SAMSUNG
WISENET

SMARTCAM D1

User Manual

SNH-V6435DN

Smartcam D1
User Manual

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SPECIFY SERVICE INSTRUCTIONS AND WARRANTY TERMS

FCC Compliance 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 undesired operation.

FCC Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to correct the interference by one of the following measures: Reorient or relocate the receiving antenna. Increase the separation between the equipment and receiver. Connect the equipment into an outlet on a circuit different from which the receiver is connected. Consult the dealer or an experienced radio/TV technician for help.

FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Industry Canada Statement

This device complies with RSS-247 of the Industry Canada Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Industry Canada Radiation Exposure Statement

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body.

Instructions & Warranty

The manufacturer is not responsible for any loss or radio/TV interference caused by unauthorized modification of the product.

Such modification will void the warranty of the product as well as the user's right of use.

WARNING

- The product must be assembled and installed by an adult.
- Before using, read all instructions on this manual thoroughly and follow operational instructions, warnings on this manual and printed on the product.
- To avoid entangled power cord, do not place it around the baby bed or other infant furniture. Keep this product and its power cord out of children's reach.
- Especially, the power cord should be installed carefully while keeping it out of children's reach.
- Never use the product near bath tub, sink, washing machine and in wet basement to avoid moisture.
- The product is not designed for medical monitoring, and requires a grown-up's protective supervision on its use.
- To avoid overheating of the product, do not expose the product to direct sunlight; do not install or use near a heat source such as heater, radiator, cooking devices (ex: electric stove or oven) and other warming devices (ex: audio amplifier, TV, etc.).
- Make sure to keep ventilated while using the product.
  Avoid pillar or furniture that may block ventilation, when installing the product.
- Make sure to use the power adaptor provided. If used with unidentified adaptor, it may damage the product. The power adaptor must be used with regular household electric supply.
- Avoid sharp, pointed objects around the adaptor's cable, not to damage the cable.
- Be warned and never hold the cable's stripped part when connecting / disconnecting the adaptor to/from the wall outlet.
- To avoid entangled cable lines, avoid using cable extension for adaptor's power cord.
- The product's servicing is allowed only to authorized Hanwha Techwin service personnel.
- Accessories and small parts of the product should be stored keeping out of children's reach.
- The product is not designed to replace responsibility of human supervision on children.
- The product is not equipped with device of immediate notification to adult with accidental/sudden children's move; it requires periodic checks and human supervision.
- This appliance and its antenna must not be collocated or operation in conjunction with any other antenna or transmitter. A minimum separation distance of 20 cm must be maintained between the antenna and the person for this appliance to satisfy the RF exposure requirements.

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01 Getting Started

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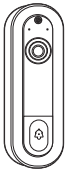
Features

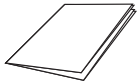
- **Easy to install**
  - The Wi-Fi Direct button allows easy connection to a wireless router.
- **Remote monitoring**
  - You can monitor your SmartCam D1 remotely, at any time and from any location, using your smartphone.
- **Real-time alarm**
  - When the bell rings, a push alarm is sent to the smartphone.
- **Face recognition**
  - You can set the person who wants to receive the alarm.
- **Downloading a recorded video**
  - You can download motion detection/audio detection/manually recorded video to the user's smartphone (Android).

What’s Included

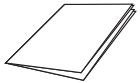
Check for components when opening the product package.



