

PG9944/8944/4944 Installation Instructions

Wireless Outdoor PIR Detector with Camera

Overview

The PGx944 uses eight PIR sensors, each acting as a Quad detector to accurately and reliably determine whether an alarm is justified. Features & benefits include:

- Optimum performance even in poor weather conditions such as snow, rain, dust, wind and direct sunlight.
- Tamper protection prevents opening and removal from wall.
- Built-in link quality indicators reduce installation time by eliminating the need for the installer to physically approach the control panel.
- Microprocessor-controlled compensation.
- Immunity to pets weighing up to 18 Kg (40lb).

NOTE: Pet immunity feature has not been evaluated to UL 639 or ULC-S306-03 due to the feature not being addressed in either standard.

CAMERA FEATURES

- Color or black & white images
- Auto-setup for brightness and contrast via the control panel
- Day and night CMOS camera, with IR illumination. This allows taking pictures in full darkness
- Camera range of 12m (40ft); with IR illumination 10m (33ft)
- Camera operation modes:
 - Post alarm – pictures are taken after detection by detector.
 - Visual Verification

Device Setup

WARNING! To comply with FCC and IC RF exposure compliance requirements, the PIR detector should be located at a distance of at least 20 cm from all persons during normal operation. The antennas used for this product must not be co-located or operated in conjunction with any other antenna or transmitter.

NOTE: The PG Series wireless PIR Motion detectors shall be installed and used within an environment that provides the pollution degree max 2 and overvoltages category II in NON HAZARDOUS LOCATIONS. The equipment is designed to be installed only by qualified service persons.

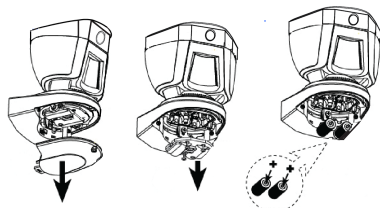
NOTE: To ensure the continued operation of all wireless devices after performing a system default, a global upload of all wireless programming via DLS is recommended before defaulting the system. After completing the system default, download the wireless programming.

NOTE: Back tamper switch is required for UL commercial burglary installations.

BATTERY INSTALLATION

Initial battery installation should be done on a flat surface. After inserting the batteries, the LED flashes for 60 seconds and the detector enters a 15 minute local diagnostic mode.

NOTE: When manually programming wireless devices, if a device has been powered up for more than 48 hours it cannot be enrolled into the system until the device has been tampered and restored. When programming the panel using Quick Enroll, follow the steps detailed in "Enrollment."



NOTE: After restoring a low battery trouble the system may take up to 5 minutes to clear the trouble.

ENROLLMENT

To quick enroll:

1. On a keypad press [*] [8] [Installer Code] [804] [000].
2. Press and hold the device enroll button until the LED lights steady and then release the enroll button while the LED is still lit. A confirmation message then appears on the keypad.
3. Press [*] key to confirm ID.
4. Enter [3 digit zone #].
5. Enter [3 digit zone type].
6. Enter [1 digit partition #] for all desired partitions and press [#]. If using an LCD keypad you can scroll to the desired partitions and press [*] to toggle the partition.
7. On an LCD keypad enter the label by using word library.

To pre-enroll:

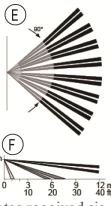
1. Remotely configure the unique ID number into the system. For more information see the HSM2HOST manual.
2. When on-site, press the device enroll button.

NOTE: If the wireless device has been powered for more than 48 hours without being enrolled, tamper and restore the device to enroll it.

PLACEMENT AND WALK TESTING

Before permanently mounting any wireless device, temporarily mount the device and perform a Placement test. Perform a walk test of the coverage area at least once a year to ensure that the detector is working correctly.

1. Tamper the device by removing the cover.
2. Restore the tamper. The device now enters Placement test mode for 15 minutes.
3. Trip the device and the red LED blinks once to identify that a signal is being sent to the receiver and then blinks three times to identify the signal strength. To perform a walk test, walk across the far end of coverage pattern in both directions. The following table indicates received signal strength indication.



