

# Exhibit 9

# Minstrel - 540

# **Novatel Wireless Technologies Ltd.**

## FCC ID: NBZRNM6833

# **User's Manual**

#### **Minstrel Wireless Modem Accessory Quick Start Guide**

The Minstrel Wireless Modem Accessory provides wireless Internet connectivity for your HP Jornada 540 Pocket PC. In order to set up your Minstrel to access the Internet, follow the steps below.

#### STEP 1

Connect the Jornada to your desktop computer using the communications software included with the Jornada. For information on how to do this, refer to the documentation supplied with the Jornada.

#### STEP 2

Start the software installation by clicking **Minstrel Modem Manager** on the main window of the software installation program. If the installation program is not running, make sure that the Minstrel CD is inserted into your CD-ROM drive and double click on **My Computer** on your desktop. Then, double-click on your CD-ROM drive and then the **Autorun.exe** program.

#### STEP 3

Following the instructions given by the installation program. The Minstrel software will automatically be installed to your Jornada once the desktop setup is complete.

#### STEP 4

When the installation is complete, disconnect your Jornada from the desktop computer and attach the Minstrel wireless modem to the Jornada.

To attach the Minstrel to the Jornada, position the devices so the front of the Minstrel is facing the back of the Jornada. Slide the Jornada down past the Minstrel's latch so that the two connectors of the Minstrel meet with the connector slots on the bottom edge of the Jornada. Then, lift up on the latch on the top of the Minstrel and slide the Jornada underneath it to secure the Jornada in place.

#### STEP 5

Set up an account with a Wireless IP service provider in your area. You will need to provide the EID number found on the back of the Minstrel and record the network information you are given when setting up the account.

#### STEP 6

Start the **Configuration Wizard** to configure your Minstrel. To start this program, select **Programs** from the **Start** menu on your Jornada. Then, locate the **Modem Manager** icon from the main window and tap it to start the **Modem Manager** program. The **Modem Manager** software will indicate that the modem has not yet been configured. When prompted, choose to start the **Configuration Wizard** program. If the modem has previously been configured and you are not prompted, select **Configuration Wizard** from the **File** menu.

For information on the **Configuration Wizard** program, refer to the documentation included with the program by selecting **Help** from the **Start** menu found in the top left corner of the window.

#### STEP 7

Once the configuration has been complete successfully, start the *Modem Manager* to register your wireless modem to the Wireless IP network. In order to send and receive data across the Internet, the Minstrel must be registered to this network.

To start the *Modem Manager* program, select **Programs** from the **Start** menu on your Jornada and tap the icon labeled **Modem Manager**. For information on the *Modem Manager* software, refer to the documentation included with the program by selecting **Help** from the **Help** menu found at the bottom of the window.

#### STEP 8

Click on the **Status** tab and wait for the **Modem Ready** check box to be checked. This indicates that your modem is registered to the network and is therefore ready to transmit and receive data. Also, the service LED found at the bottom of the Minstrel will be solid green when registration is successful.

#### STEP 9

If you wish to use *Internet Explorer* to browse the web, start *Internet Explorer* and then select **Options...** from the **Tools** menu. Move to the **Connections** tab and select **Minstrel** from the **Type** list. Click **OK**. To connect to the Internet in the future, just start *Internet Explorer* as the Minstrel will automatically register to the network.

If there are other Internet applications you wish to use on your Jornada, please consult the document provided with the application to determine how to set it up for use with the Minstrel.

#### CONGRATULATIONS

You are now ready to access the Internet using your Minstrel wireless modem accessory.

For more information about your Minstrel wireless modem, select **Novatel Minstrel Modem** from the main **Help** listing on your Jornada.

#### CUSTOMER FEEDBACK AND SUPPORT

For software updates and to provide feedback on the beta field trial, or if you have any problems setting up your Minstrel wireless modem, please contact Novatel Wireless Customer Support.

 WWW:
 www.novatelwireless.com/support/index.html

 Phone:
 1-888-888-9231

 Email:
 support@novatelwireless.com

 Fax:
 1-888-812-2888

#### NOTICE TO USERS

This device has not been authorized as required by the rules of the Federal Communications Commission. This device is not, and may not be, offered for sale or lease, or sold or leased, until authorization is obtained.

