

19 MINI CB Radio Transceiver



For more information or to order any of our products, please visit our website: www.cobra.com

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Owner's Manual



Our Thanks, The CB Story, and Customer Assistance

Thank you for purchasing the Cobra 19 MINI CB Radio Transceiver. Properly used, this Cobra product will give you many years of reliable service.

The Citizens Band Story

The Citizens Band lies between the shortwave broadcast and 10-meter amateur radio bands, and was established by law in 1949. The Class D two-way communications service was opened in 1959. (CB also includes a Class A citizens band and Class C remote control frequencies.)



Customer Assistance

Should you encounter any problems with this product, not understand its features, menu or installation, please refer to the this owner's manual. If you require further assistance, after reading this manual, we are here to help:

Have questions? Contact Cobra Electronics at
<https://www.cobra.com/pages/contact-us> or 800-543-1608

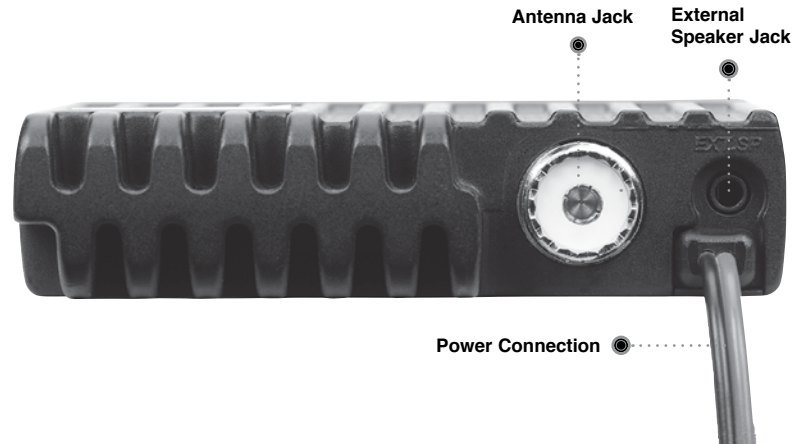
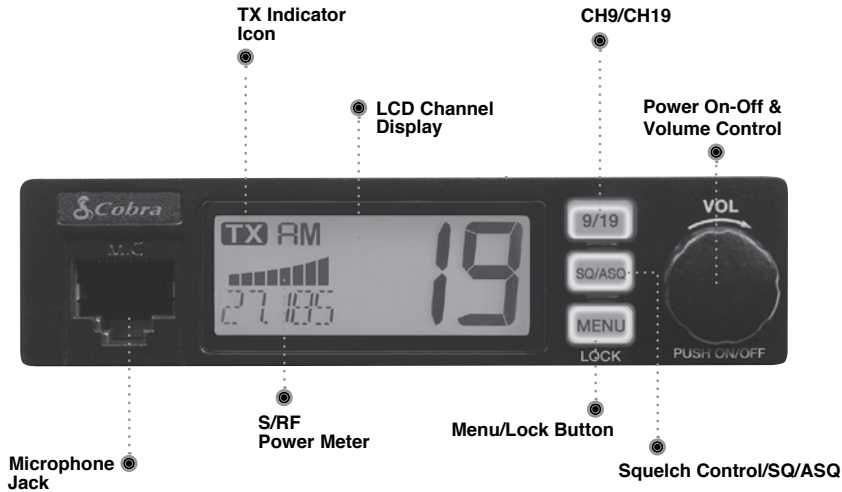
M-F 9:00AM - 5PM EST

For Assistance Outside the U.S.A.
Contact Your Local Dealer



Product Features

Introduction



Product Features and FCC Regulations

Introduction

Channel Up/Down Buttons

Push-To-Talk (PTT)

Microphone Connector Detail



FCC Regulations



FCC Compliance

Any changes or modifications not expressly approved by Cobra Electronics could void your authority to operate the 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.



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Included in this Package

You should find all of the following items in this package:

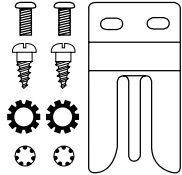
CB Transceiver



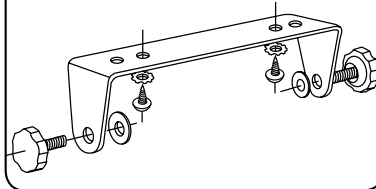
Microphone



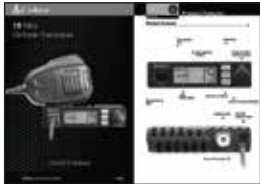
Microphone Bracket



Transceiver Bracket



Operating Manual

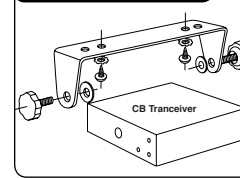


Installation and Start-Up

Mounting and Connections

Select a location for the transceiver and microphone bracket that is convenient for operation. In automobiles, the transceiver is usually mounted to the underneath of the dash panel, with the microphone bracket beside it.

