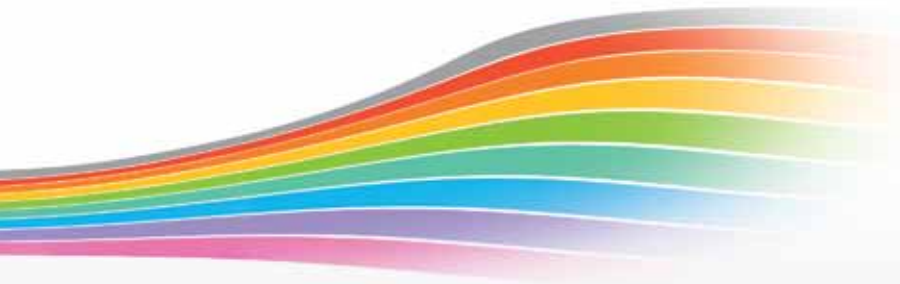




High-Speed **2go**<sup>TM</sup>



## **Quick Start Guide & Device User Manual**

4G/3G Mobile Broadband device







Here's your new Comcast 4G/3G Mobile Broadband device!

This device is for use with your Comcast High-Speed 2go Mobile Broadband service.

It is a dual mode USB modem that gives you the ability to access Comcast Mobile 4G service and Comcast Mobile 3G service. This device supports the coverage of 3G, while also providing the speeds of 4G where available.

If you have not yet signed up for Comcast High-Speed 2go, please call 1.800.COMCAST (1.800.266.2278) or go to [comcast.com/highspeed2go](http://comcast.com/highspeed2go) to establish service before installation.



# Quick Start Guide

4G/3G Mobile Broadband device

## Minimum System Requirements

Operating System: Windows XP SP2 or later, Windows Vista

Processor: 300 MHz (XP), 1 GHz (Vista)

RAM: 256 MB (XP), 1 GB (Vista)

Hard Drive Space: 100MB (XP, Vista)

Hardware: At least one active USB port

Browser: IE 5.5 (XP), IE 7 (Vista)

## Package Contents

Your Mobile Broadband device package contains the following components:

- 4G/3G Mobile Broadband device
- Quick Start Guide & Device User Manual
- Comcast Connection Manager Installation CD
- Y-Extension Cable
- Monitor Clip
- Device Pouch

## Get Up and Running in a Snap.

- 1. Install** the Comcast Connection Manager from the Installation CD, or downloaded from <http://help.comcast.net/highspeed2go>
- 2. Insert** the 4G/3G Mobile Broadband device into a USB port on your laptop.
- 3. Connect** to Comcast's 4G/3G Mobile Broadband service.

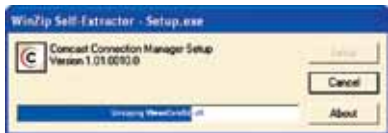
**IMPORTANT:** DO NOT PLUG THE DEVICE INTO YOUR COMPUTER UNTIL YOU HAVE COMPLETED THE COMCAST CONNECTION MANAGER INSTALLATION. INSERTING THE DEVICE PRIOR TO INSTALLING THE CONNECTION MANAGER COULD RESULT IN THE DEVICE DRIVERS BEING CONFIGURED INCORRECTLY.

## Install

- a. Insert the Comcast Connection Manager Installation CD into your laptop. If you don't have a CD drive, you can download the Comcast Connection Manager software at <http://help.comcast.net/highspeed2go>.
- b. If your computer automatically starts running the CD, follow the on-screen instructions for installation and configuration.

If your computer does not automatically install the software from the CD:

- Browse to the CD drive in **My Computer** (or **Computer**), and double click on the CD drive icon. Double click on the Setup.exe icon to begin installation.
- Click on **Run** in the **Open File—Security Warning** box to launch the installation process.



- c. Click on **Next** to continue the installation process.
- d. Read the Service Agreement. If you accept the terms, click on **I accept the terms in the Service Agreement**. Click on **Next** to continue the application installation process. If you do not accept the terms, you will not be able to install the Comcast Connection Manager.



- e. Click on **Next** in the **Destination Folder** box to accept the default destination installation folder, or click on **Change** to browse to a different installation folder. Then click on **Next**.



- f. Click on **Install** in the **Ready to Install the Program** box to run the installation process. The **Installing Comcast Connection Manager** progress indicator displays.

- g. It is recommended that you leave the default settings for the **Launch Comcast Connection Manager** and **Use this as my default Wi-Fi management utility** boxes checked.
- h. Click on **Finish** in the **InstallShield Wizard Completed** box to complete the installation.



**Note:** If you uncheck the box labeled **Launch Comcast Connection Manager**, you will have to manually launch the Comcast Connection Manager, instead of having it launch automatically upon PC startup.