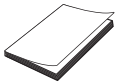
SmartCam D1



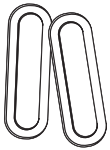
Quick Start Guide (Option by region)



Warranty Card



GPL Lisence

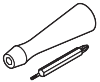


Face cover

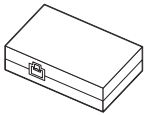
Secure screw

Plastic anchor

Drill bit



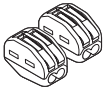
Screw driver



Power stabilizer

Power stabilizer Cable

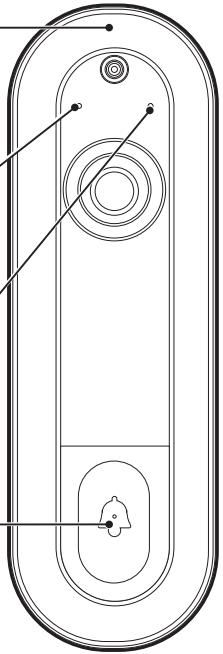
Power cable



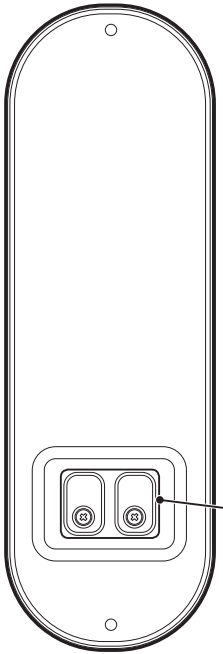
Connector

Part names and functions

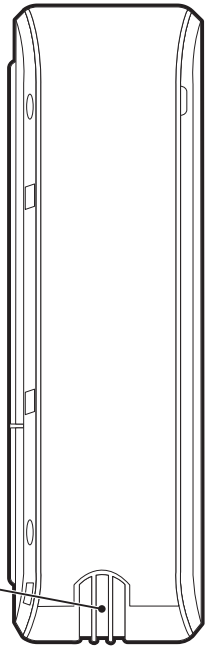
Front



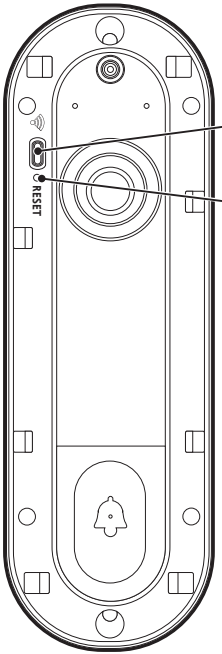
Rear



Side



Components



WiFi Direct Button

Wi-Fi is used for wireless communication between product and smartphone.

Reset button

Resets the product settings to the factory default. The system restarts if you press the button for 10 seconds using a pointed object such as a needle.

- If you press too strongly, the button can break.

Installation & Network Connection

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Installation

Precautions

1. As this product works on a Wi-Fi network, video receiving may be unstable if there is an obstacle (metal, wall, door) in the use environment, or if the product is receiving interference from another Wi-Fi device nearby.
   Install the station hub and the camera at a position that ensures good video reception, considering the Wi-Fi network environment.
2. Do not install the device under direct sunlight or other strong light sources. Place it where there is good visibility.
3. Do not install it in a place where there are a lot of obstacles.
4. When wiping the surface of the product, a clean and soft dry cloth should be used. Moist the dry cloth with water and wring it thoroughly to remove extra water.
   (Do not use cleaners containing alcohol or solvents, detergents containing surface active ingredients, and skin care products or oil, as they can cause damage or deformation of the product.)
5. Do not install the product in places where there are or may be chemicals or traces of oil. Cooking oils like soybean oil can cause damage or deformation of the product, so please do not install the product near the kitchen or the kitchen counter. This may cause damage to the product.
6. Please be careful not to get chemical substances on the surface of the product when installing the product.
   Some detergents or chemical solvents like adhesives can cause serious damage to the surface of the product.
7. The function and performance of the product may not be guaranteed if the product is not installed/uninstalled by the recommended procedure.

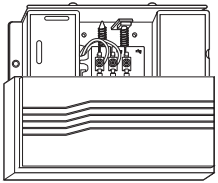
To check before installing

- Check your in-home chime whether it is a mechanical or electrical one.
- It is expected most of current mechanical chimes work properly except for one with a special feature, etc.
- Check out the compatible chime list on the website which is updated on monthly basis.

