User Manual

for IW2 Wireless Interactive Whiteboard System

Download and install IPEVO IW2 software at support.ipevo.com/IW2

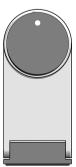




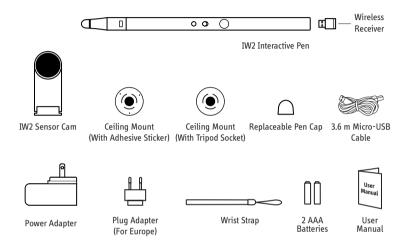
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Package Contents

Congratulations on your purchase of the IW2 Wireless Interactive Whiteboard System. After a few simple steps, your system will be calibrated and ready to use.

Your package should contain the following:

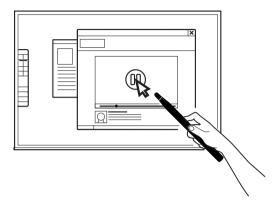


Note: The Interactive Pen tip may be disassembled for maintenance purposes. Otherwise, please do not loosen or disassemble the tip.

The Basics

The IPEVO Wireless Interactive Whiteboard System, or IW2, turns your large projector screen into an interactive touchscreen, giving you the ability to easily draw and annotate for education and business. Plus, because IW2 is compatible with many different kinds of software, you'll also be able to control your computer (and what's on the screen) at a distance. And this is all possible no matter what make and model of projector you have.

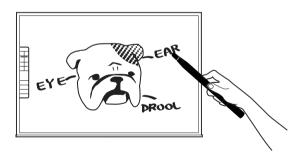
Two Ways to Use IW2



Use the Interactive Pen as a Computer Cursor

The Interactive Pen can behave like a mouse, transforming any surface into a touchscreen. Use the Pen to intuitively perform the actions you'd normally use your mouse to perform.

Note: The Interactive Pen can perform normal mouse actions including click, double click, and drag. However, some actions are not executable with the Pen, such as hovering.



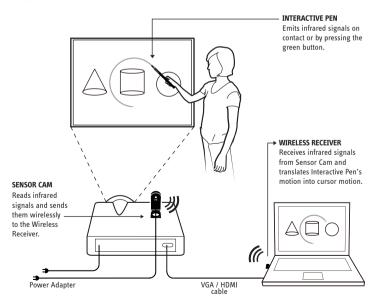
Annotate Your Text and Images

Using the free screen annotation software IPEVO Annotator, you can draw and write directly on your interactive whiteboard. You can even draw on top of your document camera's live video feed. Engage your audience and clarify your material.

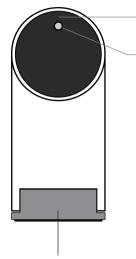
How IW2 Works

IW2 is made up of three devices: the Interactive Pen, the Sensor Cam, and the Wireless Receiver (attached at the bottom of the Interactive Pen). The Interactive Pen emits infrared signals on contact or by pressing the IPEVO button on the Pen, the Sensor Cam, which acts as the "eye" of IW2, then reads the infrared signals emitted and detects the physical location of the Pen. As the Sensor cam works in the same way as how our eyes work, it is necessary to ensure any tappings or movements made with the Interactive Pen could be "seen" and detected by the Sensor Cam. Thus, please keep a clear path between the Sensor Cam and the Pen, otherwise, these actions would not be detected.

After detecting the physical location of the Pen, the Sensor Cam sends this information wirelessly via the paired Wireless Receiver (which must be plugged into the computer's USB port) to your computer, which then translates the Pen's motion into cursor motion. Thus, wherever you move the Pen, the computer will also move its cursor in real time. You can also perform mouse clicks and drags with the Interactive Pen.



Getting to Know IW2



Lens

Detects signals emitted by the Interactive Pen.

LED Indicator

Lights up when powered up and connected. Different colors (solid and blinking) indicate various states.

Color	States
Green	The Sensor Cam is powered on and paired with the Wireless Receiver.
Blinking Orange	The Sensor Cam is not paired with the Wireless Receiver. Check that the Wireless Receiver is plugged into your computer and that it's placed within 16 ft (5m) of the Sensor Cam.
Orange	The Sensor Cam is in Sleep Mode.

