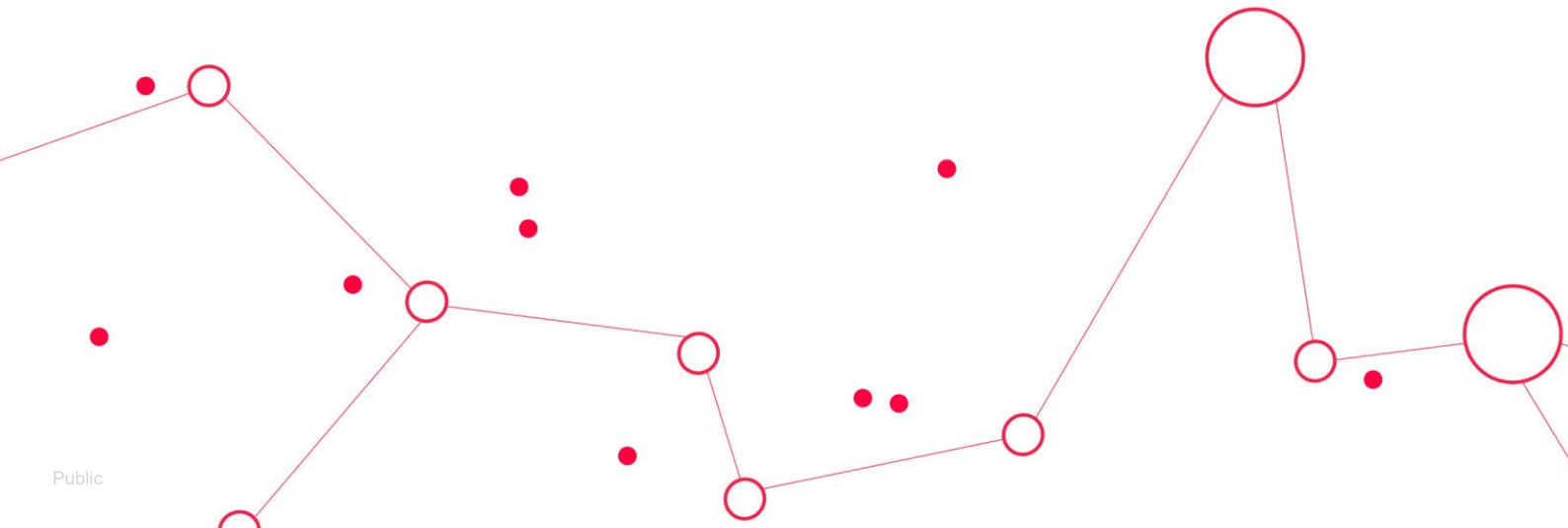
ENKOA

DOOR/WINDOW SENSOR'S

INSTALLATION GUIDE Vs8



Read carefully the instruction given, before installing and using the Door / Window sensor and hold it for future references.

GENERAL WARNINGS AND INSTRUCTION GUIDE:
In order to ensure the correct operation of the product in your installation is necessary to carry the following safety regulations out:

1. The installation and the use of the product must be done according to the technical operating conditions explained below.

2. The good use of the application is client's responsibility.

3. After reception of the goods, check the packaging and the existing material in case there is any damage. Check as well, that the reception is complete (accessories, papers, etc).

4. If packaging is damaged during delivery or it is suspicious of being damaged or having a failure, do not put the unit on. In that case please contact us.

5. The installation and handling of our product has to be done by authorized personnel. Mainly the electrical connections must be done only by qualified experts.

6. Do not try to repair any material after a failure or damage and put it working again. In this case it is highly important to contact us.

7. There will not be accepted any responsibility for damages caused by a wrong use.

8. Ensure that the battery cover is closed and blocked-up before using the equipment.

Lisez attentivement les instructions fournies avant d'installer et d'utiliser le capteur de porte/fenêtre et conservez-les pour de futures références.