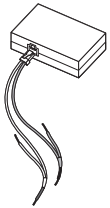
Installing Power stabilizer

Connecting Power stabilizer to existing mechanical chime.

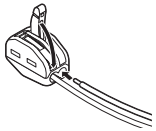
1. Find a breaker to cut off the electricity
2. Find existing chime bell in the house. (following your sound)
3. Open the chime cover and unscrew the [**FRONT**] [**TRANS**] wires with a screwdriver.



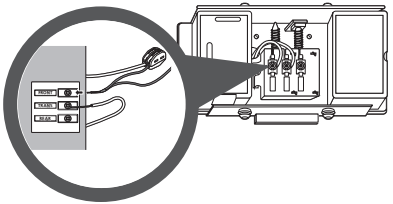
4. Connect the supplied power cord to the power stabilizer socket.



5. Open the holding pins of the enclosed two connectors, connect the wire pulled out from [**FRONT**], and close the holding pin.



6. Connect each “L” connectors to each of the two wires inside the chime.

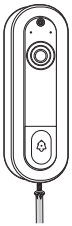


7. Place the power stabilizer in a suitable place inside the chime. (If there is no space, attach a double-sided tape to the outside.)
8. Close the chime cover.

Disassembling

- Check whether or not the camera installation position is suitable for good video reception.

1. Loosen the screws at the bottom of the product using the screwdriver as shown.
2. Pull apart the casing by pulling it apart.



Power connection

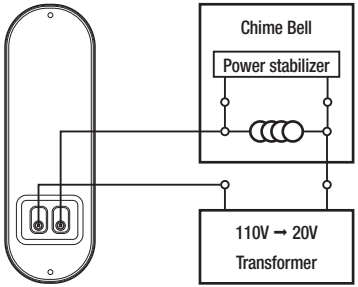
When installing SmartCam D1, connect the Power Adaptor to Chime bell.
When not connected, Some functions of SmartCam D1 and Chime Bell may not work properly.

- Only 16 to 24 volts AC power installed on the existing chime.
- Check and install a mechanical / electronic chime type.
- Install and install the circuit breaker for safety reasons.
- Refer to the Home page for a list of compatible chimes.

- Connect the chime type to chime (default) when connecting the SmartCam D1 to the 16 AC adapter Transformer.

❖ Connection Structure

- Existing installation structures have been removed from the power stabilizer in the picture below.
- Connect the two wires (black and white) to the two bunches of webbing, as shown in the figure.
- Failure to connect may result in some functions of the SmartCam D1 and the Chime Bell becoming inoperative.



❖ **LED status**

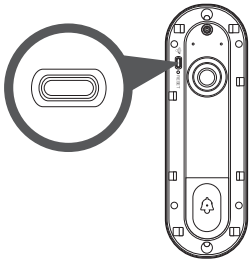
LED indicator shows operational status with colors.

Refer to table below for detailed meaning of the LED indicator.

Color	Status
Red	Booting up
Red Blinking	Booting completed / Establishing network connection
Yellow	Enabling Wi-Fi Direct
Blue Blinking	Connecting to the network.
Blue	Local connection established
Green	Connection to server completed / Normal operation
Purple	Updating firmware

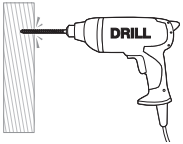
Network connection

In a location with a strong Wi-Fi signal and no interference, use Wi-Fi communication.



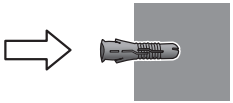
Assembling

1. Use a drill on the marked positions, and drill holes to a depth of 3 cm. Clean the holes after drilling.



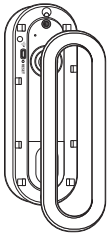
- It is recommended to use a drill bit (Ø5) that is suitable for the wall material.
- Be careful not to get injured while drilling.

2. Insert an anchor for the two holes. Fully insert the anchors by gently tapping the anchor head with a hammer or rubber mallet.

