



User's Reference Guide For Wireless IP/CDPD Modems

Mobile IP Internet Access (formerly AirBridge® Internet Access/Web Access Internet Plus)

[wireless internet access]

Section 1. Programming Your Wireless Modem

This document, along with the manuals included with your modem, allows you to get your Wireless IP modem up and running right away. If you purchased your modem from Verizon Wireless, it will come with all necessary hardware and software, including modem management software.

Note: You may be installing your modem on a laptop, handheld personal computer, or Palm™ organizer. For simplicity, this document will refer to all those devices as your "computer." Similarly, some Wireless IP devices operate as Network Interface Cards (NICs), but for brevity, all Wireless IP devices will be referred to as modems throughout this document.

Information you'll need:

- Network Entity Identifier (NEI) or IP address (provided by Verizon Wireless)

NEI = _____

- Your e-mail address (provided by Verizon Wireless)

Address = _____@airbridge.net

- Your initial e-mail password (provided by Verizon Wireless)

Password = _____

- The Verizon Wireless Domain Name Server (DNS) address

DNS = **199.74.157.18**

Installing Dial-up Networking:

Some modems require that Dial-up Networking be installed on your laptop; check the manufacturer's literature. To check whether dial-up networking is installed on your computer, follow these steps.

- Turn on your PC *without* the modem in the PCMCIA slot.
- Go to “Start>Settings>Control Panel>Network” and check if the following network components are installed: Dial-Up Adapter and TCP/IP Dial-Up Adapter. If these components are installed, skip to the next bullet. If they are not installed, follow these steps to install them:
 1. Click “**A**dd...” button;
 2. Under “Select Network Component Type,” double-click **Protocol** to pop up.
 3. “Select Network Protocol” dialog box will open.
 4. Under “Manufacturers:” list (left), select **Microsoft**, and under “Network Protocols:” list (right), select **TCP/IP**.
 5. Click “OK” button to pop up “Select Device” dialog box.
 6. Under “Manufacturers:” list (left), select **Microsoft**, and under “Models:” list (right), select **Dial-Up Adapter**.
 7. Click “OK” button. **Dial-Up Adapter** and **TCP/IP** should be on the list of the components installed under “Configuration” tab.
 8. Under “Identification” tab, enter any name for its “Computer Name:.”
 9. Click “OK” button and “Copying Files...” will display network installation in progress. After it finishes, click “**Y**es” to restart the computer.
- Double-click “My Computer.” There should be a “Dial-Up Networking” folder. If there is, skip to **Installation and Configuration** directions. If there is no “Dial-Up Networking,” perform the following steps to install it:
 1. Go to “Start>Settings>Control Panel>Add/Remove Programs.”
 2. Click on “Windows Setup>Communications>Details...”
 3. Check Dial-Up Networking box and click “OK” button to start its installation.
 4. Restart the computer.

Installation and configuration:

- On your computer, install your modem management software and your modem according to the manufacturer's instructions.
- Run the modem management software and follow the on-screen prompts.
- If asked for a carrier, choose Verizon Wireless (may also be listed as BAM, GTE, or Ameritech). There is no need to call us, as your account should be active and you should have already received an IP address (NEI) from us.
- The modem management software may prompt you to report your EID to us. There is no need to do so. The only information you need to enter to get your modem working is the modem address (NEI or IP address) assigned you by Verizon Wireless, and the Verizon Wireless DNS (199.74.157.18).

- When asked for a side or channel designation setting, select "B" if you are located in the following states: New York, Massachusetts, New Jersey, Pennsylvania, Maryland, Virginia, Delaware, Rhode Island, Washington (DC), California, Hawaii, Texas, or Indiana. Select "A" if you are located in the following states: Connecticut, North Carolina, South Carolina, Kentucky, or Tennessee.

Section 2. Setting Up Your Verizon Wireless E-mail Account

- If you have been assigned a Verizon Wireless e-mail account, your address will be ***yourusername@airbridge.net***.
- You will also need to configure your e-mail software with POP3 and SMTP mail server names. These are **mail.airbridge.net** in both cases.
- Remember that you will need to have your modem turned on in order to connect to the mail server. Be sure to disconnect your modem when you're done.
- To change your password, leave vacation messages, etc., use the browser on your Internet-connected computer. Go to the mail administration server at **http://mail.airbridge.net:8080**. It's a good idea to bookmark this location.
- Enter your user name and password, then follow the menus.
- This administrative server is currently supported by Netscape 3.0 or higher, Microsoft Internet Explorer 4.0 or higher, and Windows CE Pocket Explorer. If you use another browser, or have difficulty accessing this site, you can call Verizon Wireless's Wireless Data Support Center (**1-800-308-DATA**) to have passwords changed manually.

