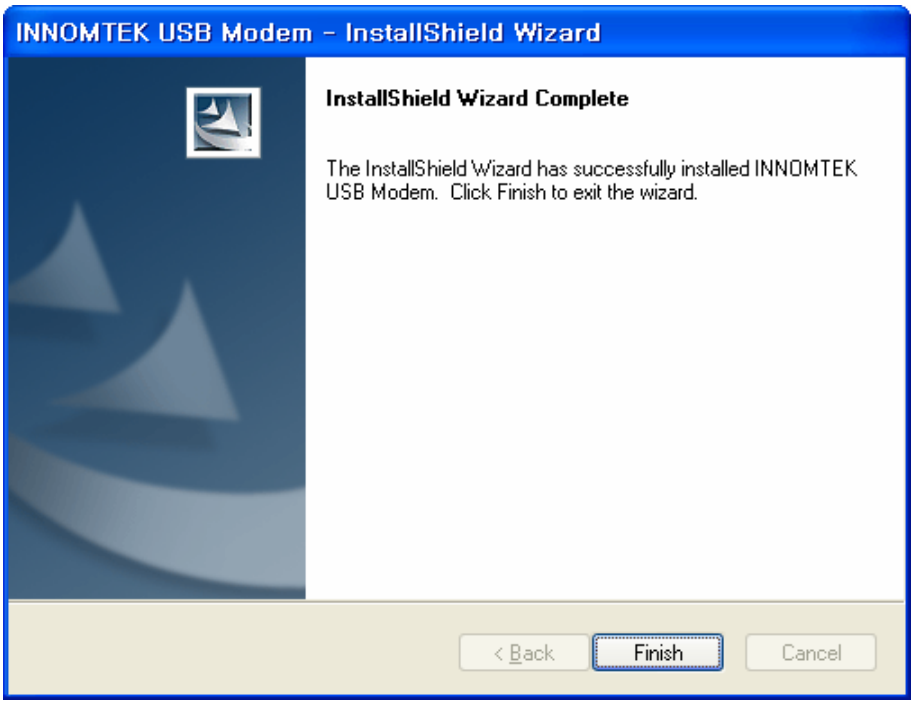
2. Execute the “setup.exe” on the installation CD. Then click Next > on the Setup Welcome window.



3. Click Continue Anyway when you have a window saying about “Windows Logo testing”



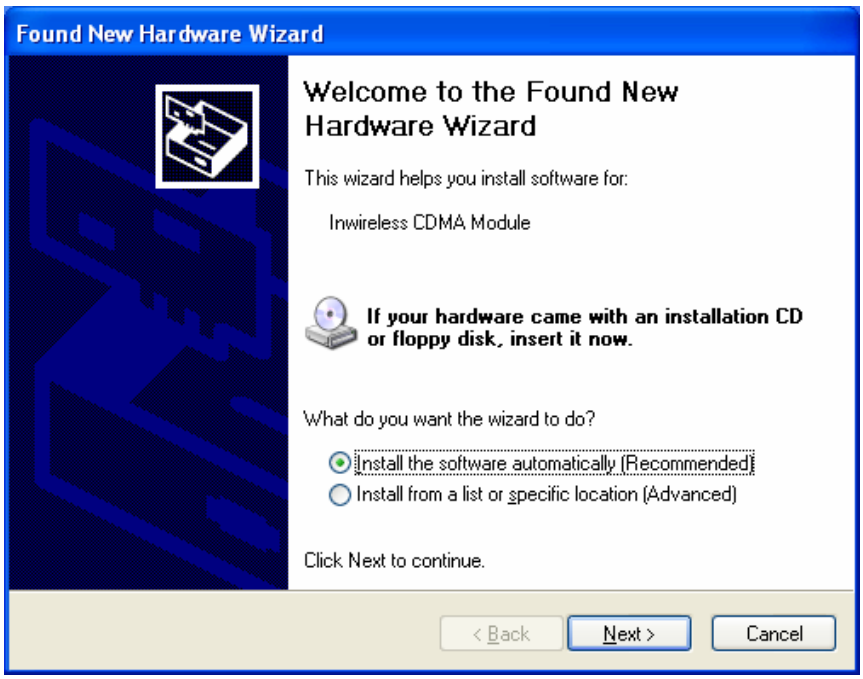
4. Click Finish to complete the installation and close the last screen of the wizard.



To install the device driver;

1. After the above software installation, insert the INNOMTEK USB Modem into USB port to install the USB driver.

2. Once you have inserted the USB modem properly, 'Inwireless CDMA Module' hardware will be automatically recognized. Click Next > after choosing "Install the software automatically" on the Found New Hardware Wizard window.