AVERTISSEMENTS GÉNÉRAUX ET GUIDE D'INSTRUCTIONS :
Afin de garantir le bon fonctionnement du produit dans votre installation, il est nécessaire de respecter les consignes de sécurité suivantes :

1. L'installation et l'utilisation du produit doivent être effectuées conformément aux conditions techniques de fonctionnement décrites ci-dessous.

2. Une utilisation correcte de l'application relève de la responsabilité du client.

3. À la réception du matériel, vérifiez l'état de l'emballage et du contenu afin de détecter tout dommage éventuel. Vérifiez également que la livraison est complète (accessoires, documents, etc.).

4. Si l'emballage est endommagé lors du transport, ou s'il existe un doute concernant un dommage ou un défaut, **ne mettez pas l'appareil en service**. Dans ce cas, veuillez nous contacter.

5. L'installation et la manipulation de notre produit doivent être effectuées par du personnel autorisé. En particulier, les connexions électriques doivent être réalisées uniquement par des techniciens qualifiés.

6. N'essayez pas de réparer le matériel après une panne ou un dommage, ni de le remettre en service. Dans ce cas, il est fortement recommandé de nous contacter.

7. Aucune responsabilité ne sera acceptée en cas de dommages causés par une mauvaise utilisation.

8. Assurez-vous que le couvercle de la batterie est correctement fermé et verrouillé avant d'utiliser l'équipement.

Content

1. INTRODUCTION

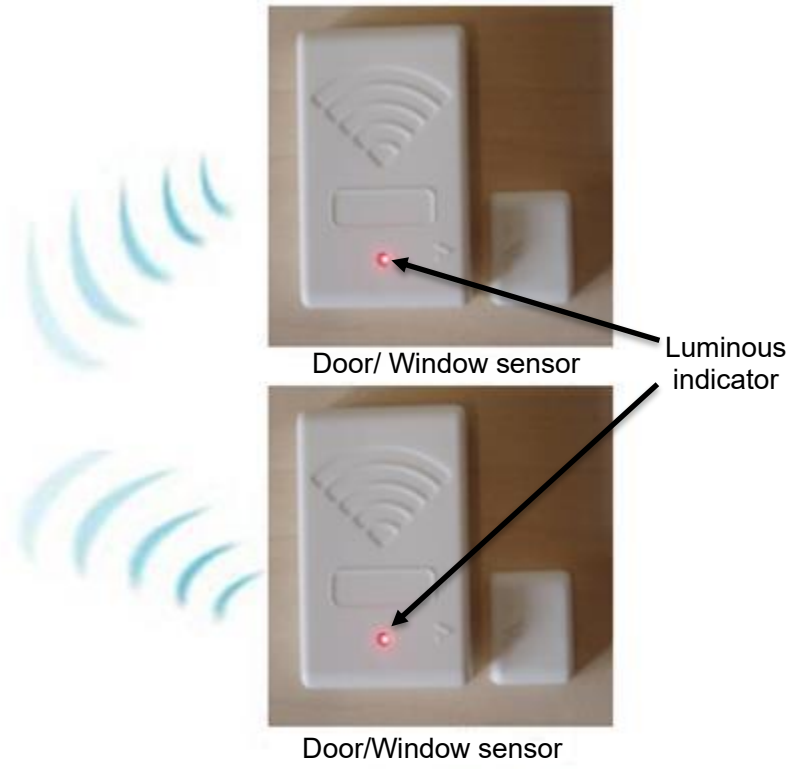
1.1 Brief description

The sensor consists of:

1- Detector (Big box).
2- Magnet (Little box).

For the proper operation of the door- window sensor, an energy saver is needed, as it turns off the relay or relays configured when the sensor communicates that the window is opened.

Energy Saver



The product is designed to hang on doors or windows, so that the detector lays on the doorframe and the magnet on the door or Windows. When the door or window is opened,

the magnet will be released from the detector and it will send a message to the energy saver to turn off the relay or relays configured (For example air conditioner).

The detector works with a (CR2450) type watch battery, which has autonomy of approximately 4 years.