Section 3. Getting Online

Once you have your Wireless IP modem installed, getting online is simple.

- Double-click on the modem's desktop icon (not all modems require this step to connect -- some browsers launch the modem automatically).
- The modem will automatically do the dial-up and make a wireless connection.
- Launch your browser by double-clicking on it and go!
- Turn off your browser then turn off the modem when you're done.

If you wish to use a third-party ISP with proprietary client software (e.g., AOL) with which you have a service agreement, you will need to ensure that you've selected "TCP/IP" as the modem or connection device in your ISP setup. Note that not all ISPs support a TCP/IP connection; some only support dial-up and can't be reached with this service. Certain browsers may require additional modifications. If you need to contact your ISP's Help Desk about setting up your wireless connection, they may not be familiar with CDPD. However, they will understand if you tell them your objective is to get the service operating with TCP/IP, *not* over a modem. They should be familiar with this from dealing with customers accessing the service from a LAN, which uses TCP/IP, rather than a modem.

To use your third-party ISP's mail server, put the ISP mail server address (you may need to call your ISP for this information) in your POP3 client and **mail.airbridge.net** in your SMTP client.

Section 4. Tech support, troubleshooting, et cetera

- If you don't reach your desired web page on the first try (if, for example, you get a "DNS error," "error resolving host name," or similar message, or the unit times out before successfully resolving), simply retry.
- Remember that apparent problems may be caused by Internet congestion, within the CDPD network, or by other factors.
- Are you within the CDPD coverage area? Are you visiting another carrier's network? Check our web pages <http://www.verizonwireless.com> to see where CDPD coverage is.
- Is your signal strength good? Your modem manager's signal strength window/RSSI reading will indicate your signal strength. The best possible dBm reading will be about -45. If your reading is -85 to -90 or lower, the signal may not be strong enough to maintain registration, or may slow down transmission.
- Are you visiting another system? Your Side/Channel selection should be set for "B" if you're in a Verizon Wireless market in New York, Massachusetts, New Jersey, Pennsylvania, Maryland, Virginia, Delaware, Rhode Island, Washington (DC), California, Hawaii, Texas, or Indiana; set it for "A" if you're in a VZW market in Connecticut, North Carolina, South Carolina, Kentucky, or Tennessee. Check with the local carrier for other markets. Don't forget to change back to the original setting when you return home.
- If you have questions or are missing information about your NEI (IP address) or your e-mail address, call the Data Customer Service group at **1-800-308-DATA**. Hours are 8 a.m. to 9 p.m. Eastern daily. (Hours subject to change.)
- Once the modem is programmed with the NEI and e-mail address and you require technical assistance, call Verizon Wireless's Wireless Data Support Center at **1-800-308-DATA**. The Wireless Data Support Center is staffed Monday through Friday from 7 a.m. to midnight and on weekends and holidays from 9 a.m. to 6 p.m. to assist with wireless data network questions. (Hours subject to change.) For non-critical questions, you may e-mail our Wireless Data Support Center at **TechnicalSupport@airbridge.net**. And check our web site at www.verizonwireless.com for updates on services, technical information, and more.
- You can reach Sierra Wireless's Technical Support on the Web at www.sierrawireless.com, or by using their Technical Support Web form at www.sierrawireless.com/SupportDownload/email.asp, or by e-mail at **Support@SierraWireless.com**, or by telephone at **604-231-1128** (Monday to Friday, 6:00 a.m. to 5:00 p.m. PST; hours subject to change).
- You can reach Novatel Wireless's Technical Support at www.novatelwireless.com, or by calling **888-888-9231**, or by e-mailing **support@novatelwireless.com**.
- Nextcell's technical support service provides post-sales technical assistance for the Nextcell Spider II, Spider, B3 Booster, and B3 Booster w/GPS. To reach a Nextcell technical support representative, call **972-578-CDPD (2373)**, or e-mail **techsupport@nextcell.com**. Nextcell's technical support staff is available from 8:30 a.m. to 5:30 p.m. CST on weekdays (hours subject to change). Visit the Nextcell web site at www.nextcell.com.

