

MPE/SAR/RF exposure information

This device was verified for RF exposure and found to comply with Council Recommendation exposure requirements. This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

**WARNING:** While this device is in operation, a separation distance of at least 41 cm (16.2 inches) must be maintained between the radiating antenna inside the EUT and the bodies of all persons exposed to the transmitter to meet the FCC RF exposure guidelines.

Making changes to the antenna or the device is not permitted. Doing so may result in the installed system exceeding RF exposure requirements. This device must not be co-located or operated in conjunction with any other antenna or radio transmitter.

**NOTE:** The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all WiFi product marketed in US must fixed to US operation channels only.

Cet appareil répond aux directives d'exposition sur la limitation d'exposition du public général aux champs électromagnétiques.

**Radiation Exposure Statement:** This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with greater than 48 cm between the radiator & your body.

**Déclaration d'exposition aux radiations:** Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à plus de 48 cm entre le radiateur et votre corps.

Safety information

The following sections describe the safety guidelines for this product.

AC adapter

This product is intended to be supplied with a listed ARRIS Direct Plug-In AC adapter marked Class 2 or LPS and rated 100-120 V, 60Hz 0.9 A output 12 V 3A for all NVG578L series gateway models.

The AC power adapter supplied with this product is designed to ensure your personal safety and to be compatible with this equipment. Use only the power adapter that was provided with the gateway.

Please follow these guidelines:

- Do not use the adapter in a high moisture environment. Never touch the adapter when your hands or feet are wet.
- Allow adequate ventilation around the adapter. Avoid locations with restricted airflow.
- Connect the adapter to a proper power source. The voltage and grounding requirements are found on the product case and/or packaging.

Adaptateur secteur

Cet appareil est destiné à être alimenté par une source d'alimentation directe fournie par ARRIS ou de « Classe 2 » ou marquée « LPS », et avec un courant de sortie de 12 V DC, 3 A pour tous les modèles NVG578L.

Le bloc d'alimentation secteur fourni avec ce produit a été conçu pour garantir votre sécurité et être compatible avec cet appareil.

Veuillez suivre les consignes suivantes:

- N'utilisez pas l'adaptateur secteur dans un environnement hautement humide. Ne touchez jamais l'adaptateur secteur si vos pieds ou mains sont humides.
- Laissez une ventilation adéquate autour de l'adaptateur secteur. Evitez les endroits où la circulation de l'air est insuffisante.
- Branchez l'adaptateur secteur sur une prise respectant les spécifications sur la tension et la mise à la terre se trouvant sur la coque et/ou l'emballage du produit.

**Telecommunication cord** Caution: To reduce the risk of fire, use only No. 26 AWG or larger UL Listed or CSA Certified Telecommunication Line Cord.

**Cordon téléphonique** Attention: Afin de réduire le risque d'incendie, n'utilisez qu'un cordon téléphonique de calibre 26 AWG ou supérieur listé UL ou certifié CSA.

Internal telephone ports (VoIP)

Telecommunication equipment connected to this port (e.g., via "Phone Lines 1 & 2" port) should be UL Listed and the connections shall be made in accordance with Article 800 of the NEC.

Port téléphonique (VoIP)

Tout équipement de télécommunication téléphonique connecté à ce port doit être listé UL et les branchements doivent être fait conformément aux dispositions de l'Article 800 du Code national de l'électricité (NEC).

Repairs

Do not, under any circumstances, attempt any service, adjustments, or repairs on this equipment. Instead, contact your local ARRIS distributor or service provider for assistance. Failure to comply may void the product warranty.

Réparations

N'essayez en aucun cas d'effectuer des réparations, des ajustements ou des réparations sur cet équipement. Contactez plutôt votre distributeur ou fournisseur de services ARRIS local pour obtenir de l'aide. Le non-respect de cette consigne peut annuler la garantie du produit.