If you uncheck the box labeled **Use this as my default Wi-Fi management utility**, the Comcast Connection Manager will not manage your Wi-Fi connections.

The Comcast Connection Manager launches automatically when the installation is complete.



## Insert

- a. Disconnect any active Internet connection before inserting the Comcast 4G/3G Mobile Broadband device.
- b. Flip the USB plug on the Mobile Broadband device out, and insert it into a USB port on your laptop.
- c. Windows automatically detects the Mobile Broadband device and installs the drivers. When finished, a message similar to “Your device is ready to use” or “Your new hardware is installed and ready to use” may display in your system tray.
- d. When using the Mobile Broadband device for the first time, an activation process must occur. The Comcast Connection Manager will automatically complete the activation process for you; for a normal activation, there is no user intervention needed by you.
- e. The Comcast Connection Manager displays the progress of the USB modem activation.
- f. Allow at least five minutes for the device installation and activation process.
- g. If your Mobile Broadband device is not successfully activated, an error message will be displayed. Please call Comcast at 1-866-206-2182 and we will help you troubleshoot this process. To expedite the troubleshooting process, please have the following information handy prior to placing the call: your Comcast account number, the Mobile Broadband Device ESN found on the back of the device and the error code that is displayed on your screen.

# Connect

- a. The Comcast Connection Manager should automatically connect to the Comcast Mobile Broadband service and complete the setup process. Within 2–3 minutes, the Comcast Connection Manager should display “Connected” status for either Comcast Mobile 4G or Comcast Mobile 3G.

If you are connected to the 4G network, the Comcast Connection Manager will look like this:



If you are connected to the 3G network, the Comcast Connection Manager will look like this:



- b. If the Comcast Connection Manager does not display “Connected” status, try manually connecting to either **Comcast Mobile 4G** or **Comcast Mobile 3G** by highlighting the appropriate network name and clicking on **Connect**.

- c. If you are still unable to establish a network connection, refer to the Comcast Connection Manager Help by clicking on **Help** from the **Comcast Connection Manager Main Menu**, and then clicking on **Help** again from the **Help Menu**.



- d. The Comcast Connection Manager Help Contents panel displays.



In addition to Comcast Connection Manager Help, you can also refer to the Comcast Connection Manager User Manual, which is available in the Comcast Connection Manager program folder on your computer. You can also visit us online at <http://help.comcast.net/highspeed2go> or call Comcast Customer Care at 1.866.206.2182.

## Mobile Broadband Device Operation

Comcast recommends that you install and use the Y-Extension cable when connecting to your Comcast High-Speed 2go service. The Y-Extension cable provides additional connectivity power when you have a weaker connection. To install, follow these simple steps:

- a. Slide the 4G/3G Mobile Broadband Device into the laptop clip, so that its USB connector protrudes through the opening.



- b. Connect the single end of the Y-Extension cable to the device.
- c. Connect the double end of the Y-Extension cable into any two USB ports on your PC.
- d. Slide the monitor clip, with the Mobile Broadband Device installed, onto the top of your laptop screen.

Note: If you use the Y-Extension cable with a single USB port on your computer, the Y-Extension cable will not supply additional power to the 4G/3G Mobile Broadband device; however, using the Y-Extension cable in this configuration will still allow you to utilize the monitor clip for device placement preference.

# Troubleshooting

Please refer to the Comcast Connection Manager User Manual (under Programs>Comcast>Comcast Connection Manager on your laptop) and Comcast Connection Manager Help (Help>Help from the Comcast Connection Manager Main Window) for a full listing of errors and possible solutions. You can also chat with a Comcast representative at <http://help.comcast.net/highspeed2go>, or call Comcast at 1.866.206.2182.

The following steps can eliminate basic installation issues:

1. Double click on the Comcast Connection Manager icon in the system tray. If this does not launch the Comcast Connection Manager, remove your 4G Mobile Broadband device from your laptop.
2. Uninstall the application using Windows' Uninstall process, and then reinstall the Comcast Connection Manager from the Installation CD.
3. After you have reinstalled the Comcast Connection Manager, reinsert the 4G Mobile Broadband device.
4. Verify that your 4G Mobile Broadband device is fully plugged into the USB port on your laptop, and that the LED light on your device is on. If not, disconnect and then reconnect the device.
5. If the LED light on your device is not on, or if the Comcast Mobile 4G line in the Comcast Connection Manager Main Window is grayed out, call Comcast at 1.866.206.2182, or visit <http://help.comcast.net/highspeed2go>.

