



MERLIN U520 USER MANUAL



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1 GETTING STARTED

In This Section

- Description of Your UMTS Merlin
 - The UMTS Package
 - System Requirements
 - Care of Your UMTS Merlin
 - Installing MobiLink on Windows 2000
 - Windows 2000 detects your UMTS Merlin
 - Installing MobiLink on Windows XP
 - Windows XP detects your UMTS Merlin
-

This section will walk you through how to get started using your UMTS Merlin, including software and driver installation, inserting the card so Microsoft Windows is able to detect and install the drivers for your UMTS Merlin and setting up a data session to connect to the Internet.

1.1 YOUR UMTS ACCOUNT

For information about your UMTS account, User Name, Password and Access Point Name; please contact your UMTS Service Provider.

1.2 YOUR UMTS MERLIN

Your UMTS Merlin is a PC card that fits into the PCMCIA slot (Type II, 5V) of most Windows based laptop computers. The U520 utilizes the UMTS (Universal Mobile Telecommunications System) Network to connect to the Internet transferring data at speeds of 384kbps. The Merlin U520 runs on Microsoft Windows 2000 and XP.

The MobiLink software will allow you to control and monitor your connection to the UMTS network. It will also allow you to send and receive SMS (Short Messaging Service), get online help and has an address book.

1.3 THE UMTS PACKAGE

The UMTS Package includes:

- Merlin U520 PC Card
- USIM (UMTS Subscriber Identification Module) -- Depending on Service Provider
- MobiLink software on installation CD
- Quick Start Guide
- Storage Case



1.4 GETTING STARTED

Before you use your UMTS Merlin, you must first:

1. Have an active UMTS account with a UMTS Service Provider
2. Have a properly configured USIM (Provided by the Service Provider) – facilitates permission to use network
3. Install the MobiLink software, located on the installation CD
4. Insert into the PC card slot on your PC for Microsoft Windows to detect and configure the UMTS Merlin U520
5. Launch MobiLink, create a profile if necessary and select the Connect button

IMPORTANT: DO NOT INSERT THE MERLIN INTO THE PC CARD SLOT UNTIL YOU HAVE UNINSTALLED ANY PREVIOUSLY EXISTING UMTS SOFTWARE FROM YOUR COMPUTER AND INSTALLED THE MOBI LINK SOFTWARE. UNINSTALL INSTRUCTIONS IN TROUBLESHOOTING SECTION. SEE WHEN I RUN THE MOBI LINK SOFTWARE, I GET THE MESSAGE "NO CARD DETECTED"

1.5 SYSTEM REQUIREMENTS


- 133 MHz or faster Pentium- compatible
- Windows 2000 or XP (Home and Professional)
- 64 MB RAM
- 16 MB available hard drive space
- CD-ROM drive
- Type II, PCMCIA slot --- 5V

1.6 CARE OF YOUR MERLIN

Novatel Wireless recommends the following handling guidelines:

- Handle with care
- Avoid storing your UMTS Merlin in extreme temperatures
- Store the card in a dry and clean environment
- Avoid spilling any liquid or immersing the card in water
- Do not place any labels on the Antenna as this may alter the sensitivity of the antenna
- Do not place any labels on the card or the USIM as this may interfere with the PC card slot/SIM slot when inserting
- Do not force the Merlin into the PC card slot
- Ensure the edges of the USIM are smooth before inserting into USIM slot
- Do not force the SIM into the SIM slot
- Do not apply force on the top or bottom of the Merlin
- When transporting your laptop, remove the Merlin from the PC card slot



NOTE: TO REMOVE YOUR MERLIN, YOU MUST CLOSE MOBILINK, THEN STOP THE MERLIN USING THE PC CARD TRAY ICON  LOCATED IN THE BOTTOM-RIGHT CORNER OF YOUR PC. CLICK THE ICON AND SELECT STOP FROM THE DIALOG BOX. ONCE YOUR CARD HAS BEEN STOPPED, PRESS THE PC CARD EJECT BUTTON LOCATED ON YOUR PC AND REMOVE THE CARD COMPLETELY FROM THE PC CARD SLOT.



