iM1100

Wireless Modem

for Windows™ 95,
Windows™ 98, Windows 2000,
and Windows™ NT

User's Guide

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iM1100 WIRELESS MODEM

Congratulations on purchasing your Motorola iM1100 wireless modem.

Your iM1100 modem offers wireless access to the internet. This wireless modem offers the following features:

- Packet Data
- Circuit Data/Fax.

The iM1100 wireless modem and iDEN Wireless Data Services software provide you with the capability of performing your most important laptop computer activities, like connecting to the internet or corporate intranets, from outside your office or home.

Overview

The iM1100 wireless modem enables the following data connections:

- **Packet data:** Access the Internet, send and receive e-mail, and transfer small files over the packet data network using standard IP protocols.

  Packet data transmits packets (blocks) of data at high speed. After the data is transmitted, you can remain connected without being charged for the idle time. Data is sent in bursts.

- **Circuit data:** Send and receive data (faxes, files, etc.) over the circuit-switched cellular channel.

SETTING UP YOUR MODEM

Installation Requirements

To install the Wireless Data Services software onto your laptop, you need the following:

- An iM1100 Wireless Modem.
- The Wireless Data Services software (provided in your package)
- An IBM®-compatible PC with:
    - An Intel® 586 (or higher) processor
    - Microsoft® Windows® 95 installed, Windows® 98, Windows® NT, and Windows® 2000.
    - Minimum 8 MB of addressable RAM
    - CD-ROM drive
    - 9 MB free hard-disk space
    - Recommended: Mouse or compatible pointing device
- Communication software
- An account with an iDEN service provider

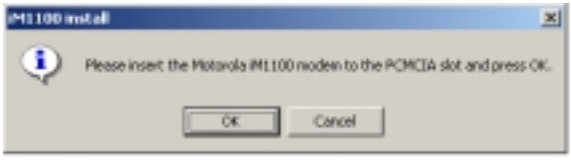
Starting the Software Installation

To begin installing the Wireless Data Services software:

1. Turn on your computer and start Windows 95, Windows 98, Windows NT, and Windows 2000.
2. Insert the Wireless Data Services software CD-ROM in your CD-ROM drive.
3. Start the iM1100 wireless modem installation program.

Inserting the iM1100 Wireless Modem

After you open the the installation program, this prompt appears:



1. Insert your SIM card into the iM1100 wireless modem as directed in the instructions on the back of the modem.
2. Insert the iM1100 wireless modem into the PCMCIA slot in you laptop.
3. Click OK.

Installing on Windows 2000, Windows NT, or Windows 95 and Windows 98

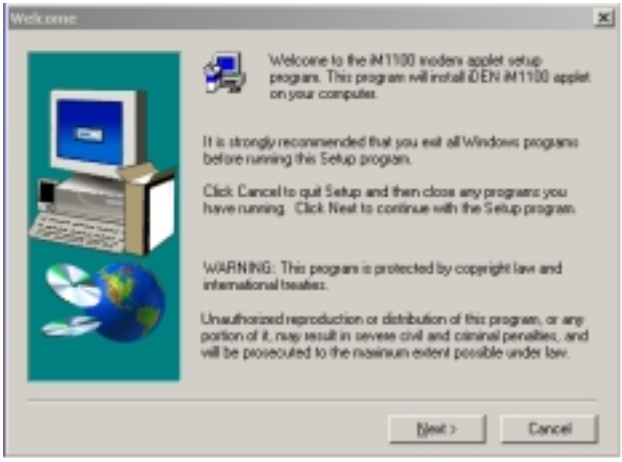
From this point in the installation, the steps you take depend on the operating system running on your laptop:

- If you are using Windows 2000, see “Completing the Installation on Windows 2000” on page 3.
- If you are using Windows 95 or Windows 98, see “Completing the Installation on Windows 95/Windows 98” on page 5.
- If you are using Windows NT, see “Completing the Installation on Windows NT” on page 7.

Completing the Installation on Windows 2000

1. Before continuing to install the iM1100 wireless modem software, you must first install an update to Windows 2000. When prompted, click Yes to install the update. Then restart your laptop.

2. Click Next when this welcome window appears:



3. When the User Information window appears, enter your name and your company's name. Then click Next.
4. When the Choose Destination Location window appears, choose a destination location or use the default. Then click Next.
5. In the Select Program Folder window, choose a destination folder, or use the default. Then click Next.
6. To complete the installation, click Finish in the Setup Complete window.