Location - electrical considerations

CAUTION: Due to risk of electrical shock or damage, do not use this product near water, including a bathtub, wash bowl, kitchen sink or laundry tub, in a wet basement, or near a swimming pool. Also, avoid using this product during electrical storms. Avoid locations near electrical appliances or other devices that cause excessive voltage fluctuations or emit electrical noise (for example, air conditioners, neon signs, high-frequency or magnetic security devices, or electric motors).

Emplacement – Considération électriques

AVERTISSEMENT: Pour éviter un risque de choc électrique, n'utilisez pas cet appareil à proximité d'une source d'eau, par exemple près d'une baignoire, un lavabo, une machine à laver, dans un garage humide ou près d'une piscine. Evitez aussi d'utiliser cet appareil durant un orage. Evitez de brancher cet appareil à proximité d'appareils électriques pouvant causer de large fluctuations de tension ou émettant du bruit électrique (tel que climatiseurs, enseignes au néon, dispositifs de sécurité magnétique ou de haute-fréquence, ou moteurs électriques).

Location - environmental considerations

Do not plug the power adapter into an outdoor outlet or operate the residential gateway outdoors. It is not waterproof or dustproof, and is for indoor use only. Any damage to the unit from exposure to rain or dust may void your warranty.

Do not use the residential gateway where there is high heat, dust, humidity, moisture, or caustic chemicals or oils.

Keep the gateway away from direct sunlight and anything that radiates heat, such as a stove or a motor.

- Do not use the adapter if the cord becomes damaged.
- Do not attempt to service the adapter. There are no serviceable parts inside. Replace the unit if it is damaged or exposed to excess moisture.

Lieu - considérations environnementales

Ne branchez pas l'adaptateur secteur sur une prise extérieure et n'utilisez pas la passerelle résidentielle à l'extérieur. Il n'est pas étanche à l'eau ou à la poussière, et est pour une utilisation à l'intérieur seulement. Tout dommage à l'appareil résultant d'une exposition à la pluie ou à la poussière peut annuler votre garantie. N'utilisez pas la passerelle résidentielle dans des endroits où la chaleur, la poussière, l'humidité, des produits chimiques ou des huiles sont caustiques. Gardez la passerelle à l'abri de la lumière directe du soleil et de tout ce qui dégage de la chaleur, tel qu'un poêle ou un moteur.

- N'utilisez pas l'adaptateur si le cordon est endommagé.
- N'essayez pas de réparer l'adaptateur. Il n'y a aucune pièce réparable à l'intérieur. Remplacez l'appareil s'il est endommagé ou exposé à un excès d'humidité.

Class 1 Laser Product

**DANGER:** Viewing the laser output with certain optical instruments (e.g. eye loupes, magnifiers and microscopes) within a distance of 100 mm may pose an eye hazard.

**DANGER:** There must be a proper termination of all active fibers in the network.  
IEC 60825-1:2014- Safety of laser products- Equipment classification and requirements  
EN 60825-1:2014- Safety of laser products- Equipment classification and requirements  
IEC 60825-2:2004+A1+A2- Safety of laser products- Safety of OFCS  
EN 60825-2:2004+A1+A2- Safety of laser products- Safety of OFCS  
Complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice

No. 50, dated June 24, 2007

Produit laser de classe 1

**DANGER:** La visualisation de la sortie laser avec certains instruments optiques (loupes, loupes et microscopes, par exemple) à une distance de 100 mm peut présenter un risque pour les yeux.

**DANGER:** toutes les fibres actives du réseau doivent être correctement terminées  
IEC 60825-1: 2014- Sécurité des produits à laser- Classification et exigences de l'équipement  
EN 60825-1: 2014- Sécurité des produits à laser- Classification et exigences de l'équipement  
IEC 60825-2: 2004 + A1 + A2- Sécurité des produits laser- Sécurité des systèmes OFCS  
EN 60825-2: 2004 + A1 + A2- Sécurité des produits laser- Sécurité des systèmes OFCS  
Conforme aux normes 21 CFR 1040.10 et 1040.11 à l'exception des déviations par rapport à l'avis laser No 50, daté du 24 juin 2007.

|                   |                                                        |
|-------------------|--------------------------------------------------------|
| Trade Name        | ARRIS                                                  |
| Responsible Party | ARRIS International plc.                               |
| Address           | 3871 Lakefield Drive, Suwanee, GA 30024, United States |
| Phone             | 1-866 362-7747                                         |

Note to CATV system Installer: This reminder is provided to call the CATV systems installer's attention to section 820-93 of the National Electric Code which provide grounding and, in particular, specify that the Coaxial cable shield shall be connected to the grounding system of the building, so close to the point of cable entry as practical, or equivalent.