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#### **Minstrel 540 Help**

#### **Getting Started**

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#### Introduction to Configuration Wizard

*Configuration Wizard* is designed to guide you step-by-step through the configuration of your wireless modem. The configuration process includes the following:

Selecting a Wireless IP Service Provider Gathering the Network Information Entering the Network Addresses Reviewing and Saving the Configuration Configuration Saved Registration Check Registration Successful

In order to configure your modem to allow access to the Internet, you will be required to set up an account with a <u>Wireless IP</u> service provider. You may find it more convenient to acquire a subscription before running *Configuration Wizard*. You can then re-run the program at a later date after your service provider has activated your account.

#### Starting Configuration Wizard

#### **Starting Configuration Wizard**

To start the *Configuration Wizard* program, select **Programs** from the **Start** menu. Then, tap the icon labeled **Modem Manager** in the main window.

If the modem has not been configured previously, when *Modem Manager* tries to connect to the network, a message box will open with a button to start *Configuration Wizard*. Click this button.

If the modem has previously been configured, select **Configuration Wizard** from the **File** menu once *Modem Manager* has started.

The first screen of Configuration Wizard gives information on the steps involved in the configuration of your wireless modem.

To begin with the first step in the configuration, click **Next** in the *Configuration Wizard* window.

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#### Selecting a Wireless IP Service Provider

To be able to connect to the Internet using your wireless modem, an account with a <u>Wireless IP</u> service provider is required. Setting the service provider you have chosen is the first step in the configuration process.

To set the service provider, select the provider's name from the list given on the second page of the *Configuration Wizard* program. If the provider you wish to use is not listed, select **Other**.

Once the provider has been selected, click Next to advance to the next step in the configuration.

#### **Gathering the Network Information**

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The second step of the wireless modem configuration involves contacting the service provider to obtain the network information required to connect to the Internet. The third page of the *Configuration Wizard* program displays the contact information for the selected service provider and the modem's Equipment Identifier (EID).

You will need to provide the EID to the service provider when setting up an account. Once your account is set up, your service provider will give you the network information required to continue the configuration process. Please keep a permanent record of this and any other information provided as it may be required later for activities such as setting up e-mail.

To advance to the next step in the configuration, click Next in the Configuration Wizard window.

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#### **Entering the Network Addresses**

In the third step of the configuration, you will need to enter the network addresses required to connect to the Internet. These addresses are provided by your service provider when your account is established and are described below.

Note that it is very important to enter these numbers exactly as your service provider specified.

#### **IP Address**

The IP address is used in the <u>Wireless IP</u> network in the same way as a desktop computer's IP address. This set of numbers is used to identify a node or access point on the Internet. It is used like a telephone number, as one device may contact another device if it knows its IP number.

#### **Primary DNS Address**

The Primary DNS address is the first address used to access a Domain Name Server, which converts URLs or text based Internet Identifiers to numerical IP addresses.

#### **Secondary DNS Address**

The Secondary DNS address is used to access a Domain Name Server when the primary DNS is unavailable.

#### **Reviewing and Saving the Configuration**

The fourth screen of the Configuration Wizard program displays the information entered in the previous steps.

To change any of these settings, click **Back** until you reach the appropriate window. Once the settings shown are correct, click **Next** to save them to the wireless modem.

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#### **Configuration Saved**

The fifth screen of the *Configuration Wizard* program confirms that the settings were successfully saved.

You will now have to wait until your account is activated. The amount of time this will take should have been indicated by your service provider when the account was set up. After you have waited for the specified amount of time, click **Next** to proceed with the modem <u>registration</u> check.

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#### **Registration Check**

In this step, the wireless modem will attempt to <u>register</u> to the <u>Wireless IP</u> network. The *Configuration Wizard* displays the following check boxes to show the status of registration.

#### **Cellular Signal Present**

Novotal Minateal Madam Uala This field is checked when there is adequate signal strength in order to communicate with the base station.

#### Wireless IP Service Detected

This field indicates whether or not there is Wireless IP service available in your area.

#### **Modem Readv**

This field shows that your modem has successfully registered on the Wireless IP network.

The bar graph at the bottom of the screen represents a timer that shows how much time the registration attempt is taking. If your modem does not register by the time the bar graph is filled, a dialog will open, giving notes on possible solutions to the problem.

Once registration has been completed, with all three of the fields listed above checked off, the *Configuration* Wizard will automatically advance to the next screen.

#### **Registration Successful**

This step confirms that your Wireless IP modem has successfully registered with your service provider and that it is able to operate with the network addresses you have specified. It also provides information on how to connect to the Internet using your wireless modem.