LED Response	Signal Strength
Green LED blinks	STRONG
Orange LED blinks	GOOD
Red LED blinks	POOR
No blinks	No communication

IMPORTANT! Only GOOD or STRONG signal strengths are acceptable. If you receive a POOR signal from the device, re-locate it and re-test until a GOOD or STRONG signal is received.

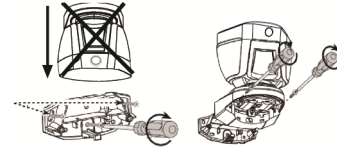
NOTE: For UL/ULC installations, only STRONG signal levels are acceptable. After installation verify the

product functionality in conjunction with the compatible receivers HSM2HOST9, HS2LCDRR(P)9, HS2ICNRR(P)9 and PG9920.

NOTE: For detailed Placement instructions refer to the control panel Reference Manual.

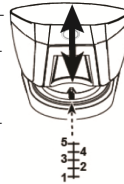
MOUNTING THE DEVICE

Installation Notes: The top cover should only be accessed by authorized service personnel or manufacturer. Do not obscure the detector field of view with large objects. Install in position such that expected intruder motion is perpendicular to the zones of detection. Alarms triggered by conditions such as weather, blowing leaves and brush, or related environmental conditions, etc., need to be considered when assessing the installation and application. If nuisance trips are not tolerable it is recommended that the wireless outdoor intrusion detection unit is enrolled in the system to a zone that is defined as a trouble alarm circuit.



1. Fix the bracket firmly on a stable wall or pillar. The orientation of the fixed bracket must be as parallel as possible to the surveyed ground surface.
2. Mark drilling point
3. Drill
4. Fasten with three long screws
5. Fasten the detector to the bracket with two short screws.

Adjust the detector's horizontal and vertical angles according to the surveyed ground surface. The vertical angle indicator position for various installation height and coverage distance combinations is detailed in the following table (the information refers to a relatively flat surveyed area. Verify the vertical adjustment by walk-test).



Mounting Height	Coverage Distance					
	2m 6.7 ft	4m 13 ft	6m 20 ft	8m 26 ft	10m 33 ft	12m 39 ft
3.0m/ 10 ft	-	1	2	2	3	3
2.5m/ 8 ft	1	1	2	3	4	4
2.0m/ 7 ft	1	2	3	4	5	5
1.5m/ 5 ft	2	3	4	5	-	-

LED Operation

LED Indications	Event
Red LED blinks	Stabilization (warm-up 60 sec.)
Red LED on 0.2 sec.	Tamper open/close
Red LED 2 blinks	One quad PIR detection in diagnostic mode
Red LED on 2 sec.	Intruder alarm

Configuration

To enter the wireless configuration section enter [804][Zone Number].

DEVICE TOGGLE

[001][01]	Alarm LED - Default [Y]
	Enables the devices LED to activate when an alarm event

	occurs.
[001][04]	Supervision - Default [Y]
	Enables supervision of the device.
[001][09]	More Options
	[03] 24Hr/Night - Default [Y]
	Define if motion alarms are always enabled or only enabled at night. For UL/ULC installations night mode is to used to supplement the protection covering the detection area.

DEVICE OPTIONS

[003]	Hightraffic Shutdown - Default [01]		
	Activating this feature helps conserve battery power when the system is disarmed by configuring a reporting timer. When motion is detected, the device transmits an alarm to the receiver and will not report any further events until the timer expires. Any motion detected during the configured period will be reported once the timer expires. No Delay causes the device to report an alarm each time the detector is tripped.		
[01] Detector Disabled (while disarmed)	[02] No Delay	[03] 5 second delay	
[04] 15 second delay	[05] 30 second delay	[06] 1m delay	
[07] 5m delay	[08] 10m delay	[09] 20m delay	
[10] 60m delay			
[004]	Image Brightness - Default [04]		
	Lightens and darkens the image		
[01] Image Bright -3	[02] Image Bright -2	[03] Image Bright -1	
[04] Image Bright 0	[05] Image Bright +1	[06] Image Bright +2	
[07] Image Bright +3			
[005]	Image Contrast - Default [04]		
	Lightens and darkens the contrast.		
[01] Image Contrast -3	[02] Image Contrast -2	[03] Image Contrast -1	
[04] Image Contrast 0	[05] Image Contrast +1	[06] Image Contrast +2	
[07] Image Contrast +3			
[007]	Detection Sensitivity - Default [02]		
	Selects the sensitivity range of PIR devices.		
[01] Low Sensitivity	[02] Mid Sensitivity	[03] High Sensitivity	
[04] UL Standard			
[011]	Camera Toggles		
[01] Color - Default [Y]	[02] High Res. - Default [Y]	[03] Normal Res. - Default [N]	
[09] More Options	[09][01] AC Power - Default [N]		