Hinged Metal Base

Allows adjustment of the angle of the Lens.

Sensor Power Button

Press once to turn on Sensor Cam and enter Active Mode. Press once again to enter Sleep Mode. To completely power off the Sensor Cam, please unplug the power adapter from the outlet.

Micro-USB Port

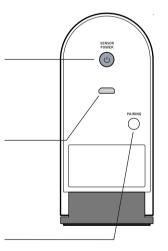
Connect Micro-USB cable here.

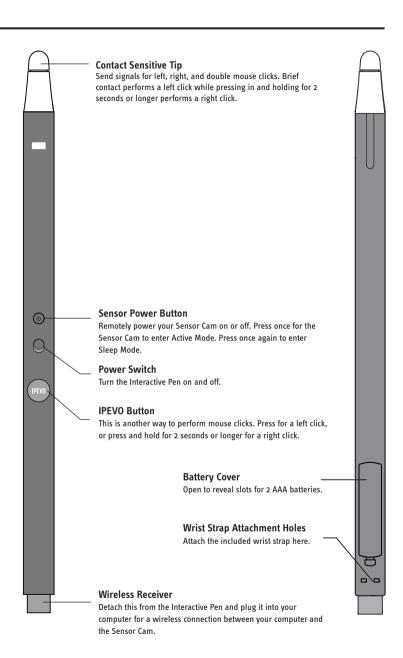
Note: To power the Sensor Cam, connect the other end of the Micro-USB cable to the power adapter and plug the adapter into an outlet.

Pairing Button

Press for 3 seconds to enter Pairing Mode.

Note: By default, no pairing action is required – the Sensor Cam and Wireless Receiver you received are already paired. Just plug the Wireless Receiver into your computer's USB port to start using IW2. However, if you are using a replacement Wireless Receiver or Sensor Cam, you need to pair them before use. To pair them, please follow the steps on Page 23.





Installing IW2

1. Driver & Software Installation

IW2 requires **IPEVO IW Driver** to function. IW2 also comes with a free screen annotation software **IPEVO Annotator**. You can choose to install and use the IPEVO Annotator with your IW2.

Please visit the IPEVO website to download the latest version of IW Driver and IPEVO Annotator at:

support.ipevo.com/IW2

Note: IW2 can be used with third-party mouse-based image processing software, but we highly recommend using it with IPEVO Annotator to fully utilize the potential of your IW2.

After downloading,

For PC:

- Double-click the downloaded file and follow the onscreen prompts to complete the installation for IW Driver.
- Follow the onscreen prompts to accept or decline installation of the Annotator software.
- 3. An IW Driver icon will appear at the bottom right-hand side of the task bar after the installation is completed.

For Mac:

- Double-click the downloaded file. Two icons, "IW Driver" and "Annotator" will appear.
- Drag the IW Driver icon and Annotator icon into the Application folder to complete the installation for both, or only drag the IW Driver icon into the Application folder to install the IW Driver.
- An IW Driver icon will appear at the top right-hand side of the status bar after the installation is completed.

Note: After successful installation of IW Driver, a menu will automatically pop up. You can close it by clicking once on the IW Driver icon. If the menu does not appear, you can start IW Driver by navigating to:

Windows 7 and below: Start Menu -> Program files -> IPEVO -> IW Driver.

Windows 8: Start Menu -> Apps -> IPEVO -> IW Driver.

Mac: Applications-> IW Driver.

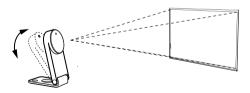
2. Positioning the Sensor Cam

Proper position of the Sensor Cam is important for optimum operation. Follow these guidelines to place the Sensor Cam:

- For most projectors, a good position for the Sensor Cam will be the same location as the projector. One exception to this is if you are using a short-throw projector. In that case, you will need to place the Sensor Cam further away from the screen than the projector.
- Minimal distance from your screen depends on screen size. Place the Sensor Cam according to the recommended distances in the chart below:

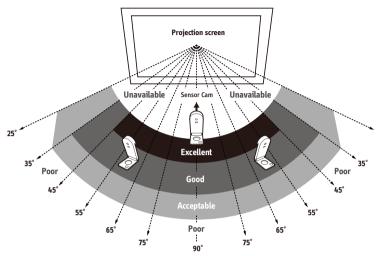
Screen Size	60"	70"	80"	100"
Minimal	8 ft	9 ft	10 ft	11 ft
Distance	(243 cm)	(275 cm)	(305 cm)	(335 cm)

The Sensor Cam should face directly at the projection screen.
 Depending on your screen's height, you may have to adjust the Sensor Cam's lens to face upwards or downwards. Adjust the hinged metal base to easily perform any such adjustments.