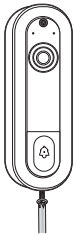


3. Match the camera to the holes on the door and fasten the screw.

4. Insert the Deco case into the camera front.



5. Tighten the screws to combine the casing.



Network Connection and Settings

Precautions

- The wireless network access may fail, depending on the communications environment.
  In this case, a wired connection is recommended.
- For details about the network settings and password, contact your network administrator or service provider.
- For a specific Internet service requiring user authentication, you may not access the service. If this is the case, contact the service provider.
- Do not access the unauthorized network.
- The farther the distance from the Wireless Access Point, the longer time the network connection may take.
- If you fail to access the selected wireless network, try a different Wireless Access Point to make access.
- For more information about the router or the wireless connection, refer to the documentation of the router or contact the router manufacturer.
- If the product is connected to a multiple-Wireless Access Point network environment, some video packets may be lost, depending on the network traffic load.
- According to the network policy of the Internet service provider (UDP blocking), video reception may be limited to 7 minutes.
- In addition to the above two situations, you may encounter a network delay or interruption due to the network conditions.
- Some hubs can have compatibility issues.

Connection using the Wi-Fi Direct function

What is Wi-Fi Direct?

If you use Wi-Fi Direct, the product can be connected to the router without using wires.

1. Connect the power adapter to the product.
2. When the power is connected, the power status LED lights up in red and starts blinking when boot-up is complete.
3. If you press and hold the Wi-Fi Direct button for 5 seconds, the LED will illuminate in yellow.

4. Register the product following the instructions in the mobile guide.
5. When the product is connected to the server, the LED will illuminate in green.

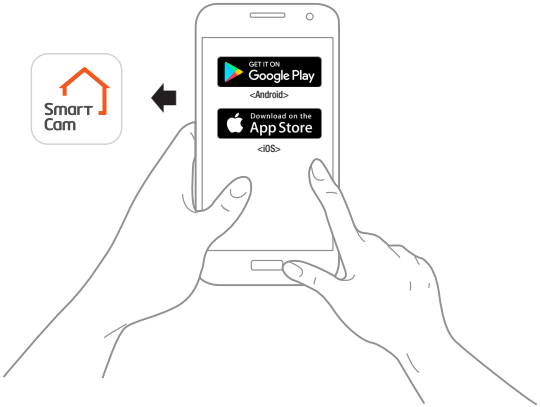
- You can connect in relay mode if the router doesn't have UPnP.
  Configuration may differ depending on the router model.
  Please refer to the router manual.
- Please contact the service provider if you have difficulty connecting to the Internet.

Creating an Account and Registering a SmartCam D1

With the Wisenet SmartCam+ app, users can monitor the SmartCam D1 from a mobile device.

1. Go to Google Play/App Store and search for "**Wisenet SmartCam+**".
2. Download the application and install it on your mobile device.
3. Run the downloaded application.
4. After completing member registration, register the SmartCam D1 as instructed on the screen.

■ For more details, refer to Wisenet SmartCam+ mobile guide.



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Specifications

Specifications

Item	Description
Video	
Imaging Device	1/2.8" CMOS
Total Pixels	2065(H) x 1565(V)
Effective Pixels	2065(H) x 1553(V)
Scanning System	Progressive
Min. Illumination	B/W : 0 Lux with IR
Lens	
Focal Length	2.29mm
Max. Aperture Ratio	F 2.2
Angular Field of View(H / V / D)	D : 154.3˚ / H : 125˚ / V : 94.8˚
Min. Object Distance	0.2m
Focus Control	Fixed Focus
Mount Type	Wall mount bracket with secure screw
Lens Distortion Correction	Support (Camera level)

