



BROADBAND**ACCESS** / NATIONAL**ACCESS**SM



V740 EXPRESSCARD

HARDWARE USER MANUAL

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Welcome

Congratulations on purchasing the Verizon Wireless V740 ExpressCard for Broadband**Access** Rev. A and National**Access** service!

Before installing the V740 ExpressCard and the **VZAccess** Manager software and drivers, review this manual which outlines the features of the V740 ExpressCard hardware.



Important: Do not plug the V740 ExpressCard into the ExpressCard slot until you have installed **VZAccess** Manager and have activated Broadband**Access**/National**Access** service for your V740 ExpressCard. (See the **VZAccess** Manager Software User Guide for detailed instructions on installation and software features, located on the Installation CD.)

This is a dual-band, Broadband**Access** Rev. A –enabled ExpressCard that operates over the high-speed Broadband**Access** Rev. 0/Rev. A and National**Access** networks in the 800/1900 bands. The enhanced EV-DO Rev. A technology enables access to Verizon Wireless Broadband**Access** network at data speeds faster than ever* before with lower latency, empowering you with connections at higher speeds to the Internet, your corporate Intranet, and your email while you're away from the office.

Verizon Wireless is rapidly adding Rev. A capability to our BroadbandAccess** service area. Your Broadband**Access** Rev. A-enabled device will indicate coverage when you are in a Broadband**Access** Rev. A service area. When outside the Rev. A service area, Broadband**Access** typical speeds will be 400-700 kbps (download) and 60-80 kbps (upload). Speed claim based on our network tests with 5 MB FTP data files, without compression. Actual throughput speed varies.*

The V740 ExpressCard Package

The Verizon Wireless V740 ExpressCard package includes:

- Verizon Wireless V740 ExpressCard
- **VZAccess** Manager CD ROM (includes detailed user guides)
- Quick Reference Guide



IMPORTANT: Do not insert the V740 ExpressCard into the ExpressCard slot until you have installed **VZAccess** Manager and have activated Broadband**Access**/National**Access** service for your V740 ExpressCard.

(See the **VZAccess** Manager User Guide for detailed instructions on installation, activation, and software features, located on the Installation CD.)

Wireless communications

Important Notice

Due to the transmission and reception properties of wireless communications, data can occasionally be lost or delayed. This can be due to the variation in radio signal strength that results from changes in the characteristics of the radio transmission path. Although data loss is rare, the environment where you operate the ExpressCard may adversely affect communications.

Variations in radio signal strength are referred to as fading. Fading is caused by several different factors including signal reflection, the ionosphere, and interference from other radio channels.

Verizon Wireless or its partners will not be held responsible for damages of any kind resulting from the delays or errors in data transmitted or received with the V740 ExpressCard, or failure of the V740 ExpressCard to transmit or receive such data.

Safety hazards

Do not operate the V740 ExpressCard in an environment that may be susceptible to radio interference resulting in danger specifically;

Areas where prohibited by the law

- Follow any special rules and regulations and obey all signs and notices. Always turn off the host device and remove the ExpressCard from the ExpressCard slot when instructed to do so, or when you suspect that it may cause interference or danger.

Where explosive atmospheres may be present

- Do not operate your ExpressCard in any area where a potentially explosive atmosphere may exist. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death. Be aware and comply with all signs and instructions.
- Users are advised not to operate the ExpressCard while at a refueling point or service station. Users are reminded to observe restrictions on the use of radio equipment in fuel depots (fuel storage and distribution areas), chemical plants or where blasting operations are in progress.
- Areas with a potentially explosive atmosphere are often but not always clearly marked. Potential locations can include gas stations, below deck on boats, chemical transfer or storage facilities, vehicles using liquefied petroleum gas (such as propane or butane), 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.

Near Medical and life support equipment

- Do not operate your ExpressCard in any area where medical equipment, life support equipment, or near any equipment that may be susceptible to any form of radio interference. In such areas, the host communications device must be turned off. The ExpressCard may transmit signals that could interfere with this equipment.

