

How to Set Up Your CBA850 3G/4G/LTE Wireless WAN Bridge

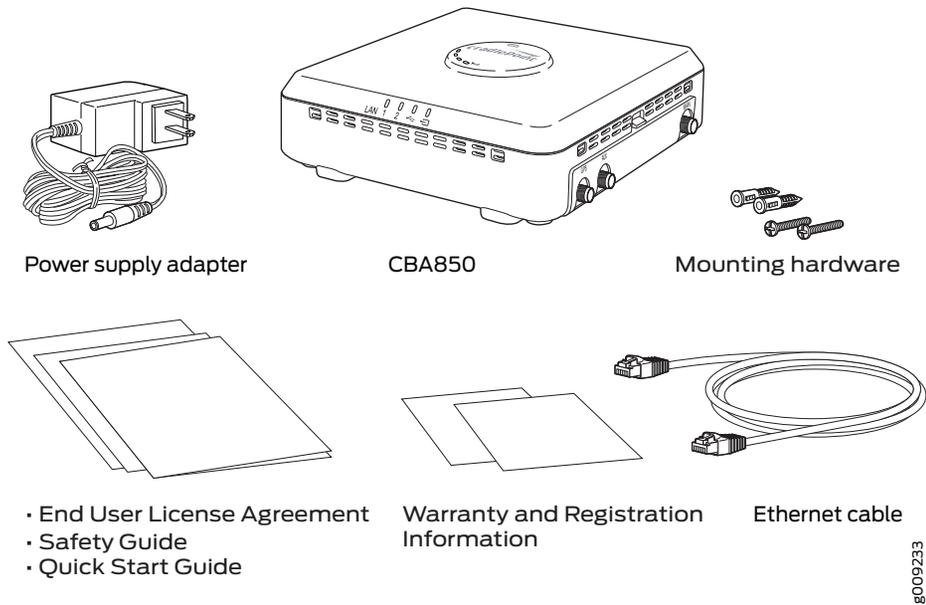
The CBA850 is a 3G/4G/LTE Wireless WAN Bridge, which integrates seamlessly with existing network infrastructure. The CBA850 can be deployed as a primary WAN or as a backup WAN to the primary wired network for the branch SRX Series Services Gateways.

The CBA850 is Power over Ethernet (PoE) enabled and provides a high-speed, automatic secondary path to access and control the network at remote locations when connectivity is lost or when the primary connection fails.

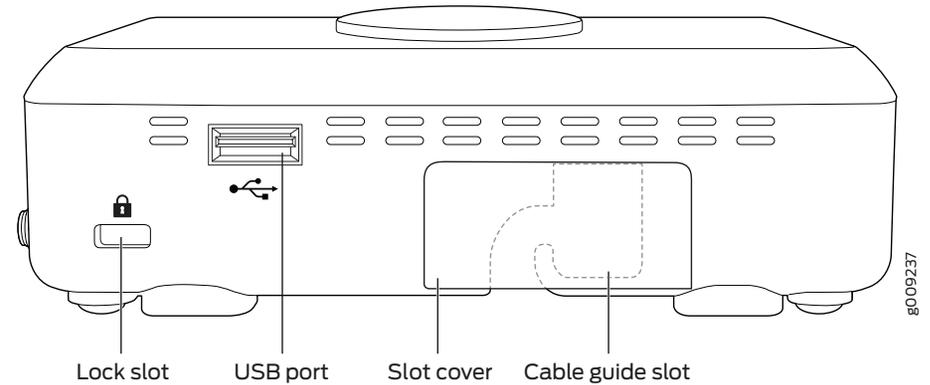
The following models of CBA850 are available:

- CBA850 (without an integrated modem)
- CBA850LPE-VZ (with an integrated Verizon modem)
- CBA850LP3-EU (with an integrated EU modem)