#### To exit the *Configuration Wizard*, click Finish.

#### Notes

You do not have to run the *Configuration Wizard* again unless you change service provider, or you want to verify registration and your DNS addresses. In the future, you should use Modem Manager to make your Internet connection, and then run your own Internet applications.

#### **Troubleshooting Configuration Wizard**

The following is a list of common error messages that may appear during the operation of *Configuration Wizard*. Click on the link for a description of the error and information on how to correct it.

**EID** Failure Low Signal Not Able to Register **Connect Failure** 

If the problems persist after trying the suggested changes, please contact <u>Customer Support</u>.

Troubleshooting

Troubleshooting

#### **EID** Failure

An EID failure will occur when the *Configuration Wizard* program cannot find the EID of your wireless modem. This error will prevent the modem from being configured.

Try resetting the Pocket PC device. This will insure that the error is not due to a communication error between the Pocket PC and the wireless modem.

Low Signal

A low signal error message will appear if your wireless modem attempts to register but the signal strength from the

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Novotal Minatual Madam Uala service provider is not strong enough to be received or cannot be fully received because of the location of the antenna on your modem.

Relocate your wireless modem for better reception. If this does not solve the problem you may be in an area where you are too far from a service provider's transmitter. You will have to relocate closer to the transmitter to achieve the minimum signal strength required to register the modem onto the network.

Troubleshooting

#### Not Able to Register

If your wireless modem was not able to register with your service provider for some reason other than low signal strength, this error will appear. Not being able to register may be due to one of the following reasons:

- Your service provider may not have set up the account yet.
- You may have entered one of the modem configuration parameters incorrectly.
- Your service provider may not have set up the account correctly.

If you have waited the required time for the Wireless Internet Provider to set up your account, verify the settings you have entered into your modem, particularly the IP address. If this number is not correct, your modem will not be able to register. If this number is valid and your modem still cannot register, contact your service provider to confirm your account status and the parameters you entered. Also check that you have Wireless IP service with adequate signal strength in your area.

**Connect Failure** 

A connection failure message appears if a problem was encountered when retrieving status information from the wireless modem. Ensure that the wireless modem is securely attached to the host device and then reset the host device and try the operation again.

#### **Introduction to Modem Manager**

The Modem Manager software allows you to register your wireless modem to the Wireless IP network and view the status of the registration. The modem automatically attempts to register when *Modem Manager* is first started. The software also allows you to change the modem's settings and then save the changes.

The sections shown below describe the *Modem Manager* interface.

Menu Bar Config Tab Status Tab Advanced Tab

Starting Modem Manager

#### **Starting Modem Manager**

To start the Modem Manager program, select Programs from the Start menu. Then, locate the icon labeled Modem Manager in the main window. Tap this icon to start the program.

When Modem Manager is first started, the wireless modem will automatically attempt to register to the Wireless IP network.

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# At the bottom of the *Modem Manager* window there is a menu bar that can be used to send commands to the modem or to find out more information about the wireless modem and its software. The commands provided in these menus are listed below, with links to a description of what the command does.

File Menu Configuration Wizard Save Settings to Modem Disconnect and Exit Shutdown Modem and Exit

Device Menu Modem Information

Help Menu Help About Modem Manager

### **Configuration Wizard**

When you select **Configuration Wizard** from the **File** menu, the **Configuration Wizard** program is started.

#### Save Settings to Modem

Selecting the **Save Settings to Modem** command from the **File** menu saves any changes that you have made in any of the Modem Manager tabs to your wireless modem.

#### **Disconnect and Exit**

Select **Disconnect and Exit** from the **File** menu to close the active communication session and exit *Modem Manager*. Any applications that were connected to the Internet will have their connection terminated. The modem remains on however, allowing for "Push" messages to be received.

#### Shutdown Modem and Exit

Selecting **Shutdown Modem and Exit** from the **File** menu closes any active communication sessions and shuts down the modem completely. Any applications that were connected to the Internet will have their connection terminated.

#### **Modem Information**

When you select **Modem Information** from the **Device** menu, information about your wireless modem is displayed, including the name of the manufacturer, the modem <u>EID</u> number, model number, and firmware revision and date. This information is useful in the event you need to contact <u>Customer Support</u> or your service provider to request support for your modem.