1.7 INSTALLING MOBILINK

This portion of the guide will instruct you how to install the MobiLink software from the Installation CD

1.7.1 Windows 2000 Installation

1. Insert the installation CD in the CD drive of your PC
2. If the auto-run does not start the application, double-click on the Lucent.exe file on the CD
3. The “Welcome to MobiLink Installation Wizard” window will appear. See Figure 1

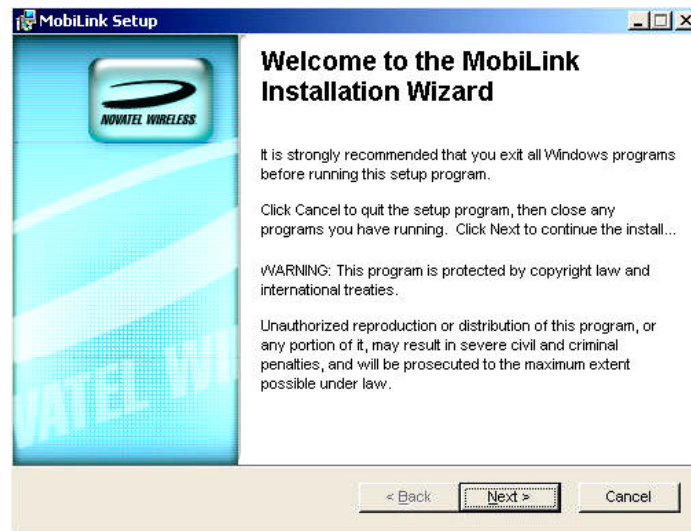


FIGURE 1

4. Read the information and click **Next**
5. The “License Agreement” window will appear next. See Figure 2

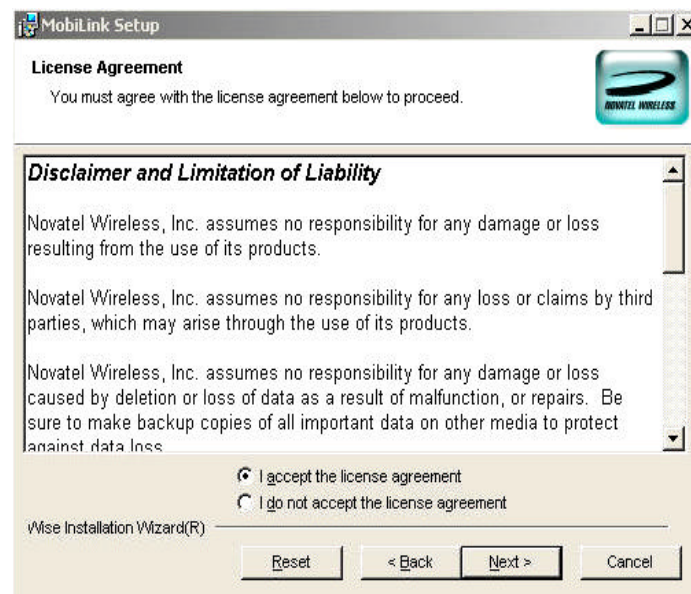


FIGURE 2



6. Read the License Agreement and acknowledge your agreement by selecting "I accept the license agreement". Then click **Next**
7. The "Updating System" window will appear and the software will begin initializing and installing. See Figure 3