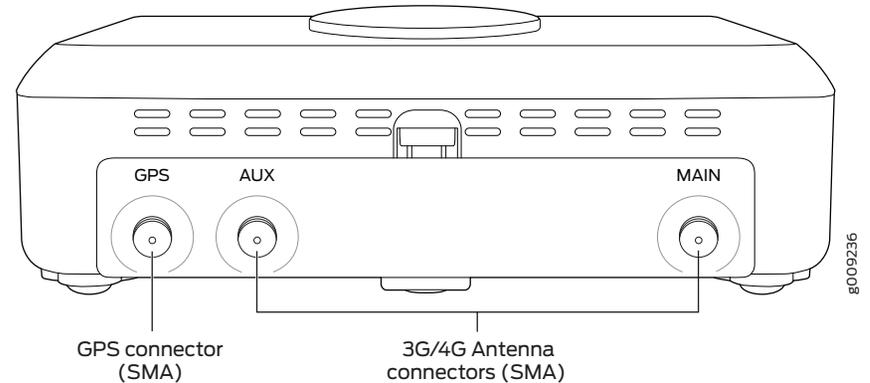
Package Contents



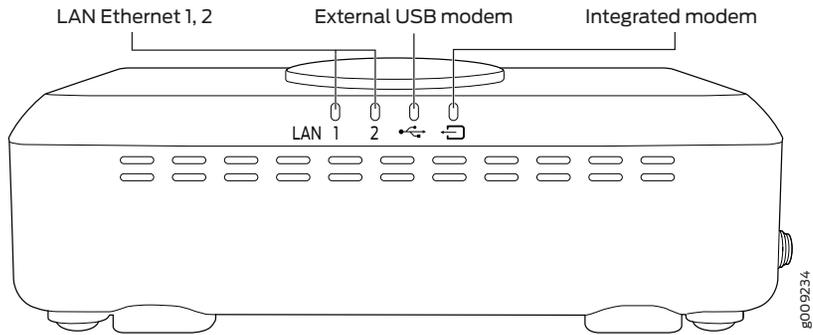
Rear Panel



Right Side Panel

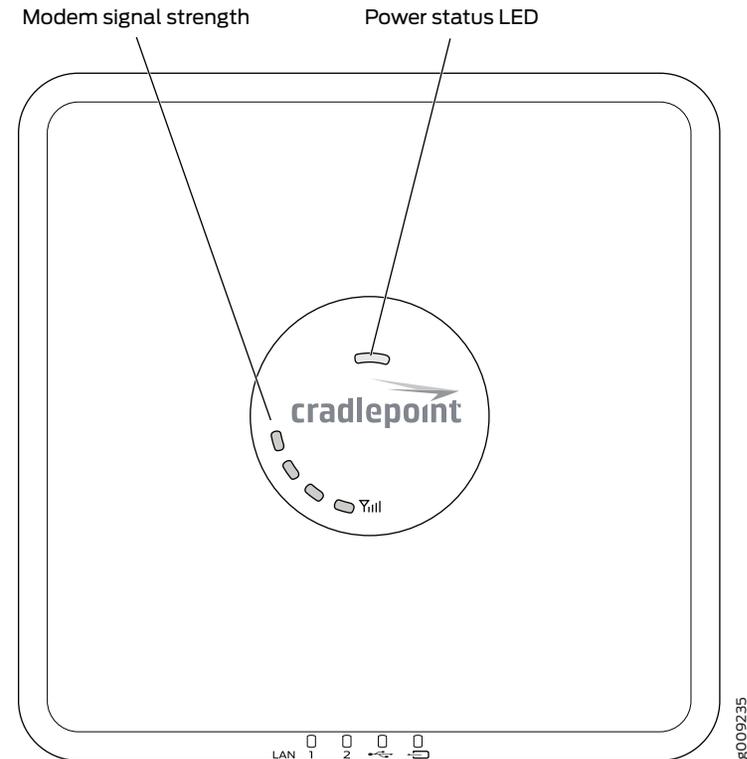


Front Panel



LED	State
LAN Ethernet 1,2	<ul style="list-style-type: none"> On: Connected
Integrated modem	<ul style="list-style-type: none"> Green: Connected Blinking green: Connecting Amber: Not active, might be engaged in failover process Blinking amber: Connection error Blinking red: Modem resetting
External/USB Modem	<ul style="list-style-type: none"> Green: Connected Blinking green: Connecting Amber: Not active, might be engaged in failover process Blinking amber: Connection error Blinking red: Modem resetting