As long as the battery level is correct, there will be no blinking, otherwise if battery is low, it will blink one time every 32 seconds. In that case, battery must be replaced the battery as soon as possible. In addition, the saver / disconnector is informed and to the IVEW system. In the IVEW system, the status of the door (open-closed) and the level of the batteries.

1.2 Shipment content

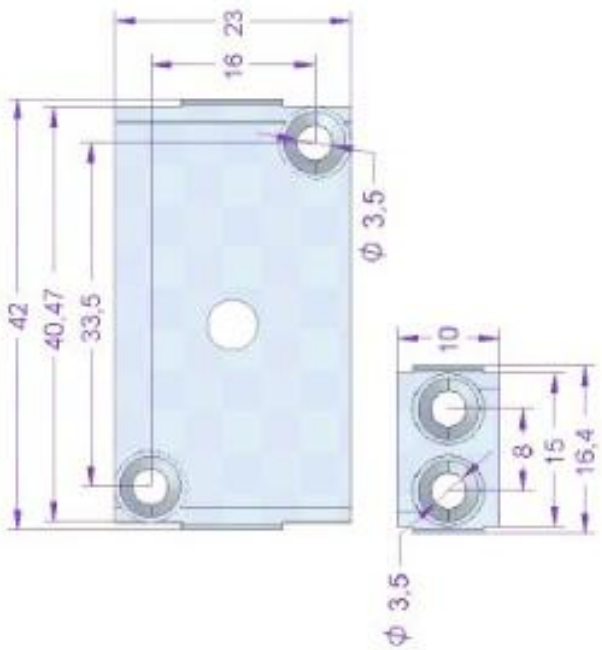
- DOOR/ WINDOW SENSOR (Detector box + magnet box)
- Starting up and user guide.

2. INSTALLATION

IMPORTANT! Please keep in mind that the Door / Windows sensor is designed for indoors.

2.1 Dimensions.

The size and location of the anchor points of each part are shown in the image below:



2.2 Installation step

First of all, it should be decided in which door or window must be installed, it is highly recommended to install it on door and windows with no looseness. The detector and the magnet should be as closed as possible, because the maximum distance between both parts is 1,2cm. If that distance is exceeding in any direction, it is probable that it no longer works.

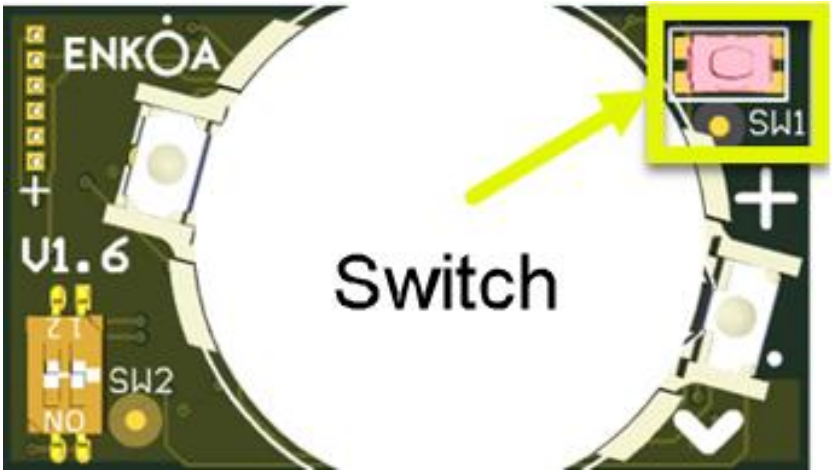
The DOOR/WINDOW sensor installation must be done following these steps in order:

IMPORTANT!

1. **STICK OR SCREW THE DETECTOR (BIG BOX) ON THE DOOR OR WINDOWS FRAME.**
   FR. COLLEZ OU VISSEZ LE DÉTECTEUR (GRANDE BOÎTE) SUR LE CADRE DE LA PORTE OU DE LA FENÊTRE.