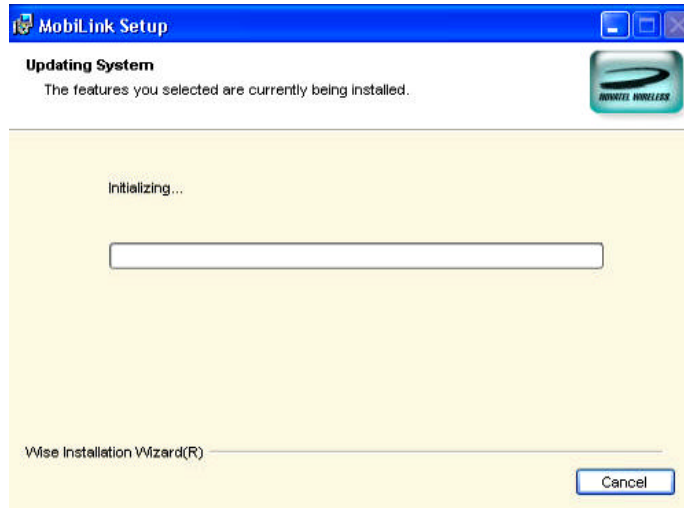


FIGURE 3

8. The "MobiLink has been successfully installed" window will appear. See Figure 4

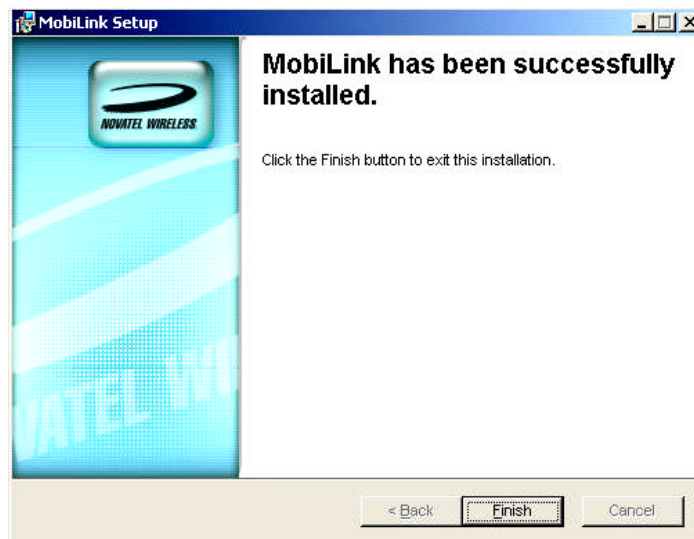


FIGURE 4

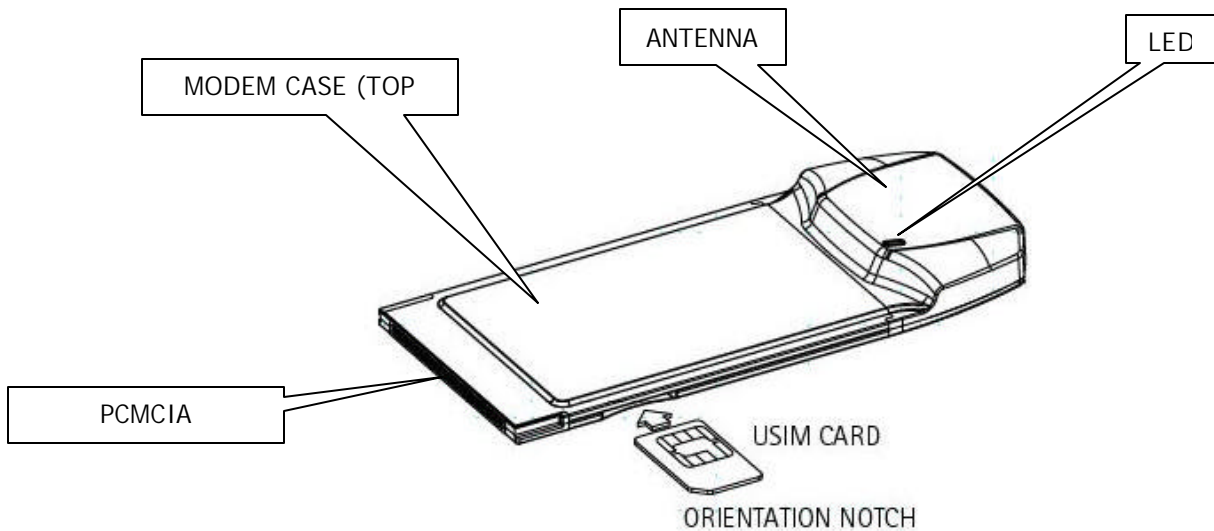
9. Click **Finish**, this completes the installation. Restart your PC.



1.7.2 Windows 2000 detects your UMTS Merlin

1. Insert the USIM card into the modem. The USIM card is required to connect to the Network.

NOTE: USIM CARD CONTACT POINTS MUST FACE UPWARDS, AND THE ORIENTATION NOTCH MUST BE POSITIONED AS SHOWN IN THE PICTURE. PLEASE SEE SECTION 1.6 ON USIM CARE AND INSERTION.



2. Insert the modem into the PC card slot of your PC. Windows reads the information from the Modem and installs drivers for each function of your UMTS Merlin.

The "Novatel_Wireless Merlin_UMTS_Modem" window will appear momentarily, see Figure 5. Then the "Novatel Wireless UMTS Modem Parent" window will appear. See Figure 6