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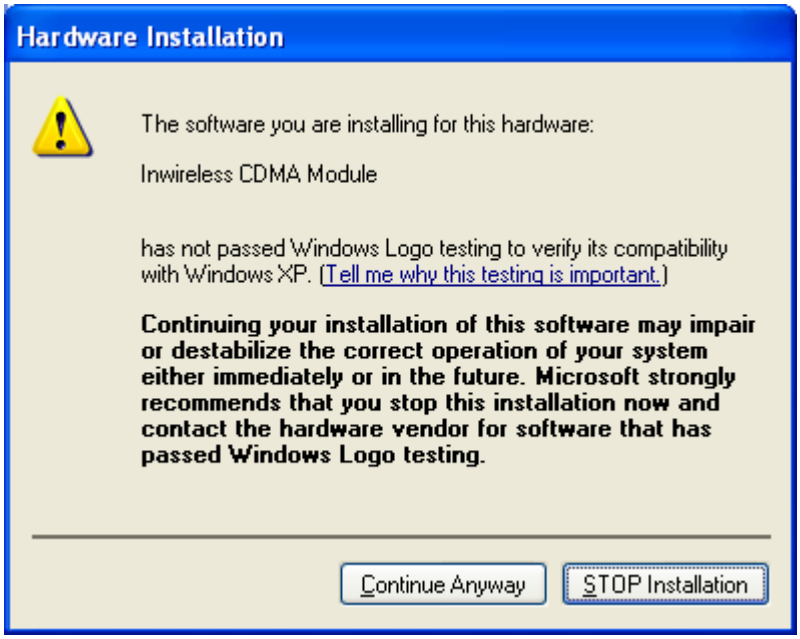
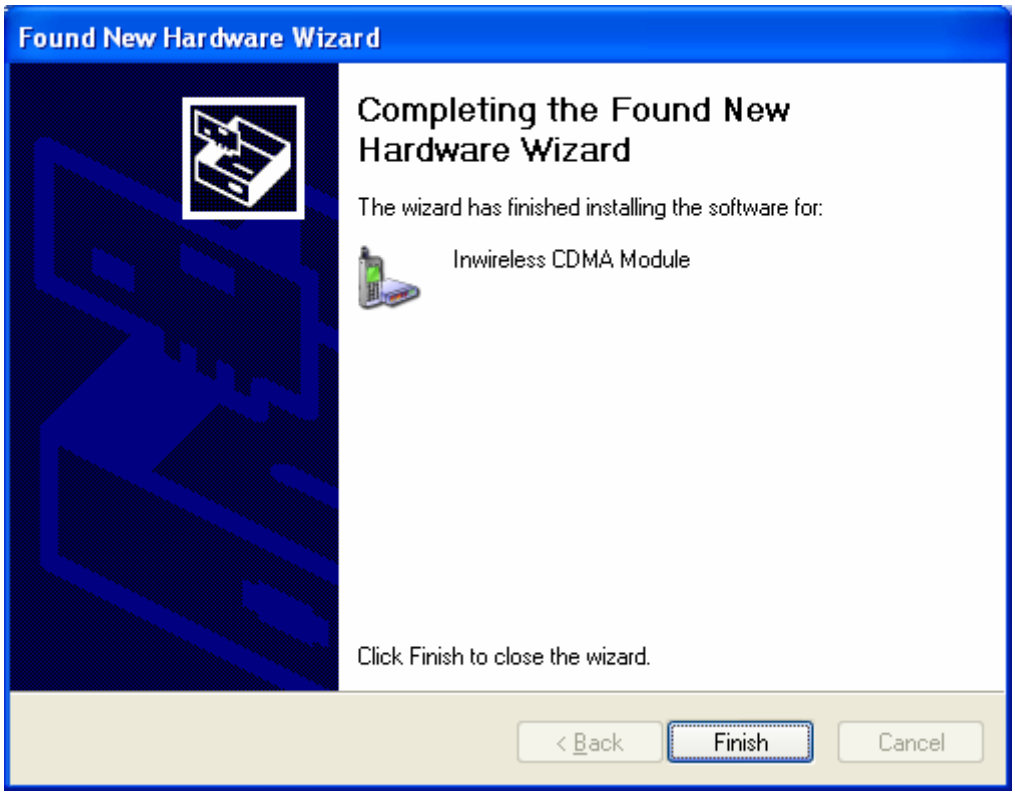
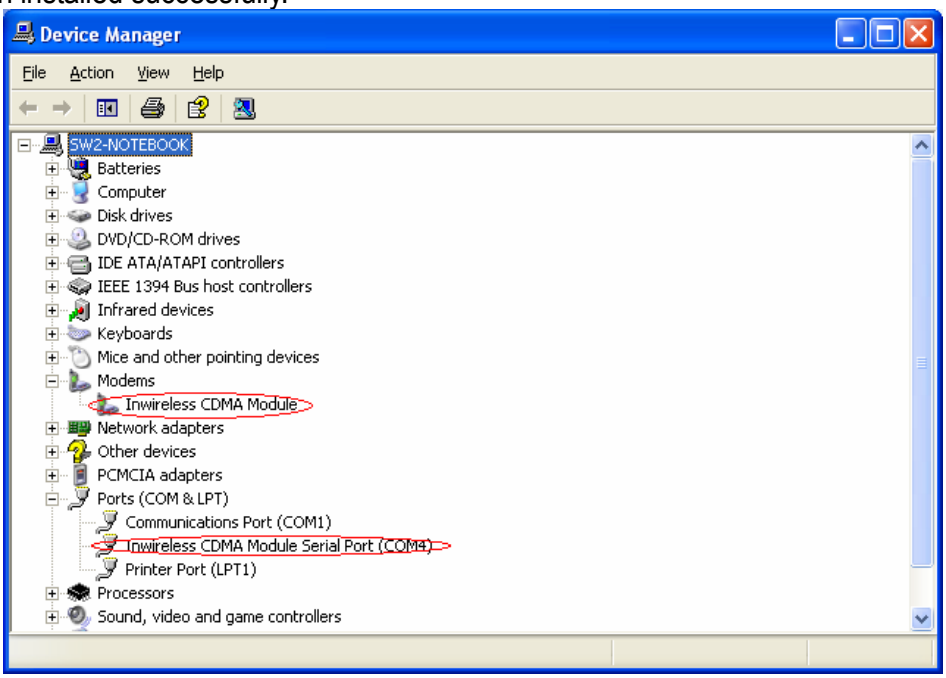


4. Click Finish to complete the installation



5. Device installation is completed. You can check whether the installation is successful or not by looking up device manager window. The following screenshot indicates that the USB driver has been installed successfully.