Transceiver Bracket

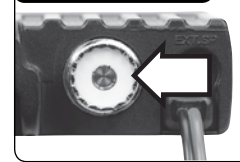


A universal mounting bracket is supplied along with self-tapping screws and star washers. The transceiver is held in the universal mounting bracket by two thumb screws, permitting adjustment at the most convenient angle.

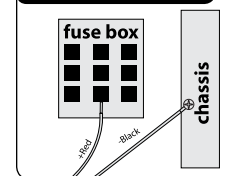
To mount and connect your transceiver:

1. Hold the radio with mounting bracket in the exact location desired. Remove the mounting bracket and use it as a template to mark the location for the mounting screws.
2. Drill necessary holes and secure mounting bracket in location.
3. Connect the antenna cable plug to the receptacle marked "ANT" on the back of the unit.
4. Connect the red lead of the DC power cord to an accessory 12 volt fuse.
5. Connect the black lead to the negative side of the automobile. This is usually the chassis. Any convenient location with good electrical contact (remove paint) may be used.
6. Mount the microphone bracket in a convenient location that does not interfere with vehicle operation using the two screws supplied.
7. Connect the microphone RJ-45 plug to the 19 MINI RJ-45 front panel jack. Then install the radio into its mounting bracket securely.

Antenna Connector



Fuse Connection



Microphone Connector

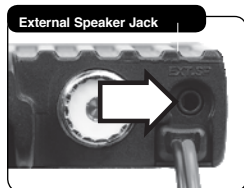


NOTE

For improved CB radio performance, **connect the radio power leads directly to the vehicle battery**. This helps to ensure the following: 1) reduces conducted power line noise into radio by taking advantage of the mechanical filtering properties of the vehicle battery. 2) Using the correct wire gauge between the battery and radio, helps to minimize Voltage drop to the radio transmitter section to maximize transmitter RF output power.



Mounting and Connections *continued*



External Speaker Jack

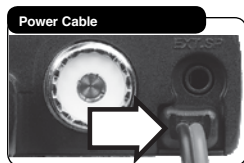
External Speaker

The speaker jack on the rear panel is used for an **External Speaker**. The external speaker should have 8-Ohm impedance and be rated to handle at least 4.0 watts. When the external speaker is plugged in, the internal speaker is automatically disconnected.



NOTE

Cobra external speakers are rated 15 watts.



Power Cable

Power

These wires supply Power to the CB radio. This cable is permanently attached to the radio. If you wish to remove the radio after installation, disconnect at fuse holder and ground connector.

CB Antenna

Only a properly matched **Antenna system** will allow maximum power output. In mobile installations (cars, trucks, boats, etc.), an antenna system that is nondirectional should be used. When installed in a boat, the transceiver will not operate at maximum efficiency without a ground plate unless the vessel has a steel hull. Before installing the transceiver in a boat, consult your dealer for information regarding an adequate grounding system.



NOTE

Cobra offers a line of antennas for use with your 19 Series CB Radio. Go to cobra.com/collections/cb-radio-accessories for antenna and antenna mounting options.



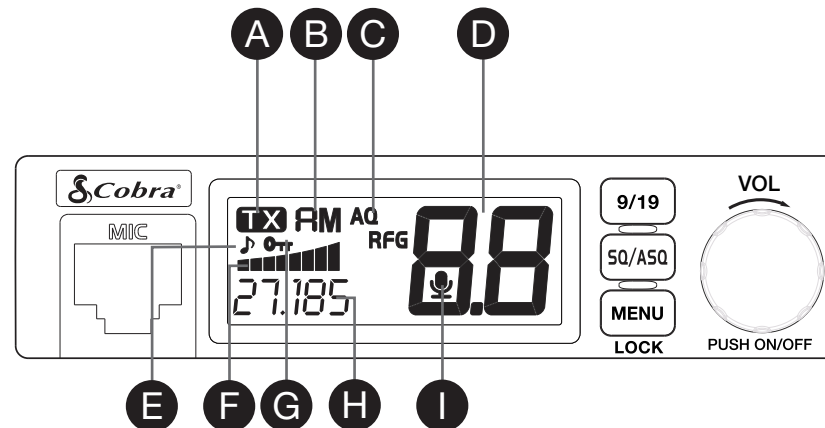
Microphone Connector

Microphone Connector

Allows for convenient removal of the Microphone plug when storage is required. The Microphone **MUST** be connected to the unit at all times, when in use, for proper operation.