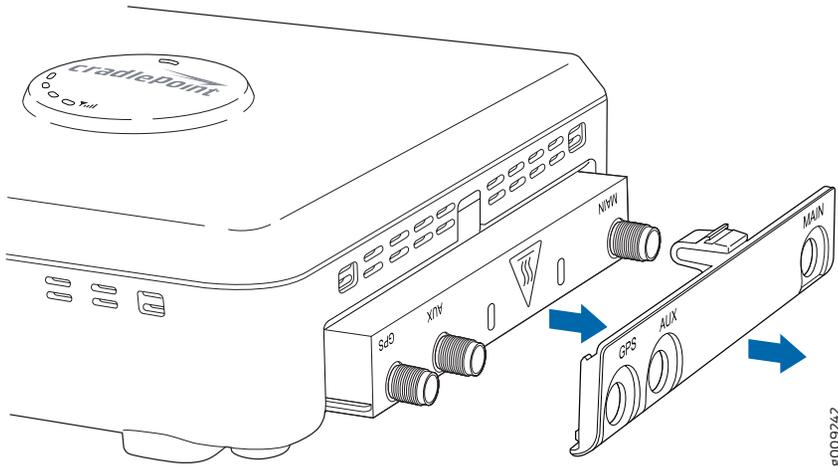
Top Panel



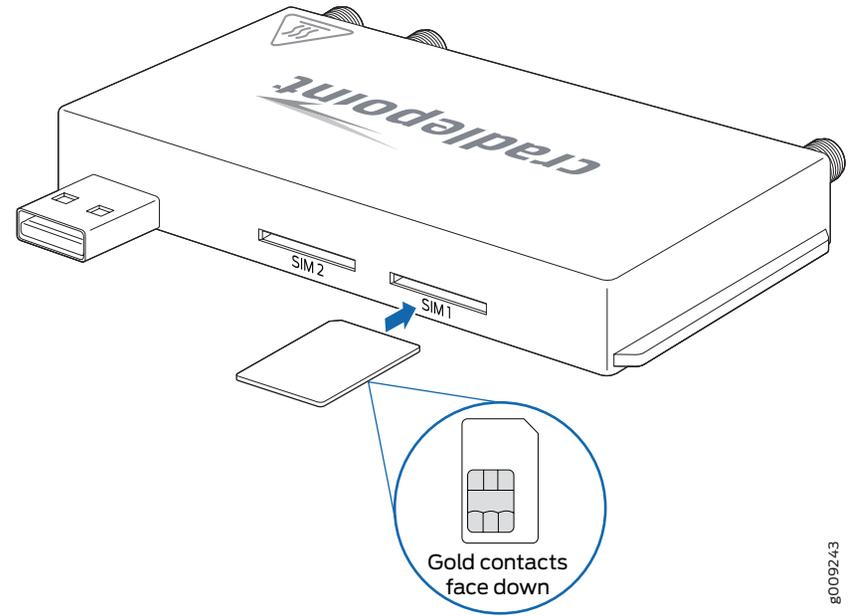
LED	State
Modem signal strength	<ul style="list-style-type: none"> Blinking indicates ½ bar
Power/Status	<ul style="list-style-type: none"> Blue: Primary connection is 4G Green: Primary connection is 3G Amber: Issue detected