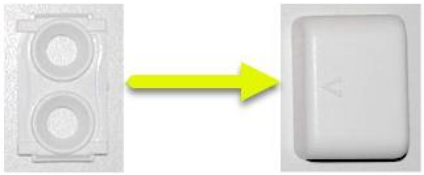
2. Synchronize the sensor and the iswitch (energy saver)

To enter the energy saver in **shinchronization mode** consult the manual of the corresponding energy saver. Once the energy saver is in synchronization mode, press once the inner button using a screwdriver. The red pilot will go on.



Then the sensor and the energy saver will try to synchronize. The synchronizing will be successful when the sensor blinks 25 times quickly for approximately 5 seconds. Finally the red pilot must go off.
Repeat it with all the sensors of the same room that must be synchronized with the same energy saver.
It is highly important not to enter two energy savers at once in synchronization mode because the sensors can be synchronized with other room.

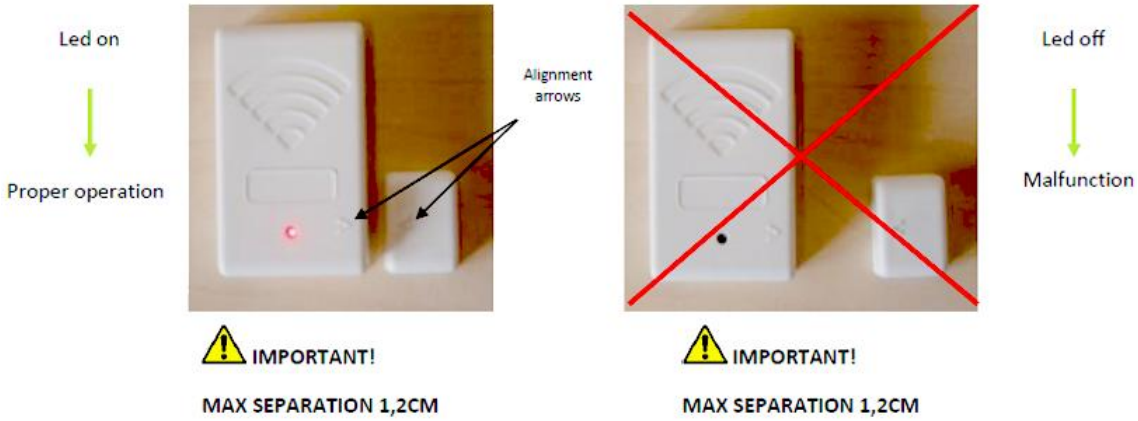
3. Do stick or screw the magnet's base at the indicated point and introduce the cap on the base.



4. Once the sensor is synchronized correctly, we will install the sensor in the window or door in the right way.

5. To check that the sensor correctly detects the magnet, hold the sensor button pressed until the red light is turned off and the sensor makes a series of 10 quick flashes. Indicating that the sensor has been introduced into the Magnet Test mode.

6. After those blinking, we will have 20 seconds to install the detector on the base, on a way that arrow pictures that have both caps match.
(It is highly important that the cap's arrows match)



7. To ensure that the sensor is working properly after installing it, we must look to the red LED is ON during those 20 seconds.
Once those 20 seconds run out. The LED will blink 10 times during 2 seconds indicating the output of the test mode and remaining the sensor ready to work.

   If you want to re-enter the magnet test, you must perform the same step as explained in point 5.

8. Finally, for a better grip between the lid and the base of the sensor, it is recommended to insert a **DIN7981 2.2mmx6.5mm** screw through the hole located in the upper side of the box.

IMPORTANT!
In case the battery is not introduced in the battery holder. We should introduce it and soon afterwards the led diode blinks 10 times during 2 seconds.

Once those blinking are made, the sensor will be in TEST way, as a consequence we should wait 20 seconds before the led diode blinks 10 times during 2 seconds showing that there is no longer in TEST way.