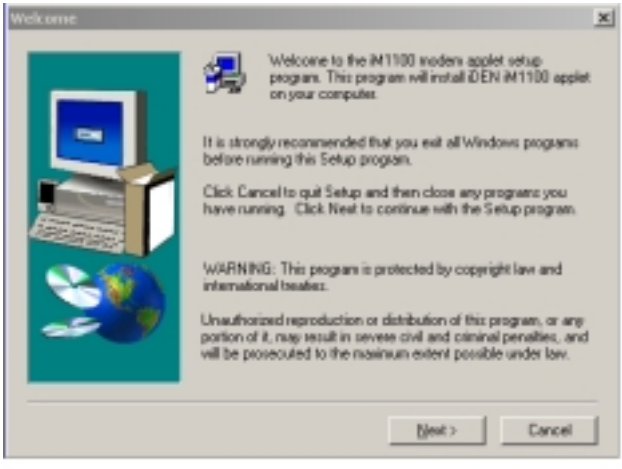
After you have competed the installation, make sure that maximum modem speed in set to 19200:

1. From the Start button, choose Accessories > Communications > Network and Dial-up Connections.
2. From the Network and Dial-up Connections window, double click on the iM1100 connection to open it.
3. From the Connecting iM1100 window, click Properties.
4. From the iM1100 window, click Configure.
5. When the Modem Configuration window appears, make sure that the

value shown for **Maximum Speed** is 19200. If a different value is shown, select 19200 from the drop-down list.

Completing the Installation on Windows 95/Windows 98

1. Click Next when this welcome window appears:

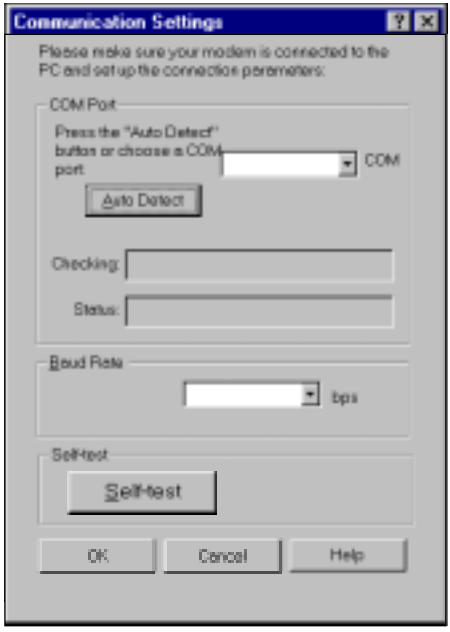


2. When the User Information window appears, enter your name and your company's name. Then click Next.
3. When the Choose Destination Location window appears, choose a destination location or use the default. Then click Next.
4. In the Select Program Folder window, choose a destination folder, or use the default. Then click Next.
5. To complete the installation, click Finish in the Setup Complete window.

6. When the Communication Setting window appears:
   - Click "Auto Detect" to let the program automatically detect the communication port to which your modem is connected and set the

corresponding COM port button.

- Or, select a COM port by clicking its selection button..



IMPORTANT

If you do not choose Auto Detect and Accept the default baud rate of 19200, ensure the settings for the baud rate setting for your laptop and the baud rate setting for your iM1100 wireless modem are the same.

7. If you want to change the baud rate, click the down arrow to make another selection.

Be sure that "Done" appears in the status box before you continue.

8. Click OK. The Setup Complete window opens.
9. To complete the installation, click Finish in the Setup Complete

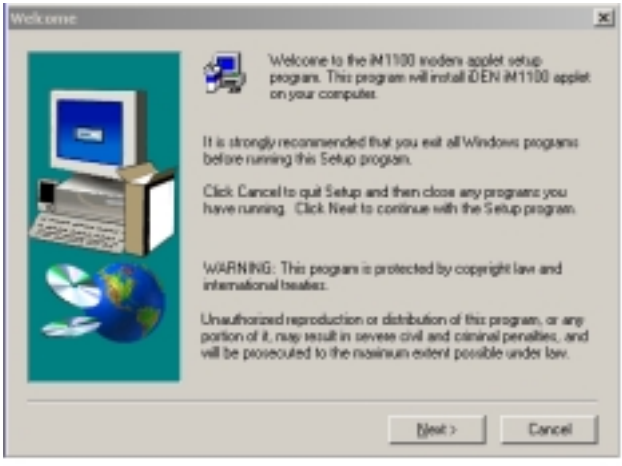
window.