High-Speed **2go**<sup>TM</sup>

# 4G/3G Mobile Broadband Device User Manual



Device User Manual

 **comcast.**



# 4G/3G Mobile Broadband Device Overview

The 4G/3G Mobile Broadband device extends your mobility and connectivity by responding to both the Comcast Mobile 4G and Comcast Mobile 3G service. As long as you're within either the Comcast Mobile 4G or the Comcast Mobile 3G coverage area, your 4G/3G Mobile Broadband device will get you connected.

## General Precautions

Because of the nature of wireless communications, transmission and reception of data can never be guaranteed. Data may be delayed, corrupted (i.e., have errors), or totally lost. Although significant delays or losses of data are rare when wireless devices such as the 4G/3G Mobile Broadband device are used in a normal manner with a well-constructed network, they should not be used in situations where failure to transmit or receive data could result in damage of any kind to the user or any other party, including but not limited to personal injury, death, or loss of property. Franklin Wireless Corp. and Comcast accept no responsibility for damages of any kind resulting from delays or errors in data transmitted or received using the 4G/3G Mobile Broadband device, or for any failure of the 4G/3G Mobile Broadband device to transmit or receive such data.

## General Precautions (continued)

- Do not operate the 4G/3G Mobile Broadband device in areas where blasting is in progress or where explosive atmospheres may be present.
- Do not operate the 4G/3G Mobile Broadband device near medical equipment, life support equipment, or any equipment which may be susceptible to any form of radio interference, including hearing aids and pacemakers. In such areas, the 4G/3G Mobile Broadband device must be removed from your computer. It can transmit signals that could interfere with this equipment.
- Do not operate the 4G/3G Mobile Broadband device in any aircraft, whether the aircraft is on the ground or in flight. In aircraft, the 4G/3G Mobile Broadband device must be removed from your computer. It can transmit signals when operating that could interfere with various onboard systems.
- The driver or operator of any vehicle should not operate the 4G/3G Mobile Broadband 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 jurisdictions, operating such communication devices while in control of a vehicle is an offense.
- The 4G/3G Mobile Broadband device must be used in a ventilated environment.
- Do not use the device where two-way radios are prohibited.
- Do not touch the antenna area unnecessarily while connected. This can reduce the signal quality and affect your device's performance.
- Do not use the device at a gas station.
- The device contains sensitive electronic circuitry. Do not expose the device to any liquids, high temperatures or shock.
- Store the device out of the reach of small children. Do not allow children to play with the device. The device may cause injury if used as a toy.
- Only use original accessories or accessories that are authorized by



Franklin Wireless Corp. or Comcast. Using unauthorized accessories may affect your device's performance, damage your device and violate governmental regulations.

- There are no user-serviceable parts inside the device. Unauthorized dismantling or repairing of the device will void the warranty.
- This device generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.
- Do not use the device immediately after a sudden temperature change, e.g., from an air-conditioned environment to high temperature and humidity outside. In such cases moisture could develop inside the device causing internal damage. Unplug the device and wait for 30 minutes before use.
- Close any associated software applications before removing the device.

## Manufacturer's Limited One-Year Warranty

Franklin Wireless Corp. (the "Company") warrants to the original retail purchaser of the 4G/3G Mobile Broadband device (the "Product"), that should the Product, during normal consumer usage conditions, be defective in material or workmanship that results in Product failure within the first twelve (12) month period from the date of purchase, such defects will be repaired or replaced with new or refurbished parts or Products at the Company's sole discretion, without charge for parts and labor directly related to the defect(s). This warranty extends to consumers who purchase the product in the United States or Canada and is not transferable or assignable. This warranty does not apply to:

- (a) Products subject to abnormal use or conditions, accidents, mishandling, neglect, unauthorized alterations, misuse, improper installation or repair or improper storage;
- (b) Products whose mechanical serial number or electronic serial number has been removed, altered or defaced;
- (c) Damage from exposure to moisture, humidity, excessive temperature or extreme environmental conditions;
- (d) Damage resulting from connection to, or use of, any accessory or other product not approved or authorized by the company;

- (e) Defects in appearance, cosmetic, decorative or structural items such as framing and non-operative parts;
- (f) Products damaged from external causes such as fire, flooding, dirt, sand, weather conditions, battery leakage, blown fuse, theft or improper usage of any electrical source.