 The Sensor Cam is best placed opposite the center of the screen at a straight-on angle. However, a straight-on angle is not required for acceptable operation, and the Sensor Cam may be placed at another angle if necessary. Please refer to the diagram on the following page for placement zones according to accuracy quality:

Installing IW2 (cont'd)



As you can see:

- Accuracy is better when the Sensor Cam is closer to the center.
- · Accuracy decreases as the angle increases.
- Larger screens require more distance between the screen and the Sensor Cam.

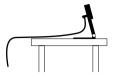
Note: Please keep a clear path between the Sensor Cam and the projection screen to ensure proper operation.

3. Securing the Sensor Cam

It's important to make sure your Sensor Cam is steady and secure before use. There are three ways to secure your Sensor Cam, depending on your setup:

A. Place on a table or AV cart

Use a flat, smooth tabletop or an AV cart. Make sure nothing is blocking the Sensor Cam's path to the screen surface. Adjust the angle of the Sensor Cam to face directly at the center of the screen surface.



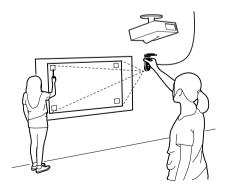
B. Use an upside-down ceiling mount

The Sensor Cam can be mounted upside-down onto the ceiling or ceiling-mounted projector. To do so:

1. Align the hole on the base of the Sensor Cam with the circular peg of the ceiling mount and push the Sensor Cam in. You will hear a slight click when the Sensor Cam has settled into position.

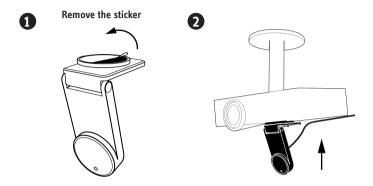


2. Before affixing the mount to the ceiling, hold the Sensor Cam in an area just below (by a few inches) where you intend to mount the projector. Run the Sensor Cam position Diagnosis (see Page 15) with the Sensor Cam in this position to ensure maximum accuracy.



Installing IW2 (cont'd)

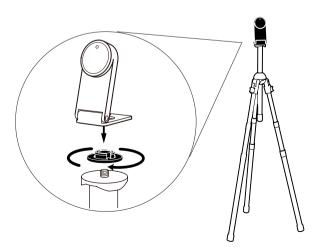
Ensure the mounting surface is clean and free of grit. Remove the adhesive sticker from the bottom of the ceiling mount, and affix the ceiling mount firmly onto the mounting surface.



Note: The adhesive sticker of ceiling mount is extremely adhesive and should only be applied once. The Sensor Cam can be detached without removing the ceiling mount. Simply remove the Sensor Cam from the ceiling mount.

C. Use a tripod

The Sensor Cam comes with a tripod mount. Consider mounting the Sensor Cam onto any standard tripod.



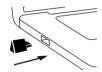
4. Connecting to the Computer

The Sensor Cam can be connected to your computer wirelessly via the included Wireless Receiver. To do so:

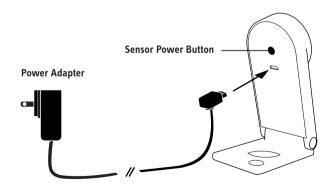
1. Detach the Wireless Receiver from the bottom of the Pen.



2. Plug the Wireless Receiver into the USB port of your computer.



Power on the Sensor Cam by plugging the Micro-USB cable into the Micro-USB port on the Sensor Cam. Then plug the other end of the cable into the power adapter. Lastly, plug the power adapter into an outlet.