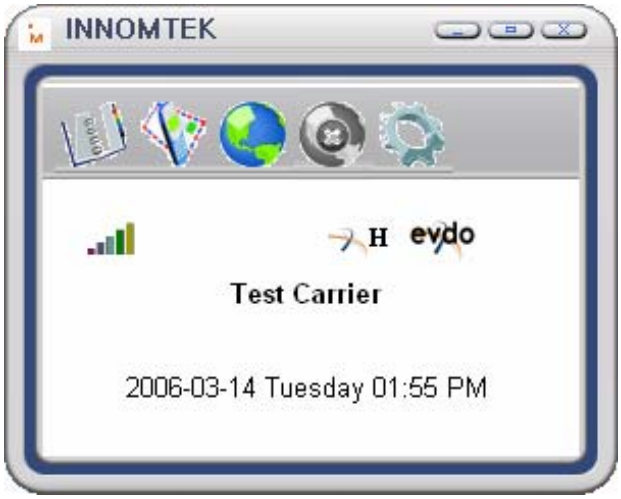
3. Launching and exiting the INNOMTEK USB Modem

Launching

A user can start the INNOMEK USB Modem with double-clicking icon, which is created on the wallpaper after successful installation. It can be also launched by selecting Start>Program>Innomtek USB Modem on your desktop.

Main Screen

When the INNOMTEK USB Modem gets started, the main screen appears like below.



Components of Main Screen

The window contains:

- Action buttons to connect and disconnect, links to customization menu, phonebook, SMS

Button	Action
	Shows up phonebook window
	Shows up SMS window
	Establish a connection
	End the current connection
	Shows setup window

- Indicating icons on the window

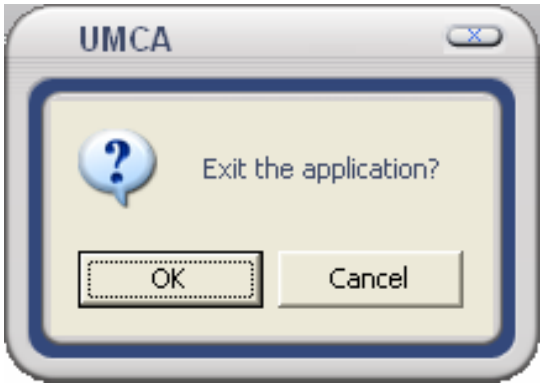
Icon	Meaning
	Signal Strength Indicator: The bars indicate the strength of the radio signal
	No Service Indicator: No service is available at the moment.
1x Ev H	Data Mode Indicators icons: display the current operating mode of modem (1X Only, 1xEVDO Only, Hybrid)
2G 1x evdo	Service Indicator icons: display which network service is currently available at your location (1xEVDO, CDMA2000 1X, 2G) Note: Once a connection is established the service indicator icon indicates the connected network.
	Roaming Status Indicator: It shows whether you are roaming onto the network of a service provider other than your own.
	Unread Message Indicator
	Connected Indicator: display that the data connection is established
zzzz	Dormant Indicator: A connection is established but no data transfer is in progress

- Network name, system time

Exiting

Before closing and exiting the INNOMEK USB Modem, you must ensure that you are disconnected from the network.

Click button on the main screen. Then the confirmation window shows up. Click OK button on the confirmation window. That's it.

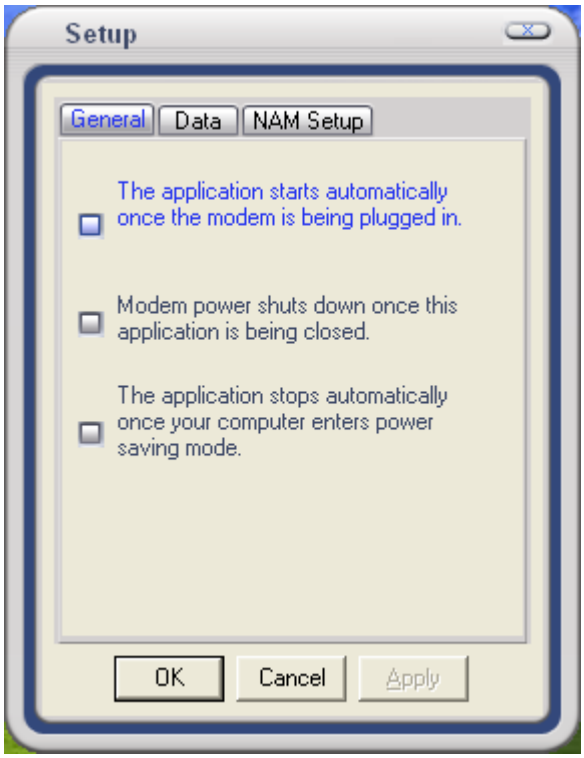


4. Setup

Once you click button on the main screen, the setup window shows up.
The setup window consists of 3 tabs, i.e. General, Data and NAM Setup.

General

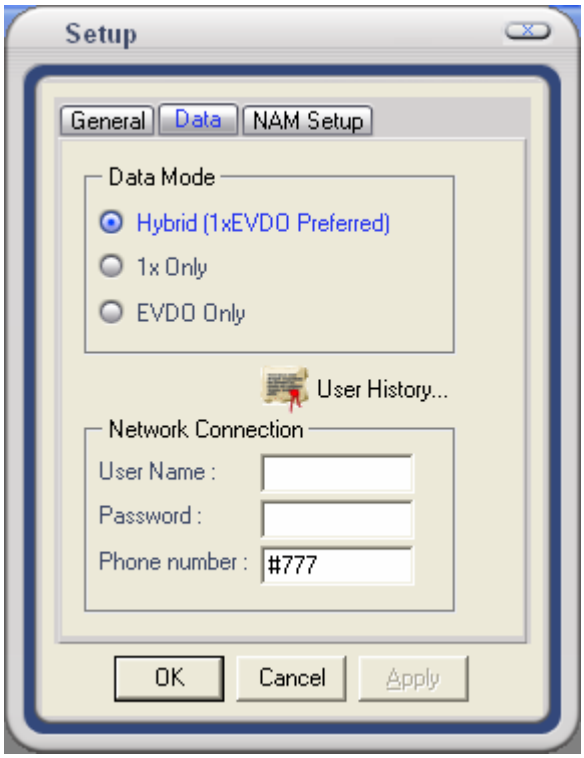
You can customize options by accessing the general tab and they are;
- The application starts automatically once the modem is being plugged in.
- Modem power shuts down once this application is being closed.
- The application stops automatically once your computer enters power saving mode