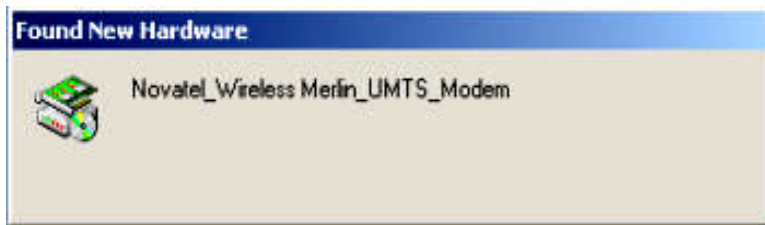


FIGURE 5

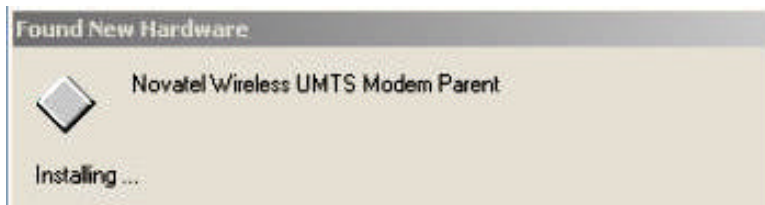


FIGURE 6



After the Novatel Wireless Parent driver is installed, a “multifunction device” driver will be installed. Additional drivers installed, are the Novatel Wireless Modem Primary Port and the Novatel Wireless Secondary Port. See Figure 7, 8, 9, and 10.

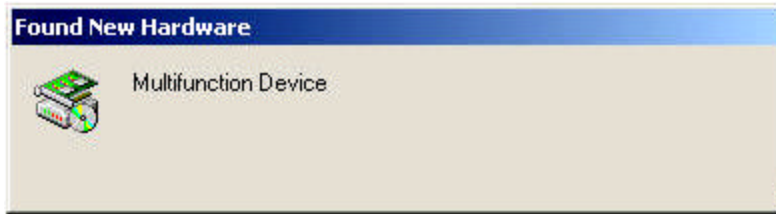


FIGURE 7

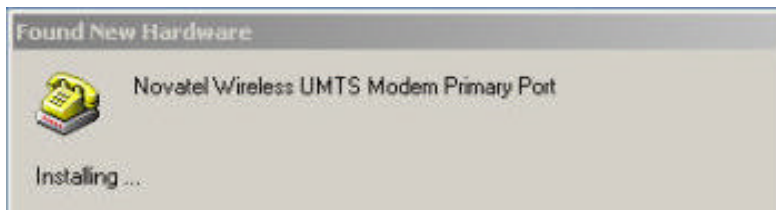


FIGURE 8

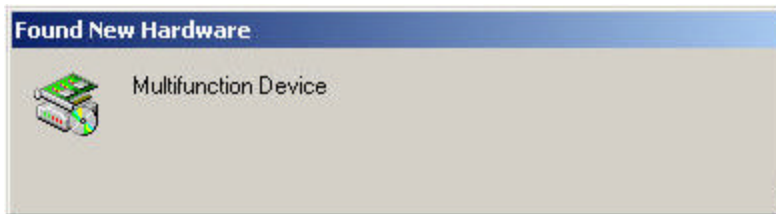


FIGURE 9

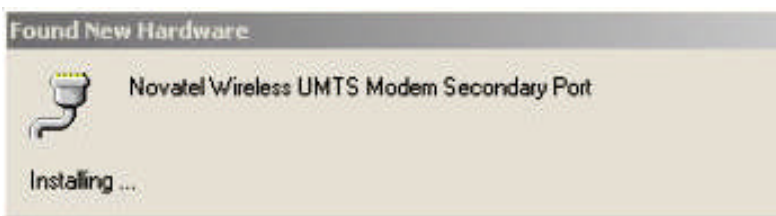


FIGURE 10

Windows has now detected and installed the drivers for your UMTS Merlin. Proceed to Section 2.



1.7.3 Windows XP Installation

1. If the auto-run does not launch the application, double-click on the Lucent.exe file on the installation CD.
2. The “Welcome to MobiLink Installation Wizard” window will appear. See Figure 11



FIGURE 11

3. Read the information on the window and click **Next**
4. The “License Agreement” window will appear, see Figure 12. Read the License Agreement and acknowledge your agreement by selecting “I accept the license agreement”. Then click **Next**

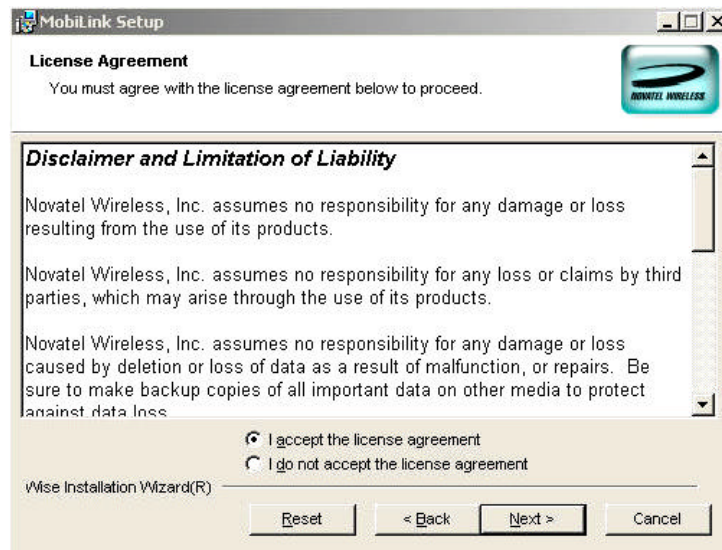


FIGURE 12



- The “Updating System” window will appear and the software will start initializing and installing. See Figure 13