Completing the Installation on Windows NT

To use the iM1100 wireless modem on Windows NT, you must install the Wireless Data Services software and configure Remote Access Service (RAS) for the iM1100 wireless modem. RAS enables you to work outside as though directly connected to a network

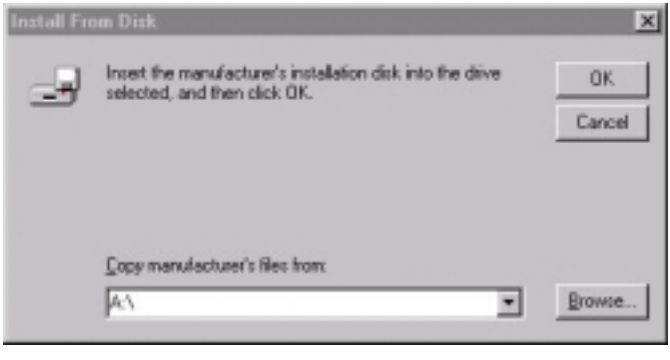
To continue the software installation:

1. Click Next when this welcome window appears:



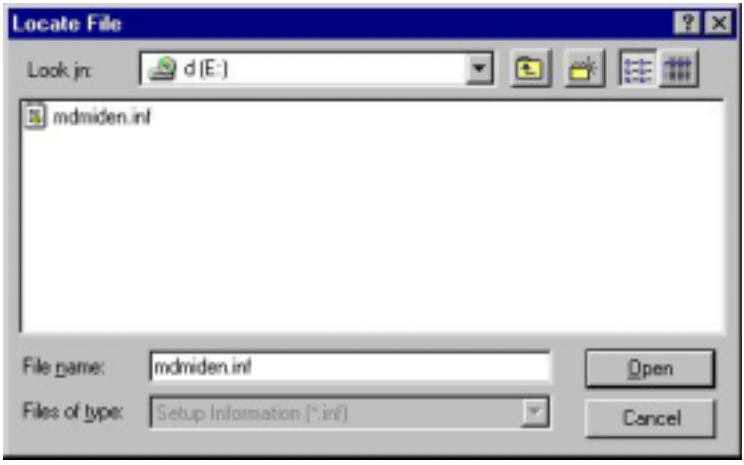
2. When the User Information window appears, enter your name and your company's name. Then click Next.
3. When the Choose Destination Location window appears, choose a destination location or use the default. Then click Next.
4. In the Select Program Folder window, choose a destination folder, or use the default. Then click Next.
5. To complete the installation, click Finish in the Setup Complete window.

6. An information window appears saying that Wireless Data Services software will be installed. Click OK.
7. When the Install New Modem window opens, you may allow your system to search for the modem, or chose to select it from a list. If you allow the system to select a modem, click Next now and skip to step 14.
8. Click Next to continue to the modem selection window. In this window, you can choose a modem from a list of modem manufacturers and model, or install a modem from a disk. If you choose a modem from the list, click Next now and skip to step 14.
9. To install a modem from a disk, click Have Disk and then Next to continue.



10. Type the name of the drive that contains the iM1100 wireless modem CD-ROM and click Browse to continue to the Locate File window opens.

11. Select the **im1100.inf** file and click Open.



12. The Install From Disk window appears again. Click OK
13. The Install New Modem window appears again. Make sure that **iM1100 Wireless Modem** is selected and click Next.
14. When the Port Selection window appears, select the COM port to which your modem is connected. Then click Next.
15. Click Finish.

After the software installation is finished, the Configure the Data Modem in RAS Manager window appears.

To configure RAS for the iM1100 wireless modem:

1. Click OK.
2. In the Network Configuration window, select the Services tab. Within the Services tab, select Remote Access Service. Then click Properties.

3. In the Remote Access Setup window, click Add.

> **NOTE**
> If a modem is already inserted in the same COM port as the iM1100 modem, click “Remove” to remove it and then click “Add”.

4. In the RAS Device window, ensure the COM port for your iM1100 modem is selected. Click OK.
5. The Remote Access Setup window now shows the added COM port. Click Continue.
6. In the Network Services Selection window, click Close.
7. When the Computer Restart window appears, click Yes.
8. When the Windows banner appears during the computer restart, log on.

The installation will automatically resume. The Setup Complete window appears.

To complete the installation:

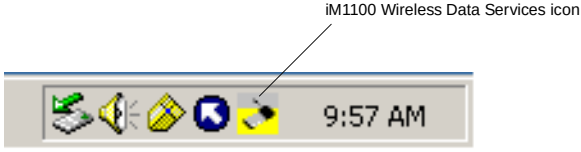
In the Setup Complete window, choose “Yes, I want to restart my computer now” and click Finish.

