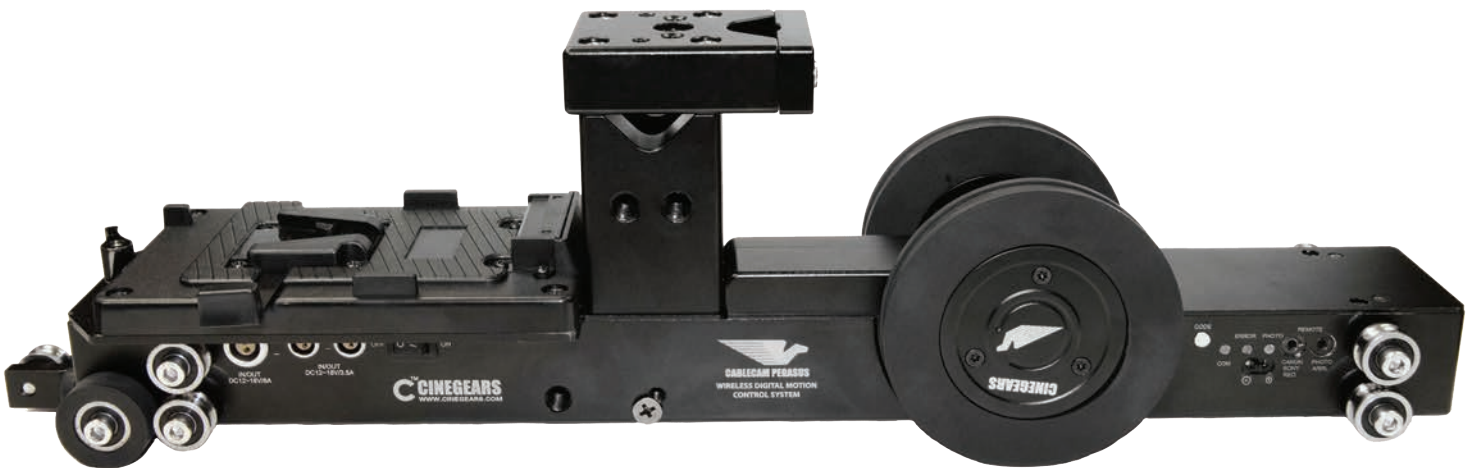




Pegasus Wireless Cablecam Controller

MANUAL BOOK



Product Name: Pegasus Wireless Cablecam Controller

Brand: CINEGEARS

Model:CG-3015

Manufacture: GuangZhou SunFieldAimo Electronic Technology Co., Ltd

■ Safe Operation	2
■ Introduction and Specifications	3
■ Accessories	4
What Comes in a Standard Pegasus Kit	4
Item Description	5
■ User Manual	8
Controller Description	8
Setting Up the Cable Cam	12
Setting Up the Trolley Cam	14
■ Disclaimers	15
■ Customer Support	16

Safe Operation

- Do not exceed the 8 kg payload in cable mode, and 10 kg payload in trolley mode (including Pegasus and battery).
- Do not exceed the 35° grade limit in cable cam mode, and the 10° grade limit in trolley mode.
- Do not set up the cable system on weak or unstable anchors; any sagging of the cable or movement of the anchors will greatly affect the functionality of the cable system, and potentially threaten the well-being of the equipment and crew.
- The Pegasus is equipped with rubber stoppers on either end of the housing for impact-absorption.
- On either side of the housing are monitors that will automatically stop motion when obstructions are detected, effectively preventing unwanted collisions between your Pegasus and its surroundings.
- In the options menu there is a Voltage monitor so you can actively observe voltage and amperage levels.
- The stability arms are highly recommended for ground use, to ensure stability, and to prevent toppling with heavy cameras that have a high center of gravity.
- The stability arms should be in place before calibrating a Gimbal, as the calibrating motions of the Gimbal may otherwise topple the Pegasus and cause damages to the Gimbal or Pegasus housing.
- Use the safety locks every time the mounting plate is utilized.
- The pulley system is highly recommended for double cable use, as it maintains an optimal space for the cable cam to travel along the two parallel wires: never let your cables cross each other.
- Every time the trolley cam system is utilized, both the small and large sets of rubber wheel mounts must be placed onto the wheels.
- In trolley mode, it is important that the stability arms be in place before calibrating a Gimbal, as the calibrating motions of the Gimbal may otherwise topple the Pegasus and cause damages to the Gimbal or Pegasus housing.
- The side of the housing where the battery sits is the forward direction of the Pegasus, as denoted by the + values.
- Warranty does not cover: overheating, over usage, damage to the motor, or any damage that occurs through user neglect. The warranty may also be voided if the user attempts to modify and repair the system independently: please contact our technical assistants before any repairs are attempted.
- When the green indication light (on the side of the body) is on, it means the battery is low; when the green light is flashing, it means there is troubles with the unit, indicating either: there is an obstacle 60 cm's ahead of the Pegasus, or the motor is dead, or the Pegasus body is overheating. When this occurs, stop procedures immediately.
- When the yellow indication light (on the side of the body) blinks periodically, it is to indicate every time a picture or video is captured. When the yellow light is flashing, it is to indicate that the collision protection is engaged.