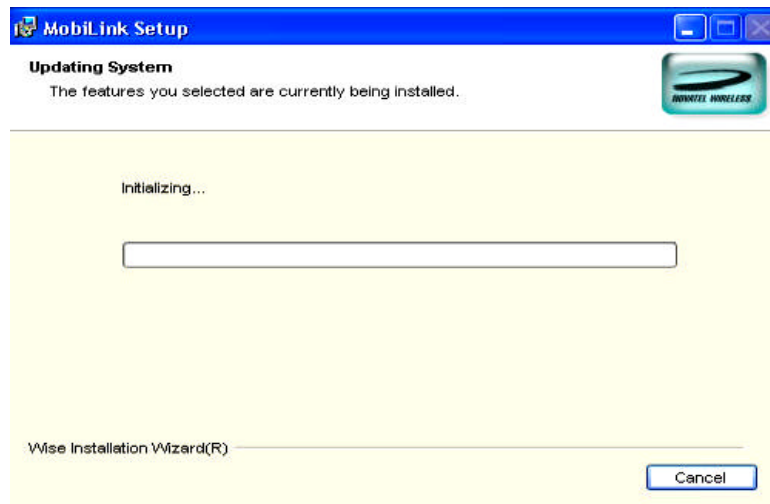


FIGURE 13

- The “MobiLink has been successfully installed” window will appear after approximately 30 seconds. See Figure 14

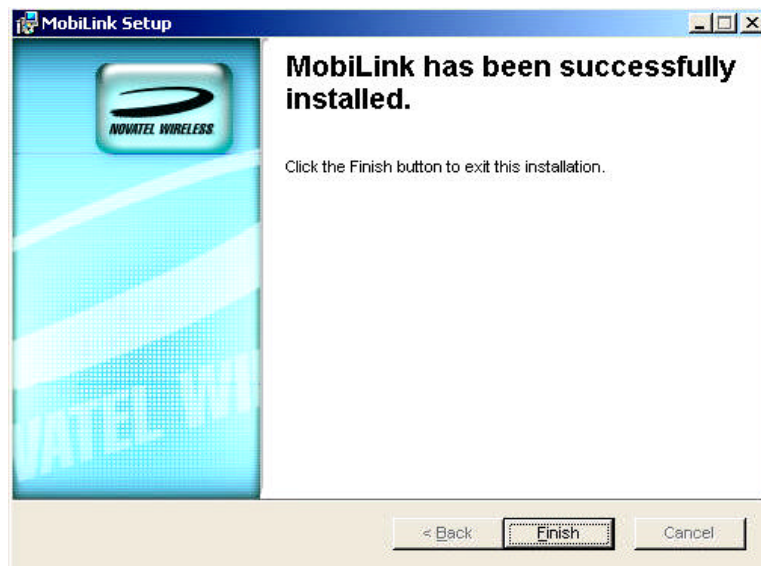


FIGURE 14

- Click **Finish** to complete the installation. Restart your PC.



1.7.4 Windows XP detects your UMTS Merlin

1. Insert the USIM card into the modem. This is only required to connect to the Network

NOTE: USIM CARD CONTACT POINTS MUST FACE UPWARDS, AND THE ORIENTATION NOTCH MUST BE POSITIONED AS SHOWN IN THE PICTURE. (SEE PICTURE IN SECTION 1.7.2). PLEASE SEE SECTION 1.1.6 ON USIM CARE AND INSERTION.