On an aircraft, either on the ground or airborne

- In addition to FAA requirements, many airline regulations state that you must suspend wireless operations before boarding an airplane. Please ensure that the host device is turned off and your ExpressCard is removed from the ExpressCard slot to avoid any instance that could interfere with various onboard systems and controls.

While operating a vehicle

- The driver or operator of any vehicle should not operate a wireless data device while in control of a vehicle. Doing so will detract from the driver or operator's control and operation of that vehicle. In some countries, operating such communications devices while in control of a vehicle is an offence.

Limitation of liability

The information contained in this document is subject to change without notice and should not be construed as a commitment by Verizon Wireless Inc.

Copyright

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Patents and licenses

Licensed by QUALCOMM Incorporated under one or more of the following Patents:

4,901,307	5,490,165	5,056,109	5,504,773	5,101,501
5,506,865	5,109,390	5,511,073	5,228,054	5,535,239
5,267,261	5,544,196	5,267,262	5,568,483	5,337,338
5,600,754	5,414,796	5,657,420	5,416,797	5,659,569
5,710,784	5,778,338			

Software Drivers License

Proprietary Rights Provisions:

The software drivers provided with this product are copyrighted by Verizon Wireless and/or Verizon Wireless' suppliers. And although copyrighted, the software drivers are unpublished and embody valuable trade secrets proprietary to Verizon Wireless and/or Verizon Wireless' suppliers. The disassembly, decompilation, and/or Reverse Engineering of the software drivers for any purpose is strictly prohibited by international law. The copying of the software drivers, except for a reasonable number of back-up copies is strictly prohibited by international law. It is forbidden by international law to provide access to the software drivers to any person for any purpose other than processing the internal data for the intended use of the software drivers.

U.S. Government Restricted Rights Clause:

The software drivers are classified as "Commercial Computing device Software" and the U.S. Government is acquiring only "Restricted Rights" in the software drivers and their Documentation.

U.S. Government Export Administration Act Compliance Clause:

It is forbidden by US law to export, license or otherwise transfer the software drivers or Derivative Works to any country where such transfer is prohibited by the United States Export Administration Act, or any successor legislation, or in violation of the laws of any other country.

V740 ExpressCard Hardware: Overview

The V740 ExpressCard is a new CDMA EV-DO (Rev. A capable*) wireless data card designed for computing devices with ExpressCard 54/34 slots. Compatible with all the leading manufacturers, including Apple, the BroadbandAccess Rev. A V740 ExpressCard is perfect for any mobile professional who needs fast, reliable access to critical information.

**Typical download speeds 450-800 Kbps. Typical upload speeds 300-400 Kbps. Speed claims based on our network tests with 5 MB FTP data files without compression. Actual throughput speed varies.*

The V740 ExpressCard requires an activated account with Verizon Wireless in order to function. The ExpressCard can be activated three ways:

- in a Verizon Wireless store
- by contacting Verizon Wireless Telesales
- self-activated through the Verizon Wireless activation website.



Important: Prior to using the **V740 ExpressCard**:

- Install **VZAccess Manager** as provided with your **VZAccess Manager** Installation CD (refer to the comprehensive **VZAccess Manager** Software User Guide for instruction, located on the **VZAccess Manager** Installation CD).

Customer Service

For Customer Service while in the U.S. or Canada, dial 1-800-922-0204.

V740 ExpressCard System Requirements

To install and use the V740 ExpressCard, your host computer must meet these requirements:

Operating System	Microsoft Windows® 2000 (SP4) , XP (SP2 or higher), Vista Note: Windows XP SP1, Windows 2000 SP3 and SP4 require specific OS patches. Note: Windows Vista 32-bit or 64-bit. - OR - Mac® OS X 10.4.8 or higher
Software	Internet browser software (i.e. Internet Explorer, Netscape, AOL)
ExpressCard Software	VZAccess Manager (<i>Included on the VZAccess Manager Installation CD</i>)
CPU	166 MHz or higher
Interface	ExpressCard34/54 computer slot
Disk Drive	CD-ROM
Memory (RAM)	32 MB
Hard Disk Space	14 MB

Your Verizon Wireless V740 ExpressCard

Your V740 ExpressCard fits into the ExpressCard slot (54 or 34 slot) of most notebook computers. This Broadband**Access** Rev. A-enabled device works seamlessly across the CDMA EV-DO Rev. A and Rev. 0 (Broadband**Access**) and 1xRTT (National**Access**) service areas allowing for exceptional coverage.