SPECIFICATIONS

Caution! Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the manufacturer's instructions and according to local rules and regulations. Batteries are to be replaced by service persons only.

OPTICAL

Black Mirror Max. Coverage: At least 12 m (40 ft) / 90°

Detector Technology: 8 independent quad PIR detectors operating in true Quad configuration
Pet Immunity: Up to 18 Kg (40 lb)

ELECTRICAL

Input Power: Two 3V CR17450 Lithium batteries
Note: For UL installations use Eve Energy Co. CR17450 only.
Battery Life (for typical use): minimum one year, typical 3 years (not verified by UL/ULC)
Low Battery Threshold: 4.0 V

Functional

Picture Resolution: 320x240 pixels QVGA
Frame Rate: up to 2 fps (for user)
Alarm period: 2 seconds

WIRELESS

Frequency Band (MHz): CE Listed PG4944: 433MHz; CE/EN listed PG8944: 868MHz; FCC/IC/UL/ULC listed PG9944: 912-919MHz

MOUNTING

Mounting type: Wall mounting
Mounting Height: 1.5 - 3.0 m (5 - 10 ft). Must be 8 feet for UL/ULC listed installations.
Horizontal Adjustment: -45° to +45°, in 5° steps
Vertical Adjustment: 0° to -10°, in 2.5° steps

ENVIRONMENTAL

Temperature range: -40°C to +70°C (UL/ULC only verified the range -35°C to +66°C)
Relative Humidity: up to max. 93%RH, non-condensing
White Light Immunity: Above 25000 lux

PHYSICAL

Size (H x L x W): 157 x 147 x 124 mm (6-3/16 x 5-13/16 x 4-7/8")
Weight (with battery): 600 g (21 oz)

COMPATIBLE RECEIVERS

433MHz Band: HSM2HOST4; HS2LCDRF(P)
4:HS2ICNRR(P)4; PG4920
868MHz Band: HSM2HOST8; HS2LCDRF(P)8;
HS2ICNRR(P)8; PG8920
912-919MHz Band: HSM2HOST9; HS2LCDRF(P)9;
HS2ICNRR(P)9; PG9920

NOTE: Only devices operating in band 912-919MHz are UL/ULC listed.

Notice

The PGx944 detector was designed to adhere to applicable privacy regulations and only processes data needed for the primary functionality of the device. Before using the detector you will be asked to provide consent with processing of the personal data that the detector may capture. Note that the detector records video to secure the best functionality of the device. The recordings are processed securely and automatically erased on a periodic basis. Based on the location of the module you may have the obligation to issue a notice about using it.

The data recorded through the PGx944 detector are processed and maintained primarily by the data controller. Data controller is the entity that provides monitoring services to you. You have the right to inquire about your data with them. For more information about their privacy practices please contact the data controller.

For more information about Tyco privacy practices please visit our website <http://www.tyco.com/privacy>.

UL/ULC Notes

Only model PG9944 operating in the frequency band 912-919MHz is UL/ULC listed. The PG9944 has been listed by UL for commercial and residential burglary applications and by ULC for residential burg-

lary applications in accordance with the requirements in the Standards UL 639 and UL C-5306 for Intrusion Detection Units.