Registering Your iM1100 Wireless Modem

Your iM1100 wireless modem must register with your service providers network before you use it for the first time.

To register your modem after installation, start the Wireless Data Services software Status Program and connect.

The LED located on the iM1100 wireless modem and the background of the iM1100 Wireless Data Services icon on you toolbar turn solid green to indicate that your modem is packet-data registered.



Setting or Disabling Your SIM PIN

The first time you use your modem, you must choose a SIM PIN or disable the SIM PIN requirement. See “SIM Card Personal Identification Number (PIN)” on page 19.

USING THE MODEM

Connecting to the Internet

To connect the iM1100 wireless modem to the internet or an intranet:

1. Start the iM1100 Wireless Modem Services Status Program on your laptop. This window appears.

2. Click Connect. As the connection starts, you will see the following messages:

   CONNECTING
   CONNECTED SUCCESSFULLY

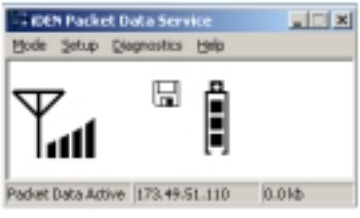
3. If prompted, enter your SIM PIN. See “SIM Card Personal Identification Number (PIN)” on page 19.

You may now use your modem.

Disconnecting from the Internet

To close your modem's connection:

1. If the iDEN Packet Data Services window is not open, open it by clicking on the iM1100 wireless modem icon on your taskbar.



2. From the iDEN Packet Data Services window's menu bar, choose Mode > Exit and Disconnect or close the window.

This disconnects your modem from the network and closes the status window.

When You Are Connected

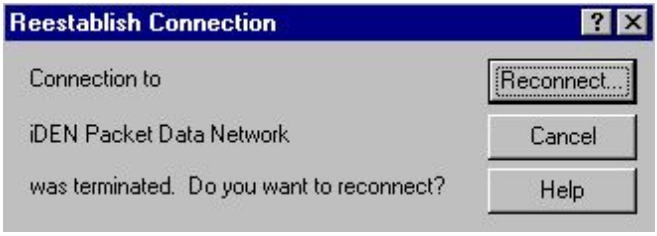
When your iM1100 modem is connected to your computer with the data cable, and your packet data modem is selected, you are Packet Data Registered even if you are not actively transmitting data.

Your PC displays a floppy disk icon, indicating that your modem is ready to make packet data calls.

After you send data, the packet data transfers take place during times when the iDEN network is not busy. You do not have simultaneous contact with the addressee.

If You Lose Connection

If you lose connection, you will see the following message:



To re-establish your connection, click Reconnect.

Running Applications over Packet Data

You can run any standard TCP/IP application during a packet data session.

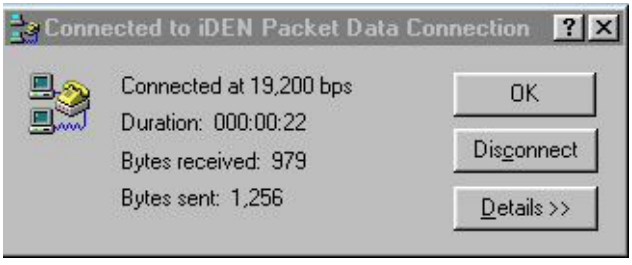
NOTE

When a packet-data session is active, any software specifically configured for use with other service providers may be required to be reconfigured for use with your service provider.

GETTING STATUS INFORMATION

Using the iDEN Packet Data Connection Window

To display the iDEN Packet Data Connection window, click the Packet Data Connection icon located on the taskbar.



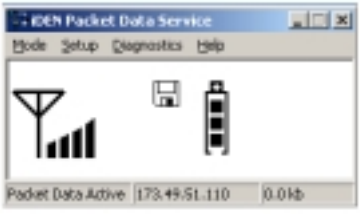
This window will provide you the with current connection baud rate, duration, bytes received, and bytes sent.

Bytes count includes:

- Data sent and received through the iDEN Packet Data Network.
- Data communication (between the modem and the PC) used for showing your modem's status during the Packet Data Connection.

Using the iDEN Packet Data Service Window

To display the iDEN Packet Data Service window click on the iM1100 wireless modem icon on your taskbar.