#### **About Modem Manager**

When the **About Modem Manager** command is selected from the **Help** menu, information about the *Modem Manager* software you have installed is displayed. This includes the version and date of the software and contact information for <u>Customer Support</u>.

Menu Bar

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Menu Bar

Menu Bar

Selecting the **Help** command from the **Help** menu displays the Help file for the *Modem Manager* software, which you are currently reading.

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#### **Config Tab**

The **Config** tab of the *Modem Manager* software allows you to change some of the settings used to connect to your service provider. These settings are given to you by your service provider and were previously entered using *Configuration Wizard*.

If you relocate to an area where you need to access a different network, or where your current service provider does not provide service or a roaming agreement (similar to cellular telephone roaming agreements), you will need to have a new <u>Wireless IP</u> account set up. This tab allows you to enter these new settings. Alternatively, you can run *Configuration Wizard* again to step you through the configuration process.

Please note that changing these settings will clear the authentication parameters that are stored in your wireless modem. Even if you restore these settings back to their original state by re-entering the original configuration information, your modem will no longer register. You will have to contact your serivce provider and have them reset your authentication. This is a security feature to prevent other people from using your Wireless IP account.

A list of the fields shown in the **Config** tab is given below with links to information about the parameter.

IP Address DNS Address 1 DNS Address 2 Equipment ID Cellular Signal Present Wireless IP Service Detected Modem Ready Preference Prefer to Use The Wireless Internet Provider Use This Wireless Internet Provider Only

#### **IP Address**

The IP address is assigned by the service provider and is used to identify the wireless modem. Used similar to a telephone number, one device may contact another device if it knows the IP address. Do not edit this field unless instructed, as doing so will reset the registration credentials.

**DNS Address 1** 

This field shows the settings for the Primary Domain Name Server. The DNS is an Internet based (accessible) computer system used to convert a URL or text based Internet Identifier to a numerical IP address.

Config Tab

#### DNS Address 2

This field shows the settings for the Secondary Domain Name Server. The DNS is an Internet based (accessible) computer system used to convert a URL or text based Internet Identifier to a numerical IP address. The Secondary Domain Name Server is the second choice used when the Primary Domain Name Server is unavailable.

Config Tab

Config Tab

Config Tab

#### Dogo Q of 15 Novetal Minstral Modern Holn The Equipment ID field shows the **EID** number of your wireless modem. This value should not be changed unless vou are instructed to do so by Customer Support.

#### **Cellular Signal Present**

This field indicates whether or not the wireless modem has found a cellular channel on which it is able to send and receive information to and from the Internet.

#### Wireless IP Service Detected

When the box is checked, it indicates the presence of a wireless service which the modem can use. This may not necessarily be the service provider with which you have a subscription, but shows that there is Wireless IP service available at your current location.

#### **Modem Ready**

The Modem Ready status indicator shows whether or not the Modem Manager software can communicate with the wireless modem and that the modem has successfully registered onto the network. When this field is checked, you are now connected to the Internet and your modem is ready to send and receive data.

#### Preference

The Preference drop-down list box allows you to select from different service providers. If you are moving to locations where Wireless IP service is provided by different service providers who offer roaming agreements on their networks, or if you have separate subscriptions for different locations, you can chose the provider you want to connect to from the list.

If you chose **Other** as your preference, you will have to enter the **SPI** for the service provider you wish to use in the Advanced tab.

#### **Prefer to Use This Wireless Internet Provider**

Select this option to have the wireless modem use the service provider chosen in the Preference field as the preferred service provider. This means that the modem is also allowed to use any other service provider that it can find if your preference is not available.

The preferred service provider does not have to be the same provider that you have a subscription with. This feature allows you to select a preferred service provider when you are roaming outside the area of your usual provider.

#### **Use This Wireless Internet Provider Only**

Select this option to force your wireless modem to only use the service provider chosen in the Preference field. This prevents the modem from roaming on any other service provider's channels and/or networks. You would choose to do this to prevent roaming on other channels to save costs on roaming agreements, for security reasons, or to ensure adequate network performance.

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The Modem Manager software can be used to monitor and the current state of your wireless modem using the Status tab. This tab displays the fields listed below. For more information on the field, click on the link provided.