Item	Description
Operational	
IR LED	850nm
Viewable Length	5m
Motion Sensor	N/A
Camera Title	Off / On (Time display)
Day & Night	True D/N
Wide Dynamic Range	Off / On
Contrast Enhancement	Auto
Digital Noise Reduction	Support (2D+3D Noise Filter)
Digital Image Stabilization	N/A
Motion Detection	Motion Zone Selection
Privacy Masking	N/A
Gain Control	Auto
White Balance	Auto
Digital Zoom	4x(Mobile)
Flip / Mirror	N/A
Intelligent Video Analytics	Motion Zone Selection, Body Detection, Face Recognition
Sound Classification	Sound Classification (Siren, Glass breaking, Screaming, Gun shot/ Explosion)
Alarm I/O	N/A

Item	Description
Alarm Triggers	Combination of events (Body Detection + Motion Zone Selection) ※ Customizable Event action
Alarm Events	Push Alert (Mobile Device) Notification via e-mail
Memory Slot	N/A
Cloud Storage	Support (for North America only)
Booting Time	Max 30sec
Factory reset	Support (Pin hole button)
Network	
Ethernet	N/A
Wireless	WiFi 802.11a/b/g/n/ac (Dual Band)
Video Delay(Latency)	Max. 1000ms(Internet, Mobile, not relay mode)
Response Time	Within 5 seconds
Panning Control Delay	N/A
Video Compression Format	H.264
Resolution	1600×1200 / 1280×720 / 640×480
Max. Framerate	H.264, 640x480 10FPS(256kbps), Low Speed MJPEG, 640x480 3FPS(500kbps), Third Party H.264, 1024x768 15FPS(768kbps), Mid Speed H.264, 1600x1200 30FPS(2.5Mbps), Hig Speed
Smart Codec	N/A
Video Quality Adjustment	Compression Level, Target Bitrate Level Control

Item	Description
Bitrate Control Method	VBR ATC(Auto Transmission Control)
Streaming Capability	Multiple Streaming (Up to 4 Profiles) TBD
Audio I/O	Built-in Mic and Speaker
Audio Compression Format	G.711 u-law
Audio Communication	2-way audio / Full duplex
IP	IPv4, IPv6
Protocol	TCP/IP, DHCP, SMTP, DNS, RTSP, RTCP, RTP, HTTP, TCP, UDP, STUN, TURN, XMPP, SIP, uPNP, ICE, SNTP, IPv4/v6, ICMP, Bonjour
Security	HTTPS(SSL) Login Authentication
Streaming Method	Unicast
Max. User Access	5 users at Unicast Mode
Webpage Language	N/A
Web / App viewer	Web viewer : not supported Supported OS : iOS, Android
Central Management Software	N/A
Environmental	
Operating Temperature / Humidity	-20°C ~ 40°C / Less than 90% RH
Storage Temperature / Humidity	-30°C ~ +50°C / Less than 90% RH
Ingress Protection	Weather Resistant

Item	Description
Electrical	
Input Voltage / Current	Wired AC(16~24VAC, 10VA)
Power Consumption	Max 7W
Power Connector	
Mechanical	
Color / Material	Silver/Black
Dimension (WxHxD/ØxH)	42mm × 135mm × 23mm
Weight	119g
Adapter	
Color / Material	N/A
Volume	N/A
Cable Length	N/A
Plug Type	N/A
Plug Size	N/A
Compatibility	
Full API	Must Support (smartcam function level)
Automation	N/A
3rd Party Integration	N/A

Product Appearance

unit: mm (inch)

unit: mm (inch)

Troubleshooting

If you encounter a problem with your system, see the table below to solve the problem as quickly and easily as possible. Please follow the instruction below:

Problem	Action
I forgot my user ID/ password.	- Move to "Log-in page ➞ Forgot your ID/Password?", and enter the registered e-mail address to which we will send you the user ID and/or a new password. It can be spammed out depending on the policy of the email server. After logged in, it is advisable to change the temporary password provided.
Product is not connected to the wireless hub.	- If the green light on the product state LED turns off frequently, it may be because the product is installed in an environment with a poor wireless Internet connection. In this case, a wired connection is recommended. - Check the password for the wireless hub and try again.
After logged in, I failed to register the product.	- Check whether the serial number entered matches the label on the product. - Enter the correct password for the product registered again and try to register the product again. - Check whether the LED light of the product is yellow. - If this fails to resolve the problem, factory reset the product and repeat the procedure from the beginning. (To factory reset the product, press and hold the RESET button on the product for 10 seconds. The product will be restarted when the product is factory reset.)