The Verizon Wireless V740 ExpressCard runs on Microsoft® Windows® (2000, XP, Vista) and Apple® Macintosh® (OS X) operating systems. **VZAccess Manager** (included on the Installation CD) allows you to control and monitor your connection, to send and receive SMS (Short Messaging Service), get online help and includes an address book.

**Speed claims based on our network tests with 5MB FTP data files, without compression. Typical upload speeds of 300-400 Kbps. Typical download speeds 450-800 Kbps. Actual throughput speed varies.*

Note: **VZAccess Manager** software is required to be installed on your notebook to support the ExpressCard.



ExpressCard: this is the device when plugged into a Personal Computer provides wireless data solutions

Notebook Connector: connects to your Personal Computer via the computer ExpressCard slot

Flip-Up Antenna: The advanced dual band diversity antenna system design incorporates a flip-up antenna, maximizing data speed performance and allowing for stronger network signal reception.

External Antenna Connector: Connect an optional external antenna to the V740 ExpressCard for improved performance in fringe areas.

Service Status Indicator: visual indicator that shows you service and data modes

LED not lit	No Power to ExpressCard
LED GREEN	ExpressCard is powered but not transmitting or receiving
LED GREEN – slow blinking	ExpressCard searching for a CDMA network
LED GREEN – intermittent blinking	ExpressCard transmitting/receiving data; blinking rate proportional to data speed

Key Features

The V740 ExpressCard is packed with features including VPN capability, Auto Connectivity options and 2-Way Short Messaging Service (SMS), and NDIS configuration, and operates on different computing platforms and operating systems including, Windows 2000, XP, Vista, and Mac OS X 10.4.8 or higher.

ExpressCard Technology

A new EVDO Rev. A wireless data card based on ExpressCard technology that delivers a smaller and faster device for your desktop and notebook computers. The V740 ExpressCard is compatible with all the leading notebook manufacturers with ExpressCard 54/34 slots.

High Speed Wireless Data (BroadbandAccess Rev. A-enabled)

The V740 ExpressCard enables subscribers to access the latest in CDMA EV-DO technology, referred to as Rev. A. This BroadbandAccess Rev. A-enabled device is “backwards compatible,” meaning it works seamlessly across the CDMA EV-DO Rev. A and Rev. 0 (BroadbandAccess) and 1xRTT (NationalAccess) service areas allowing for exceptional coverage.

Advanced Antenna System

The advanced dual band diversity antenna system design incorporates a flip-up antenna, maximizing data speed performance and allowing for stronger network signal reception.

External Antenna Connector

Add an optional external antenna to further improve data throughput and improve network connectivity in fringe areas.

Lower Latency

BroadbandAccess Rev. A improves performance of many applications running over the wireless BroadbandAccess network, resulting in less delays and an overall faster throughput.

Care of Your V740 ExpressCard

As with any electronic device, the V740 ExpressCard must be handled with care to ensure reliable operation. Verizon Wireless recommends the following handling guidelines:

- Do not place any labels on the Antenna as this may alter the sensitivity of the antenna
- Do not place any labels on the card as this may interfere with the ExpressCard slot when inserting it into the ExpressCard 54/34 slot
- The V740 ExpressCard should plug easily into your computer's ExpressCard slot. Forcing the device into the slot may damage it.
- Protect the V740 ExpressCard from liquids, dust, and excessive heat.
- Store the V740 ExpressCard in a safe place, when not in use.
- When transporting your notebook, remove the V740 ExpressCard from the ExpressCard slot.