Signal Strength

**Status Tab** 

**Config Tab** 

**Config Tab** 

Config Tab

Config Tab

**Config Tab** 

**Config Tab** 

RSSI	
Error Detect	
System Busy	
TX	
RX	
Provider	
<u>RF Channel</u>	
Registration Error	
	Status Tab

#### **Signal Strength**

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#### The strength of the signal being received from the Wireless IP network is displayed here as a series of boxes. Typically, if at least half of the boxes are filled, the signal is considered to be good. If less than a quarter of the boxes are filled, the signal is weak and you may encounter delays in data transmission.

#### RSSI

This field provides a numerical value for the received signal strength. Modem operation is most reliable when the signal strength is greater than -100dBm.

#### **Error Detect**

The **Error Detect** indicator will flash if an error is encountered in data transmission or reception.

#### System Busy

The System Busy indicator will flash when the Wireless IP network is busy. The cause is normally too many users on the network. You may notice a decline in the performance of sending and receiving data.

## The **TX** indicator will flash when the modem is transmitting data.

#### RX

TX

The **RX** indicator will flash when the modem is receiving data.

#### Provider

This field will display the name of the service provider's network that you are currently connected to. Because of roaming agreements between providers, if you are travelling between service areas the name that appears in this field may not be the name of the provider with whom you have an account.

**RF** Channel

This field shows the number of the CDPD channel which you are currently using.

#### **Registration Error**

This field will display an error message if your modem encounters an error in attempting to connect to the network or while connected. For information on possible errors and how to correct them, refer to the Troubleshooting Modem Manager.

**Status Tab** 

**Status Tab** 

**Status Tab** 

**Status Tab** 

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#### **Status Tab**

**Status Tab** 

**Status Tab** 

**Status Tab** 

#### **Advanced Tab**

The **Advanced** tab allows you to configure more advanced settings for your wireless modem. It includes the following fields. To find more information about setting the field, tap on the link.

#### Service ID

The fields in the **Service ID** box show the identifier numbers associated with the service providers. For more information about these fields, click on one of the links below.

<u>SPI</u>		
<u>SPNI</u>		
WASI		

#### SPI

The **SPI** is an identifier for a CDPD carrier or Wireless IP service provider and is called the *Service Provider Identifier*. This number is used globally for each specific service provider.

#### **SPNI**

The **SPNI** is the *Service Provider Network Identifier*, which is used to identify a specific network region or domain for a service provider.

#### WASI

The WASI field displays the unique identifier used for a group of service providers that have agreed to provide service over a large geographic area comprising many <u>SPNIs</u>.

#### **CDPD Version**

This field displays the version of <u>CDPD or Wireless IP</u> technology that your wireless modem is using. Most service providers use CDPD Version 1.1. You should not change this setting unless directed to do so by your service provider.

#### **Restore Defaults**

Pressing the **Restore Defaults** button will write over some of the current settings with the factory defaults. The parameters will be reset as follows:

• <u>Preference</u> is changed to Any

Advanced Tab

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Advanced Tab

Advanced Tab

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Advanced Tab

Advanced Tab

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- <u>CDPD Version</u> is changed to 1.1 • Provider Side is changed to A preferred
- <u>Sleep Mode</u> is *Disabled*
- Auto Power Off is Disabled

All of the settings not listed here are not changed.

#### **Sleep Mode**

Sleep mode is a power saving mode where the wireless modem periodically powers down to its minimum power consumption state while still maintaining a connection to the host device and a periodic link to the CDPD network. The host device may wake the modem at any time, while the network will wake it at a predetermined time if there is data to be sent to it. You can choose to either Enable or Disable sleep mode by using the pull-down list.

#### **Auto Power Off**

Enabling the Auto Power Off setting means that the wireless modem will power off when your network connection is terminated. The connection will be terminated if you use either the Disconnect and Exit or Shutdown Modem and Exit command from the File menu.

#### **Provider Side**

The **Provider Side** field indicates the network channel side that the wireless modem is currently operating on. Cellular systems have two sides, which are labeled A and B. Normally, you should operate the modem on either A Preferred or **B** Preferred as recommended by your service rovider.

#### **Troubleshooting Modem Manager**

Errors encountered during registration to the Wireless IP network will either be displayed in the Registration Error box of the **Status** tab or in a separate window. The following is a list of error messages that may appear with links to suggestions on correct the error.

Error connecting to the wireless modem Unable to read settings Modem not connected and changes not saved Modem not connected and cannot shut down Networking session disconnected

If the problem persists after trying the suggested changes, please contact

Troubleshooting

#### "Could not connect to the wireless modem. If the problem persists, reinstall the software and retry the operation."

This message indicates that a problem with the support services of the Pocket PC operating system was encountered during initialization of the networking connection with the modem. Try removing the wireless modem software and reinstalling.

