

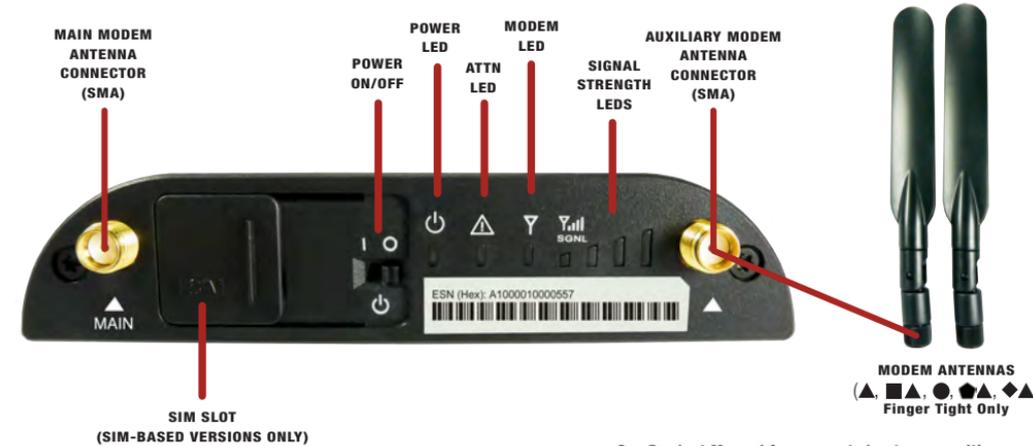
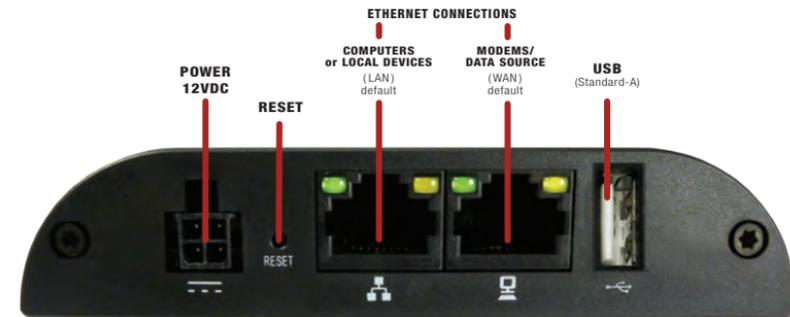
QUICK START GUIDE

SETTING UP THE ROUTER

- 1) Purchase a data plan. Then insert the SIM if model requires.
- 2) Plug the power supply into an electrical outlet.
- 3) Connect modem (▲, ■▲, ●, ◆▲, ◆▲) antennas (finger tight only).
- 4) Connect the power supply to the IBR650.
Ensure power is switched on. O = OFF I = ON



PORTS & SWITCHES

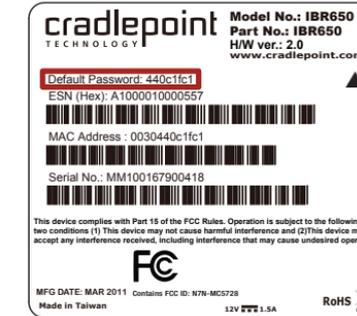


See Product Manual for suggested antenna positions.

ACCESSING THE ADMINISTRATION PAGES

To make configuration changes to your router, open the IBR650's GUI-based administration pages.

- 1) Connect via Ethernet.
- 2) Open a browser window and type "cp/" or "192.168.0.1" in the address bar. Press **ENTER/RETURN**.
- 3) When prompted for your password, type the **eight character DEFAULT PASSWORD** found on the product label.



Find this label on the bottom of your router.

THE FIRST TIME SETUP WIZARD

When you log in for the first time, you are automatically directed to the **FIRST TIME SETUP WIZARD**, which will help you customize your COR IBR650. Change any of the following:

- Administrator password
- Time zone
- Access Point Name (APN) for SIM-based modems
- WAN failure check mode

NOTE: To return to the First Time Setup Wizard after your initial login, select **GETTING STARTED** on the top navigation bar and **FIRST TIME SETUP** in the dropdown menu.

RESET: To restore the COR IBR650 to its factory default settings, press and hold the **RESET** button on the side of the device for ten seconds. Reset returns the login password to the **DEFAULT PASSWORD** and resets all configuration changes.