Supported Services

The Verizon Wireless V740 ExpressCard supports Verizon Wireless BroadbandAccess- Rev. 0 and Rev. A* and NationalAccess service. The Verizon Wireless BroadbandAccess- Rev. A and NationalAccess service provides a superior wireless data connection.

**Speed claims based on our network tests with 5MB FTP data files, without compression. Typical upload speeds of 300-400 Kbps. Typical download speeds 450-800 Kbps. Backwards compatible with BroadbandAccess and NationalAccess. Actual throughput speed varies.*

Installation and Configuration

This section guides you through the hardware installation and setup process for the V740 ExpressCard. Before you begin using your ExpressCard with **VZAccess Manager**, read through this Hardware Manual to become familiar with the hardware and the additional documentation that came with your V740 ExpressCard.

Basics

Follow these steps to begin using your V740 ExpressCard:

1. Turn on your computing device and close all applications.
2. Insert the **VZAccess Manager** CD-ROM into your computer's CD drive.
3. If the **VZAccess Manager** CD does not automatically launch, manually launch the **VZAccess Manager** CD following the guidelines outlined for manual CD launch per the operating system of your computing device. Instructions for manual CD launch may be found in the User Guide or Help features of your computing device.
4. Install **VZAccess Manager** as outlined in the Quick Reference Guide.
5. Insert the V740 ExpressCard to install the necessary drivers.
6. Launch **VZAccess Manager**, and click on the **Connect** button. If your device was activated prior to installation of **VZAccess Manager** and you are in a Broadband**Access**/National**Access** coverage area, you will be connected to the Verizon Wireless network. If your device was not activated prior to installation of **VZAccess Manager**, the software will connect to the Verizon Wireless activation website. Follow the on-screen instructions to complete the activation. Refer to the **VZAccess Manager** User Guide, located on the Installation CD for more detailed instructions.



Important: Installation must be performed within a Broadband**Access**- Rev. A/O and/or National**Access** coverage area.

Important: Before installing your new software, delete or uninstall any previously existing modem or dialer software from your computing system.

Important: **VZAccess Manager** must be installed before you insert the V740 ExpressCard into your computer for the first time. Only after the software has been installed can the operating system successfully install and configure the V740 ExpressCard.

Using your V740 ExpressCard

Inserting the V740 ExpressCard

Before you insert the card, you must first install **VZAccess Manager**. Once you have completed the software installation procedure, you may insert your card into your computer's ExpressCard slot or card bay. The Verizon Wireless label should be facing up and the card should be inserted directly into the computer's ExpressCard slot or card bay.

When you connect the V740 ExpressCard, the following should occur once **VZAccess Manager** has been installed:

- If sound effects are enabled, the computer beeps.
- The label of the V740 ExpressCard must be facing up.
- The V740 ExpressCard is powered as soon as you connect it to the ExpressCard slot of your computing device. Although the ExpressCard is powered, it does not automatically connect to the Internet.
- The Unplug/Eject Hardware icon appears in the system tray (unless the feature has been disabled)



- The LED indicator on the device lights up.
- The **VZAccess Manager** software starts (unless the auto-launch feature has been disabled).

Note: A portion of the card remains outside the Express Card slot. This section contains the card's antenna and the LED (light-emitting diode). Because the card is not entirely contained in your computer, it is important to remove the card when transporting your notebook computer.

The V740 ExpressCard Flip-Up Antenna

The V740 ExpressCard contains a flip-up antenna that helps maximize the RF signal; this is an integral part of the ExpressCard. To raise the antenna, flip-up the antenna by gently gripping the top right side of the external cover with your forefinger.

Removing the V740 ExpressCard

Turning Off the V740 ExpressCard

When the card is inserted into the computer's ExpressCard slot, it has power and is trying to communicate with the network. To turn the card off, first terminate your Internet connection session and exit **VZAccess Manager** (Alternatively the V740 ExpressCard may be removed after the computing device is shutdown or turned off).