2. Insert the modem into the PC card slot of your PC. Windows reads the information from the Modem and connects drivers for each function of your UMTS Merlin. You will see a sequence of callouts near the bottom right of your computer screen, as windows connects all drivers for your UMTS Merlin. See Figure 15 through Figure 21



FIGURE 15



FIGURE 16

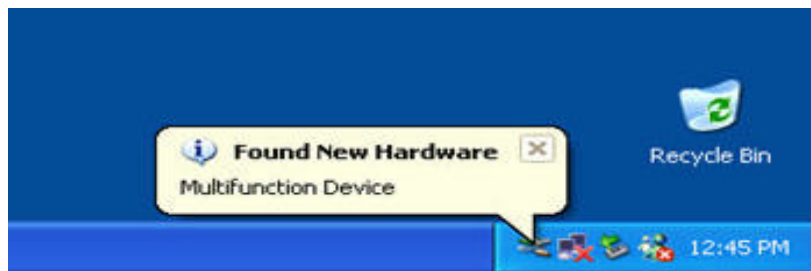


FIGURE 17

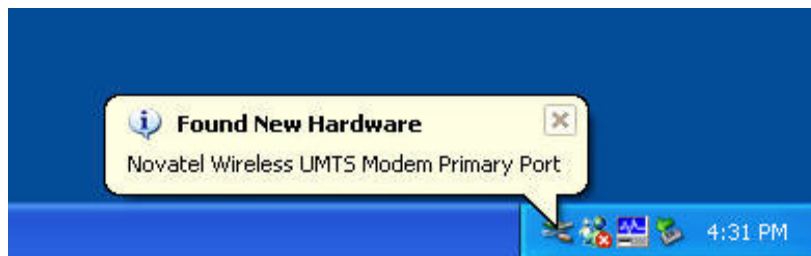


FIGURE 18



FIGURE 19



FIGURE 20

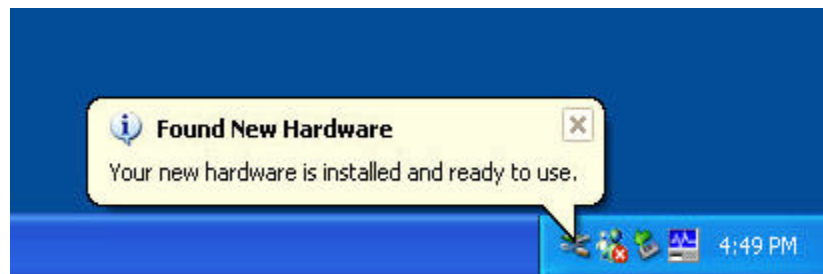


FIGURE 21

Windows has now detected and installed the drivers for your UMTS Merlin. Proceed to Section 2



2 MOBILINK

In This Section

- Starting MobiLink
 - MobiLink's Main Window
 - Using MobiLink to connect to and disconnect from the Network
 - MobiLink's features
 - Create a data session with MobiLink
-

This section will describe how to use Novatel's Connection Manager MobiLink, to connect to and disconnect from the Network along with the various functions associated with the buttons and the menu.





2.1 STARTING MOBILINK






To start MobiLink double-click on the MobiLink icon  , located on your desktop.

2.1.1 Main Display Window










- Connect/Disconnect Button: Signal Strength Indicator
Connects you to the network. Will change to Disconnect after Connected Black rectangular bars at right window. Active when in UMTS coverage
- Web Browser Icon:  Launches Internet Explorer. Becomes active after connected to network
- SMS Client Icon:  Launches SMS Client. Becomes active after attached to network.
- Address Book Icon:  Launches an address book
- Help Icon:  Launches online help
- Menu Button: Displays various features of MobiLink

- Open/Close Profile Manager Button:  Clicking this button will open or close the Profile Manager Screen. This button will only appear once attached.
- Minimize Button:  Clicking this button shall cause the connection manager to shrink to the task bar.
- Shrink Button:  Clicking this button shall cause the connection manager to change forms to a minimized view that displays only the key parameters.
- Enlarge Button:  Clicking this button shall change the main display to the standard view.
- Close Button:  Clicking this button shall close the window and exit the application.

2.1.2 Icon Display Window

-  : Indicates Roaming
-  : Data Session in process
-  : Dormant. Physical Channel released due to traffic requirements. (May not be applicable for all mobile applications)
-  : SMS is available
-  : SIM Locked



2.1.3 Features

Click on the Menu Button will display various features of MobiLink.

Configuration Button displays:	
General Tab:	Customizes MobiLink's Window and launch settings
User Interface Tab:	Sets language and sound preferences
Network Tab:	Automatic setting will connect to the available UMTS network.
Settings Tab:	Profile preferences (i.e Always use default) SIM Lock (Lock SIM)
Properties Button Displays:	
Firmware Version:	This is software programmed in the modem
IMEI:	A unique number that identifies your modem on the network
Mobile Number:	SIM Number (a numeric number)
Manufacturer:	Novatel Wireless
Modem Type:	Merlin UMTS
About Button Displays:	MobiLink's version
Web Update Button	Launches a wizard to check the Internet for updates to MobiLink



2.1.4 Creating a data session

NOTE: PLEASE ENSURE YOU HAVE AN ACTIVE UMTS DATA ACCOUNT WITH A UMTS SERVICE PROVIDER, THE USIM MUST BE ENA BLED FOR UMTS AND SMS AS REQUIRED.