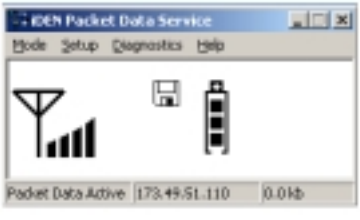


iDEN Packet Data Service window displays the following information:

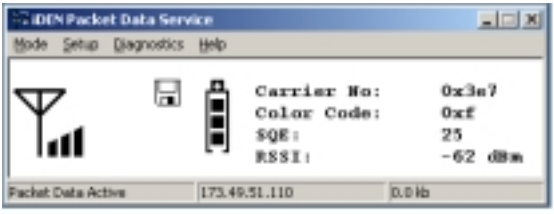
- The body window displays status icons that tell you how your modem in functioning.
- The status bar indicates the Packet Data Status, Equipment IP Address, and the number of kilobytes that were sent and received through the iDEN Packet Data Network (during the current connection).
- The options on the window's menu provide additional status information during a packet data connection.

Use the Mode option on the menu bar to choose the information that is displayed:

- *Normal mode* provides signal strength, battery strength and the number of kilobytes sent and received for the current packet data session.



- *Advanced mode* displays technical information about service provider, signal strength, and the number of kilobytes sent and received for the current packet data session.



Status Icons

These status icons appear in the body of iDEN Packet Data Service window:

Icon	Indicates...
	Battery Strength icons — remaining battery charge. More bars on the battery indicate a greater charge.
	Signal Strength icons — strength of the network signal. More bars next to the antenna indicate a stronger signal.
	Text Message — you have one or more Text Messages or Net Mail messages.
	Packet Data Ready — phone is ready to receive data through a data cable.

Advanced Mode Information

The following addition information is displayed in Advanced Mode:

Carrier No.	The hexadecimal equivalent for the service provider number of a cell
Color Code	The hexadecimal value for the service provider color code
SQE	The decimal value for the Signal Quality Estimate in decibels (dB)
RSSI	The value that represents the signal strength power received in dBm units.

Menu Options

You can access the following menu options form the iDEN Packet Data Service window

Mode	Sets display to Normal or Advanced, and en you to Exit and Disconnect.
Setup	Preferences enables you to change your modem's response time.
Diagnostics	Enables you to view and change information about your host server.
Help	Accesses online help.

SIM CARD PERSONAL IDENTIFICATION NUMBER (PIN)

To prevent unauthorized use of your modem, your SIM card is protected by a PIN. Each time the modem is powered on, you must enter your PIN. You can change or disable your PIN if desired.

NOTE: Disabling your PIN enables anyone to use your modem. If you disable your PIN, you must still keep the SIM card in the modem to make calls.

Entering the PIN

Depending on your service provider, your modem may or may not require you to enter a SIM PIN when you first use your modem.

If your modem is set to require you to enter a PIN, your default PIN is 0000. It is recommended that you change your PIN to prevent fraudulent use of the SIM card (see “Changing the PIN” on page 20).

Caution

Incorrectly entering your PIN three times causes the SIM card to be blocked. To unblock your SIM card, you must contact your service provider. For more information, see “Unblocking the PIN” on page 20.

To enter a SIM PIN:

1. From the User Settings window, enter your 4- to 8-digit PIN. An asterisk appears for each character entered.
2. Click OK.

If you enter an incorrect PIN, the message **SIM PIN incorrect: Try again** appears. After three consecutive incorrect attempts, the SIM card is blocked. Once blocked the modem does not allow you to enter your PIN again, even after powering the modem off and back on. If this happens, see “Unblocking the PIN” on page 20.

Changing the PIN

To change your SIM PIN:

1. From the User Settings window, enter your current 4- to 8-digit PIN. An asterisk appears for each character entered.
2. Enter your new 4- to 8-digit PIN. Enter it again to verify it.
3. Click OK.

Unblocking the PIN

If you forget your PIN and unsuccessfully enter it three times, access to your iM1100 will be blocked.

NOTE: Before you begin, obtain the PIN Unblocking Key (PUK) code from your service provider, then read and understand the PIN unblocking sequence. In entering the key press sequence, each key press must occur within 5 seconds of the prior key press.

Caution

If you unsuccessfully enter the PUK code ten times, the SIM card is permanently blocked and must be replaced. If this happens, all data will be lost. You will get a message to contact your service provider. If the SIM card is blocked, the modem only allows outgoing Emergency calls.

Disabling/Enabling the PIN Requirement

When the PIN requirement is enabled, you are prompted to enter your PIN each time you turn on your modem. Until a valid PIN is entered, you can not use the modem.

After the PIN is accepted, the modem registers on the network and the idle screen displays.

When the PIN requirement is disabled, the modem can be used without entering a PIN.