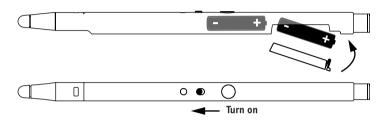


4. The Sensor Cam's LED indicator will light up green once it is successfully connected to your computer.

Installing IW2 (cont'd)

5. Readying the Interactive Pen

Remove the battery cover from the Interactive Pen and insert 2 AAA batteries. Replace the cover. Attach the included wrist strap into the attachment holes. Turn on the pen when ready to use.



6. Calibration

IW2 must be calibrated before use to ensure accurate operation. This process only takes a couple of steps.

To start the calibration process, follow these steps:

PC and Mac:

Click on the IW Driver icon located in the task bar or status bar. Choose "Start Calibration" in the menu.

Note: The Interactive Pen must have batteries and be switched on for calibration and operation.



You can disable auto pop up of the menu and/or auto startup of IW Driver by unchecking the respective boxes in the menu.

Calibration Steps

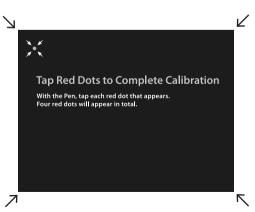
Step 1: Sensor Cam Coverage Detection

Tap each corner square (in any order) with the Interactive Pen and make sure ALL the resulting dots appear inside your projection screen. If not, follow the instructions onscreen to reposition the Sensor Cam until all dots are contained within the projection screen. Then, press Space to continue



Step 2: Accuracy Check

With the Pen, tap each red dot that appears. Four red dots will appear in total. You MUST tap all four in order. Failing to do so may negatively impact Pen accuracy.

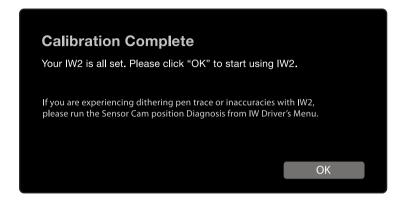


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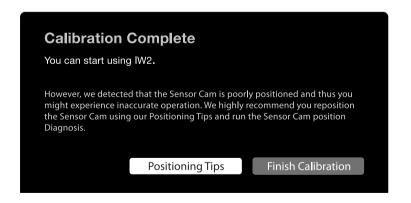
Installing IW2 (cont'd)

Step 3: Calibration Completed

After the process, you will be returned to your desktop and your IW2 will be ready for use.



However, if the system detected that the Sensor Cam is poorly positioned and that there might be inaccuracies with IW2, follow the instructions onscreen to improve its accuracy.



Sensor Cam position Diagnosis

If you find that your pen trace is jumping (dithering), lagging, or otherwise becoming inaccurate after a period of time, please run the Sensor Cam position Diagnosis and reposition the Sensor Cam according to the suggestions given.

You can start the Diagnosis by clicking on the IW Driver icon located in the task bar or status bar and choose "Run Diagnosis".

Using IW2 Interactive Pen

There are two ways to use the Interactive Pen. Firstly, it can be used as a mouse with any mouse-based software application. Secondly, when paired with IPEVO Annotator, it can be used just like your regular whiteboard marker (see Page 18~21).

Using the Interactive Pen as a Mouse

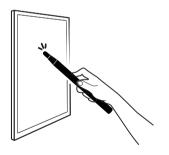
The Interactive Pen can behave like a mouse, transforming any surface into a touchscreen when you use it with a mouse-based application. It can be use to:

A. Control cursor movement

Control the computer's cursor movement by using the Interactive Pen to intuitively perform the actions you'd normally use your mouse to perform. The mouse cursor will follow the Pen's movement in real time.

B. Perform left click

Tap the contact-sensitive Pen tip onto the screen surface, or press the IPEVO button once to perform a left click.



Tap the contact-sensitive Pen tip onto the screen surface.



Press the green button.

C. Perform right click

Press and hold the contact-sensitive Pen tip onto the screen surface, or press and hold the IPEVO button. Hold for at least 2 seconds.

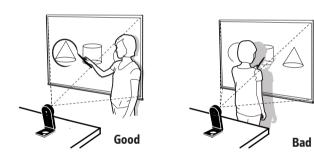
D. Perform double click

Quickly tap the contact-sensitive Pen tip onto the screen surface twice, or press the IPEVO button twice.