For UL/ULC installations use these device only in conjunction with compatible DSC wireless receivers: HSM2H05T9, HS2LDRF(P)9, HS2LCNRR(P)9 and PG9920. After installation verify the product functionality in conjunction with the compatible receiver used.

FCC COMPLIANCE STATEMENT

WARNING! Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device 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 residential installations. 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 and television reception.

However, there is no guarantee that interference will not occur in a particular installation. If this device does cause such interference, which can be verified by turning the device off and on, the user is encouraged to eliminate the interference by one or more of the following measures:

- Re-orient or re-locate the receiving antenna.
- Increase the distance between the device and the receiver.
- Connect the device to an outlet on a circuit different from the one that supplies power to the receiver.
- Consult the dealer or an experienced radio/TV technician.

FCC ID: F5314P69944

Industry Canada Statement

This equipment complies with FCC and IC RF radiation exposure limits set forth for an uncontrolled environment.

This device complies with FCC Rules Part 15 and with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference that may be received or that may cause undesired operation.

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:160A-PG9944



Europe: The PG4944 and PG8944 are compliant with the RTTE requirements - Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999. The PG8944 is certified to the following standards: EN50131-2-2 GRADE 2, CLASS IV, EN50131-6 Type C. Certification is for only the 868 MHz variant of this product. According to EN 50131-1:2006 and A1:2009, this equipment can be applied in installed systems up to and including Security Grade 2, Environmental Class II. UK: The PG8944 is suitable for use in systems installed to conform to PD6662:2010 at Grade 2 and environmental class 2 BS8243. The Power G peripheral devices have two-way communication functionality, providing additional benefits as described in the technical brochure. This functionality has not been tested to comply with the respective technical requirements and should therefore be considered outside the scope of the product's certification.

Limited Warranty

Digital Security Controls (DSC) warrants that for a period of twelve months from the date of purchase, the product shall be free of defects in materials and workmanship under normal use and that in fulfillment of any breach of such warranty, DSC shall, at its option, repair or replace the defective equipment upon return of the equipment to its factory. This warranty applies only to defects in parts and workmanship and not to damage incurred in shipping or handling, or damage due to causes beyond the control of DSC such as lightning, excessive voltage, mechanical shock, water damage, or damage arising out of abuse, alteration or improper application of the equipment.

The foregoing warranty shall apply only to the original buyer, and is and shall be in lieu of any and all other warranties, whether expressed or implied and of all other obligations or liabilities on the part of DSC. This warranty contains the entire warranty. Digital Security Controls neither assumes responsibility for, nor authorizes

any other person purporting to act on its behalf to modify or to change this warranty, nor to assume for it any other warranty or liability concerning this product. In no event shall DSC be liable for any direct or indirect or consequential damages, loss of anticipated profits, loss of time or any other losses incurred by the buyer in connection with the purchase, installation or operation or failure of this product.

Warning: Digital Security Controls recommends that the entire system be completely tested on a regular basis. However, despite frequent testing, and due to, but not limited to, criminal tampering or electrical disruption, it is possible for this product to fail to perform as expected.

IMPORTANT - READ CAREFULLY: DSC Software purchased with or without Products and Components is copyrighted and is purchased under the following license terms:

This End-User License Agreement ("EULA") is a legal agreement between You (the company, individual or entity who acquired the Software and any related Hardware) and Digital Security Controls, a division of Tyco Safety Products Canada Ltd. ("DSC"), the manufacturer of the integrated security systems and the developer of the software and any related products or components ("HARDWARE") which you acquired. If the DSC software product ("SOFTWARE PRODUCT" or "SOFTWARE") is intended to be accompanied by HARDWARE, and is NOT accompanied by new HARDWARE, You may not use, copy or install the SOFTWARE PRODUCT. The SOFTWARE PRODUCT includes computer software, and may include associated media, printed materials, and "online" or electronic documentation. Any software provided along with the SOFTWARE PRODUCT that is associated with a separate end-user license agreement is licensed to You under the terms of that license agreement.