Section 5. Other Useful Information

- Remember that CDPD is a radio signal. Many things can affect reception, even on a day-to-day basis. If you're inside, moving nearer a window may cause better reception. Even shifting a few feet can improve your coverage.
- For faster performance, use your browser option to turn off graphics. If an image that you want to see comes up, turn on graphics and reload that page.
- When you want to leave a partially loaded page, click the "stop" button before going on to the next site.
- HandWeb browser software on the Palm OS doesn't support frames or embedded e-mail addresses.
- CDPD's raw transmission speed is 19.2 kbps. Actual transmission speeds will be slower due to packet overhead and re-transmissions.
- CDPD has an inherent sleep mode to reduce battery drain. However, it will use power when actively transmitting data. For maximum operating time, whenever possible, browse with your device plugged into an auxiliary power source.
- For safety's sake, don't surf and drive.
- Because this is a cellular service, don't use CDPD in an airborne aircraft or when the crew has asked you to turn off cell phones.
- Because CDPD is a seamless service, you won't see an indication if you're visiting another carrier's system. Check Verizon Wireless's coverage maps for details on where various carriers provide service. Remember, usage with Mobile IP Internet Access is unlimited in Verizon Wireless's CDPD markets, but \$0.08/kilobyte in other carriers' systems or \$0.06/kilobyte with the Traveler option. **To lower your visiting charges**, turn off graphics in your browser. Graphics are extremely kilobyte-intensive. When downloading e-mail, use the filters in your e-mail program to determine which have large attachments or are not critical to receive at that time. Watch the user information on your browser -- if you see you're beginning to download an unexpectedly large file, hit *stop* to minimize the number of kilobytes for which you'll be billed.
- CDPD's airlink is encrypted. But as with any Internet service, information on the Internet itself is not secure.
- Want to know more about CDPD? Visit the Wireless Data Forum's web site at www.wirelessdata.org.

Section 6. Venturi Wireless Web Acceleration Software

If you're using your modem with a laptop running Windows 95 or higher, you can take advantage of Venturi web acceleration software by Fourelle Systems, Inc., to improve your performance. Visit the Verizon Wireless data web site to obtain a copy. This software will improve the speed at which you can browse the Internet wirelessly, and will reduce the number of kilobytes you transmit (and pay for) while visiting other carriers' CDPD markets. (Mac and Windows CE versions coming soon. Please see the Verizon Wireless web site for updates.)

When you run *setup.exe*, the Venturi client will install itself on your computer. The software is preconfigured for Verizon Wireless's network, so you only need to change a few settings in your browser and e-mail software. If you previously had an earlier version of Venturi installed, you will need to uninstall it first.

- For Internet browsing: In the control section of your browser where proxy server information is kept (under Edit/Preferences/Advanced/Proxies/Manual proxy configuration in Netscape and View/Internet options/Connection/Proxy server in Microsoft Internet Explorer), type **127.0.0.1** as the proxy address and **8000** as the port. Only enter 127.0.0.1 in the http and ftp fields; do not choose the setting that applies the same proxy for all protocols.
- For e-mail: Your mail clients should have both the POP3 and SMTP servers set to **127.0.0.1** instead of **mail.airbridge.net**.

Troubleshooting and technical assistance:

If you encounter difficulties while browsing, you can turn Venturi "off" using the button on the Venturi user interface, thereby forcing Venturi into bypass mode. (Turn it back on by clicking the button back to "Dial-up.") You can also go into the preferences section of your browser to turn off the proxy and select "direct connection to the Internet." Either way, you'll resume browsing as you did before installing the compression software.

If your software stops working completely, be sure you're not using a demo version that may have expired. If this is the case, you'll need to download the full, non-expiring version from the Verizon Wireless Web site.

You will not be able to get to firewall-protected sites (like intranet sites or corporate Exchange servers) using the Venturi proxy. If you need to reach these sites, turn the client software to the "off" position using the client interface, or temporarily choose "direct connection to the Internet" in your browser preferences. Your browser's proxy configuration settings also allow you to list the domain names of sites to be excluded from using the proxy.

If you have trouble with e-mail, simply return your mail client's settings to their original configuration. This will allow you to continue browsing with Venturi but leave your e-mail unaffected.

You may be prompted for a password the first time you log into your mail after configuring it for Venturi. Use your regular mail account password.

In the event that you have any difficulty in setting up or using Venturi, you may troubleshoot the problem with our Wireless Data Support Center (800-308-DATA) or file a bug report at http://www.fourelle.com/tech_support/bug_report.html.

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