E. Click and drag

Press and hold the contact-sensitive Pen tip onto the screen surface, or press and hold the IPEVO button. While doing so, move the Interactive Pen to the desired spot.

Note: While using the Interactive Pen, please be careful not to block the Pen's path to the Sensor Cam with your body as it may affect Pen accuracy.



Using IW2 Interactive Pen (cont'd)

Using the Interactive Pen as a Whiteboard Marker with IPEVO Annotator

IPEVO Annotator is a simple and intuitive screen annotation, recording, image capturing and editing software that comes with IW2 for free. It can be used in combination with many other third-party software or applications. When the Interactive Pen is paired with the Annotator, you can easily draw and annotate on images projected onto the screen just like a regular whiteboard marker, regardless of the software or applications running in the background.

Note: The IPEVO Annotator may not work with certain software and/or applications running in full screen mode.

If you have not previously installed IPEVO Annotator together with the IW Driver, or have not upgraded IPEVO Annotator to the latest version, please visit the Annotator's website for downloading at: support.ipevo.com/Annotator

After installation, you can start using Annotator by clicking on the IW Driver icon located in the task bar or status bar, and choose "Open Annotator".

IPEVO Annotator offers two modes – Desktop Mode (Annotator's default mode) and Drawing Mode. In just a tap, you can easily select the Drawing Mode.



Mode selection



Tap to select Desktop Mode.



Tap to select Drawing Mode.

Using IW2 Interactive Pen (cont'd)

Drawing Mode

In the Drawing Mode, you have access to a wide range of drawing tools to annotate your onscreen material.





Select this tool to draw and annotate. Select the pulldown menu to change color and thickness, or to apply effects.



Allows normal control of other applications while your drawings/ annotations still appear on screen.



Draw basic shapes such as rectangles or ovals. Select the pulldown menu to change color and thickness.



Erase your drawings or annotations. Select the pulldown menu to change the size of the eraser.



Clear all drawings and annotations at once.



Duplicates selected drawings and/or annotations for use on your screen or whiteboard.



Highlights important sections on the screen while blocking the rest to focus the attention of your audience.



Allows undoing and redoing of actions.

Besides, other features are also available.



Save part of your current screen as an image.



Save all of your current screen as an image.



Display a touchscreen keyboard.



Allows viewing and managing of images taken using IPEVO Annotator.



Allows toggling between your screen and whiteboards.



Use your connected IPEVO doc cam's live feed as your background.



Allows recording of all onscreen activities.



Hide the toolbar.



Clicking the rounded corner arrow on either side of the screen will show the toolbar again on that side.

Desktop Mode

When in the Desktop Mode, the annotation features of Annotator is set to hidden, thus your drawings and/or annotations will not appear on your screen. You can then control your computer and applications as per normal. Your drawings and/or annotations will appear on your screen again when you switch back to the Drawing Mode.

For more guides on using IPEVO Annotator, please visit the Annotator's website at:

support.ipevo.com/Annotator

FAQ

How do I quickly determine a good working distance between the screen and the Sensor Cam?

Normally, the projector is a good location to place the Sensor Cam. If you are using a short-throw projector, however, please refer to Page 7 for the recommended Sensor Cam distance guidelines.

Can I use rechargeable AAA batteries for the Interactive Pen? Yes. Rechargeable alkaline batteries are recommended.

Can I use IW2 with my own software instead of IPEVO Annotator? Yes. IW2 can be used with third-party image processing software and whiteboards. Any mouse-based software should work fine.

Can I use IW2 with a TV or monitor instead of a projector?
Yes you can, but we do not recommend it due to the following considerations:

- The TV/monitor screen could be scratched over time from all the Pen swipes.
- The brightness of the TV/monitor can cause eye fatigue over long sessions.
- 3. If the TV/monitor is not firmly mounted, it might move once you start tapping, throwing off the calibration.

What should I do if the cursor is not pointing correctly and/or following the Interactive Pen correctly?

The cursor may lose accuracy if the screen resolution or screen ratio has changed, or if the Sensor Cam has been moved. Please run the calibration process again. See Pages 12~14.