Data

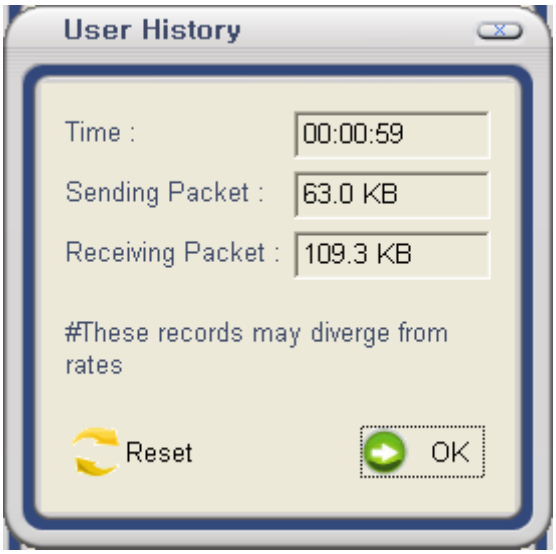
You can customize options by accessing the data tab, and they are;
- Data mode (Hybrid, 1x Only, EVDO Only)
- Network Connection (User Name, Password, Connect number)

Note: You should set these items appropriately per network carrier for data connection.



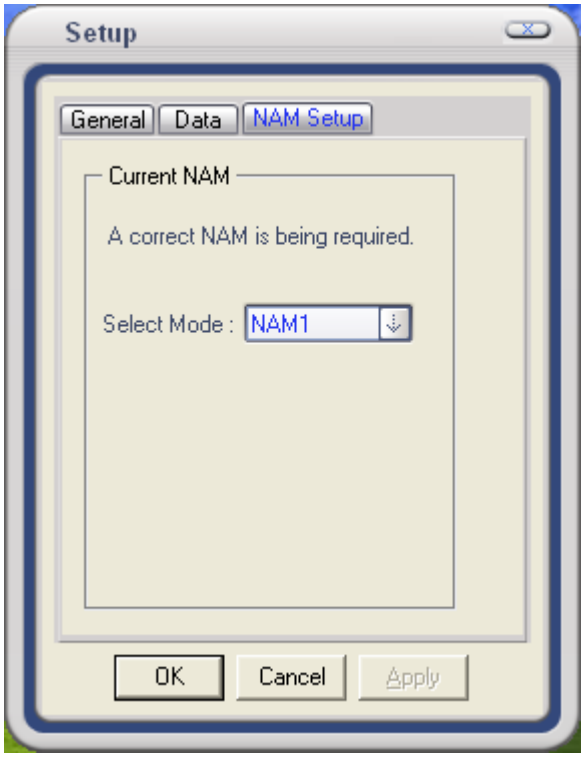
At this window you can also check the data connection history by clicking

button.



NAM Setup

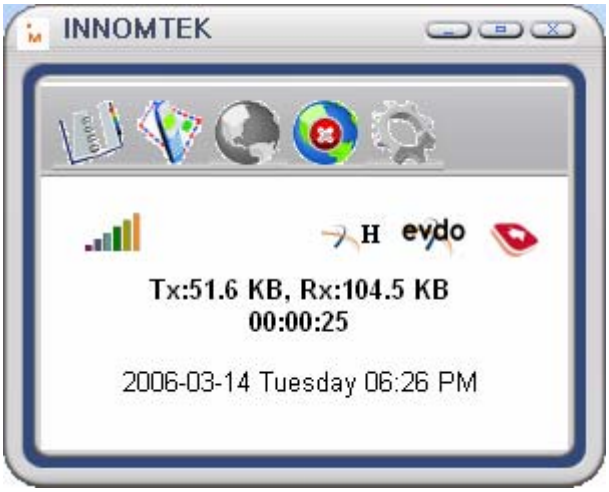
You can customize NAM selection by accessing the nam setup tab. NAM selection is an important item so you should input 4-digit password first. The default password is 4 zeros (0000). You can customize your own password on the password window.



5. Connect and Disconnect

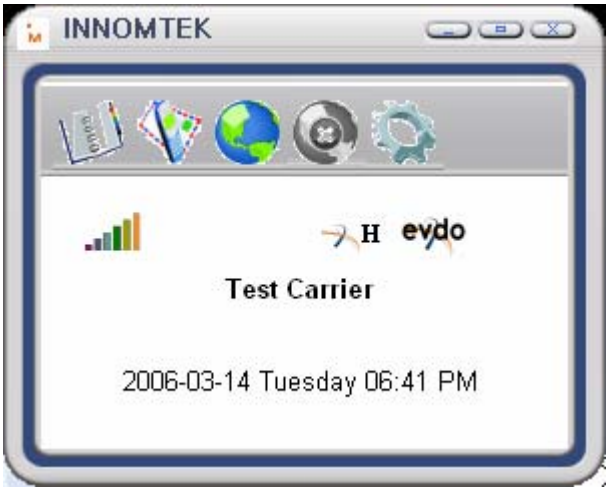
Connect

Click button to establish a connection on the main screen. The INNOMTEK USB Modem will take a few moments to connect to the network. Once a connection is established the main screen becomes like below.



Disconnect

Click button to end the current connection on the main screen. After disconnection the main screen becomes like below.