Note (Desynchronization of sensors)

FR. Si la pile n'est pas insérée dans son support, il faut l'introduire. Peu après, la diode LED clignote 10 fois pendant 2 secondes.
Une fois ces clignotements effectués, le capteur passe en mode TEST. En conséquence, il faut attendre 20 secondes avant que la diode LED ne clignote à nouveau 10 fois pendant 2 secondes, indiquant que le capteur n'est plus en mode TEST.
Note (Désynchronisation des capteurs)

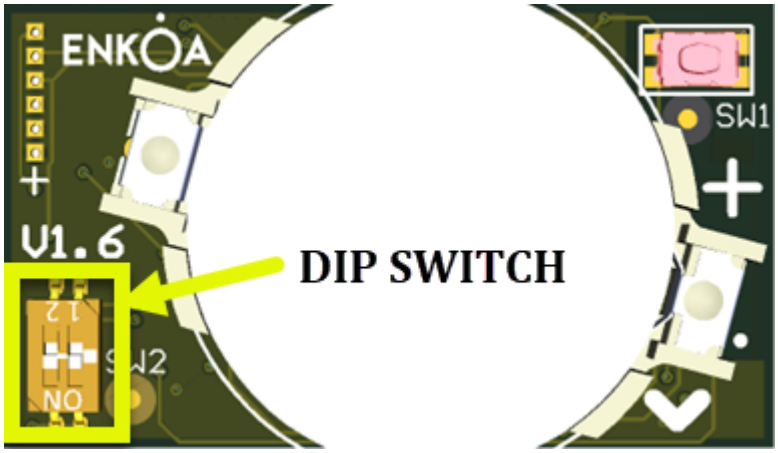
To perform the desynchronization or erasure of the sensors in the energy saver consult the manual of the corresponding saver.
The desynchronization will be necessary in the following cases:
- When one of the room sensors must be deleted.
- When a sensor is damaged and it is replaced by a new one.

After the desynchronization, it is always necessary to synchronize the room sensor with the new energy saver.
The desynchronizing will NOT be necessary in the following cases:
- When sensor battery is replaced.
- When a new sensor is added in a room.

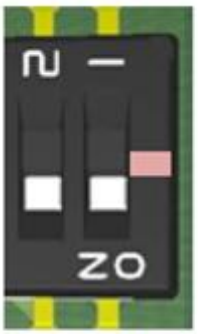
3. SENSOR CONFIGURATION

The sensor will be configured by default as Door sensor.
The Door/ Window sensor has four operating ways, one as Door sensor, Windows sensor, Minibar sensor and the other one as Twin Door.

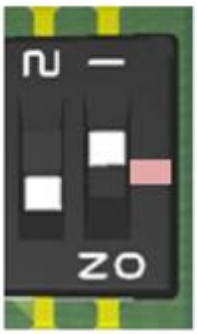
Depending on which application it is used, it must be configured one way or another.



To configure the sensor in one way or another, we must move the DIP Switch in one way or another:

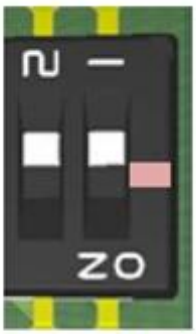


DOOR



WINDOW

MINIBAR



TWIN DOOR

4. OPERATION

The DOOR/ WINDOW sensor has a wireless Communication with the Iswitch energy saver and in turn maybe connected with the IVIEW system.

The different operating ways are the following:
The DOOR / WINDOW Sensor detects any opening or locking of the DOOR/ WINDOW sensor and sends energy saver status, till there is no opening detected the energy saver will not switch off the relay or relays. (For instance air conditioned)

4.1 Blinks summary

	State of the red Led	Number of blinks	During of the Blinks(seg)
Initial Blinks	Short Blinks	10	2
Test output	Short Blinks	10	2
Correct Synchronization	Short Blinks	25	5
Low Battery	Short Blinks	1	0.01

5. SWITCHING OFF THE RELAY OR RELAYS OF THE ENERGY SAVER

The switching off of the relay or the relays (Depends on configuration) when the window is opened will be configurable from 0 to 250 seconds in multiples of 5 seconds.