ACTIVATE YOUR MODEM

A wireless broadband data plan must be added to your IBR650. Wireless broadband data plans are available from wireless carriers such as Sprint, Verizon, AT&T, EE, Vodafone, and Clearwire. Mobile broadband, M2M and router pricing plans are available. To add or transfer a line of service you will need to provide a unique identifier such as ESN for 3G EVDO modems, MAC address for WiMAX modems, or IMEI/MEID for LTE or HSPA+ modems. LTE and HSPA+ plans require a SIM. SIM provisioning for LTE and HSPA+ models is done the same way as for USB modems. Once provisioned insert the SIM into the router until it clicks into place, close the SIM door, and turn on the power switch. After adding a data plan to the Verizon 3G EVDO model the modem may need to be activated. Log into the IBR650 administration pages (see page 3) and select **Internet** from the top navigation bar and then **Connection Manager** from the dropdown menu. Find and select the CradlePoint "EVDO Modem" and click **Control** and then click **Activate**. When modem activation is complete, confirm the modem LED is solid green on the router.

For more information on activation see www.cradlepoint.com/activation.

The NM (no module) units do not have an integrated modem. An attached USB modem may require activation.

SPECIAL FEATURES

- IPSec VPN End-Point Support
- GRE Tunneling
- Data Usage Management & Alerts
- GPIO Interface
- GPS (if supported by modem carrier)
- Failover/Failback
- IP Passthrough
- VLAN Support
- USB to Serial Console Passthrough Support
- LAN/WAN Affinity
- BGP/OSPF/RIP
- RRRP

IP PASSTHROUGH

To quickly and easily configure IP Passthrough, select **GETTING STARTED** in the top navigation menu and **IP PASSTHROUGH SETUP** in the dropdown menu. The IP Passthrough Setup Wizard will guide you through the setup process.

For more IP Passthrough options, select **NETWORK SETTINGS** in the top navigation menu and **LOCAL NETWORKS** in the dropdown menu. Select the LAN you would like to edit and set the Routing Mode to "IP Passthrough".

UPDATING FIRMWARE

CradlePoint regularly creates new firmware packages. You may need to update firmware to use the IBR650 with new modems and to access our latest features. Visit knowledgebase.cradlepoint.com for more information.

HOW TO UPDATE FIRMWARE

- 1) Log into the administration pages (see page 3). You may have changed the **ADMINISTRATOR PASSWORD** when you used the **FIRST TIME SETUP WIZARD**.
- 2) Select **SYSTEM SETTINGS** on the top navigation bar, then **SYSTEM SOFTWARE** in the dropdown menu.
- 3) Find the **FIRMWARE UPGRADE** section. This displays the current firmware version that is installed and indicates if updated firmware is available.
- 4) Click **AUTOMATIC (Internet)** if new firmware is available. The IBR650 will download and install the firmware and automatically reboot itself. A status monitor will appear and indicate when this process is complete. This process may take several minutes depending on your Internet connection speed.

If your device does not have an active Internet connection, you need to download the latest firmware from www.cradlepoint.com/firmware to your desktop. Then use the **MANUAL FIRMWARE UPLOAD** option.

CRADLEPOINT ENTERPRISE CLOUD MANAGER

NEXT GENERATION NETWORK MANAGEMENT AND APPLICATION PLATFORM

Rapidly deploy and dynamically manage networks at geographically distributed stores and branch locations with Enterprise Cloud Manager, CradlePoint's next generation application platform that will improve productivity, increase reliability, reduce costs, and enhance the intelligence of your network and business operations.

Subscription required. See cradlepoint.com/ecm for details.

This important Product Information and Safety Guide contains safety, handling, disposal, regulatory, trademark, copyright, and software licensing information. Read all safety information below and operating instructions before using the IBR650 device to avoid injury.

FEDERAL COMMUNICATION COMMISSION INTERFERENCE STATEMENT 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 of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and 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/TV technician for help.

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

This device complies with Part 15 of the FCC Rules. 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.