NVG578L Gateway Quick Start Guide

Introduction

Use this Quick Start Guide to install, configure, and perform basic troubleshooting for the NVG578L gateways.

Power supply installation

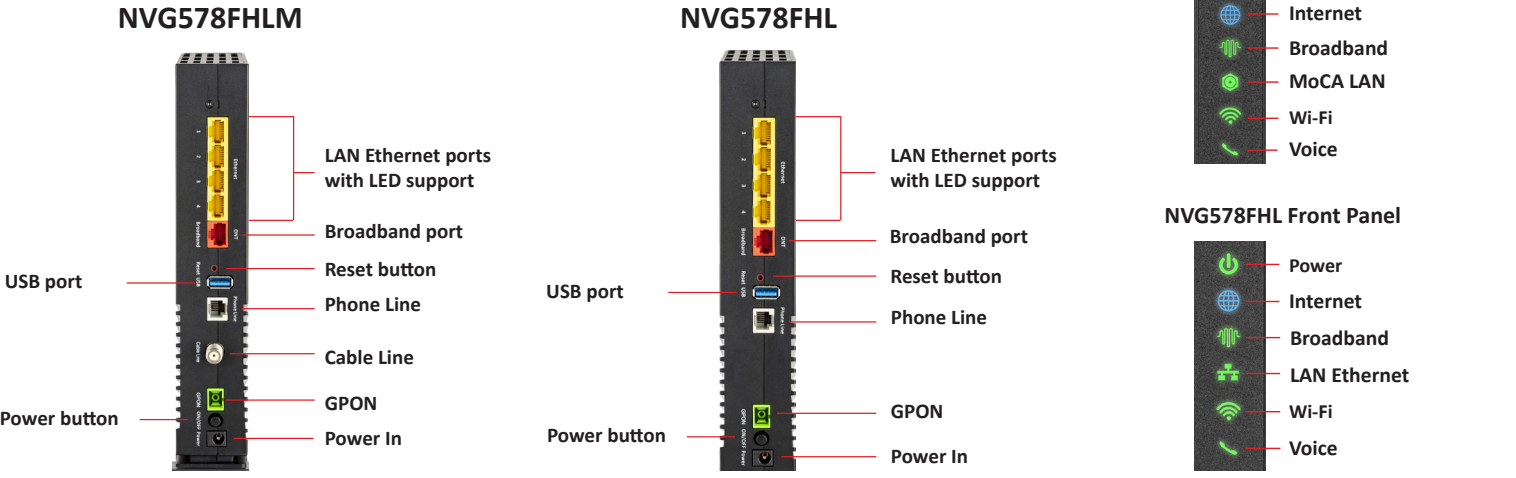
Connect the power supply cord to the Power In connector on the gateway the other end into an appropriate electrical outlet.

Product ventilation

The gateway is intended for residential use. Position the gateway in a vertical position and where temperature remains within a range of 32° – 104°F(0° – 40°C) and heat from the unit itself is not trapped. There must be at least two inches (2") of clearance on all sides except the bottom.

Gateway positioning, status indicator lights and port configuration

Proper positioning of the gateway is essential for proper cooling. Colored LEDs on the gateway indicate the status of various port activity.



NOTE: Please see the product label placed on the base of your unit for the model number.