1. Double-click on the MobiLink icon  , located on your desktop. Figure 23 will appear momentarily.



FIGURE 23

2. The MobiLink software will then initialize your UMTS Merlin. See Figure 24



FIGURE 24

3. You will then be prompted for a SIM PIN code (provided by your Service Provider). See Figure 25

NOTE: IF YOU ARE NOT PROMPTED FOR A SIM CODE, CONTINUE TO STEP 4.

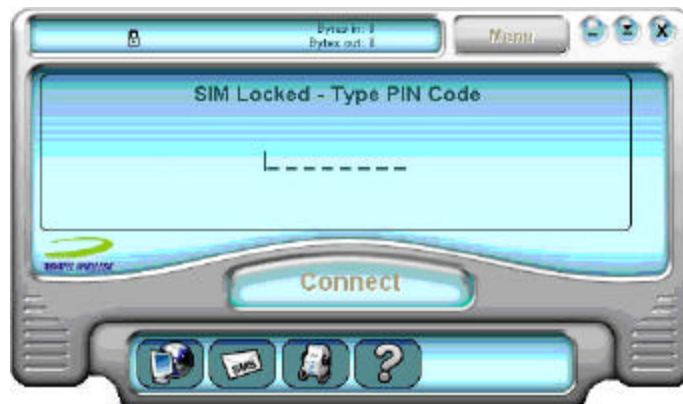


FIGURE 25



NOTE: IF YOU ENTER THE SIM PIN CODE INCORRECTLY 3 TIMES, YOU WILL HAVE TO CONTACT YOUR SERVICE PROVIDER AND OBTAIN A PUK CODE. SEE FIGURE 26

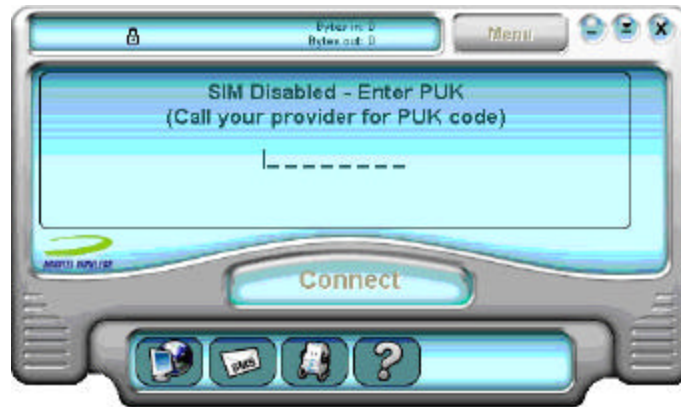


FIGURE 26

4. Your UMTS Merlin will then search for a UMTS network. See Figure 27



FIGURE 27

5. Depending on your predefined settings, MobiLink will use a default profile to attach to the UMTS Network or MobiLink may prompt you to select or create a profile. See Figure 28.

NOTE: IF A PROFILE EXISTS AND MOBILINK WAS SET UP TO USE IT (I.E ALWAYS USE DEFAULT PROFILE SETTING LOCATED IN MENU) THEN YOU WILL ATTACH TO THE NETWORK (INDICATED BY READY). GO TO STEP 8 AND CLICK ON CONNECT.

NOTE: BEFORE PROCEEDING TO THE NEXT STEP, YOU WILL NEED TO CREATE A PROFILE IF IT IS THE FIRST TIME THAT YOU ARE CONNECTING TO THE UMTS NETWORK, OR IF A PROFILE HAS NOT BEEN CREATED FOR YOU BY YOUR SERVICE PROVIDER. THE PROFILE WILL INCLUDE THE FOLLOWING WHICH WILL BE PROVIDED TO YOU BY YOUR SERVICE PROVIDER.

- Profile Name – Your Name of choice
- User Name – If required – (Will be provided by your Service Provider)
- Password – If required (Will be provided by your Service Provider)
- APN (Access Point Name) – (Will be provided by your Service Provider)

NOTE: THE NAMES CONTAINED IN THE FIGURES BELOW ARE FOR DEMONSTRATION PURPOSES ONLY



- 6. Click the **New** button to create a new profile. See Figure 28



FIGURE 28

- 7. The Profile Wizard window will be displayed. Please enter the appropriate information requested by the wizard to finish creating your profile. Click the down arrow button to continue until you are prompted to save the profile.