Display



- A. TX Icon
- B. AM Icon
- C. Auto Squelch Icon
- D. Channel
- E. Key Tone Icon
- F. S/Rf Meter
- G. Channel Lock Icon
- H. Channel Frequency
- I. VOX Icon



Operation

Operating Your CB Radio

On-Off/Volume Knob



Turning on Your CB Radio

Push and release the Vol/ON/OFF knob to power ON the radio.

On-Off/Volume Knob



Volume

Rotate the channel knob left or right to adjust the volume.

Channel 9/Channel 19 Button



Channel 9/Channel 19

Set **CH 9** to obtain instant access to the emergency channel. Set **CH 19** to obtain instant access to the information and calling channel.

Channel 9/19 access:

1. Push and release the Channel 9/19 button to quick select channel 9.
2. Push and release the Channel 9/19 button a second time to select channel 19.
3. Push and release the Channel 9/19 button a third time to return to the last used channel

Adjust Squelch



Squelch

This control is used to cut off or eliminate receiver background noise in the absence of an incoming signal when properly adjusted.

To squelch your radio:

1. Push and release the SQ/ASQ button.
2. Rotate the Channel knob to set the desired squelch level.
3. Push and release the SQ/ASQ button to save the setting.



Operation

Operating Your CB Radio

Adjust Squelch



Auto Squelch

The Auto Squelch (ASQ) feature can help to improve the receiver performance experience when enabled for communicating with **nearby stations**. For weaker or more distant stations consider using the SQ (traditional squelch) system or disable squelch for continuous receiver audio.

To auto squelch your radio:

1. Push and hold the SQ/ASQ button until "AQ" shows on the LCD display. The ASQ level set will also show in the lower left side of the display.
2. Rotate the Channel knob to set the desired squelch level.
3. Push and release the SQ/ASQ button to save the setting.

On-Off/Volume Knob



Operating Procedure to Receive

Be sure the power cord, antenna and microphone are connected to the proper connectors before proceeding further (see pages 4 and 5).

To receive:

1. Turn ON the radio.
2. Select the desired channel.
3. Set squelch to OFF (audio noise heard from speaker).
4. Set the receiver volume to a comfortable listen level.
5. Reset the squelch level for the intended listening requirements.

Squelch/ASQ Button



Press-to-Talk Switch



Operating Procedure to Transmit

Be sure the antenna is properly connected to the radio before transmitting. **Prolonged transmitting without an antenna, or with a poorly matched antenna, could cause damage to the transmitter.**

To transmit:

1. Select the desired channel.
2. The receiver and transmitter are controlled by the **Push-to-Talk** switch on the microphone. Press the switch and the transmitter is activated; release switch to receive. When transmitting (on a clear channel), hold the microphone two inches from the mouth and speak clearly in a normal voice.



Operation

Operating Your CB Radio

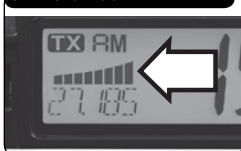
Channel Selection



Selecting a Channel

1. Push and release the Channel knob.
2. Rotate the channel knob left or right to select the channel.
3. Push and release the channel knob to save the setting.

S/R/F Power Meter



Signal Strength Meter

The Signal Strength Meter indicates the received signal strength from the antenna. The meter segments shown on the LCD increase with signal strength.

TX Indicator



TX Indicator

The **TX Indicator** appears when in transmit mode. In this mode, the meter shows all bars at full output power.

Channel Frequency



Channel Frequency

Displays the current channel and receive transmit frequency.

VOX



Enable/Disable VOX

1. Push and hold the Push-To-Talk switch on the microphone, then
2. Push and release the MENU button.
3. This will both enable/disable the VOX function.



Operation

Operating Your CB Radio

Menu Options

Selecting the Menu



Selecting the Menu

1. Push and release the MENU button to access menu options (see menu options in the Table below).
2. Rotate knob to select Menu Option
3. Push and release knob on selected option, then rotate knob to desired setting and push knob again to save setting

LCD Display	Function	Setting
KEY BP	Beep	on (default): turn on beep oF : turn off beep
ROG BP	Roger Beep Sound Setting (Tones)	oF, Tone settings 01 - 06 oF : (default) turn off roger beep
VOX L	VOX Sensitivity Level Setting	Level: 01 - 09 Default: 03
VOX T	VOX Delay Time Setting	Level: 01 - 09 Default: 01
RF.GAIN	RF Gain Control	Levels: 03, 06, 09 - 48 oF (default) RF gain off
TOTSET	Time Out Timer	oF, 01 - 10 minutes Default: 05
PUWRAUTO	Automatic Power On Setting	on (default): Auto power on oF : Manual power on
FU.WER	Firmware Version	Displays 2-digit Firmware Version
RESET	See Reset to Factory Default Section	



Frequency Ranges

Operating Your CB Radio

The Cobra 19 MINI radio transceiver represents one of the most advanced AM two-way radios for use as a Class D station in the Citizens Radio Service. This unit features advanced Phase Lock Loop (PLL) circuitry providing complete coverage of all 40 CB channels.