LED descriptions

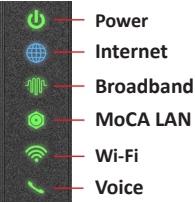
| LED                                             | Status                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power                                           | <b>Solid Green:</b> The device is powered.<br><b>Flashing Green:</b> The device is booting.<br><b>Solid Red:</b> Boot failure.<br><b>Flashing Red:</b> Detecting Factory Reset (press and hold the recessed Reset Switch for 10 or more seconds to trigger the factory reset).                                                                                                                                                                                                 |
| Internet                                        | <b>Solid Red:</b> No IP address or authentication failed.<br>Off: No active broadband connection.                                                                                                                                                                                                                                                                                                                                                                              |
| Broadband                                       | <b>Solid Green:</b> Ethernet WAN connection is active.<br><b>Solid Red:</b> No broadband Ethernet WAN connection on the line.                                                                                                                                                                                                                                                                                                                                                  |
| MoCA LAN                                        | <b>Solid Green:</b> MoCA LAN connection is active.<br>Off: No MoCA LAN connection or MoCA is disabled.                                                                                                                                                                                                                                                                                                                                                                         |
| Wi-Fi                                           | <b>Solid Green:</b> Wireless enabled (either radio).<br><b>Flashing Yellow:</b> WiFi Protected Setup (WPS) is active.<br>Slow flash = less than 3 sec WPS push for the configured radio SSID (2.4 GHz or 5GHz) user pairing.<br>Fast flash = 3 sec or longer WPS push for 5GHz Video SSID pairing.<br><b>Flashing Red:</b> Flashes for 30 seconds to indicate WPS timeout or conflict.<br><b>Solid Red:</b> Wireless network failure.<br>Off: Wireless disabled (both radios). |
| LAN/WAN Ethernet LEDs on rear panel RJ-45 ports | <b>Solid Green:</b> Port is active.<br>Off: Port is not active.<br><b>Flashing Green:</b> Traffic is passing on the line.                                                                                                                                                                                                                                                                                                                                                      |
| Phone Line                                      | <b>Solid Green:</b> All voice lines are registered and active.<br><b>Flashing Green:</b> A voice line is ringing or off-hook.<br><b>Solid Yellow:</b> Both lines of a two line system are provisioned with one unregistered.<br><b>Solid Red:</b> All provisioned voice lines are provisioned but not SIP registered.<br>Off: VoIP is not provisioned, or the gateway power is off.                                                                                            |



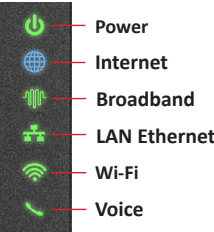
Minimum spacing



NVG578FHLM Front Panel



NVG578FHL Front Panel



## Powering and initial cabling

Press the **Power** button on the back of the gateway. The Power indicator will initially flash GREEN to indicate that the gateway is booting and then solid GREEN to indicate it is operational. Under normal operation, while the gateway is powering up, LED status is as follows:

- Internet, Broadband, Coax, Wireless, and Phone indicators will be off.
- Broadband indicator will initially be solid RED, and upon Ethernet link, it will light solid GREEN.
- Coax and Wireless indicators will light solid GREEN to indicate that the Coax link is established and Wireless service is enabled. Internet will light solid BLUE to indicate Internet connection is active.
- Phone indicator will light solid GREEN after the Internet indicator lights BLUE to indicate that digital phone service is active.

**NOTE:** During the initial setup, it may take several minutes to achieve service connectivity.

**Broadband:** Follow instructions provided by your Service Provider. If no instructions are provided, then call your Service Provider.

**Digital Phone Service:** To connect the gateway to a digital phone line:

1. Connect the supplied RJ-11 terminated phone cable to the Phone port on the back of the gateway.
2. Connect the phone cable to a phone or fax machine.

**LAN Ethernet:** To make an Ethernet connection:

1. Connect the supplied RJ-45 terminated Ethernet cable to one of the Ethernet ports on the back of the gateway.
2. Connect the Ethernet cable to the Ethernet port on a local computer.

**USB port:** To connect the gateway to the USB port:

1. Connect the USB cable to the USB port on the back of the gateway.
2. Connect the other end of the USB cable to your device.