Cinegears Pegasus Cablecam

Smoothest in the Sky, Drive it on the Fly

Versatile

The Cinegears Pegasus cable cam system introduces the concept of a cable cam that converts to a land-based remote control system on the fly. Designed in Vancouver Canada, this system allows you take to the ground or air with a full bi-directional range of motion with maximized stability and pre-programmability. Stay in range of your camera at all times with the 1km (line of sight) range ability the custom Pegasus controller.

Lightweight & Strong

The added functionality does not translate into added weight: we have designed this system to be light powerful, and versatile. The sturdy aluminum body of the Pegasus does not compromise on strength & safety, weighing in at well under 1kg. Being such a lightweight system, the Pegasus uses smaller motors add almost zero noise pollution on set.

Maximum Shot Stability

Carry up to a 20kg load on a maximum slope of 35° with perfect start and stop stability; the dual-cable system will not sway from wind or speed during motion, and will come to a perfect stop from maximum Using German-engineered motor technology, the Pegasus will not slide back down even the steepest maximum grade of cable slope.

Utterly Precise & Programmable

Utilizing the same motor technology used in our time-lapse slider system, the programmable and precise controller will allow you to take the biggest and boldest time-lapse shots ever. Motion from ambient breeze is eliminated by our dual-cable design, which also eliminates jarring motions from starting and stopping momentum.

Safety

The Pegasus is designed with insight from a wealth of on-set experience. A forward-motion object detection system will prevent your cable cam from coming into unwanted contact with trees, walls, and talent. All Pegasus' come in a custom-fit, waterproof, shockproof hard case, ensuring optimal safety in transport.

Compatible

The Pegasus is compatible with DJI Ronin, MōVI, Letus Helix, and all other major Gimbals, using a universal dovetail head. The Pegasus kit comes with REC triggers built in for all major professional film (e.g., Sony Blackmagic URSA, ARRI Alexa, RED Epic) and DSLR cameras (e.g., Canon 5D, Nikon D70, Sony Alpha).

SPECIFICATIONS:

- Heavy duty design in a small sized steel and aluminum body weighing only 1.1kg.
- Payload: 25kg max, with up to a 35 degree incline or decline.
- 133 Mhz avoids interference from on-set 2.4g or 5g devices, transmitting up to 1500 meters with no lag.
- Auto channel pairing between 49 channels for maximum signal clarity.
- Front and rear ultra sonic collision detection sensors provide extra safety in motion.
- Power source: Standard V-lock battery plate, interchangeable for AB or other common production batteries.

What Comes in a Pegasus Kit?

PEGASUS KIT COMPONENTS



Item Description

1. Pegasus Body (3-014)



The body of the Pegasus can run suspended on cables, or on the ground on the trolley. The body responds to the Cinegears controller, and has two obstruction sensors on either side to stop the motion of the body if something is blocking its path. The body has a D-Tap outlet, ensuring stable surge-protected 12-24 V DC output. It also has two 2-pin Lemo outlets: a 12-18V/3.5A, and a 12-18V/8A outlet. The Pegasus body has an OFF/ON switch, as well as a CODE button, and a toggle switch to alternate between cable and trolley mode: the trolley mode is denoted by the larger icon, which represents the larger rubber wheels of the trolley mode. The power source is a standard V-lock battery plate, with other battery-type options available. There is also an adjustable steering wheel on the front end of the body, allowing for customizable trajectory curvature.