Set Up Your CBA850 3G/4G/LTE Wireless WAN Bridge

1. Remove the screw securing the modem cover and pull out the integrated modem.

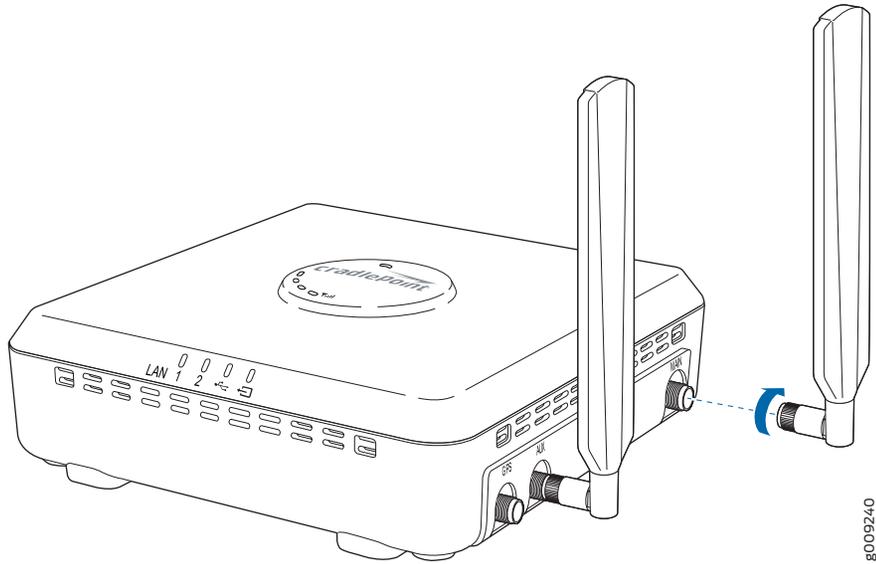


2. Insert the SIM card into the slot marked SIM 1 (use the other slot, SIM 2, for a secondary or backup SIM).



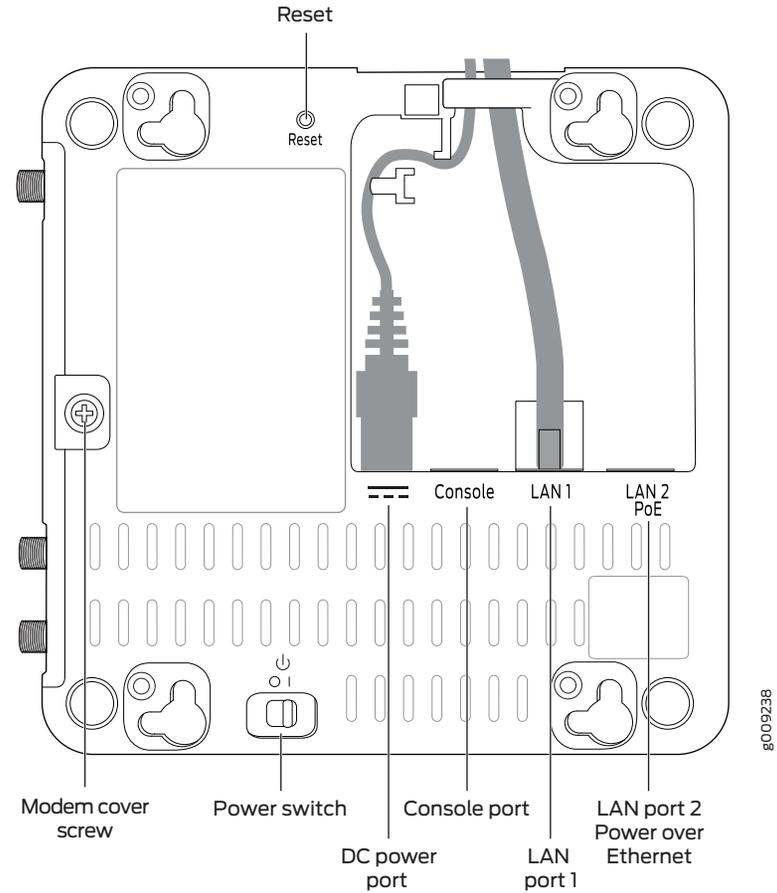
i **NOTE:** Alternately, you can also connect a Juniper Networks business-grade or USB wireless broadband data modem with an active subscription.

- Slide the integrated modem back into its slot and secure the modem cover using the screw.
- Attach the antennas to the MAIN and AUX terminals (finger-tight only).



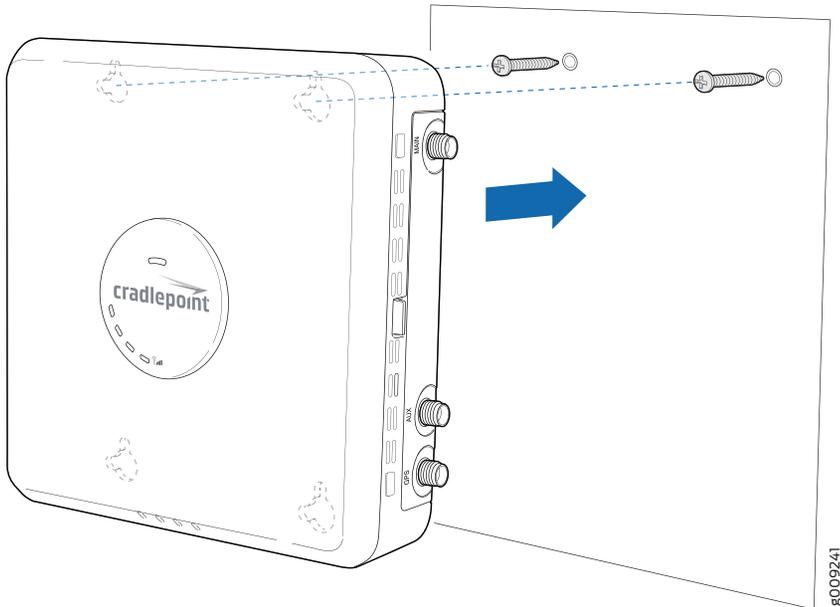
- Connect the power supply adapter to the DC power port on the device and to a power source.

i **NOTE:** Alternately, you can also connect a POE-enabled RJ-45 cable to the LAN 2 port.