CB Channel	Channel Frequency in MHz
1	26.965
2	26.975
3	26.985
4	27.005
5	27.015
6	27.025
7	27.035
8	27.055
9	27.065
10	27.075
11	27.085
12	27.105
13	27.115
14	27.125
15	27.135
16	27.155
17	27.165
18	27.175
19	27.185
20	27.205

CB Channel	Channel Frequency in MHz
21	27.215
22	27.225
23	27.255
24	27.235
25	27.245
26	27.265
27	27.275
28	27.285
29	27.295
30	27.305
31	27.315
32	27.325
33	27.335
34	27.345
35	27.355
36	27.365
37	27.375
38	27.385
39	27.395
40	27.405



Specifications

Operating Your CB Radio

General	
Channels	CB – 40 CH
Frequency Range	CB – 26.965 to 27.405 MHz
Frequency Tolerance	0.005 %
Frequency Control	PLL (Phase Lock Loop) Synthesizer
Operating Temperature Range	-30° C TO + 65° C
Microphone	Plug-in Condenser
Input Voltage	13.8VDC nom. (negative ground)
Current Drain	Transmit: AM full mod., 1.4A (maximum) Receive: Squelched, 0.9 A; full audio output, 1.2A (nominal)
Size	1.75" H x 4.5" W x 7" D
Weight	3.25 lbs.
Antenna Connector	UHF; SO-239
Meter	LCD's; indicates relative power output and received signal strength
Transmitter	
Power Output	4 watts
Modulation	AM (Amplitude Modulation)
Frequency Response	300 to 3000 Hz
Output Impedance	50 ohms, unbalanced
Receiver	
Sensitivity	Less than 1 µV for 10dB (S+N)
Selectivity	6 dB @ 7 KHz, 60 dB @ 10KHz
Image Rejection	60 dB, typical
Adjacent-Channel Rejection	50 dB, typical
Automatic Noise Limiter	Built-in



Ignition Noise Interference

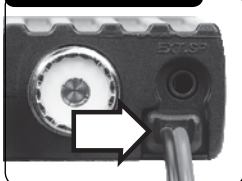
Use of a CB receiver at low signal levels is normally limited by the presence of electrical noise. Under most operating conditions, when signal level is adequate, the background noise does not present a serious problem. Also, when extremely low level signals are being received, the transceiver may be operated with vehicle engine turned off. The unit requires very little current and therefore will not significantly discharge the vehicle battery.

Even though this radio has an automatic noise limiter, in some installations ignition interference may be high enough to make good communications impossible. Consult your authorized Cobra dealer or a two-way radio technician for help in locating and correcting the source of severe noise.

Maintenance/Adjustment

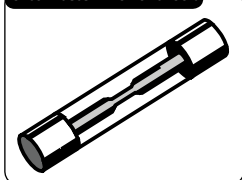
Your Cobra CB transceiver is specifically designed for the environment encountered in mobile installations. The use of all solid state circuitry and its light weight result in high reliability. Should a failure occur, however, review the following, then if necessary, replace parts only with identical parts. Do not substitute.

Check Power Source



1. Check connections to the source of power and make sure it is the 13.8 VDC required to operate your radio.

Check Fuses in DC Power Cord



2. Check the fuses in the DC power cord. The main power lead (red) has a two amp 3AG type fuse in its holder. Use only the above specified type and size fuse for maximum protection. Failure to do so will void the warranty.

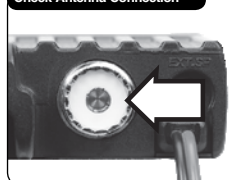


Check Microphone Connection



3. Make certain the microphone is properly plugged in.

Check Antenna Connection



4. Make certain the antenna is properly assembled and connected. If you are unable to correct the problem, refer to product service on page 14 for the correct procedure for warranty and post-warranty service from Cobra.



Limited One-Year Warranty

Warranty

Warranty Terms:

Cobra warrants your product against all defects in materials and workmanship for a period of one (1) year from the date of original purchase.