2. Wireless Controller (3-015)



This Cinegears controller is a high-end quality technology that sends signal to the Pegasus body according to the user's programmed or manual instructions. The controller functions in both manual and automatic mode, and has a wide-variety of programmable features and modes so the user can pre-set parameters, as well as monitor the progress of set programs. For full instructions on the functionality and programming of the Controller, see Controller Description (page 8-11).

3. Stability Arms with Ground Balancing Wheel (3-0155)



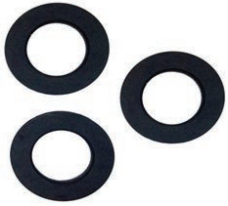
The Stability Arms allow for greater stability and functional safety of the mounted camera for GROUND USE ONLY. The stability arms are easily mounted: simply screw in a stability arm on either/both sides of the body (the threaded ports for the stability arms are halfway along either side of the body). Unscrew the arms to remove the stability arms. The stability arms are highly recommended for ground use, to ensure stability, and to prevent toppling with heavy cameras or Gimbals with a high center of gravity.

4. 15mm Balance Rod (3-0156)



The mounting extension arm is an optional feature that enables an extended perspective. The mounting extension arm can be used with both the cable and trolley mode: with the cable mode, you can mount the housing so the camera rests standing upright, or dangling upside down, and the mounting extension arm can be utilized to extend the camera in either direction.

5. Ultra-Friction Rubber Ground Wheels (3-0157)



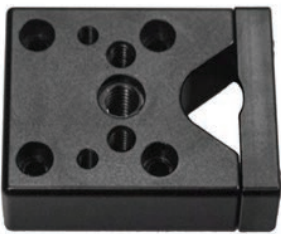
The rubber wheels are meant for the trolley mode: when using the trolley mode, place the rubber wheels on the large bare wheels on either side of the housing. The wheels enable added traction and stability and are mandatory in trolley mode.

6. Ultra-Friction Rubber Cable Wheels (3-0158)



Like the larger rubber wheels, the small rubber wheels are meant for trolley mode: when using the trolley mode, place the small rubber wheels on the small bare wheels on either side of the housing. The wheels enable added traction and stability and are mandatory in trolley mode. The steering wheel on the front of the body of the Pegasus also requires a small rubber wheel in trolley mode.

7. Universal Mounting Plate (3-0159)



This universal mounting plate allows for the mounting of virtually any professional grade camera or DSLR camera. The mounting plate is constructed with high grade steel, and can work in conjunction with the quick release dove tail, or on its own. Included with the universal mounting plate is an adjustable rod bracket to ensure maximum compatibility. The mounting plate comes with a wide variety of mounting screws to help optimize the universality of the plate.

8. Quick Release Dove Tail Bracket (Ronin 3-0151, Movi 3-0152)



This quick release dove tail rests onto the mounting plate; simply place the dove tail on top of the mounting plate and secure it with the four accompanying screws. The system is universal in design and supports any professional grade camera or DSLR camera.

9. Start/Stop Triggers (3-0160)



The start/stop triggers allow for complete automated control of your camera rig; it allows for remote controlled or programmed starting and stopping of your recordings, and is quintessential to processes like time-lapse shots. These cables can work in concert with any industry-standard camera, as well as DSLR cameras.

Item Description

10. 30m Flexible Steel Braid Cable (3-0153)



This high-grade steel cable is coated in a thick plastic sleeve and has been field-tested extensively to guarantee its functionality and structural integrity. The standard Pegasus kit comes with 20m of steel wiring wrapped on an industrial-strength spool.

11. Heavy Duty Cable Pulley (3-0161)



The cable pulley is used for two cable set-ups, with the wire fed through the pulley and returned to the cable mounting plates. The design facilitates universal mounting with ratchet straps, screws, or clamps, all the while ensuring full customizability with the placement of the pulley on the anchor, as well as the mounts themselves. Made out of high-grade industrial steel to guarantee maximized structural integrity.