By installing, copying, downloading, storing, accessing or otherwise using the SOFTWARE PRODUCT, You agree unconditionally to be bound by the terms of this EULA, even if this EULA is deemed to be a modification of any previous arrangement or contract. If You do not agree to the terms of this EULA, DSC is unwilling to license the SOFTWARE PRODUCT to You, and You have no right to use it.

SOFTWARE PRODUCT LICENSE

The SOFTWARE PRODUCT is protected by copyright laws and international copyright treaties, as well as other intellectual property laws and treaties. The SOFTWARE PRODUCT is licensed, not sold.

1. GRANT OF LICENSE This EULA grants You the following rights: (a) Software Installation and Use - For each license You acquire, You may have only one copy of the SOFTWARE PRODUCT installed. (b) Storage/Network Use - The SOFTWARE PRODUCT may not be installed, accessed, displayed, run, shared or used concurrently on or from different computers, including a workstation, terminal or other digital electronic device ("Device"). In other words, if You have several workstations, You will have to acquire a license for each workstation where the SOFTWARE will be used. (c) Backup Copy - You may make back-up copies of the SOFTWARE PRODUCT, but You may only have one copy per license installed at any given time. You may use the back-up copy solely for archival purposes. Except as expressly provided in this EULA, You may not otherwise make copies of the SOFTWARE PRODUCT, including the printed materials accompanying the SOFTWARE.

2. DESCRIPTION OF OTHER RIGHTS AND LIMITATIONS

(a) Limitations on Reverse Engineering, Decompilation and Disassembly - You may not reverse engineer, decompile, or disassemble the SOFTWARE PRODUCT, except and only to the extent that such activity is expressly permitted by applicable law notwithstanding this limitation. You may not make any changes or modifications to the Software, without the written permission of an officer of DSC. You may not remove any proprietary notices, marks or labels from the Software Product. You shall institute reasonable measures to ensure compliance with the terms and conditions of this EULA. (b) Separation of Components - The SOFTWARE PRODUCT is licensed as a single product. Its component parts may not be separated for use on more than one HARDWARE unit.

(c) Single INTEGRATED PRODUCT - If You acquired this SOFTWARE with HARDWARE, then the SOFTWARE PRODUCT is licensed with the HARDWARE as a single integrated product. In this case, the SOFTWARE PRODUCT may only be used with the HARDWARE as set forth in this EULA.

(d) Rental - You may not rent, lease or lend the SOFTWARE PRODUCT. You may not make it available to others or post it on a server or web site.

(e) Software Product Transfer - You may transfer all of Your rights under this EULA only as part of a permanent sale or transfer of the HARDWARE, provided You retain no copies, You transfer all of the

SOFTWARE PRODUCT (including all component parts, the media and printed materials, any upgrades and this EULA), and provided the recipient agrees to the terms of this EULA. If the SOFTWARE PRODUCT is an upgrade, any transfer must also include all prior versions of the SOFTWARE PRODUCT.

(f) Termination - Without prejudice to any other rights, DSC may terminate this EULA if You fail to comply with the terms and conditions of this EULA. In such event, You must destroy all copies of the SOFTWARE PRODUCT and all of its component parts.

(g) Trademarks - This EULA does not grant You any rights in connection with any trademarks or service marks of DSC or its suppliers.

3. COPYRIGHT - All title and intellectual property rights in and to the SOFTWARE PRODUCT (including but not limited to any images, photographs, and text incorporated into the SOFTWARE PRODUCT), the accompanying printed materials, and any copies of the SOFTWARE PRODUCT, are owned by DSC or its suppliers. You may not copy the printed materials accompanying the SOFTWARE PRODUCT. All title and intellectual property rights in and to the content which may be accessed through use of the SOFTWARE PRODUCT are the property of the respective content owner and may be protected by applicable copyright or other intellectual property laws and treaties. This EULA grants You no rights to use such content. All rights not expressly granted under this EULA are reserved by DSC and its suppliers.

4. EXPORT RESTRICTIONS - You agree that You will not export or re-export the SOFTWARE PRODUCT to any country, person, or entity subject to Canadian export restrictions.

