UMW190
User Manual
(Hardware)

MEMO
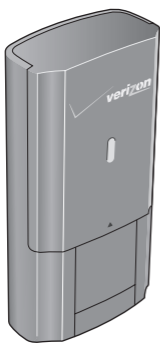
CHAPTER 1

BEFORE USING UMW190

■ ABOUT THIS USER MANUAL

You will find all the information you need to install and use the UMW190 in this user manual. Before using the UMW190, you must properly install the UMW190 software by closely following the installation instructions.

INSTRUCTIONS

- Install the UMW190 software **BEFORE** using the UMW190 USB Device with your computer. The installation software is provided with enclosed CD. Installation may take a few minutes.
- It is highly recommended that you read the safety precautions described in this manual before using the UMW190.

■ PRODUCT OVERVIEW

Thank you for purchasing the Verizon Wireless UMW190 USB Modem. The UMW190 is a 3G wireless device that enables high-speed wireless communication from your computer. The UMW190 is simple to install and use.

■ WHAT'S INSIDE THE PRODUCT PACKAGE

The following items are included in the product package. If any of the items listed below are missing, please contact the retail location where you purchased the product.

- UMW190 Wireless USB Modem
- Pre-installed SIM Card on the UMW190 Wireless USB Modem
- VZAccess Manager CD ROM (including User Guides)
- USB Modem Extension Cable
- Quick Reference Guide
- RF Brochure

■ INTRODUCTION TO WIRELESS UMW190 USB MODEM

The Verizon Wireless UMW190 is designed for your computer's USB port, which is available in most models. The UMW190 can be used to access the Internet, your company's intranet, or you can use it to send and receive email. It is extremely useful when you are away from the office, on the road, or wherever a wireline Internet access is not readily available.

LED status indicator *

External Antenna Booster Jack (on the back side)

SIM Card Slot

USB Connector
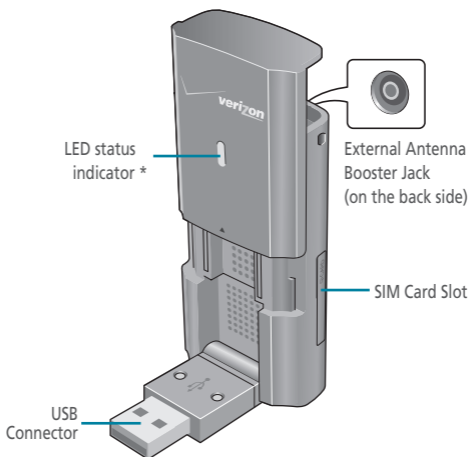
* Blue light: Connected to PC and detected to network
Red light: Connected to PC but out of service area

■ PRODUCT FEATURES

- Power management: The UMW190 utilizes power management and system overhead reduction functions provided by the USB interface for maximum power savings.

- Antenna design: Efficient, innovative internal antenna design optimizes data transfer rate and sensitivity to network signals.

- Extension Y Cable connector: Simply insert the USB connector into the USB port of your computer to deliver a power boost, increased RF performance, and to solve clearance issues.

> **NOTE** **IMPORTANT:** In GSM network coverage, users MUST use a extension Y cable connector to provide reliable 1amp of current in use. Please refer to page 15 for instructions on how to use the USB modem extension cable.

- USB Modem that supports Type A USB Port interface.

> **NOTE** **IMPORTANT:** Note that the USB Modem MUST be connected to USB interfaces USB 2.0 or higher. The connection to the so-called power USB is prohibited.

- Supports North American PCS (1900MHz) and Cellular (800 MHz) / GSM (850 MHz), EGSM (900 MHz), DCS (1800 MHz) and PCS (1900 MHz) / UMTS band1 (2100 MHz), band2 (1900MHz) and band 5 (850 MHz).

- Utilizes QUALCOMM MSM 7625 chip set.

- Supports 3G network technologies.

- **Data Speeds**
  CDMA bands: Typical download speeds of 600 Kbps to 1.4 Mbps and upload speeds of 500 to 800 Kbps in Mobile Broadband coverage area.