The Company disclaims liability for removal or reinstallation of the product, for geographic coverage, for inadequate signal reception by the antenna or for communications range or operation of the cellular system as a whole. When sending your wireless device to Franklin Wireless's authorized distributors for repair or service, please note that any personal data or software stored on the device may be inadvertently erased or altered. Therefore, we strongly recommend you make a backup copy of all data and software contained on your device before submitting it for repair or service. This includes all contact lists, downloads (i.e., third-party software applications, games and graphics) and any other data added to your device. The Company is not responsible for and does not guarantee restoration of any third-party software, personal information or memory data contained in, stored on or integrated with any wireless device, whether under warranty or not, returned to Comcast for repair or service. To obtain repairs or replacement within the terms of this Warranty, the product should be delivered with proof of Warranty coverage (e.g., dated receipt), the consumer's return address and a daytime phone number.

#### *Manufacturer's Warranty*

Please call Comcast at 1.866.206.2182 in the United States for instructions on warranties, returns, etc. The extent of the Company's liability under this warranty is limited to the repair or replacement provided above and, in no event, shall the Company's liability exceed the purchase price paid by purchaser for the Product. Any implied warranties, including any implied warranty of merchant ability or fitness for a particular purpose, shall be limited to the duration of this written warranty. In no case shall the Company be liable for any special, consequential or incidental damages for breach of this or any other warranty, express or implied, whatsoever. The Company shall not be liable for the delay in pending service under this warranty or loss of use during the time the Product is being repaired or replaced. No person or representative is authorized

to assume for the Company any liability other than expressed herein in connection with the sale of this product. Some states or provinces do not allow limitations on how long an implied warranty lasts on the exclusion or limitation of incidental or consequential damage so the above limitation or exclusions may not apply to you. This Warranty gives you specific legal rights, and you may also have other rights, which vary from state to state or province to province.

## Regulatory Approvals

The equipment must be installed and operated in accordance with provided instructions and must not be co-located or operated in conjunction with any other antenna or transmitter. End users must be provided with antenna and transmitter operating instructions to satisfy FCC RF exposure compliance requirements.

### **Specific Absorption Rate (SAR) Value:**

- CDMA835 Body: Max 1.030 W/kg
- PCS1900 Body: Max 1.160 W/kg
- Wimax Body: Max 0.424 W/kg

This device is compliant with Parts 15, 22 and 24 of the FCC Rules (FCC ID: TARCMU-300).

Operation is subject to the following two conditions: (1) This device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation. FCC Guidelines stipulate that the antenna should be 1.5 cm (0.6" or more) from user during operation. This equipment has been tested and found to comply with the 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 in a residential installation. This equipment

generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is 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 receiver. Connect the equipment to 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.

#### CAUTION

Unauthorized modifications or changes to the device not expressly approved by Comcast could void compliance with regulatory rules and thereby your authority to use this equipment.

## Specifications

### Radio Frequency and Electrical Specifications

Interface type:	High-speed USB 2.0 compliant
Common air interface:	Dual-device (CDMA+WiMAX)
Antenna diversity:	3.8V / 50mA
DC input operating voltage:	+5VDC from USB host port
Maximum current @ +5VDC:	Under 700mA

### Environmental Specifications

Operating temperature:	0°F to +130°F (-20°C to +55°C)
Storage temperature:	-40°F to +155°F (-40°C to +70°C)
Humidity:	95%, non-condensing

### Software Specifications

OS Support:	Windows XP (SP2/3) and Vista
-------------	------------------------------

### Mechanical Specifications

Dimensions:	(W x H x D) 1.3 x 3.7 x 0.5 in (33 x 93 x 12.5 mm)
Weight:	Approx. 1.5 oz (43.8 g)
Form Factor:	USB Series "A" type plug
Antenna Type:	Internal type for primary & RX diversity

**LED Operation**

CDMA LED Functions:	LED Color CDMA Dual LED	
CDMA Mode	Red	Green
3G standby and ready to connect:	Off	Slow Flashing Power on, boot or reset
Connecting to 3G service:	Off	Flashing
3G service not available:	On	Off
3G service connected:	Off	Fast Flashing
3G service connected and no activity:	Off	On
Not in 4G/3G service area:	Off	Off

**WiMAX LED Functions**

WiMAX LED Functions:	LED Color WiMAX Dual LED	
WiMAX Mode	Red	Blue
4G standby and ready to connect:	Off	On
4G out of service or is still acquiring service:	On	Off
4G error condition or downloading firmware:	Flashing	Off
4G service connected:	Off	Flashing at the rate of data transfer
4G service connected and no activity:	Off	Flashing

## Trademarks

Comcast and the Comcast logo are trademarks of Comcast. Franklin Wireless and the Franklin Wireless logo are trademarks of Franklin Wireless. Other marks are the property of their respective owners.

## Copyrights

©2009 Comcast. Comcast and the Comcast logo are trademarks of Comcast.  
Other marks are the property of their respective owners.

## Patents

U.S. Patent pending by C-motech Co. Ltd. of South Korea for the Y-Extension Cable.