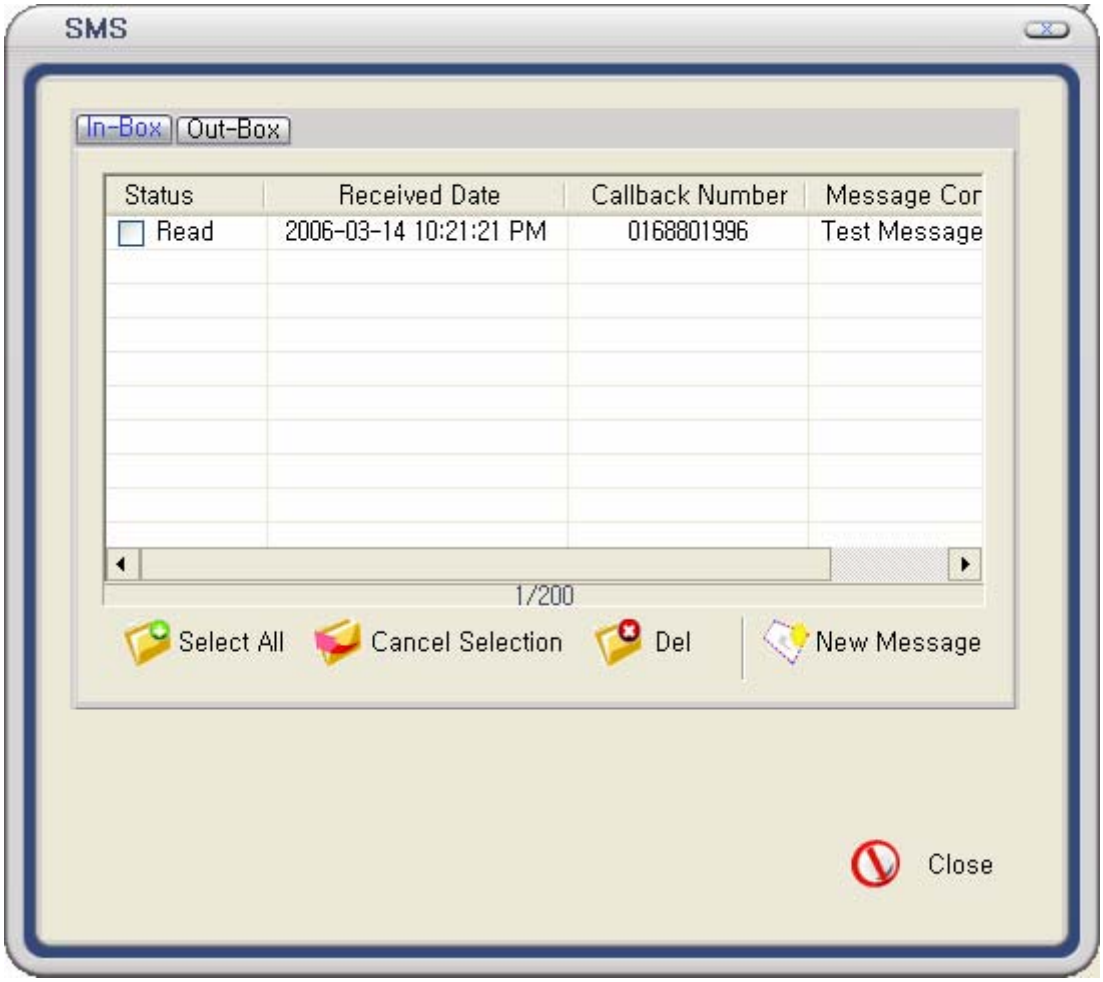


6. SMS

Once you click button on the main screen, the SMS window shows up. The sms window consists of 2 tabs, i.e. In-Box and Out-Box