## Access the Web Management Interface

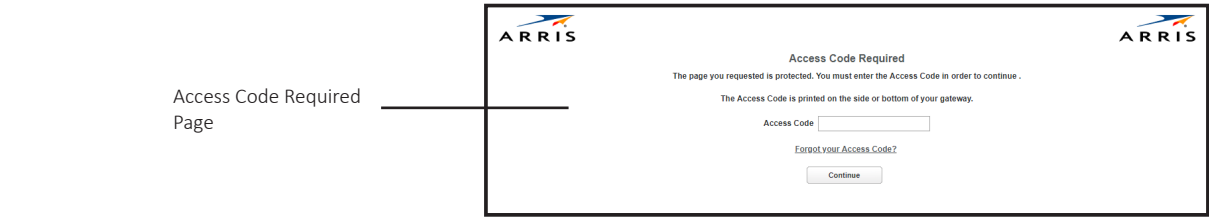
1. Open a web browser, such as Firefox, Chrome, or Microsoft Internet Explorer, from the computer connected to the gateway.
2. Type the following address in the address bar of the browser to open the Access Code Required Screen:

http://192.168.1.254

**NOTE:** Select the appropriate language button in the lower right corner of the Access Code Required screen to continue with the selected language.

1. Provide the Device Access Code, a unique code printed on a label on the base of the gateway.
2. Select **Continue**.

To access the Web Management configuration pages:



**NOTE:** The terms Device Access Code and Password are sometimes used interchangeably.

## Add a wireless device to the gateway

On the wireless device, use the Wireless setup option to find the available wireless network names. The Wi-Fi Network Name for the gateway is printed on the bottom of the label along with the Wi-Fi password.

NOTE: The main page provides an overview about the connection and home network status. You can also access information for the following:

- **Home:** Network Status/Configuration
- **System:** System status, upgrade, restart and factory reset options
- **Broadband:** WAN status, statistics, and parameter settings
- **Wi-Fi:** Wi-Fi status and configuration
- **Voice:** Voice status and QoS configuration
- **Home Network:** LAN status and configuration
- **Wireless:** Network Status/Configuration, including security settings
- **Network:** Status of all Devices in the LAN Host Discovery table
- **Firewall:** Firewall status/configuration
- **Diagnostics:** Gateway connection and application diagnostics