Why is there no scrollbar in my browser or finder window in Mac OS X when using IW2?

By default, the scrollbar is enabled only when a mouse is connected to Mac. You can manually enable the scrollbar by going to System Preferences -> General and set "Show scroll bars" to "Always".

How do I pair the Sensor Cam with the Wireless Receiver? By default, your Sensor Cam is already paired with the Wireless Receiver that comes with it. That said, if you are using a replacement Wireless Receiver or Sensor Cam, you need to pair them before use. To pair your devices:

- 1. Place the Sensor Cam within 1.6 ft (50cm) of your computer (and the Wireless Receiver).
- 2. Power up the Sensor Cam. The Sensor Cam LED indicator should show a blinking Orange.
- Press the Pairing Button for 3 seconds to enter Pairing Mode. The Sensor Cam LED indicator should blink alternately between Orange and Green.
- 4. Plug the Wireless Receiver into your computer's USB port. The Sensor Cam LED indicator will blink Green three times before changing to a solid Green, which lets you know the pairing was successful.

Troubleshooting

When I tap on the corners during calibration, the dots don't fall within the projection screen.

Move the Sensor Cam closer to the area where the corresponding dots do not appear. Or, move the Sensor Cam further away from the screen. Run the calibration process again. See Pages 12-14.

The cursor on my screen is jumping around abnormally and I am not able to control it.

Remove any strong light source or infrared equipment close to the Sensor Cam, as these may interfere with the Sensor Cam.

During calibration, multiples spots appear or spots appear erratically.

- Remove any strong light source or infrared equipment close to the Sensor Cam, as these may interfere with the Sensor Cam.
- Ensure the projector screen you are using is not made of highly reflective glass or metal. Such reflective materials affect Sensor Cam's operation.

The pen trace continually breaks when I write or draw with the Interactive Pen.

- The Sensor Cam might be placed too far away from the screen. Move the Sensor Cam closer to the screen and run the calibration process again. See Pages 12-14.
- Pen trace can only occur if the Sensor Cam's vision field is not blocked. Please do not draw or write with your body blocking the Sensor Cam.
- 3. Replace the batteries in the Interactive Pen. Low batteries can have an adverse affect on pen trace and accuracy.

The LED indicator of the Sensor Cam blinks alternately between Orange and Green, and the pen trace continually breaks when I write or draw with the Interactive Pen.

There might be interference between the wireless connection of the Sensor Cam and the Wireless Receiver. Move the Sensor Cam within 16 ft (5m) of the Wireless Receiver, and check that the LED indicator on

the Sensor Cam changes to a solid Green before continue using the Interactive Pen.

My pen trace and pointing are inaccurate after I change screen resolution.

Changing the screen resolution throws off the calibration. Please run the calibration process after every resolution change. See Pages 12~14.

My pen and cursor lose accuracy every now and then.

Please make sure the Sensor Cam is positioned on a flat and stable surface. A slight tip of the Sensor Cam may result in inaccurate operation.

I have the task bar set to hidden, and I can't use the task bar with the Interactive Pen.

Please uncheck the auto-hide option and position the task bar on the screen when using IW2.

Product Specifications

Sensor Cam

Effective Board Area: Up to 100"
Effective Distance: Up to 20 ft (600cm)

Power Supply: DC Adapter (Input Rating 5V/2A)

Dimensions L x W x H (folded): 3.8" x 1.7" x 0.8" (96 x 44 x 21.5 mm)

Weight: 3.70z (106g)

Operation Temperature: 0~40°C

Interactive Pen

IR Trigger: Contact Sensitive Tip or Button Press

Battery Type: 2 AAA (Alkaline Battery)

Dimensions L x W x H (with Wireless Receiver): 14.6" x 0.8" x 0.87" (372 x 19.6

x 22.2 mm)

Weight: 2.5oz (72g)

Operation Temperature: 0~40°C

Wireless Receiver

Wireless Receiver is powered by USB connection (Input Rating 5V/0.5A)

Operation Temperature: 0~40°C

For IPEVO IW2 FAQ, Software, Documents, please visit: support.ipevo.com/IW2

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Federal Communication Commission 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 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.

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 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.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.