Note: Once you have inserted the V740 ExpressCard, avoid removing it before your Internet connection is terminated, as some computers may be unable to respond to the sudden change in operation, causing automatic shutdowns or screen freeze issues.

Removing the V740 ExpressCard

The V740 ExpressCard technology allows you to safely remove the V740 ExpressCard at any time when you are not connected to the network.

To remove the card, follow these steps:

- Terminate your Internet connection.
- Exit **VZAccess Manager**

- After VZAccess Manager has been exited, left-click the Unplug/Eject Hardware icon in the system tray.



Windows XP



Windows 2000

- A message bar appears. Click this message bar. A dialog notifies you it is safe to remove the card.

Safely remove NEC PCI to USB Open Host Controller

- Simply grip the V740 ExpressCard on both sides and pull straight out to avoid damaging the card.

Windows 2000: Once the Safe to Remove Hardware message appears, click **OK** and use the ejector button (located on most notebooks next to the ExpressCard slot and PC Card slot, if using the ExpressCard Adapter accessory) to remove the card.

Windows XP: Once the Safe to Remove Hardware message appears in the system tray, use the ejector button (located on most notebooks next to the ExpressCard slot and PC Card slot, if using the ExpressCard Adapter accessory) to remove the card.

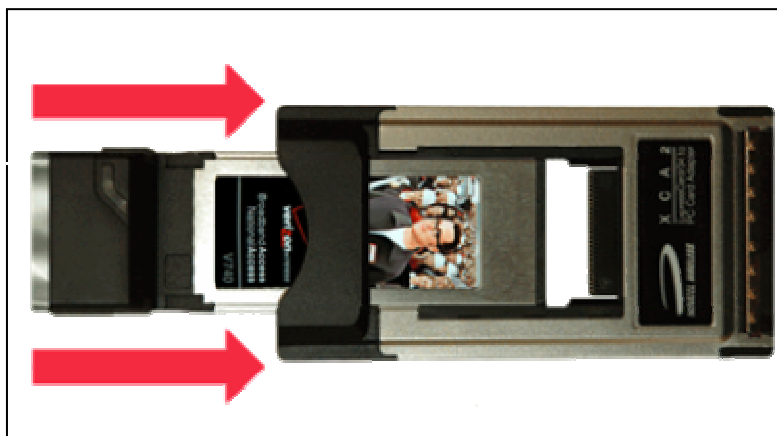
Using the ExpressCard Adapter (Card Caddy Accessory)

An optional ExpressCard Adapter (sold separately through Verizon Wireless) is an accessory that allows you to use the ExpressCard in any computer with a Type II PCMCIA slot. The ExpressCard Adapter enables you to use the new smaller, more compact wireless ExpressCard form factor in notebooks that may not have an ExpressCard 54/34 slot but are equipped with Type II PCMCIA or other 54 mm slots. Now, with a single ExpressCard and adapter, you can use an ExpressCard on any notebook regardless of the type of slot it has.

Note: Use of the adapter is completely transparent to the computer. All device drivers and applications recognize the ExpressCard in the adapter as if the adapter was built into the notebook. Intelligent hardware on the adapter resolves all compatibility issues by converting ExpressCard signals to PCMCIA (Cardbus) signals and vice versa.

To Use the ExpressCard Adapter:

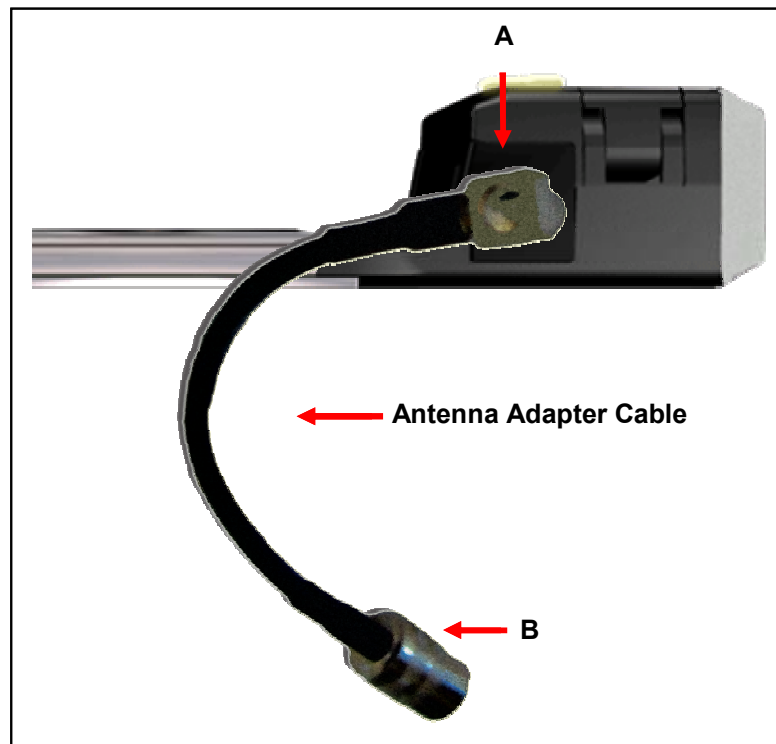
1. Insert the V740 ExpressCard, label facing up, through the ExpressCard Adapter opening, with “Insert this Side” facing up.
[DO NOT force the V740 ExpressCard into the ExpressCard Adapter].
2. Ensure that the V740 ExpressCard connects or locks with the connector pins on the adapter.
3. Properly insert into your notebook's PCMCIA slot, leading with the portion of the combination that states “Insert this Side”. (See page 8 for instruction on proper insertion and removal of the V740 Express Card.)



Using the External Antenna Connector

An optional external antenna and External Antenna Adapter Cable may be purchased (both sold separately) for use with the V740 ExpressCard. An external antenna is useful when traveling in select fringe coverage areas where the network signal may be weak.

1. The External Antenna Connector jack is located at the base of the flip-up antenna on the V740 ExpressCard.
2. Remove the rubber protector to expose the External Antenna Connector. (Keep the rubber protector in a safe place for future use in order to protect the External Antenna Connector from debris when not in use).
3. Connect the External Antenna Adapter Cable to the V740 ExpressCard's External Antenna Connector **[A]**.
4. Connect the External Antenna Adapter Cable's receiving end into the external antenna of your choice **[B]**.



Technical Support

Data Technical Support

For additional information and technical support for VZAccess Manager and Verizon wireless devices, you can visit the Verizon Wireless Data Technical Support page at: <http://www.verizonwireless.com/b2c/support/data.jsp>.

Troubleshooting

V740 ExpressCard

The following tips will help solve many common problems encountered while using the V740 ExpressCard:

- Make sure you are using the V740 ExpressCard in the correct geographic region: Broadband**Access**-Rev. A and National**Access** in the US.
- Ensure that the wireless network's coverage extends to your current location.

When properly installed, the V740 ExpressCard is a highly reliable product. Most problems are caused by one of these issues:

- The wrong driver has been installed.
- System resources required by the V740 ExpressCard are being used by other devices.
- Network coverage is not available (either because you are outside the Broadband**Access**- Rev. 0/Rev. A and National**Access** coverage area or because of an account or network problem).

For issues related to the VZAccess Manager consult the VZAccess Manager User Guide, located on the Installation CD.