Troubleshooting

## "Not able to read settings from modem. Reinsert device into cradle and retry."

During application initialization the modem manager will attempt to read information from the modem. If it cannot do this the error message above will appear. If the wireless modem is a separate accessory from the host device, there may be a problem with the physical connection of the device to the modem cradle. Try removing the wireless modem from the Pocket PC and then re-attaching it.

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#### "Wireless modem is not connected. Changes not saved!"

If you have selected to save the settings to the modem, this message will appear if the cradle is not attached or there is some problem in communicating with the cradle. Try exiting the *Modem Manager* software and restarting it.

Troubleshooting

Troubleshooting

#### "Wireless modem is not connected. Cannot shut down!"

This error indicates that you have selected to shutdown the *Modem Manager* but the cradle is not attached or there is some problem in communicating with the cradle. Try exiting the *Modem Manager* software and restarting it.

Troubleshooting

# "Networking session with your Wireless Modem has been disconnected. Do you want to try and reestablish the connection?"

This message indicates that the Pocket PC device has been powered off manually or allowed to power off through the idle timer while a networking session with the modem was active. This causes the networking session to close. To re-establish the session, click **OK**.

#### **Equipment Identifier**

Every wireless IP modem manufactured has a unique serial number associated with it, which is refered to as the Equipment Identifier or EID. Each EID consists of six sets of two hexadecimal numbers that are often separated by a period ("."), as in the sample EID **00.60.D6.04.BC.FE**.

The EID of the modem can be found on a label on the back of the modem or through the *Configuration Wizard* and *Modem Manager* software.

#### Wireless IP

Wireless IP, which is also called Cellular Digital Packet Data (CDPD), is a wireless data transmission technology that uses unused cellular channels to transmit packets of data. To send and receive data across the Internet, a CDPD or Wireless IP modem must first register to the Wireless IP network.

#### Registration

In order to send and receive data across the Internet, a Wireless IP modem must first register to the Wireless IP network. This involves selection of an appropriate channel to use and the exchange of authentication parameters with the CDPD network to set up a path for communication.

This electronic registration process also includes measuring a variety of network parameters to ensure a minimum level of capability for successful operation of your modem. Registration is done automatically every time the modem is powered on.

#### Notes

When your Wireless Modem attempts to register onto the network, it will search for service on channels that it has previously registered to. If you have relocated to a new CDPD coverage location, the modem will may not find a channel in this list and, consequently, it will begin a search for a new channel. This will cause a noticeable delay in registration as the modem must search for all the channels on its list and then search for a new channel.

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#### **Features and Requirements**

The Minstrel 540 modem provides wireless Internet connectivity for the HP Jornada 540 Pocket PC using <u>Wireless</u> <u>IP</u> technology.

#### Features

The Minstrel 540 has the following features:

- CDPD Specification 1.1
- Data transmission speeds of up to 19.2 kbps
- Built in TCP/IP, UDP, PPP and SLIP protocols
- 0.6 Watt RF power output
- Attaches to the Jornada to create a single, integrated unit
- Rechargeable Lithium-Ion battery (technician-replaceable)
- AC adapter included
- LED indicators

#### **Requirements**

The following is required to set up and configure the Minstrel 540:

- HP Jornada 540 Pocket PC
- Desktop software that allows you to communicate between your Desktop PC and the Jornada
- Modem application software for the Pocket PC (included with your Minstrel)
- An account with a Wireless IP service provider in your area
- Application software for your Pocket PC such as an e-mail client and web browser

Wireless IP service is available from your local cellular carrier in most North American cities. Check your product packaging or *www.novatelwireless.com* for carrier contact information.

#### Caution

To satisfy FCC RF exposure compliance requirements for mobile transmitting devices, the user should generally maintain a separation distance of 20 cm between the person's body, and the device and its antenna. The hands and wrists have a higher exposure limit because they are extremities, and the device should be used in a hand-held, hand-operated configuration only.

This device has been tested for compliance with a separation distance of 4 cm from a person's body. The operating configurations of this device generally do not support normal transmissions while it is carried in pockets or holsters next to a person's body.

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#### **LEDs and Controls**

The Minstrel 540 has both LED indicators and software that allow you to easily configure the modem or determine the status of various modem parameters.