Cobra, at our sole discretion, will repair or replace your product (with the same or comparable product) free of charge.

Cobra will not pay shipping charges that you incur for sending your product to us. Products received COD will be refused.

To make a warranty claim, we will require proof of purchase in the form of an invoice or receipt. No proof of purchase is required for factory direct purchases.

Warranty Exclusions: Warranty does not apply to your product under any of the following conditions:

1. The serial number has been removed or modified. 2. Your product has been subjected to misuse or damage (including water damage, physical abuse, and/or improper installation). 3. Your product has been modified in any way. 4. Your receipt or proof-of-purchase is from a non-authorized dealer or internet auction site including E-bay, U-bid, or other non-authorized resellers.

LIMITATION OF WARRANTY: EXCEPT AS EXPRESSLY PROVIDED HEREIN, YOU ARE ACQUIRING THE PRODUCT "AS IS" AND "WHERE IS", WITHOUT REPRESENTATION OR WARRANTY. COBRA SPECIFICALLY DISCLAIMS ANY REPRESENTATION OR WARRANTY INCLUDING, BUT NOT LIMITED TO THOSE CONCERNING THE MERCHANTABILITY AND SUITABILITY OF THE PRODUCT FOR A PARTICULAR PURPOSE. COBRA SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INCIDENTAL DAMAGES INCLUDING, WITHOUT LIMITATION, DAMAGES ARISING OUT OF THE USE, MISUSE OR MOUNTING OF THE PRODUCT.

The above limitations or exclusions shall be limited to the extent they violate the laws of any particular state. Cobra is not responsible for products lost in shipment between the owner and our service center.

General Warranty Information

Each product we manufacture is covered by our factory warranty. While each product may have unique components and policy, the general guideline below will apply to most Cobra products.

All Cobra products purchased factory-direct or from our Authorized Resellers will come with a full one to three (1-3) year warranty from the date of the original retail purchase (see policy statement above for full warranty details and exclusions).

Standard accessories packaged with each model will have a one-year factory warranty.

Accessory items have a one-year factory warranty.

Shipping to our facility is not covered in our warranty. Return shipping is included within the US.

This warranty is non-transferrable.

For the sake of clarity, 'repair or replace the Product or its defective part' does not include removal or installation work, costs or expenses which include but are not limited to labor costs or expenses.

Cobra will not be responsible for lost packages.



Customer Assistance

Product Service

If you have any questions about operation or installing your new Cobra product, PLEASE CONTACT COBRA FIRST...do not return this product to any retail store.

The contact information for Cobra will vary depending on the country in which you purchased and utilize the product. For the latest contact information, please go to www.cobra.com/support

For products purchased in the U.S.A. you may call 800-543-1608.

For products purchased in the U.S.A., if your product should require factory service, please please go to www.cobra.com/support and follow the instructions for returning your product to the Cobra Factory Service Department for service.

Should there be any problems with this product or further information is needed on its features please visit www.cobra.com for support, frequently asked questions, Declarations of Conformity, and full manuals.

For Products Purchased Outside the U.S.A. or Canada

Please contact your local dealer for product service information.

For Products Used in Canada

Industry Canada Notice

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.



FCC Part 15.19 Warning Statement

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 UNDESIRE OPERATION.

FCC Part 15.21 Warning Statement-

NOTE: THE GRANTEE IS NOT RESPONSIBLE FOR ANY CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

FCC Part 15.105(b) Warning Statement

NOTE: 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 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.

IC RSS-GEN, Sec 8.4 Warning Statement

ENGLISH: This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

FRENCH: Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

IC RSS-GEN, Sec 8.3 Warning Statement

ENGLISH: This radio transmitter (identify the device by certification number, or model number if Category II) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Immediately following the above notice, the manufacturer shall provide a list of all antenna types approved for use with the transmitter, indicating the maximum permissible antenna gain (in dBi) and required impedance for each.

FRENCH: Le présent émetteur radio (identifier le dispositif par son numéro de certification ou son numéro de modèle s'il fait partie du matériel de catégorie I) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

RF Exposure Statement

ENGLISH: This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 40cm between the radiator & your body.

The device is in compliance with RF exposure guidelines, users can obtain Canadian information on RF exposure and compliance. The minimum distance from body to use the device is 40cm.

FRENCH: Le présent appareil est conforme

Après examen de ce matériel aux conformité ou aux limites d'intensité de champ RF, les utilisateurs peuvent sur l'exposition aux radiofréquences et compliance d'acquérir les informations correspondantes. La distance minimale du corps à utiliser le dispositif est de 40cm.