12. Dual Lock Cable Mounting Plate (3-0162)



Introducing the all NEW Lemo Power cable for the Multi Axis Wireless Follow Focus system. It now connects at a right angle, saving you space on your rig. It helps to keep the wires organized, as well as making it more universal. You can get it in a variety of lengths so don't hesitate to ask.

13. Waterproof Custom Hard Carrying Case (3-0163)



This waterproof carrying case features custom-cut hard foam that ensures every component of your Pegasus kit is safely secured during transportation. The case is extremely shock resistant, and comes with wheels and an extendable handle to help with ease of transportation.

14. Mounting Screws (3-0164)



The Pegasus comes with one 1/4" and one 3/8" mounting screw to accommodate mounting cameras directly to the universal mounting plate or to the mounting extension arm. These are easily installed directly in to the 3/8" port on either the mounting plate or the mounting extension arm.

Controller Description



Controller Description

(1) Code (C) Button

This button synchronizes the Pegasus with the controller, and turns on the collision protection.

Turning On the Collision Protection

The collision protection is off by default; to turn it on, simply hold code for three seconds

Synchronizing the Controller with the Body of the Pegasus

Attach a battery to the Pegasus and press the ON toggle on the side of the Pegasus housing.

Press the CODE button on the side of the Pegasus: the blue COM light on the Pegasus should now be off. If the light is on, press the CODE button again to turn it off.

Press and hold the CODE button on the controller: the controller will say SEND ADDRESS...SUCCESS if successful.

If synchronization fails, press the CODE button on the Pegasus so the blue light is off and try holding the CODE button on the Cinegears controller once more. Synchronization only needs to be done once, unless other controllers are used.

(2) OFF/MANU/AUTO Toggle

Manually switch between Off (power on/off), MANU (manual mode), and AUTO (automatic mode).

(3) Manual Mode

Allows the user to manually control the slider motion and speed. Manual mode is comprised of three adjustable parameters (see "Arrow Buttons" to learn how to adjust on-screen parameters):

Adjusting the Parameters of Manual Mode

Run Dir: Controls the motion direction. L means it will travel leftwards; R means it will travel rightwards.

Max Speed: Controls the speed parameters of motion. 0% is a very slow, restricted motion; 100% is unrestricted.

Press Time: How long you have to hold the Start Button to unlock the ability to cease recording. If it is set to 3 seconds, you have to hold the button for 3 seconds and then let go: now you can press the Start Button to cease filming.

(4) Automatic Mode

Allows the user to establish programmable motions and speed of movement over determined durations of time. Automatic mode is comprised of 6 adjustable parameters, and 2 inventory categories

Adjusting the Parameters of Automatic Mode

Start Place: Controls where the motion starts along the track. Set anywhere between 0-60,000 mm.

Stop Place: Controls where the motion stops along the track. Set anywhere between 0-60,000 mm.

Press Time: How long you have to hold the Start Button to unlock the ability to cease recording. E.g., If it is set to 3 seconds, you have to hold the button for 3 seconds and then let go: now you can press the Start Button to cease filming.

Controller Description

Photo Number: The number of REC Start/Stop triggers that the Pegasus will transmit to the camera; each trigger will turn the recording on or off (if it is on, and receives a signal, it will turn off, and vice versa).

Run Time: How long it takes the Pegasus to travel from the start to stop point during a single program. Divide the run time by the photo number to determine how long the camera will record each shot.

Cycle Times: The number of program cycles (i.e., the number of times the Pegasus will travel between the start and the stop points). One cycle is complete when the photo numbers have counted down to zero and the Pegasus has traveled completely between the start and the stop places.

Photo Remain: How many photos remain to be taken during the active program.

Programming Automatic Mode

Begin by setting the start and stop places: this is the distance your Pegasus will travel to complete one cycle.

Set press time: press time is not quintessential to the programming process, but make sure to set it at a greater value than 1 second so recordings are not accidentally ceased when pressing the button unintentionally.

Set photo number: This is the amount of times the camera will record; each value is either on or off, so the amount of active recording times will be half the set value.