Caution

If you disable the PIN requirement, you remove protection of personal data on your SIM card. Anyone can then use your modem and access your personal data.

CUSTOMER SUPPORT

For technical support, contact your service provider. Before you call, have your subscription number available and make a note of the exact problems and error messages you encountered.

N O T E

Additional information for iDEN Wireless Data Services can be found on the Motorola iDEN web site at: http://www.mot.com/iDEN

ACCESSORIES

Table 1: Accessories Table

Kit Number	Model Description
ANTENNAS	
HAF9067A	Mobile Roof Mount Antenna
FAD5524A	Mobile Window Antenna
RAF4136AMM	Magnetic Antenna
NKN6557A	Adaptor Cable for External Antenna

Safety and General Information

IMPORTANT INFORMATION ON SAFE AND EFFICIENT OPERATION.

READ THIS INFORMATION BEFORE USING YOUR INTEGRATED MULTI-SERVICE PORTABLE RADIO.

RF Operational Characteristics

Your radio product contains a radio frequency transmitter to convey the information you wish to send as well as occasional automatic signals used to sustain connection to the wireless network, and a receiver which enables you to receive communication and connection information from the network.

PORTABLE RADIO PRODUCT OPERATION AND EME EXPOSURE

Your Motorola radio product is designed to comply with the following national and international standards and guidelines regarding exposure of human beings to radio frequency electromagnetic energy (EME):

- United States Federal Communications Commission, Code of Federal Regulations; 47 CFR part 2 sub-part J
- American National Standards Institute (ANSI) / Institute of Electrical and Electronics Engineers (IEEE). C95. 1-1992
- Institute of Electrical and Electronics Engineers (IEEE). C95. 1-1999 Edition
- National Council on Radiation Protection and Measurements (NCRP) of the United States, Report 86, 1986
- International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998
- Ministry of Health (Canada). Safety Code 6. Limits of Human Exposure to Radio frequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz, 1999.
- Australian Communications Authority Radio communications (Electromagnetic Radiation - Human Exposure) Standard 1999 (applicable to wireless phones only)

To assure optimal radio product performance and make sure human exposure to radio frequency electromagnetic energy is within the guidelines set forth in the above standards, always adhere to the following procedures:

Antenna Care

Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could damage the radio product and may violate FCC regulations.

DO NOT hold the antenna when the radio product is "IN USE". Holding the antenna affects call quality and may cause the radio product to operate at a higher power level than needed.

Operation

Position the antenna and the radio product at least one inch (2.5 cm) from any part of the body when using the supplied antenna. When using any approved accessory antenna, position it at least eight inches (20 cm) from any part of any person.

Approved Accessories

For a list of approved Motorola accessories, call 1-800-453-0920, visit our website at www.mot.com/iden or look in the accessory section of this manual.

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

Your wireless radio product 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 devices 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 using standard operating positions reviewed by the FCC with the device 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 device while operating can be well below the maximum value. This is because the radio device 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 radio product is available for sale to the public, it must be tested and certified to the FCC that is 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 radio product when tested for use during packet data transmission is 1.42 W/kg.

The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model phone 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 AZ489FT5811.

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.

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* 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 substantial margin of safety to give additional protection for the public and to account for any variations in measurements.

Electro Magnetic Interference/Compatibility

NOTE: Nearly every electronic device is susceptible to electromagnetic interference (EMI) if inadequately shielded, designed or otherwise configured for electromagnetic compatibility.

Facilities

To avoid electromagnetic interference and/or compatibility conflicts, turn off your radio product in any facility where posted notices instruct you to do so. Hospitals or health care facilities may be using equipment that is sensitive to external RF energy.

Aircraft

When instructed to do so, turn off your radio product when on board an aircraft. Any use of a radio product must be in accordance with applicable regulations per airline crew instructions.

Medical Devices

Pacemakers

The Health Industry Manufacturers Association recommends that a minimum separation of 6 inches (15 cm) be maintained between a handheld wireless radio product and a pacemaker. These recommendations are consistent with those of the U.S. Food and Drug Administration.

Persons with pacemakers should:

- ALWAYS keep the radio product more than 6 inches (15 cm) from their pacemaker when the radio product is turned ON.
- Not carry the radio product in a breast pocket.
- Use the ear opposite the pacemaker to minimize the potential for interference.
- Turn the radio product OFF immediately if you have any reason to suspect that interference is taking place.

Hearing Aids

Some digital wireless radio products may interfere with some hearing aids. In the event of such interference, you may want to consult your hearing aid manufacturer to discuss alternatives.