Product Specification

Technical Specifications

TABLE 1


Drop	1 meter drop, no damage – fully operational
Vibration Stability	5 Hz to 500 Hz, 0.1 octave/second
Name:	Verizon Wireless V740 ExpressCard
Model:	V740 ExpressCard
Approvals:	<div> FCC (North America);</div>
Dimensions:	Length: 112mm, Width: 34mm, Depth: 5mm (Length: 4.41 in, Width: 1.34 in, Depth: .19 in)
Weight	39 g (1.4 oz)
Wireless Network – Dual Mode:	CDMA 1X/EV-DO
ExpressCard Standard:	ExpressCard 34/54

TABLE 2

Technology:	CDMA
Band Designation:	1X/EV-DO: 800/1900 MHz
Transmit Band:	824.7-848.31MHz/1851.25-1908.75MHz
Receive Band:	869.7-893.31MHz/1931.25-1988.75MHz
Voltage:	3.3 V (nominal)

TABLE 3

Operating Temperature	0° Celsius to +60° Celsius
Storage Temperature	-40° Celsius to +85° Celsius

Regulatory notices

Federal Communications Commission Notice (FCC -- United States)



Electronic devices, including computers and wireless modems, generate RF energy incidental to their intended function and are therefore subject to FCC rules and regulations.

This equipment has been tested to, and found to be within the acceptable limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment. This equipment generates radio frequency energy and is designed for use in accordance with the manufacturer's user manual. However, there is no guarantee that interference will not occur in any particular installation. If this equipment causes harmful interference to radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna

Increase the separation between the equipment and the receiver

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected

Consult the dealer or an experienced radio/television technician for help

This device complies with Part 15 of the Federal Communications Commission (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.

WARNING: DO NOT ATTEMPT TO SERVICE THE WIRELESS COMMUNICATION DEVICE YOURSELF. SUCH ACTION MAY VOID THE WARRANTY. THE V640 EXPRESSCARD MODEM OEM IS FACTORY TUNED. NO CUSTOMER CALIBRATION OR TUNING IS REQUIRED. CONTACT VERIZON WIRELESS TECHNICAL SUPPORT FOR INFORMATION ABOUT SERVICING YOUR WIRELESS COMMUNICATION DEVICE.

FCC CAUTION: Any changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

MODIFICATIONS: The FCC requires that you be notified that any changes or modifications made to this device that are not expressly approved by Verizon Wireless, Inc. may void your authority to operate the equipment.

In accordance with FCC rules and regulations, the combination of the MX720/V740 ExpressCard Transmitter with the XUA-1 ExpressCard Adapter results in a FCC Class B computer peripheral approved under Declaration of Conformity: tested to comply with FCC Standards.

RF Exposure/Specific Absorption Rate (SAR) Information

This product has been evaluated for SAR and meets the FCC Guidelines for exposure to radio waves.

FCC Equipment Authorization ID: PKRNVWMX720

Your wireless modem is a radio transmitter and receiver. It is designed and manufactured not to exceed the exposure limits for radio frequency (RF) energy set by the Federal Communications Commission (FCC) 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 devices including mobile ExpressCards and wireless modems uses a unit of measurement known as the Specific Absorption Rate, or SAR. Tests for SAR are conducted using standard operating positions reviewed by the FCC with the device under test transmitting at its highest certified power level in

all frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the ExpressCard or modem while operating can be well below the maximum value. This is because the ExpressCard or modem 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 this device is made 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 (for example, at the ear or worn on the body) as required by the FCC for each model.

THE FCC HAS GRANTED AN EQUIPMENT AUTHORIZATION FOR THIS WIRELESS MODEM WITH ALL REPORTED SAR LEVELS EVALUATED AS IN COMPLIANCE WITH THE FCC RF EXPOSURE GUIDELINES. THE HIGHEST SAR VALUE FOR THIS MODEM WHEN TESTED FOR COMPLIANCE AGAINST FCC STANDARDS WAS 1.14W/KG USER-LAP POSITION AND 0.163W/KG BYSTANDER POSITION.

THIS DEVICE WAS TESTED FOR SAR COMPLIANCE IN THE BYSTANDER CONFIGURATION WITH A 2.5CM SPACING. IN ORDER TO COMPLY WITH FCC RF EXPOSURE REQUIREMENTS, BYSTANDERS SHOULD MAINTAIN A 2.5CM DISTANCE FROM THE ANTENNA OF THIS DEVICE.