Set run time: this establishes how long one cycle will take; if there are too many photos for too short of a run time, the controller interface will automatically set a mandatory minimum value for the run time.

Set cycle times: this feature is for repeated cycles, so if you want to repeat the program several times, use the cycle times to tell the Pegasus how many times to repeat the program in succession.

Once your program is set, hold the Download Button to transfer it to the Pegasus. Press the Start button to begin.

(5) V (Volt Output)

Actively monitors the volt output of the Pegasus. Both the Manual and Automatic modes show the Volt Output at the bottom of the LED Screen, labeled V.

(6) Arrow Buttons

The 4 arrow buttons are used primarily for the navigation of the Auto and Manual mode parameters.

(7) Set Button

To navigate an options menu, press the Set Button.

Setting Menu Parameters

When in the menu screen, press the UP or DOWN arrows to cycle through the difference options. Once you have selected the parameters you want to change (e.g., Max Speed), press the Set Button once more, this will allow you to finely adjust the values of the parameters by pressing UP, DOWN, LEFT, or RIGHT. UP and DOWN adjusts the quantity one unit at a time, and pressing left or right adjusts the larger or smaller increments. Once you have set the desired parameters, press the Set Button one more time to deselect the option; you can now scroll up and down along the column of options again.

(8) Reset

While in the manual mode you can establish up to 3 set points along the cable. Press Reset to clear the set points.

Setting/Resetting Set Points for the Cable Cam or Trolley

Use the controller to move the Pegasus (see "Speed Knob") to the desired set point along the path of motion. To save that set point, simply hold either the Left (1), Right (2), or Down (3) arrow for 3 seconds. To save the next set point simply move the cable cam to the next desired location on the cable, and hold down either Left (1), Down (2), or Right (3), depending on which save slots are empty; if a set point is established for a button, and the user moves the Pegasus and holds down the same button, the new set point position will override the older set point.

To get the Pegasus to travel to its set points, simply press (not hold) the desired set point (i.e., 1, 2, or 3). To reset all the set points, hold the Up (reset) Button.

(9) Speed Knob

The Speed Knob is a bi-directional, pressure sensitive manual toggle. Used primarily with Manual Mode. Press left or right to dictate the movement of the cable cam/trolley: the speed of the motion is controlled by the pressure of the finger against the button.

(10) Start/Photo Button

In Auto mode this button will start and stop the recording program. In Manual mode this button will start and stop basic recording. Do not hold the Start/Photo button: simply press it once.

(11) Download Button

Sends the Auto mode settings information to the Pegasus housing.

Downloading the Controller Data to the Pegasus

Once Auto program parameters are established, hold the Download Button for 3 seconds to transmit the instructions to the motor. Once sent, press the Start/Photo button to begin cycle. A single click of the Download Button will turn off the LED screen light.

(12) DC 5V Port

Standardized USB charging port

Setting Up the Cable Cam

■ Setting Up the Cable Between Anchors

1. To operate the cable cam feature of the Pegasus, you must first run a length of cable between two anchor points. Make sure the anchor points are sturdy and stable enough to support the fully-equipped cable cam and the cable.

■ Setting Up a Single Cable

1. To set up a single cable line, run a length of cable between two anchors.
2. At each anchor point use the ratchet straps or other similar mounting options to secure the mounting brackets are horizontally level.
3. Feed the end of the cable through the bearing lock (the line goes into the protruding side of the bearing lock), leaving about 6" inches extra line past the bearing lock. The bearing lock automatically clasps the line so it can only be fed through the opening. To release the clasped line, press-in to depress the protruding cylinder center of the bearing lock, and pull the line out. Each bearing lock can hold over 100 pounds of tension, but it is recommended to use the top mounted safety locks located on the mounting bracket for added security.
4. Unscrew the safety lock to allow space between the washer and the mounting plate. Take the 6" end of cable that has been fed through the bearing lock and wrap it around the closer safety lock (in the space between the washer and the mounting plate). Follow the groove indents of the mounting plate to set the cable against the mounting plate and then screw the safety lock into place, effectively locking the cable between the grooves of the mounting plate and the washer of the safety lock. Use the safety locks every time the mounting plate is utilized.
5. Make sure the cable is tight between the two anchor points.