GSM bands: Typical download speeds of up to 400 to 700 Kbps on high-speed networks in popular travel destinations such as the United Kingdom, Germany, Italy and France.

• Supports Windows 2000, XP and Vista systems with installed host software and driver.

• Provides Verizon Wireless Mobile Broadband and NationalAccess network service (where available).

■ PRODUCT HANDLING

❶ Do not put any adhesive label on the USB connector. It may leave a sticky residue that can cause problems inside the computer USB port.

❷ The UMW190 USB device should easily slide into the USB port. Do not force the UMW190 into the USB port as it may cause damage to the modem and/or the port.

❸ Keep the UMW190 in a dry and clean place. (Storage temperature: -22°F to 149°F [- 30°C to 65°C]). Keep your device away from liquids, dust and excessive heat.
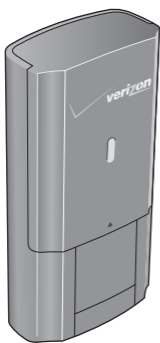
■ CONFIGURATION

To use the UMW190, you should first install the software included on the CD and configure the UMW190 USB device. See the next section for more information on software installation and USB device configuration.

MEMO

CHAPTER 2

INSTALLING UMW190

■ PRECAUTIONS

❶ The first time you use the UMW190, insert the VZAccess Manager CD into your computer and follow the screen instructions to complete the installation. When you complete the software installation, insert the UMW190 to use this device as USB modem.

❷ Once the modem has been inserted into the computer, do not remove it without first completing the unplugging/ejection process.

■ RECOMMENDED SYSTEM REQUIREMENTS

To successfully install and use the UMW190 USB device in your computer, the following system specifications are required.

Item	Required Specification
• **Operating system**	Windows® Vista / Windows® XP / Windows® 2000
• **Port**	Type A USB port
• **Processor**	150MHz or faster
• **Memory**	32 MB
• **Disk space**	28.1MB
• **Dial-up networking**	DUN bound to TCP/IP

* The UMW190 is useful for Pocket PCs that include a USB port. Voice service is not supported.

■ USING THE SIM CARD

TO INSTALL THE SIM CARD

❶ Open the protective cover with your finger tip.
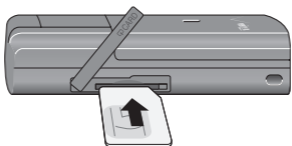
❷ Insert the SIM card into the slot with holding the card so the writing on the back is facing you, and the gold contacts facing up, aligned with the card slot. The Verizon Wireless logo will be facing down.

❸ Gently push the card in until it clicks into place and close the card slot.

TO REMOVE THE SIM CARD

❶ Open the protective cover with your finger tip and turn it to show card slot.
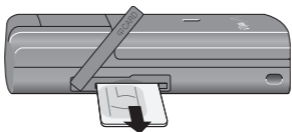
❷ Gently push in the SIM card one time to pop it loose.

❸ Carefully pull out the SIM card and close the protective cover.

■ INSTALLING SOFTWARE

INSTALLATION

• When you install VZAccess Manager, it will install the USB Driver for the UMW190.
  Follow the instructions for VZAccess Manager installation.

• It is normal to hear a short beep sound each time you insert or remove the UMW190. It is an audible notification that your PC recognizes the new hardware.
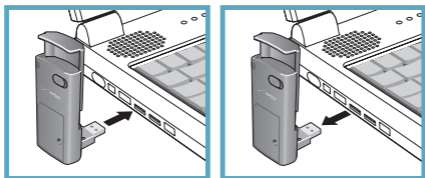
■ REMOVING UMW190

After your session is over and you disconnect from the network, you're ready to safely remove your wireless device.

When removing the UMW190, always grip the top and bottom of the modem and push/pull carefully.

NOTE

■ USB MODEM EXTENSION CABLE

The UMW190 USB Modem package includes an extension USB Y-shaped cable. The cable is not required for use with your UMW190 modem except when out of coverage area. However, it offers increased performance for your UMW190 modem under certain operating conditions. Attach to the UMW190, then insert the other ends of the USB connector into the USB ports of your computer to deliver power boost, increased RF performance, or to solve clearance issues.