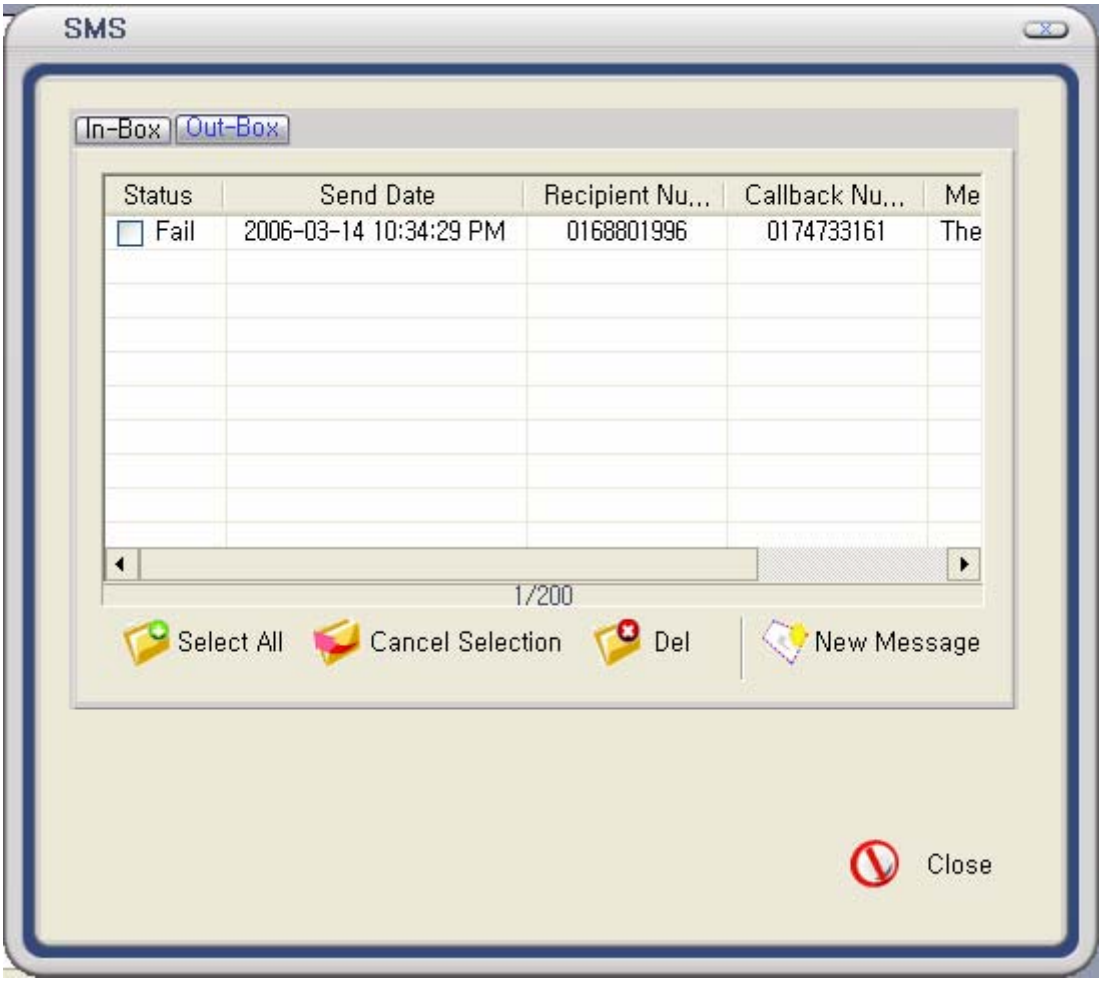
In-Box

The received messages are stored and accessible in in-box.



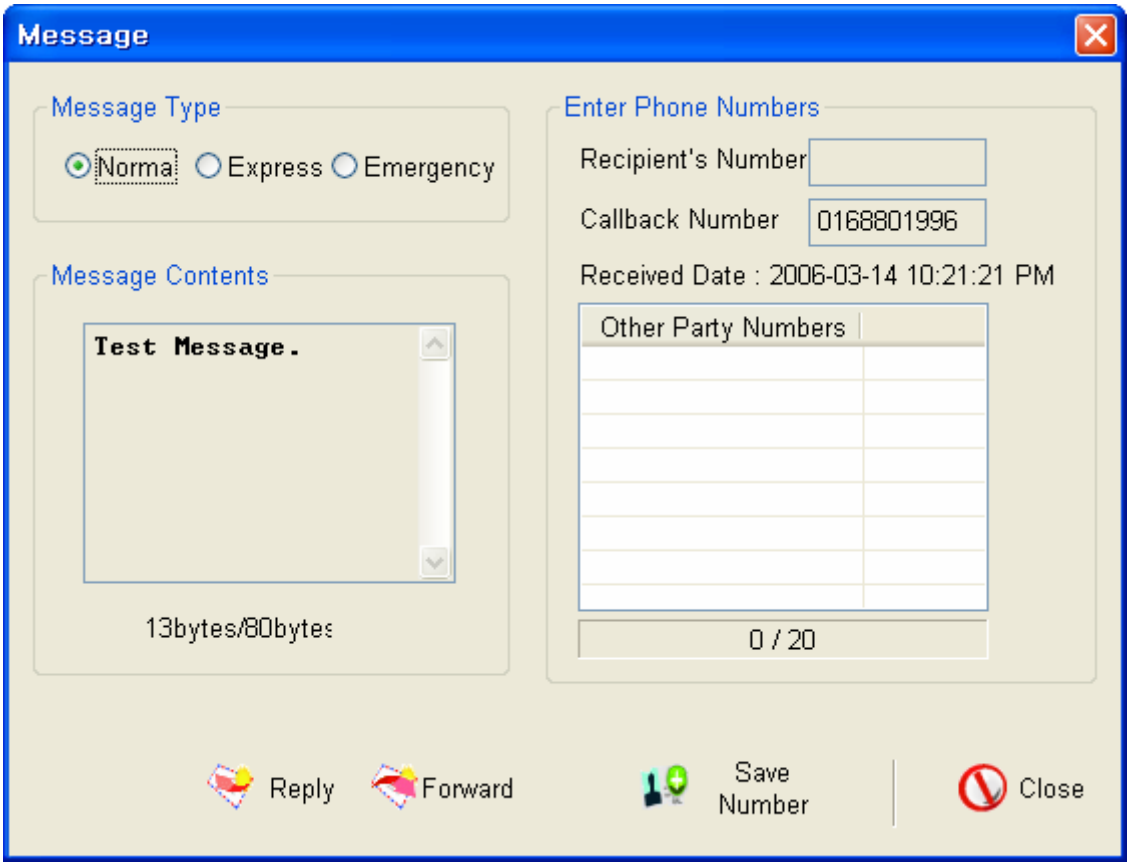
Out-Box

The sent messages are stored and accessible in out-box.



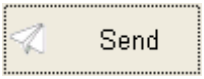
Receive a new message

When a new text message is received, the new message window comes out like below. If you click OK button, the newly arrived message window shows up and you can read the message.