6. Power on the device.
7. Connect an Ethernet cable to the LAN 1 port for local management. Connect LAN 2 (Default IP Passthrough 0/24) to the services gateway to pass through 3G/4G Internet traffic to the Ethernet.

i **NOTE:** We recommend that you mount the device on a wall in a vertical position. Horizontal mounting or ceiling mounting at locations where ambient temperatures exceed 40°C (104°F) is not recommended.



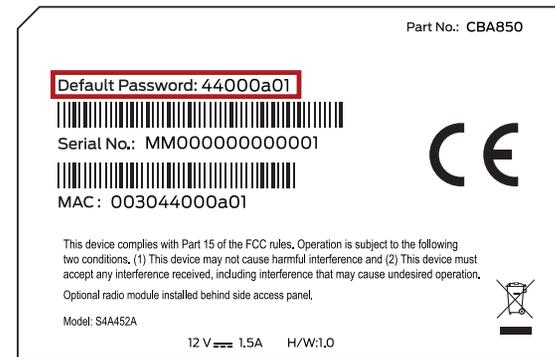
Access the Administration Pages

The CBA850 can be used immediately without any configuration changes. If you want to configure any of the advanced features, log in to the administration pages.

To access the administration pages:

1. Open a browser window and type cp/ or 192.168.0.1 in the address bar. Press Enter.
2. When prompted for your password, type the eight-character default password found on the product label.

Your unique default password is shown on the product label on the bottom of your CBA850.



Configure the CBA850 Using the First Time Setup Wizard

When you log in for the first time, you are automatically directed to the First Time Setup wizard, which helps you customize your CBA850.

To configure the CBA850:

1. To change any of the following options, follow the prompts in the wizard:

- Administrator Password
- Time Zone
- Access point name (APN)
- Modem authentication
- Failure Check
- WiFi network name
- Security mode

After making the changes, review the details and record your administrator password.

2. Click Apply to save your settings.

i **NOTE:** To return to the First Time Setup wizard after your initial login, select **System** → **Setup Wizards** → **First Time Setup** on the top navigation bar.

Setting Your Administrator Password and Time Zone

To secure your router, please set and verify the administrator password below. Your default password is printed on the product sticker found on the back of your product. The administrator password allows you to modify all router settings.

Administrator Password:

If you plan to use your router in a PCI DSS compliant environment, do not use this setting. Use the [Administration -> Router Security](#) setting instead.

Selecting your Time Zone allows the router to keep the proper date and time for your location.

Time Zone:

1 of 4

Reset the Configuration

To restore the CBA850 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.

Update the Firmware

Juniper Networks regularly creates new firmware packages. You might need to update the firmware to use the CBA850 with new modems and to access the latest features.

To update the firmware:

1. Log in to the administration pages. You might have changed the Administrator Password when you used the First Time Setup wizard.
2. Select **System** → **System Control** → **System Firmware**.
3. Find the Firmware Upgrade section. This displays the current firmware version that is installed and indicates if an updated firmware is available.
4. Download the latest firmware to your desktop from the Juniper Customer Support website: <http://www.juniper.net/support/downloads/>. Log in using your Juniper Networks support credentials. Select **By Series** → **CBA Series** → **CBA850** and download the file under the **Software** tab.

i **NOTE:** To take a backup of the configuration settings before upgrading the firmware, click **Download Settings** under System Config Save/Restore.

5. Click **Manual Firmware Upload**. In the Firmware Upgrade screen. The Manual Firmware Upload dialog box is displayed.
6. Select the firmware file that you downloaded in step 4 and click **Begin Firmware Upgrade**. The upgrade process will take several minutes to complete.

Regulatory and Safety Information

Read all operating instructions and the safety information below and before using the CBA850 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.

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 a minimum distance of 20 cm between the radiator and your body.

To comply with FCC regulations limiting both maximum RF output power and human exposure to RF radiation, for the CBA850-LE the maximum antenna gain must not exceed 8 dBi in the cellular band, 3 dBi in the PCS band and 10 dBi in the LTE band. For the CBA850-LP 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 CBA850-W the maximum antenna gain must not exceed 9.2 dBi in the 2.5 GHz band (2496-2690 MHz).

SAFETY AND HAZARDS: Under no circumstances should the CBA850 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 CBA850 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 CBA850 device be used in any aircraft, regardless of whether the aircraft is on the ground or in flight. In any aircraft, the CBA750B 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 CBA850 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 CBA850 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 CBA850 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 CBA850 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.

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.

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