■ Setting up a Double Cable with Two Cables

1. As with one cable, the two plate system requires two mounting plates be ratchet strapped to anchors: the only difference is that you repeat the process of running line and securing it with the bearing and safety lock for two lengths of cable.

■ Setting Up a Double Cable with One Cable

1. Setting up a double cable with only one length of wire is similar to the two cable method, but with only one mounting plate working in tandem with a mounted pulley. Run your length of cable from the mounting plate, to the pulley, and back to the mounting plate: feed your cable through the pulley before you return to the mounting plate.
2. Secure both ends of the cable into the bearing and safety locks, making sure the line is tight and parallel. The pulley system is recommended for double cable use, as it maintains an optimal space for the cable cam to travel along the two parallel wires.

■ Mounting the Body to the Cable

1. To mount the Pegasus to the cables, begin by removing the large and small rubber wheels from the body, as well as any stabilizer arms: these rubber wheels and stabilizer arms are for ground use only.
2. Once the rubber wheels are removed, use a 3/8" Allen key to remove the bottom two wheels of one side of the Pegasus body.
3. Place the side of the Pegasus with removed wheels onto the cable: the largest wheel rests on top of the cable, as well as the two smaller wheels not removed.
4. Reattach the wheels with the cable running along their top side, so the cable is pinched between the two smaller wheels on either side. If using a double cable system, remove the two small wheels from the other side of the body and repeat the aforementioned process of locking the cable between the small wheels of the body.
5. To remove the Pegasus from the cable, unlock and remove the bottom two smaller wheels of the body and slide out the cable.

Setting Up the Trolley Cam

■ Toggling Between Cable and Trolley Mode

Whenever switching between Cable and Trolley mode, make sure to flip the toggle to the proper direction on the body of the Pegasus. The switch alternates between the two modes: the larger of the two symbols represents the larger wheels of the Trolley mode, whereas the smaller symbol is the smaller wheels of the Cable Cam mode.

■ Placing the Rubber Wheels onto the Body

Every time the trolley cam system is utilized, the small and large sets of rubber wheel mounts should be placed onto the wheels, as well as the rubber mount for the front steering wheel. These wheels not only add traction, they also stabilize the unit and are essential in both the functionality and stability of the unit in trolley mode.

■ Placing the Stability Arms onto the Body

Every time the trolley cam system is utilized, both stability arms must be in place. It should also be noted that the stability arms should be in place before calibrating a Gimbal, as the calibrating motions of the Gimbal may otherwise topple the Pegasus and cause damages to the Gimbal or Pegasus housing. To attach the stability arms, simply screw in the arms into either of the threaded ports along the middle of the Pegasus body. Once the stability arms are in the place and the camera/Gimbal has been mounted, the user is free to control the movements of the Pegasus with the controller. Be mindful not to run into obstructions, or to traverse terra that is too unstable or rugged.

■ Adjusting the Trajectory Curvature of the Path

Though the Pegasus moves bi-directionally (forward and backwards) you can dictate the curvature of the path it takes by adjusting the steering wheel on the front of the body. The steering wheel is a single wheel that can be adjusted according to the intended curvature of the Pegasus' path; to adjust the wheel, simply loosen the nut that rests right above the wheel. With the nut loose, you can now manually reposition the wheel in the direction of the intended pathway. Once a desired position for the wheel has been established, simply tighten the nut and place the Pegasus on the ground to test its trajectory.

■ Terms and Conditions

Congratulations on purchasing your new CINEGEARS product. Please read this manual carefully before using the product. By using this product, you hereby agree to this disclaimer and signify that you have read it in full. You agree that you are responsible for your own conduct and any content created while using CINEGEARS products, and for any consequence thereof. You agree to use this product only for purposes that are proper and in accordance with local regulations, terms and any applicable policies and guidelines.

By reading this disclaimer, you also agree:

1. Any part of this disclaimer is subject to change without prior notice. Refer to WWW.CINEGEARS.COM for the latest version.
2. CINEGEARS reserves the right of final interpretation of this disclaimer.

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FCC Caution.

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.

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

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

IC Warning

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

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

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

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