USING THE USB MODEM EXTENSION CABLE:

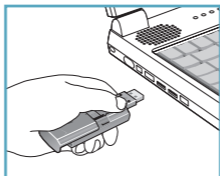❶ Plug the single end of the Y-shaped cable into the UMW190 Modem. [A]

❷ Depending on the condition you are trying to solve (power boost, increased RF performance, or clearance issues), plug either one of the two connected ends of the USB modem extension cable into the Type A USB port(s) on your computer. [B]
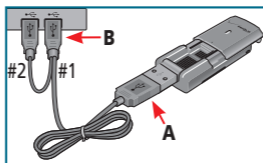
NOTE The USB modem extension cable connector labeled #1, is the primary data power cable used to either extend the UMW190 modem away from your computer allowing you to locate the modem in a more optimum signal location or solve any computer USB port clearance issues. The USB modem extension cable connector labeled #2, is a power boost cable and must be used with connector #1 to provide the modem up to 1Amp of current for use in weaker signal areas.

❸ The device is connected to and powered by the computer as soon as the USB cable is plugged properly into the appropriate Type A USB port(s).

❹ Launch VZAccess Manager and click Connect.

REGULATORY AND SAFETY INFORMATION

REGULATORY NOTICES

OPERATING CONDITIONS

WARNINGS AND CAUTIONS

SAFETY PRECAUTIONS

■ REGULATORY NOTICES

UMW190 complies with Parts 15, 22, and 24 of the FCC rules. It has been tested with the typical personal computer with a USB port. This USB device must not be co-located or operated in conjunction with any other antenna or transmitter. If you use this USB device in any other configuration, the FCC RF Exposure compliance limit can be exceeded.

■ OPERATING CONDITIONS

❶ This device may not cause harmful interference, and must accept any interference received, including interference that may cause undesirable operations.

❷ The manufacturer stipulates that the antenna should be more than 1.5 cm (0.60") from by-standers and 1.0cm (0.39") from the user.
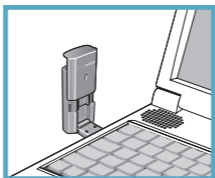
■ WARNINGS AND CAUTIONS

❶ Modifying or changing this USB device without express authorization can nullify compliance with RF exposure guidelines.

❷ This USB device has been tested and found to comply with the limits pursuant to Part 15, 22, and 24 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when appropriately installed. This USB device generates, uses, and can radiate radio frequency and, if not installed and used according to the instructions provided, it may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in any particular installation.

❸ If this USB device does cause harmful interference with radio or television signals (determine this by turning the USB device off and on), attempt to correct the interference by trying one or more of the following:

- Increase the separation between the USB device and receiver.

- Connect the USB device into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

❹ This USB device does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference causing equipment standard entitled "Digital Apparatus", ICES-003 of the Department of Communications.

❺ If you have purchased this product under a United States Government contract, it shall be subject to restrictions as set forth in subparagraph (C)(1)(ii) of Defense Federal Acquisitions Regulations (DFARs) Section 252.227-7013 for Department of Defense contracts, and as set forth in Federal Acquisitions Regulations (FARs) Section 52.227-19 for civilian agency contracts or any successor regulations. If further government regulations apply, it is your responsibility to ensure compliance with such regulations.

* WARNING: This product contains a chemical known to the State of California to cause cancer.

* WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

■ SAFETY PRECAUTIONS

❶ Data transmission and reception cannot be guaranteed because of the nature of wireless communications. Data can be delayed, corrupted or lost during transmission. Even though it is quite rare that significant data delay or loss occurs if the USB device is used in a normal manner, this USB device should not be used in cases that data transmission or reception failure could result in damage of any kind to the user or another party, including but not limited to personal injury, death or loss of personal property. Personal Communications Devices, LLC., bears no responsibility for damages or losses of any kind resulting from delays or errors in data transmission using the USB device, or for failure of the USB device to transmit or receive such data.