Other Medical Devices

If you use any other personal medical device, consult the manufacturer of your device to determine if it is adequately shielded from RF energy. Your physician may be able to assist you in obtaining this information.

Use While Driving

Check the laws and regulations on the use of radio products in the area where you drive. Always obey them.

When using the radio product while driving, please:

- Give full attention to driving and to the road.
- Use hands-free operation, if available.
- Pull off the road and park if driving conditions so require.

WARNING

Operational Warnings

For Vehicles with an Air Bag

Do not place a portable radio product in the area over the air bag or in the air bag deployment area. Air bags inflate with great force. If a portable radio is placed in the air bag deployment area and the air bag inflates, the radio product may be propelled with great force and cause serious injury to occupants of the vehicle.

Potentially Explosive Atmospheres

Turn off your radio product prior to entering any area with a potentially explosive atmosphere, unless it is a radio product type especially qualified for use in such areas as "Intrinsically Safe" (for example, Factory Mutual, CSA, or UL approved). Do not remove, install, or charge batteries in such areas. Sparks in a potentially explosive atmosphere can cause an explosion or fire resulting in bodily injury or even death.

NOTE: The areas with potentially explosive atmospheres referred to above include fueling areas such as below decks on boats, fuel or chemical transfer or storage facilities, areas where the air contains chemicals or particles, such as grain, dust or metal powders, and any other area where you would normally be advised to turn off your vehicle engine. Areas with potentially explosive atmospheres are often but not always posted.

Blasting Caps and Areas

To avoid possible interference with blasting operations, turn off your radio product when you are near electrical blasting caps, in a blasting area, or in areas posted: "Turn off two-way radio". Obey all signs and instructions.

Operational Cautions

Antennas

Do not use any portable radio product that has a damaged antenna. If a damaged antenna comes into contact with your skin, a minor burn can result.

Batteries

All batteries can cause property damage and/or bodily injury, such as burns if a conductive material such as jewelry, keys, or beaded chains touches exposed terminals. The conductive material may complete an electrical circuit (short circuit) and become quite hot. Exercise care in handling any charged battery, particularly when placing it inside a pocket, purse, or other container with metal objects.

Cleaning and Drying Considerations

This product is not water proof, and exposing the unit to liquids may result in permanent damage to the unit.

If your radio product interior gets wet, then do not try to accelerate drying with the use of an oven or a dryer as this will damage the radio product and void the warranty. Instead, do the following:

1. Immediately power off the radio product.
2. Remove Battery and SIM card (if so equipped) from radio product.
3. Shake excess liquid from radio product.
4. Place the radio product and battery in an area that is at room temperature and has good air flow.
5. Let the radio product, battery dry, and SIM card for 72 hours before reconnecting the battery and/or powering on the radio product.

If the radio product does not work after following the steps listed above, contact your dealer for servicing information.

Clean the external surfaces of the radio product with a damp cloth, using a mild solution of dishwashing detergent and water. Some household cleaners may contain chemicals that could seriously damage the radio product. Avoid the use of any petroleum-based solvent cleaners. Also, avoid applying liquids directly on the radio product.

Accessory Safety Information

IMPORTANT:

SAVE THESE ACCESSORY SAFETY INSTRUCTIONS

- Before using any battery or battery charger, read all the instructions for and cautionary markings on (1) the battery, (2) the battery charger, which may include a separate wall-mounted power supply or transformer, and (3) the radio product using the battery.
- Do not expose any battery charger to water, rain, or snow as they are designed for indoor or in-vehicle use only.

 **WARNING**	**To reduce the risk of injury, charge only the rechargeable batteries listed in the Accessories section of this manual. Other types of batteries may burst, causing personal injury and damage.**

- To reduce the risk of damage to the cord or plug, pull by the plug rather than the cord when you disconnect the battery charger from the power source outlet.
- Do not operate any battery charger with a damaged cord or plug — replace them immediately.
- Battery chargers may become warm during operation, but not hot. If it becomes hot to the touch, unplug it from the power outlet immediately and discontinue its use.
- Use of a non-recommended attachment to a battery charger may result in a risk of fire, electric shock, or injury to persons.
- Make sure the battery charger power cord is located so that it will not be stepped on, tripped over, or subjected to damage or stress.
- An extension cord should not be used with any battery charger unless absolutely necessary. Use of an improper extension cord could result in a risk of fire and electric shock. If an extension cord must be used, make sure that:
  - The pins on the plug of the extension cord are the same number, size, and shape as those on the plug of the charger.
  - The extension cord is properly wired and in good electrical condition.
  - The cord size is 18AWG for lengths up to 100 feet and 16AWG for lengths up to 150 feet.