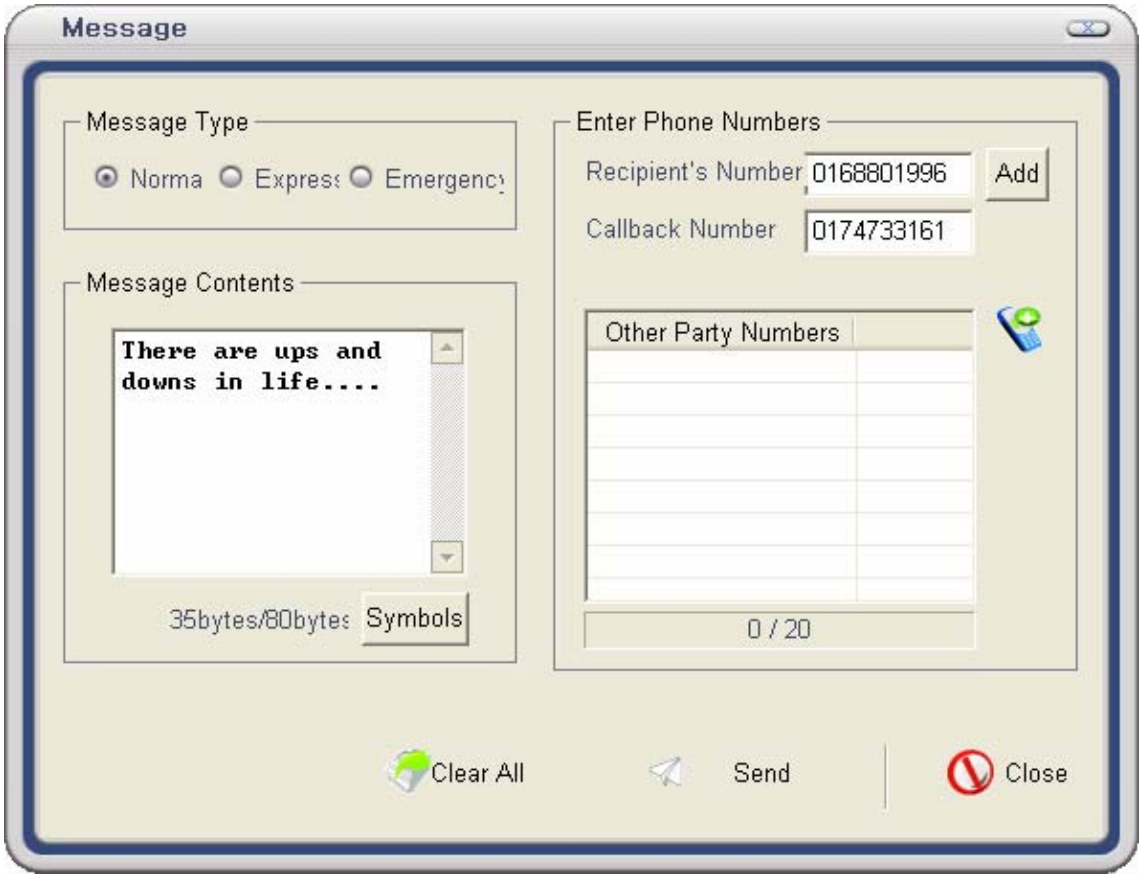


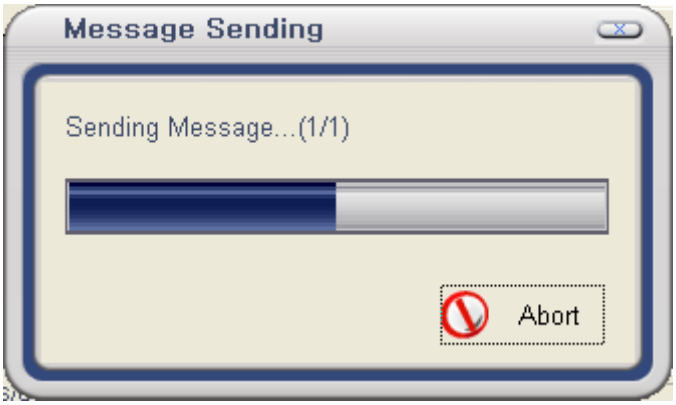
Write a new message

When a user click

button on in-box or out-box, the message window comes out like below. On this window you can write a message and send it by clicking 

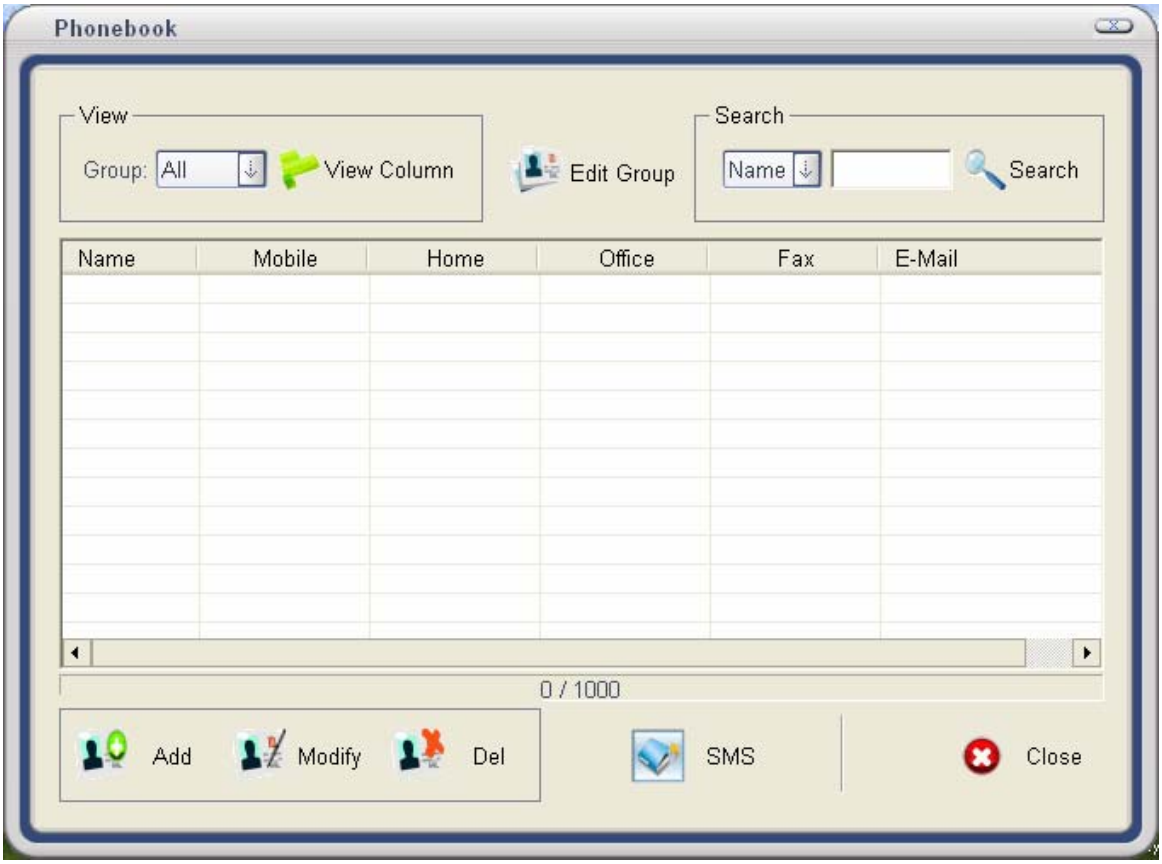
button.