❷ Do not use this USB device in areas where blasting is in progress, where explosive atmospheres may be present, near medical equipment, life support equipment, or any equipment which may be susceptible to any form of radio interference. Turn off this USB device in these areas, since it can transmit signals that could interfere with this equipment.

❸ Do not use this USB device in any aircraft whether the aircraft is on the ground or in flight. Make sure to turn off this USB device in aircraft.
If used in an aircraft, it can transmit signals that could interfere with various aircraft systems.

❹ Do not use this USB device while driving a car, since it can distract the driver. In some area, using the communication device while driving a car is illegal.

MEMO

CHAPTER 4

APPENDIX

■ GLOSSARY

Analog Coverage
An area where analog service is available. Analog phones usually indicate signal strength on an indicator in the phone's display when receiving an analog signal.

Browser
The software that allows you to view the Internet; contains navigator commands such as forward and back; examples include Netscape, Microsoft Explorer. A Web browser in your computer requests HTML files from Web servers and takes you to the Internet sites you wish to visit, by linking your computer's IP address to a site's IP address.

COM PORT (communications port)
A connector for a communications interface, usually, a serial port.

Data
Information kept in databases, on an intranet, on the Internet, etc.

Driver
Software that controls a device.

Inactivity Time-Out
A stoppage in a connection, which usually occurs after a period of time elapses, without activity. Time-out settings are usually determined by the network.

Internet

A cooperatively run, globally distributed collection of computer networks that exchange information via a common set of rules for exchanging data (Transfer Control Protocol/Internet Protocol or TCP/IP).

Intranet

An intranet is a web site created by a business, which posts its own company information in a secure part of the Internet that only employees or other authorized users can reach. Intranets are generally protected by firewalls.

Kbps

Kilobits per second.

Kilobyte (KB)

1024 bits (Approximately 1/2 page of plain text)

Modem

Hardware that translates and transmits data over wire-line or wireless.

Package Minutes

Package minutes are those minutes included in the cost of a monthly service plan. Once the packaged minutes have been exhausted, additional airtime charges apply. Please refer to Plans and Pricing for more information, details and offers in your area.

Packet Switching

Packet-switching messages are divided into packets or pieces before transmission over one or more routes and are reassembled at their destination.

POP3 e-mail

Protocol used by ISP's mail servers to manage e-mail for subscribers. E-mail clients such as Microsoft Outlook support POP3.

Proxy Settings

A specific IP (Internet Protocol) address that allows access to a secured enterprise network. The proxy settings provide directions to a computer so that it can locate an address and access information and services, which exist at that location.

Search Engine

A program that receives a user's search request, compares it to the entries in the index, and returns results to help the user find relevant information.

Serial Port

A connector on a computer used to connect peripherals, which communicate using a serial protocol.

Serial/Data Cable

A wire that connects two serial ports carrying data to one another.

Transmission Speed

The rate at which data is sent over a communications line, usually measured in kilobits (kbps).

USB Cable

A wire connecting two USB ports carrying data to one another.

USB Port

A connector on a computer to connect peripherals using USB (Universal Serial Bus) protocol.

■ SPECIFIC ABSORPTION RATES (SAR)

Maximum: SAR 1.06 W/kg CDMA835 Body
SAR 0.893 W/kg PCS1900 Body
SAR 1.13 W/kg GSM850 Body
SAR 0.819 W/kg EGSM900

THIS MODEL PHONE MEETS THE GOVERNMENT'S
REQUIREMENTS AND EUROPEAN UNION (EU) STANDARDS
FOR EXPOSURE TO RADIO WAVES.

Your wireless phone is a radio transmitter and receiver. It
is designed and manufactured not to exceed the emission
limits for exposure to radiofrequency (RF) energy set
by the Federal Communications Commission of the U.S.
Government. These limits are part of comprehensive
guidelines and establish permitted levels of RF energy for the
general population. The guidelines are based on standards
that were developed by independent scientific organizations
through periodic and thorough evaluation of scientific
studies. The standards include a substantial safety margin
designed to assure the safety of all persons, regardless of
age and health. The exposure standard for wireless mobile
phones employs a unit of measurement known as the
Specific Absorption Rate, or SAR. The SAR limit set by the
FCC is 1.6 W/kg* and EU standards is 2.0 W/kg.