- Do not operate any battery charger if it has received a sharp blow, has been dropped, or has been damaged in any way; take it to a qualified service technician.
- Do not disassemble a battery charger; take it to a qualified service technician when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire.
- Maximum ambient temperature around the power supply or transformer of any battery charger should not exceed 40°C (104°F).
- The output power from the power supply or transformer must not exceed the rating given on the Desktop Dual-Pocket Charger.
- The disconnection from the line voltage is made by unplugging the power supply from the AC receptacle.
- To reduce risk of electric shock, unplug any battery charger from the outlet before attempting any maintenance or cleaning.

For optimum charging performance, turn off the radio product while charging it in any battery charger.

GLOSSARY

asynchronous	Data without an accompanying time signal. Timing is built into data characters as start and stop bits.
AT command	An order entered into the computer to request your modem to perform certain actions, such as dial a telemodem number. AT commands are Hayes-compatible modem commands.
baud rate	Signaling speed of the modem. Common baud rates are 2400, 4800, 9600, 19200, and 56k.
bps	Bits per second. The rate at which data passes over the telemodem line or through the air. The basic unit of measure for serial data transmission capacity.
burst	A unit of information consisting of a sequence of signals.
circuit-switched data	Continuous data communication, such as a modem call.
CTS	The Clear to Send signal passed from the local modem to the local terminal when the data port is ready to transmit data. Occurs in response to the Request To Send (RTS) signal.

command mode	The mode that accepts AT commands. Also known as Terminal Mode. When your modem is in this mode, it is waiting to receive AT commands that you type from your communication software.
communication software	A computer program designed to connect your computer to an external source, such as another computer or a fax machine.
data services	One of the functions of your iM1100 modem. Wireless data services uses both circuit-switched and packet data transmissions.
DCD	Data Carrier Detect. An acceptable carrier signal received by the modem over the modem line. Also known as Received Line Signal Indicator (RLSI).
DCE	Data Communications Equipment. The equipment that establishes, maintains and terminates a connection. It converts data into units of sound and vice versa for communication over telemodem or cellular networks.
default	A factory preset choice that, under normal circumstances, works best for your system. You can either accept the default or change it.
dialing directory	A modem book of frequently called modem numbers that you can set up and maintain in your communication software.

DTE	Data Terminal Equipment. A computer or hand-held device that generates and receives data, and provides functions that control data communications through a device like the modem.
hand-held devices	Small computing appliances, such as palm tops, personal digital assistants, and pen-based computers.
home agent	The server that is responsible for routing data from your home network to your computer.
iDEN service provider	Provider of circuit data services and packet data services.
Internet	Inter-connected networks that all use the TCP/IP protocols.
Intranet	A private network inside a company or organization.
laptops	Portable computers, such as notebooks and subnotebooks.
mobile IP	Mobile Internet Protocol—a locating device. Provides the capability to locate you on the network at all times.
modem	MOdulator/DEModulator. An electronic device enabling digital data to be sent over analog transmission facilities. Converts a digital signal to analog and back to digital again.

non-volatile memory	Permanently stored information. It is not lost when the power is turned off.
packet data	A block of data for transmission.
parity bit	An error-checking method in asynchronous transmission. An additional non-data bit added to a group of bits to indicate whether the number of bits in the group is odd or even.
PIN	Personal Identification Number. A security number that allows you to access a system.
PPP	Point-to-point protocol.
protocol	A set of conventions regulating the format and relative timing of message transfer between two communication terminals.
RAM	Random Access Memory. The working memory of the computer where you can enter information and call up data.
RTS	Request to Send. Signal sent from the local terminal to the local modem to prepare the modem for data transmission.
serial port	An input/output (I/O) port that transmits data one bit at a time; as opposed to a parallel port which transmits multiple (usually eight) bits simultaneously. RS232C is a common serial interface standard.

service provider	Provides your computer with Internet access. Also known as an ISP (Internet Service Provider).
service-specific software	A program that is designed for a designated online service.
stop bit	A data bit used in asynchronous transmission to signal the end of a character.
system administrator	The person responsible for monitoring computer activity in a specified area, such as a department or a company.
terminal mode	The mode that accepts AT commands. Also known as Command Mode. When your modem is in this mode, it is waiting to receive AT commands that you type from your communication software.
transmission rate	The rate at which data is transferred, in bits per second.
wireless data services	See data services.