THIS DEVICE IS INTENDED TO BE USED IN NOTEBOOK COMPUTERS. USE IN OTHER TYPES OF HOST UNITS SUCH AS PDA'S, ETC, ARE PROHIBITED AND MAY NOT COMPLY WITH FCC RF EXPOSURE GUIDELINES/REQUIREMENTS.

Limited Warranty and Liability

Novatel Wireless warrants for the 12 month period immediately following receipt of the Product by Purchaser that the Product will be free from defects in material and workmanship under normal use. THESE WARRANTIES ARE EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

The exclusive remedy for a claim under this warranty shall be limited to the repair or replacement, at Novatel Wireless' option, of defective or non-conforming materials, parts or components. The foregoing warranties do not extend to (I) non conformities, defects or errors in the Products due to accident, abuse, misuse or negligent use of the Products or use in other than a normal and customary manner, environmental conditions not conforming to Novatel Wireless' specification, of failure to follow prescribed installation, operating and maintenance procedures, (II) defects, errors or nonconformity's in the Product due to modifications, alterations, additions or changes not made in accordance with Novatel Wireless' specifications or authorized by Novatel Wireless, (III) normal wear and tear, (IV) damage caused by force of nature or act of any third person, (V) shipping damage, (VI) service or repair of Product by the purchaser without prior written consent from Novatel Wireless, (VII) products designated by Novatel Wireless as beta site test samples, experimental, developmental, reproduction, sample, incomplete or out of specification Products, or (VIII) returned products if the original identification marks have been removed or altered.

Glossary

1xRTT

Short for single carrier (1x) Radio Transmission Technology. A high speed wireless technology based on the CDMA platform. 1xRTT has the capability of providing Broadband-like speeds of up to 144 Kbps. 1xRTT is also referred to as CDMA2000.

1xEVDO

Part of a family of CDMA2000 1x digital wireless standards. 1xEVDO is a "3G" standard. EVDO stands for "Evolution, Data-Optimized." 1xEVDO is based on a technology initially known as "HDR" (High Data Rate) or "HRPD" (High Rate Packet Data), developed by Qualcomm. The international standard is known as IS-856. 1xEVDO has the capability of providing Broadband-like speeds of average speeds of 400-700 kbps.

bps

Bits per second – rate of data flow.

Broadband

High-capacity high-speed, transmission channel with a wider bandwidth than conventional modem lines. Broadband channels can carry video, voice, and data simultaneously.

ExpressCard

A new standard introduced by PCMCIA that delivers thinner, faster, lighter devices to desktop and notebook computers. All ExpressCard slots accommodate devices that support USB 2.0 or PCI Express Standards.

Kbps

Kilobits per second – rate of data flow

LAN

Local Area Network. A data network confined to limited area with moderate to high data rates. Does not use common carrier circuits, although may have gateways or bridges to other public or private networks.

Mbps

Megabits per second

Rev. A

CDMA EV-DO Rev. A is a leading-edge wireless technology with higher data rates and higher system capacity. It is a fully backward compatible standard and remains interoperable with deployed EV-DO networks and devices around the world. The increased data rates on Rev. A's physical layer enable richer applications and services.

For more information, visit www.cdg.org.

SMS

Short Messaging Service. Short text messages of generally no more than 140-160 characters sent and received by wireless devices.

VPN

Virtual Private Network. A way to communicate through a dedicated server securely to a corporate network over the Internet.

WAN / WWAN

Wide Area Network (WAN). A computer network covering a broad geographical area. WANs are used to connect local area networks (LANs) together, so that users and computers in one location can communicate with users and computers in other locations.

WWAN

Wireless Wide Area Network (WWAN). Also called "wireless Broadband" or "Broadband wireless," wireless WANs (WWANs) use cellular towers to transmit a wireless signal over a range of several miles to a mobile device compared to wireless Wi-Fi LANs (WLANs), which span only a few hundred feet and generally to only stationary devices.

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v1.0 JAN2007