Down Arrow Button

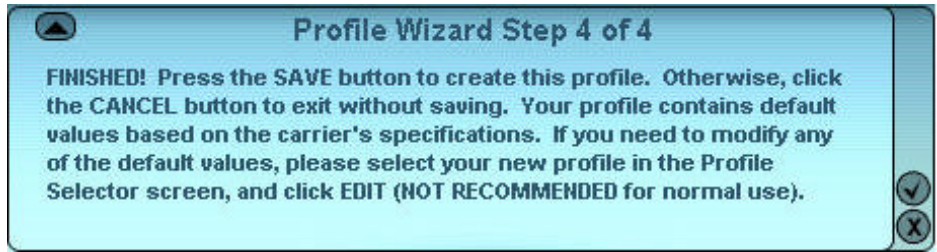
Save Button

Cancel Button

Profile Wizard Step 1 of 4
Please enter a name that you want to give to this profile.
Profile Name:

Profile Wizard Step 2 of 4
Please enter the following information that will be needed to log on to the network.
Username:
Password:

Profile Wizard Step 3 of 4
Please enter the APN. If you don't know the APN, please contact your service provider.
APN:



8. After saving your profile, select it and click on the **CONNECT** button. See Figure 29



FIGURE 29

9. While connecting you will see Figure 30

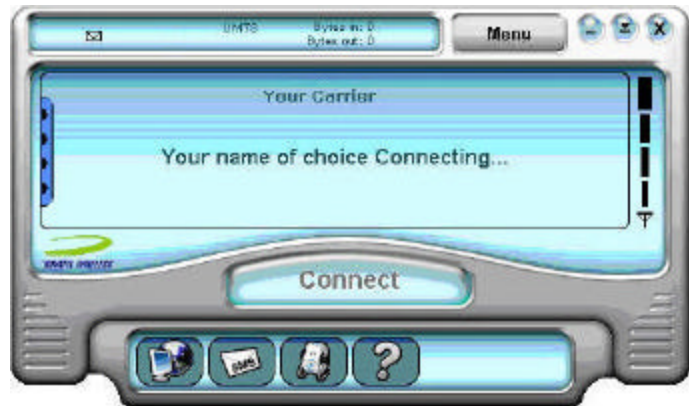


FIGURE 30



10. Once connected to the network you will see Figure 31

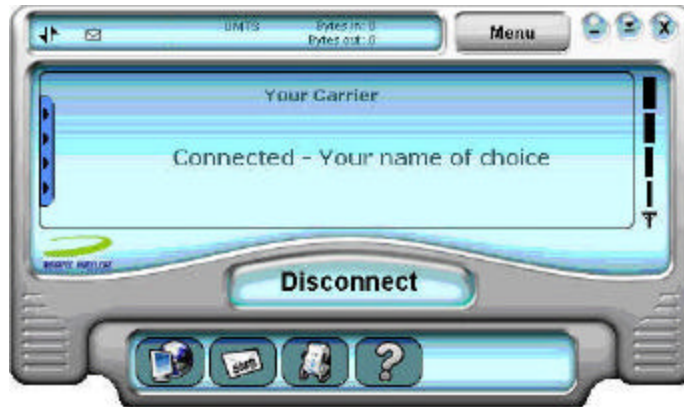


FIGURE 31

11. To disconnect from the network click on the **DISCONNECT** button. See Figure 32

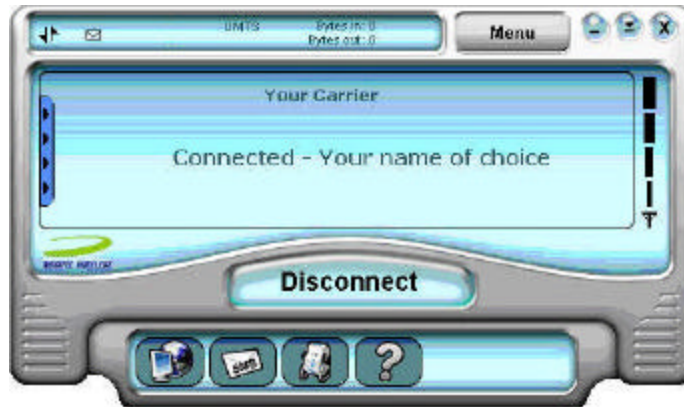


FIGURE 32