#### **Configuration Wizard Software**

The <u>Configuration Wizard</u> is designed to guide the user through the configuration of the Minstrel in a step-by-step fashion.

#### Modem Manager Software

The <u>Modem Manager</u> software provides a simple interface for configuring the modem and determining the status of registration.

#### Service LED

The Service LED is found on the front of the Minstrel and is labeled with the icon shown below.

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When the modem is attempting to register, this LED will flash green. When the modem is registered, the LED will

be solid green. In sleep mode, the LED will be solid green mostly but will flash off occassionally.

#### Data/Message Waiting LED

The Data/Message Waiting LED can be identified by the icon below.

This LED flashes green to indicate that data is being sent or received. When the LED flashes red, a "push" message is has been received by the modem. This LED will flash until the message is viewed.

#### **Battery LED**

The Battery LED is labeled with the following icon:

When this LED is flashing red, the battery is low and requires charging. If it is flashing green, the battery is being charged, and if it is solid green, the battery is fully charged and the AC adapter is powering the unit.

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#### **Charging the Battery**

The Minstrel 540 contains a rechargeable Lithium-ion battery. This battery is shipped only partially charged, so it is necessary to charge the battery to its full capacity before using the unit.

To charge the battery, plug the AC adapter that is supplied with the Minstrel into an outlet and insert the barrel connector into the DC jack found on the top edge of the Minstrel.

It will take approximately 3 hours to charge the battery from a zero charge state. With sleep mode enabled, the battery should provide power for the unit for a full day of web browsing under normal conditions.

When the <u>Battery LED</u> is flashing red, this indicates that the battery is low and requires charging. Note that if the battery charge goes lower than a pre-set threshold, the modem will automatically de-register and power off in order to preserve the settings in its internal memory.

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#### Attaching the Minstrel to the HP Jornada

The Minstrel 540 attaches to the Jornada to provide a single, integrated unit and uses the serial interface found on the bottom of the Jornada to communicate with it. In order to configure and use the Minstrel, you must attach the Minstrel to the Jornada as follows:

First, position the devices so the back of the Jornada is facing the front of the Minstrel. Slide the Jornada down past the Minstrel's latch so that the two connectors of the Minstrel meet with the connector slots on the bottom edge of the Jornada. Then, lift up on the latch on the top of the Minstrel and slide the Jornada underneath it to secure the Jornada in place.

#### **Configuring the Minstrel**

In order to connect to the Internet, the Minstrel must first be configured with the necessary parameters to be able to register to the <u>Wireless IP</u> network.

To configure the Minstrel, <u>attach</u> the Minstrel to the Jornada and run the <u>Configuration Wizard</u> program. For more information on how to start this program, refer to <u>Starting the Configuration Wizard</u>.

Note that in order to configure and use the Minstrel, an account must first be established with a Wireless IP service provider.

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To send and receive data across the Internet using the Minstrel, a connection to the <u>Wireless IP</u> network is required. To <u>register</u> to the network, run the <u>Modem Manager</u> program. For more information on how to start this program, refer to <u>Starting Modem Manager</u>.

Once the Minstrel is registered, you can set up and use any Internet application on your Pocket PC.

#### Using Pocket Internet Explorer

To view web pages using Pocket Internet Explorer, you must set up the Internet Explorer program to work with your Minstrel modem. To do this, start Pocket Internet Explorer and select **Options...** from the **Tools** menu. Select the **Connections** tab and select **Minstrel** from the **Type** list. The next time you start Pocket Internet Explorer, the Minstrel wireless modem will automatically register to the network, so it is not necessary to start the *Modem Manager* program first.

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#### **Customer Feedback and Support**

For software updates and to provide feedback on the beta field trial, or if you have any problems setting up your Minstrel 540, please contact Novatel Wireless Customer Support.

www.novatelwireless.com/
support/index.html
1-888-888-9231
support@novatelwireless.com
1-888-812-2888

#### Notice to Users

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To satisfy FCC RF exposure compliance requirements for mobile transmitting devices, the user should generally maintain a separation distance of 20 cm between the person's body, and the device and its antenna. The hands and wrists have a higher exposure limit because they are extremities, and the device should be used in a hand-held, hand-operated configuration only.

This device has been tested for compliance with a separation distance of 4 cm from a person's body. The operating configurations of this device generally do not support normal transmissions while it is carried in pockets or holsters next to a person's body.