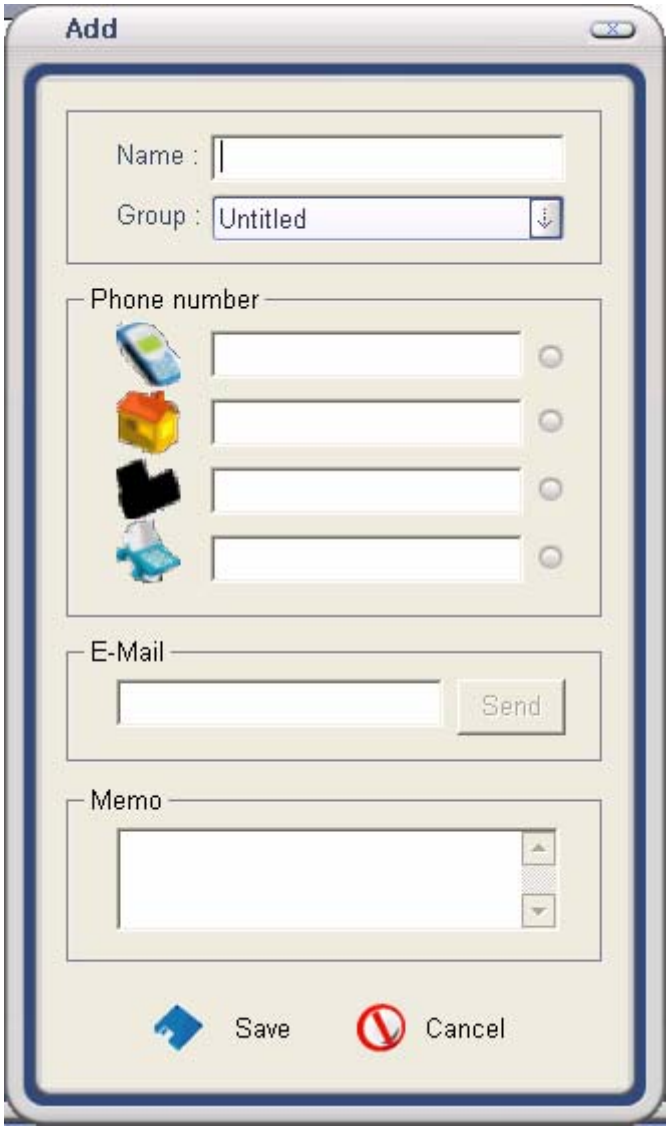


7. Phonebook

Once you click button on the main screen, the phnebook window shows up. On this window you can add/modify/delete phonebook lists by clicking the corresponding button.


Phonebook
View
Group: All
View Column
Edit Group
Search
Name
Search
Name
Mobile
Home
Office
Fax
E-Mail
0 / 1000
Add
Modify
Del
SMS
Close

ADD Window



8. Specifications

LED Operation

There are two LEDs in ICU-E640. One is Power-LED (Red) and the other is Data-LED (Green).

LED Behavior	Indicates
Power-LED ON (Red)	Modem is being powered and on
Data-LED ON (Green)	Modem is booting up and initializing at the moment
Data-LED Flashing (Green)	Data connection is established

SAR INFORMATION

THIS MODEL PHONE MEETS THE GOVERNMENT'S
REQUIREMENTS FOR EXPOSURE TO RADIO WAVES.

Your PC wireless card is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radiofrequency (RF) energy set by the Federal Communications Commission of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health. The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg. * Tests for SAR are conducted with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output. Before a phone model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model. The highest SAR value for this model when tested for use at the when worn on the body, as described in this user guide, is 1.18**W/Kg**. (Body-worn measurements differ among models, depending upon available accessories and FCC requirements). While there may be differences between the SAR levels of various and at various positions, they all meet the government requirement for safe exposure. The FCC has granted an Equipment Authorization for this model with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model is on file with the FCC and can be found under the Display Grant section of http://www.fcc.gov/ oet/fccid after searching on **FCC ID: T42ICU-E640**.

Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications Industry Association (CTIA) web-site at http://www.wow-com.com.
* In the United States and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a sub-stantial margin of safety to give additional protection for the public and to account for any variations in measurements.

SAFETY INFORMATION FOR RF EXPOSURE

SAR compliance has been established in the notebook computer configurations with horizontal USB slot configurations as tested in this filing, and can be used in notebook computers with substantially similar physical dimensions, construction, and electrical and RF characteristics. This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.
The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.

FCC Compliance Information

This device complies with Part 15 of FCC Rules.
Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and
(2) This device must accept any interference received.
Including interference that may cause undesired operation.

U.S.A.

U.S.FEDERAL COMMUNICATIONS COMMISSION

RADIO FREQUENCY INTERFERENCE STATEMENT

INFORMATION TO THE USER

NOTE : This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful Interference in a residential installation This equipment generates, uses, and can radiate radio frequency energy and, if Not installed and used in accordance with the instructions, may cause harmful Interference to radio communications. However, there is no guarantee that interference will not occur in a particular Installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet of a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for assistance.

Changes or modification not expressly approved by the party responsible for Compliance could void the user's authority to operate the equipment. Connecting of peripherals requires the use of grounded shielded signal cables.