Tests for SAR are conducted with the phone transmitting
at its highest certified power level in all tested frequency
bands. Although the SAR is determined at the highest
certified power level, the actual SAR level of the phone
while operating can be well below the maximum value.
This is because the phone is designed to operate at
multiple power levels so as to use only the power required
to reach the network. In general, the closer you are to a

wireless base station antenna, the lower the power output. Before a phone model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model. The highest SAR value for this model phone when tested for use at the when worn on the body , as described in this user guide, is 1.13 W/Kg. (Body-worn measurements differ among phone models, depending upon available accessories and FCC requirements). While there may be differences between the SAR levels of various phones and at various positions, they all meet the government requirement for safe exposure. 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: PP4PX-5000.

Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications Industry Association (CTIA) web-site at http://www.wow-com.com.

* In the United States and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.

The Declaration of Conformity at the back of this guide demonstrates your device's compliance with the European Radio & Terminal Telecommunications Equipment (R&TTE) directive.

■ SAFETY INFORMATION FOR RF EXPOSURE

BODY WORN OPERATION

This device was tested in multiple computer configurations with USB port configurations for typical near-body operations with the back of the USB Modem kept 5mm from body. To maintain compliance with FCC RF exposure requirements it can be used in computers with substantially similar physical dimensions, construction, and electrical and RF characteristics, and that maintain a minimum 20mm separation distance between the user's body and the back of the USB Modem, including the antenna. The antenna(s) used for this USB Modem must not be co-located or must not operate in conjunction with any other antenna or transmitter within a host device.

SAFETY INFORMATION

SAFETY INFORMATION FOR FIXED WIRELESS TERMINALS POTENTIALLY EXPLOSIVE ATMOSPHERES

Turn your phone OFF when in any area with a potentially explosive atmosphere and obey all signs and instructions. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

INTERFERENCE TO MEDICAL DIVICES

Certain electronic equipment may be shielded against RF signal from you wireless phone (pacemakers, Hearing Aids, and so on). Turn your phone OFF in health care facilities when any regulations posted in these areas instruct you to do so. RF signals may affect improperly installed or inadequately shielded electronic system in motor vehicles.

EXPOSURE TO RF ENERGY

Use only the supplied or an approved replacement antenna. Do not touch the antenna unnecessarily when the phone is in use. Do not move the antenna close to, or touching any exposed part of the body when making a call.

FCC COMPLIANCE INFORMATION

This device complies with Part 15 of FCC Rules.

Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received. Including interference that may cause undesired operation.

■ DECLARATION OF CONFORMITY (R & TTE)

We, PANTECH&CURITEL COMMUNICATION, INC. declare under our sole responsibility that the product

Product Name: UMW190
Product Type: USB Modem

PANTECH
PANTECH CO.,LTD.

to which this declaration relates, is in conformity with the following standards and/or other normative documents.

SAFETY	EN 60950-1 : 2001 + A11 :2004
EMC	EN 301 489-1 V 1.6.1 (2005-09)
	EN 301 489-7 V 1.3.1 (2005-11)
	EN 301 489-24 V 1.3.1 (2005-11)
SAR	EN 50360: 2001 & EN 62209-1: 2006
RADIO	EN 301 511 V9.0.2 (03-2003)
	EN 301 908 – 1 V3.2.1 (05-2007)
	EN 301 908 – 2 V3.2.1 (05-2007)

We hereby declare that (all essential radio test suites have been carried out and that) the above named product is in conformity to all the essential requirements of Directive 1999/5/EC.

The conformity assessment procedure referred to in Article 10 and detailed in Annex (III) or (IV) of Directive 1999/5/EC has been followed with the involvement of the following Notified Body(ies): **PHOENIX, Koenigswinkel 10 32825 Blomberg Germany**

Identification mark: 0700
(Phoenix Notified Body number)

$C \in 0700$