5. CHOICE OF LAW - This Software License Agreement is governed by the laws of the Province of Ontario, Canada.

6. ARBITRATION - All disputes arising in connection with this Agreement shall be determined by final and binding arbitration in accordance with the Arbitration Act, and the parties agree to be bound by the arbitrator's decision. The place of arbitration shall be Toronto, Canada, and the language of the arbitration shall be English.

7. LIMITED WARRANTY

(a) NO WARRANTY - DSC PROVIDES THE SOFTWARE "AS IS" WITHOUT WARRANTY. DSC DOES NOT WARRANT THAT THE SOFTWARE WILL MEET YOUR REQUIREMENTS OR THAT OPERATION OF THE SOFTWARE WILL BE UNINTERRUPTED OR ERROR-FREE.

(b) CHANGES IN OPERATING ENVIRONMENT - DSC shall not be responsible for problems caused by changes in the operating characteristics of the HARDWARE, or for problems in the interaction of the SOFTWARE PRODUCT with non-DSC SOFTWARE or HARDWARE PRODUCTS.

(c) LIMITATION OF LIABILITY; WARRANTY REFLECTS ALLOCATION OF RISK - IN ANY EVENT, IF ANY STATUTE IMPLIES WARRANTIES OR CONDITIONS NOT STATED IN THIS LICENSE AGREEMENT, DSC'S ENTIRE LIABILITY UNDER ANY PROVISION OF THIS LICENSE AGREEMENT SHALL BE LIMITED TO THE GREATER OF THE AMOUNT ACTUALLY PAID BY YOU TO LICENSE THE SOFTWARE PRODUCT AND FIVE CANADIAN DOLLARS (CAD\$5.00). BECAUSE SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, THE ABOVE LIMITATION MAY NOT APPLY TO YOU. (d) DISCLAIMER OF WARRANTIES - THIS WARRANTY CONTAINS THE ENTIRE WARRANTY AND SHALL BE IN LIEU OF ANY AND ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED (INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE) AND OF ALL OTHER OBLIGATIONS OR LIABILITIES ON THE PART OF DSC. DSC MAKES NO OTHER WARRANTIES. DSC NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON PURPORTING TO ACT ON ITS BEHALF TO MODIFY OR TO CHANGE THIS WARRANTY, NOR TO ASSUME FOR IT ANY OTHER WARRANTY OR LIABILITY CONCERNING THIS SOFTWARE PRODUCT.

(e) EXCLUSIVE REMEDY AND LIMITATION OF WARRANTY - UNDER NO CIRCUMSTANCES SHALL DSC BE LIABLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL OR INDIRECT DAMAGES BASED UPON BREACH OF WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR ANY OTHER LEGAL THEORY. SUCH DAMAGES INCLUDE, BUT ARE NOT LIMITED TO, LOSS OF PROFITS, LOSS OF THE SOFTWARE PRODUCT OR ANY ASSOCIATED EQUIPMENT, COST OF CAPITAL, COST OF SUBSTITUTE OR REPLACEMENT EQUIPMENT, FACILITIES OR SERVICES, DOWNTIME, PURCHASERS TIME, THE CLAIMS OF THIRD PARTIES, INCLUDING CUSTOMERS, AND INJURY TO PROPERTY. WARNING: DSC recommends that the entire system be completely tested on a regular basis. However, despite frequent testing, and due to, but not limited to, criminal tampering or electrical disruption, it is possible for this SOFTWARE PRODUCT to fail to perform as expected.

The term IC before the radio certification number signifies that the Industry Canada technical specifications were met. This Class B digital apparatus complies with Canadian ICES-003. This device

complies with RSS-210 of Industry Canada. 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. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada. Le dispositif satisfait aux exigences d'Industrie Canada, prescrites dans le document CNR-210, son utilisation est autorisée seulement aux conditions suivantes: (1) il ne doit pas produire de brouillage et (2) l'utilisateur du dispositif doit être prêt à accepter tout brouillage radioélectrique reçu, même si ce brouillage est susceptible de compromettre le fonctionnement du dispositif.