Problem	Action
The video from the camera is temporarily lost.	- The video from the camera can be delayed according to a network delay. Check if the product and the camera are far apart.
No sound is output from the video.	- Click the Voice icon in the video playback page, or check if the voice is turned On in your smart phone app. - Some internet service providers do not support audio outputs in relay mode.
I want to change my password and/or email address.	- Change the account information after logging into Wisenet SmartCam+. For more details, refer to the mobile guide.
Product will be connected in a relay mode.	- Check the UPnP setting of the router. - A network upload speed of at least 3.5Mbps (1080p) is recommended. - Depending on the policy of your service provider, you can access in relay mode.
No event is detected.	- The Outdoor, Battery-Powered Camera cannot detect additional events while detecting an event and transmitting to the station hub, and may be subject to a time delay during live monitoring.
A battery replacement push notice is generated.	- The Outdoor, Battery-Powered Camera is displayed as activated on the camera list even if it is fully discharged, so please replace the battery when a push notice is received.
Motion event is not recorded.	- The Outdoor, Battery-Powered Camera detects the movement of an object using a PIR sensor, but it may fail to record the movement of an object if it approaches to the camera and passes quickly.

Hanwha Techwin cares for the environment at all product manufacturing stages, and is taking measures to provide customers with more environmentally friendly products. The Eco mark represents Hanwha Techwin's devotion to creating environmentally friendly products, and indicates that the product satisfies the EU RoHS Directive.

Correct Disposal of This Product

(Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

Head Office
6, Pangyo-ro 319 beon-gil, Bundang-gu, Seongnam-si,
Gyeonggi-do, 463-400 Rep. of KOREA
Tel : +82.70.7147.8753 Fax : +82.31.8018.3740
www.wisenetlife.com

Hanwha Techwin America
500 Frank W. Burr Blvd. Suite 43 Teaneck, NJ 07666
Tel +1.877.349.3149
www.wisenetlife.com

Hanwha Techwin Europe
Heriot House, Heriot Road, Chertsey, Surrey, KT16 9DT, United Kingdom
Tel#1 00800.801.08022
Tel#2 +31.77.326.1580
www.wisenetlife.com

Hanwha
Techwin

FCC Compliance 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 undesired operation.

FCC Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to correct the interference by one of the following measures:

• Reorient or relocate the receiving antenna.

• Increase the separation between the equipment and receiver.

• Connect the equipment into an outlet on a circuit different from which the receiver is connected. • Consult the dealer or an experienced radio/TV technician for help.

FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

IEEE 802.11b or 802.11g operation of this product in the USA is firmware-limited to channels 1 through 11.

If the device is going to be operated in the 5.15 - 5.25 frequency range, then it is restricted to indoor environment only. This device meets all other requirements specified in Part 15E, Section 15.407 of the FCC Rules.

Industry Canada Statement

This device complies with RSS-247 of the Industry Canada Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Ce dispositif est conforme à la norme CNR-247 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

Industry Canada Caution

(i) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems; (ii) high-power radars are allocated as primary users (i.e. priority users) of the bands 5250- 5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Avertissement:

(i) les dispositifs fonctionnant dans la bande 5 150-5 250 MHz sont réservés uniquement pour une utilisation à l'intérieur a n de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux; (ii) De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5 250-5 350 MHz et 5 650-5 850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

Industry Canada Radiation Exposure Statement

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body.

Déclaration d'exposition aux radiations

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non con trôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.