For instance if energy saver's relay 2 is temporized with 30 seconds and the window is opened after 30 seconds, the energy saver's relay 2 will turned off.

To configure this switching off time consult the manual of the corresponding saver.

6. CLEANING AND MAINTENANCE

For the long lasting of the device, please follow the following instructions:

- Replace the battery from time to time every two years or when the sensor asks for that by 3 red blinking.

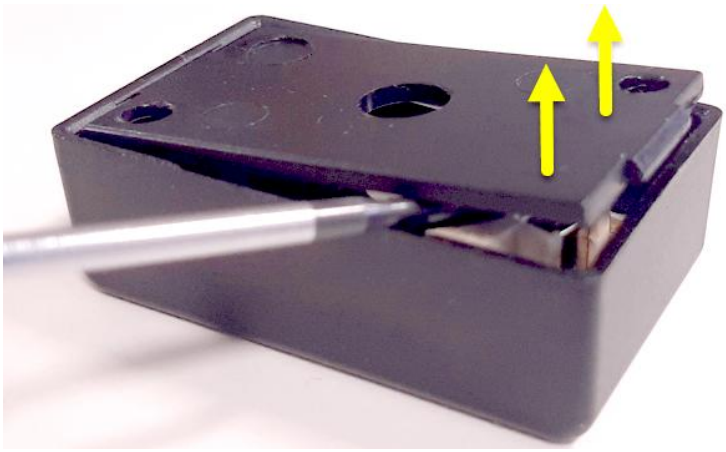
6.1 Battery replacement

When batteries are about to run out the sensors warns the user, in order to be replaced.

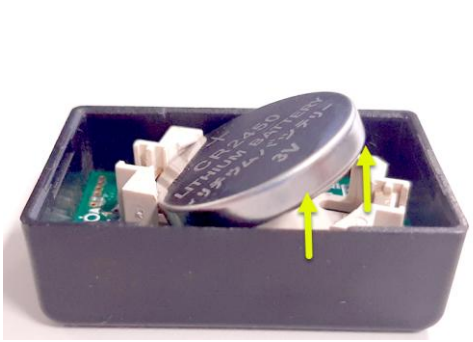
The detector blinks **1 time red every 32 seconds showing low battery**.

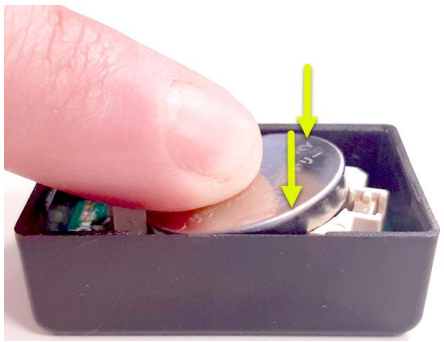
For replacing the battery, the following steps must be followed:

- Remove the rear cover of the detector as shown in the picture:



- Remove the CR2450 battery from the PCB as shown in the picture and replace it with a new one in the same position. Check that the detector flashes red when the new battery is inserted.





CAUTION: make sure you are introducing a battery with the appropriate polarity.
ATTENTION : assurez-vous d'insérer une pile avec la polarité appropriée.

- Once replaced the battery, put the detector cap on over the base and ensure that it's been correctly installed.

7. TIPS FOR PROTECTING THE ENVIRONMENT

Batteries may be damaging if they are not disposed appropriately. Protect the environment by throwing the worn out batteries in an authorized collection point.
For a long lasting of the batteries, when the battery is low, replace all the batteries.

FR. Les piles peuvent être dangereuses si elles ne sont pas éliminées correctement. Protégez l'environnement en déposant les piles usées dans un point de collecte autorisé.
Pour prolonger la durée de vie des piles, lorsque l'indicateur de batterie faible apparaît, remplacez toutes les piles.