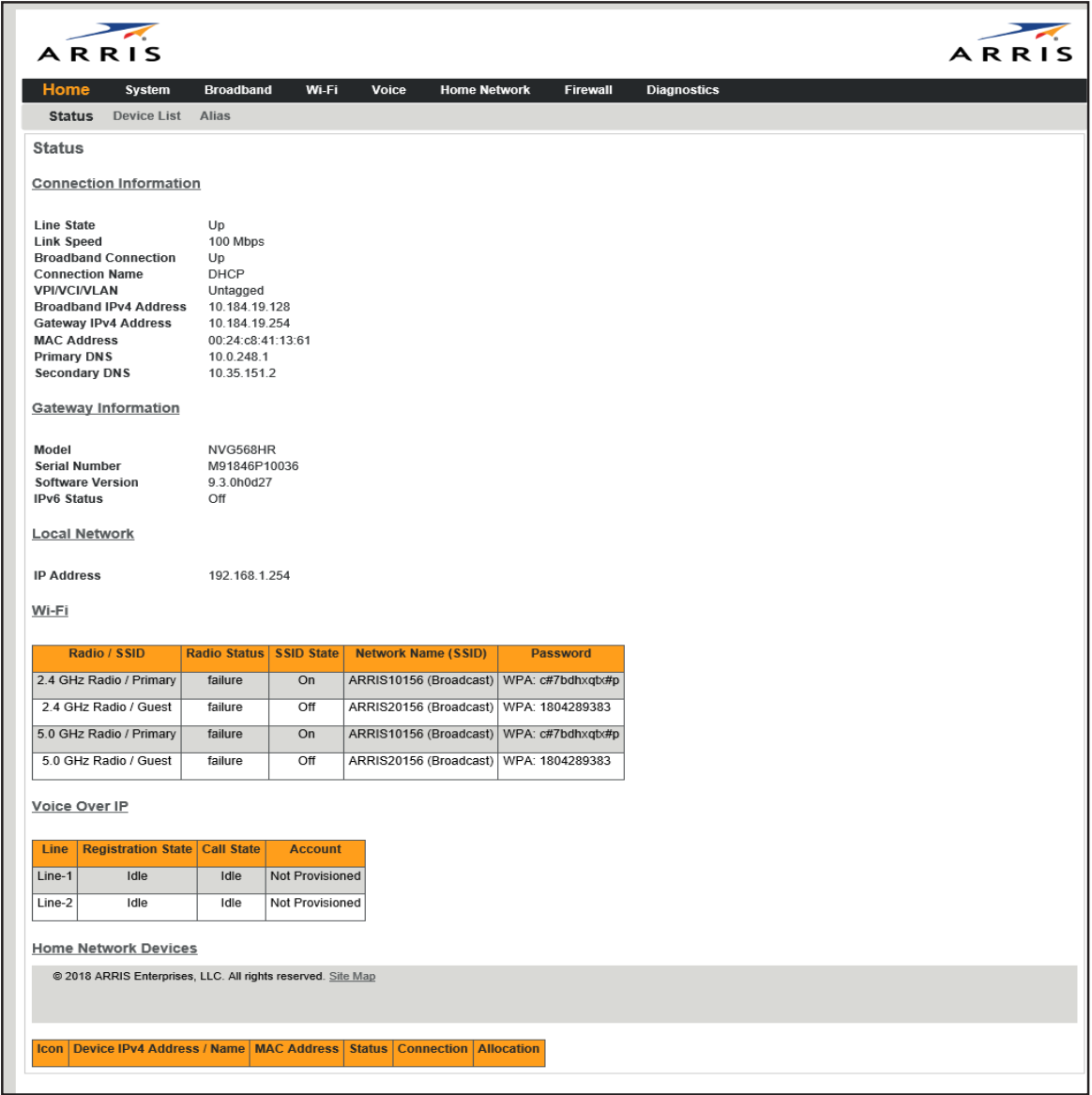


Image: Home page

**NOTE:** This is a reference image and may slightly differ based on your device.

### Declaration of conformity

The following sections describe regulatory compliance by region.

#### FCC/ISED compliance

This device has been tested and certified as compliant with the regulations and guidelines set forth in the Federal Communication Commission- FCC Title 47 Part 15 and the Innovation Science and Economic Development (ISED) Canada CAN ICES-3 (B)/NMB-3(B) and RSS-247 Radio and Telecommunication regulatory requirements.

Cet appareil a été testé et certifié conforme aux réglementations et directives définies dans les exigences réglementaires CAN CAN ICES-3 (B) / NMB-3 (B) et RSS-247 d'Innovation et Canada (ISED).

**Manufacturer:** ARRIS

**Models:** NVG5x8 Product Family

#### Part 15 of FCC rules

This device complies with part 15 of the FCC Rules and Industry Canada license- 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 received, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux normes 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.

Users should be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5470-5725 MHz and that these radars could cause interference and/or damage to the LE-LAN device.

Les utilisateurs doivent être avisés que les radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250-5350 MHz et 5650- 5850 MHz et que ces radars peuvent causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

The device for operation in the band 5150-5250MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

Where applicable, antenna type(s), antenna models(s), and worst-case tilt angle(s) necessary to remain compliant with the e.i.r.p. elevation mask requirement set forth in section 6.2.2.3 shall be clearly indicated.

Les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

Lorsqu'il y a lieu, les types d'antennes (s'il y en a plusieurs), les numéros de modèle de l'antenne et les pires angles d'inclinaison nécessaires pour rester conforme à l'exigence de la p.i.r.e. applicable au masque d'élévation, énoncée à la section 6.2.2.3, doivent être clairement indiqués

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 to 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.

**Caution:** Changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate this equipment.