IMPORTANT NOTE

FCC Radiation Exposure Statement: This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

To comply with FCC regulations limiting both maximum RF output power and human exposure to RF radiation, for the IBR650E the maximum antenna gain including cable loss must not exceed 4.55 dBi in the cellular band and 2.85 dBi in the PCS band. For the IBR650LE the maximum antenna gain including cable loss must not exceed 7.5 dBi in the cellular band, 3.01 dBi in the PCS band and 10.17 dBi in the LTE band. For the IBR650LP the maximum antenna gain including cable loss must not exceed 7.5 dBi in the cellular band, 3 dBi in the PCS band, 5.5 dBi in LTE Band 4, and 9 dBi in LTE Band 17. For the IBR650W the maximum antenna gain including cable loss must not exceed 9.2 dBi in the 2.5 GHz band (2496-2690 MHz). For the IBR650P the maximum antenna gain including cable loss must not exceed 5 dBi in the cellular band and 3.3 dBi in the PCS band.

SAFETY AND HAZARDS Under no circumstances should the IBR650 device be used in any areas (a) where blasting is in progress, (b) where explosive atmospheres may be present, or (c) that are near (i) medical or life support equipment, or (ii) any equipment which may be susceptible to any form of radio interference. In such areas, the IBR650 device MUST BE POWERED OFF AT ALL TIMES (since the device otherwise could transmit signals that might interfere with such equipment). In addition, under no circumstances should the IBR650 device be used in any aircraft, regardless of whether the aircraft is on the ground or in flight. In any aircraft, the IBR650 device MUST BE POWERED OFF AT ALL TIMES (since the device otherwise could transmit signals that might interfere with various onboard systems on such aircraft). Furthermore, under no circumstances should the IBR650 device be used by the driver or operator of any vehicle. Such use of the device will detract from the driver's or operator's control of that vehicle. In some jurisdictions, use of the IBR650 device while driving or operating a vehicle constitutes a civil and/or criminal offense.

Due to the nature of wireless communications, transmission and reception of data by the IBR650 device can never be guaranteed, and it is possible that data communicated or transmitted wirelessly may be delayed, corrupted (i.e., contain errors), or totally lost. The IBR650 device is not intended for, and CradlePoint recommends the device not be used in any critical applications where failure to transmit or receive data could result in property damage or loss or personal injury of any kind (including death) to the user or to any other party. CradlePoint expressly disclaims liability for damages of any kind resulting from: (a) delays, errors, or losses of any data transmitted or received using the device; or (b) any failure of the device to transmit or receive such data.

Warning: This product is only to be installed by qualified personnel!

Industry Canada Statement

This device complies with RSS-210, RSS-102, and RSS-Gen of the Industry Canada Rules. 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.

IMPORTANT NOTE: Radiation Exposure Statement

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

This device has been designed to operate with an antenna having a maximum gain of 5 dBi. Antenna having a higher gain is strictly prohibited per regulations of Industry Canada. The required antenna impedance is 50 ohms.

Déclaration d'Industrie Canada

Ce dispositif est conforme à la norme CNR-210, CNR-102, et CNR-Gen d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

NOTE IMPORTANTE (Pour l'utilisation de dispositifs mobiles): Déclaration d'exposition aux radiations

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

Ce dispositif a été conçu pour fonctionner avec une antenne ayant un gain maximal de 5 dBi. Une antenne à gain plus élevé est strictement interdite par les règlements d'Industrie Canada. L'impédance d'antenne requise est de 50 ohms.

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WARRANTY INFORMATION CradlePoint, Inc. warrants this product against defects in materials and workmanship to the original purchaser (or the first purchaser in the case of resale by an authorized distributor) for a period of one (1) year from the date of shipment. This warranty is limited to a repair or replacement of the product, at CradlePoint's discretion as purchaser's sole and exclusive remedy. CradlePoint does not warrant that the operation of the device will meet your requirements or be error free. Within thirty (30) days of receipt should the product fail for any reason other than damage due to customer negligence, purchaser may return the product to the point of purchase for a full refund of the purchase price. If the purchaser wishes to upgrade or convert to another CradlePoint, Inc. product within the thirty (30) day period, purchaser may return the product and apply the full purchase price toward the purchase of another CradlePoint product. Any other return will be subject to CradlePoint, Inc.'s existing return policy.

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PRIVACY CradlePoint collects general data pertaining to the use of CradlePoint products via the Internet including, by way of example, IP address, device ID, operating system, browser type and version number, etc. To review CradlePoint's privacy policy, please visit: <http://www.cradlepoint.com/privacy>.

OTHER BINDING DOCUMENTS; TRADEMARKS; COPYRIGHT By activating or using your IBR650 device, you agree to be bound by CradlePoint's Terms of Use, User License and other Legal Policies, all as posted at www.cradlepoint.com/legal. Please read these documents carefully.

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