8. TECHNICAL DATA

DESCRIPTION	Door / Window sensor for the energy saver
REFERENCE	SPVxIxS
POWER SUPPLY	3V CR2450 lithium battery
AUTONOMY	4 years (13uA average consumption, 90mA at most)
COMMUNICATIONS	2,45 GHz wireless, IEEE 802.15.4
COMMUNICATION COVERAGE	20m (max. Distance to the energy saver)
INTERFACE	Red led
MATERIAL	"Fireproof material according to norm UL 94 V-0"
RANGO TEMPERATURA	-10º a 50º
TECHNOLOGY	Magneto resistive sensor + magnet
MAX. DISTANCE BETWEEN THE SENSOR – MAGNET	Recommendable to have a slight separation Maximum clearance 1.2cm
DIMENSIONS (DETECTOR, MAGNET)	Detector (44,21mmx27mm) Magnet (18,30mmx13,34mm)
WEIGHT	14g

9. REGULATORY INFORMATION

FCC ID: **2ASEQSPVXIXS**

IC: **24733-SPVXIXS**

HVIN: **SPVxIxS**

6.1 FCC Compliance Statement (§15.19)

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.

6.2 ISED Compliance Statement (RSS-Gen)

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

6.3 FCC Class B Digital Device Notice (§15.105)

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.

6.4 FCC Modification Warning (§15.21)

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

6.5 RF Exposure Statement (§2.1093)

This equipment complies with FCC and ISED radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. The device has been evaluated to meet the general RF exposure requirements. The device can be used in portable exposure conditions without restriction.

10. INFORMATIONS RÉGLEMENTAIRES

FCC ID: **2ASEQSPVXIXS**

IC: **24733-SPVXIXS**

HVIN: **SPVxIxS**

6.1 Déclaration de conformité FCC (§15.19)

Cet appareil est conforme à la partie 15 des règles de la FCC. Son fonctionnement est soumis aux deux conditions suivantes :

(1) Cet appareil ne doit pas provoquer d'interférences nuisibles, et

(2) Cet appareil doit accepter toute interférence reçue, y compris les interférences susceptibles de provoquer un fonctionnement indésirable.

6.2 Déclaration de conformité d'ISDE (CNR-Gen)

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique 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;
(2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

6.3 Avis relatif aux appareils numériques de classe B de la FCC (§15.105)

Cet équipement a été testé et déclaré conforme aux limites d'un appareil numérique de classe B, conformément à la partie 15 des règles de la FCC. Ces limites sont conçues pour fournir une protection raisonnable contre les interférences nuisibles dans une installation résidentielle. Cet équipement génère, utilise et peut émettre de l'énergie radiofréquence et, s'il n'est pas installé et utilisé conformément aux instructions, peut causer des interférences nuisibles aux communications radio.

Cependant, il n'y a aucune garantie que des interférences ne se produiront pas dans une installation particulière. Si cet équipement cause des interférences nuisibles à la réception de la radio ou de la télévision, ce qui peut être déterminé en éteignant et en rallumant l'équipement, l'utilisateur est encouragé à essayer de corriger l'interférence par une ou plusieurs des mesures suivantes :

- Réorienter ou déplacer l'antenne de réception.
- Augmenter la distance entre l'équipement et le récepteur.
- Brancher l'équipement sur une prise d'un circuit différent de celui auquel le récepteur est connecté.
- Consulter le revendeur ou un technicien radio/TV expérimenté pour obtenir de l'aide.

6.4 Avertissement sur les modifications (§15.21)

Attention : Tout changement ou modification non expressément approuvé par la partie responsable de la conformité pourrait annuler le droit de l'utilisateur à utiliser l'équipement.

6.5 Déclaration sur l'exposition aux RF (§2.1093)

Cet équipement est conforme aux limites d'exposition aux rayonnements de la **FCC et d'ISDE** établies pour un environnement non contrôlé. Cet émetteur ne doit pas être co-localisé ou fonctionner en conjonction avec une autre antenne ou un autre émetteur. L'appareil a été évalué pour répondre aux exigences générales d'exposition aux RF. L'appareil peut être utilisé dans des conditions d'exposition portables sans restriction.