

# TR-C385

# SKY EAGLE




## ***USER MANUAL***


If you have questions about the TR-C385 Sky Eagle, visit us on the web at [www.toprace.com](http://www.toprace.com) or send an email to:  
US: [sales@toprace.com](mailto:sales@toprace.com) or UK: [order@toprace.co.uk](mailto:order@toprace.co.uk)

## WARNING

The following terms are used throughout the product literature to indicate various levels of potential harm when operating this product.

**CAUTION: Failure to follow these operating instructions may pose a risk for physical injury or property damage.**

 Read the ENTIRE instruction manual to become familiar with the features of the product before operating.

 This is a sophisticated hobby product and NOT a toy. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this device in a safe and responsible manner could result in injury or damage to the product or other property. This product is not intended for use by children without direct adult supervision. This manual contains instructions for safety, operation and maintenance. Be sure to read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate the unit correctly and avoid damage or serious injury.

**Age Recommendation: Not for children under 14 years. This is not a toy.**

## Safety Precautions

---

As the user of this product, you are solely responsible for operating it in a manner that does not endanger yourself and others or result in damage to the product or the property of others.

- Always ensure the batteries have been properly charged before using the vehicle.
- Always check the vehicle, battery pack and connections for damage prior to each run.
- Never operate your vehicle near spectators, parking areas or any other area that could result in injury to people or damage to property.
- Never operate your vehicle during adverse weather conditions. Poor visibility and high winds can cause disorientation and loss of control of your vehicle.
- It is not necessary to point the transmitter antenna directly toward the vehicle. If at any time during the operation of your vehicle you observe any erratic flight operation, immediately stop operation until the cause of the problem has been ascertained and corrected.

## Battery Usage & Charging Warnings

---

**CAUTION:** All instructions and warnings must be followed. Mishandling of Li-Po/Li-Ion/Ni-Mh batteries can result in fire, personal injury, and/or property damage.

- The battery charge cable included with your plane is designed to safely balance and charge the specific Li-Po/Li-Ion/Ni-Mh battery.

- By handling, charging or using the included battery pack, you shall assume all risks associated with Li-Po/Li-Ion/Ni-Mh battery.
- If at any time the battery begins to warp or swell, discontinue use and replace it immediately. Using a damaged battery pack can result in fire and personal injury.
- Always store the battery at room temperature and in a dry area for best results.
- Always transport or store the battery pack in a temperature range of 40-120 Fahrenheit
- Do not store battery pack or the vehicle in direct sunlight or near a heat source or risk fire or battery pack damage.
- Always charge the battery away from flammable materials or any heat source.
- Always inspect the battery before charging and never charge damaged batteries.
- Disconnect the battery after charging, and allow the charger cool before the next charge.
- Never leave charging batteries unattended.
- ONLY USE THE CHARGER CABLE SPECIFICALLY DESIGNED TO CHARGE THE BATTERIES.
- Never discharge Li-Po cells till below 3V under load.
- Never cover warning labels with hook or loop strips.
- To avoid damage, disconnect the batteries as soon as they are charged.
- Never attempt to dismantle or alter the charger.
- Minors MUST charge battery pack under adult supervision.
- Never charge batteries in extremely hot or cold places or in direct sunlight.

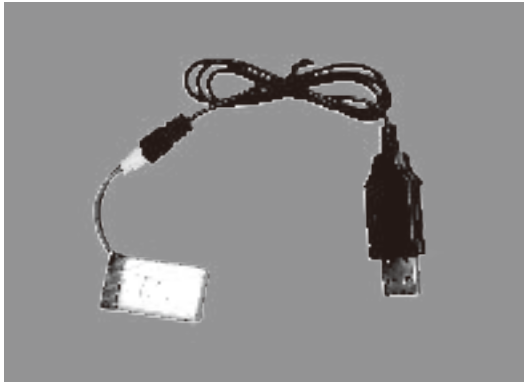
## Box Contents

---

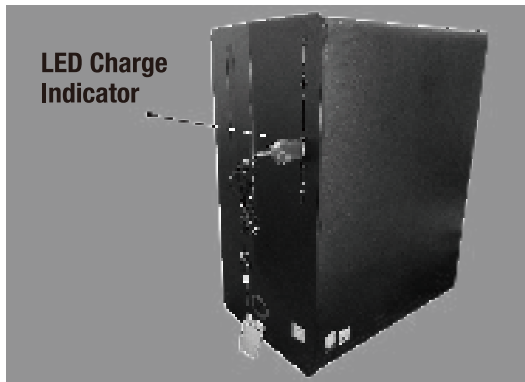


## Charging Instruction

---



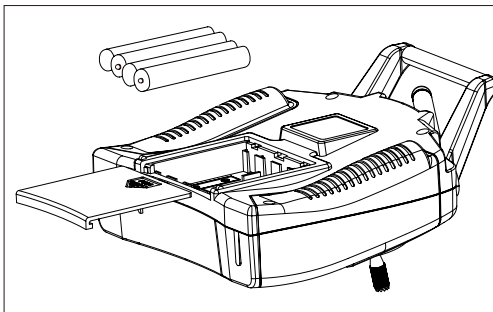
1. Remove the battery pack from the plane.
2. Next, plug the charger into the USB port on a computer or into a USB adapter.
3. Connect battery into the charger as shown left.



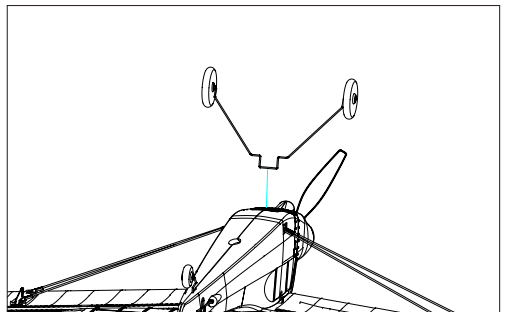
4. The charging process takes about 2 hours. For safety reasons, never charge the battery for longer than 4 hours. While charging, the red LED indicator will be flashing. When the charging is finished, the red LED will turn off.

## Initial Setup Instructions

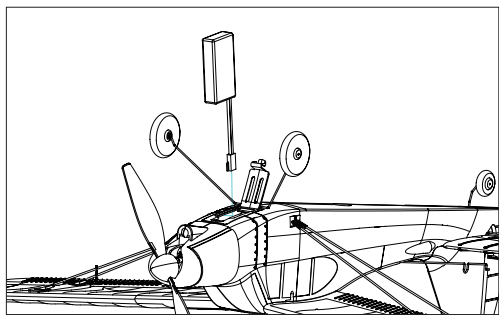
---



1. Install 4 AA batteries (not included) in the transmitter.
2. Be sure to install batteries according to the polarity diagram in the compartment.



3. Plug the landing gear into the fuselage as shown above.



3. Connect the battery pack to the receiver, then place it into the cabin, making sure the battery pack is secure.

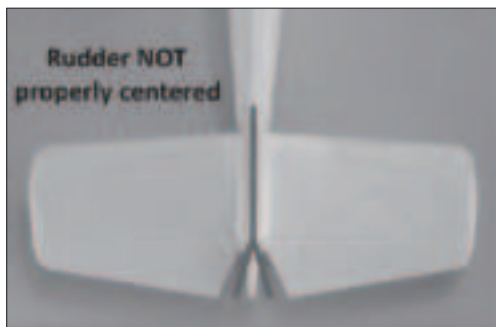
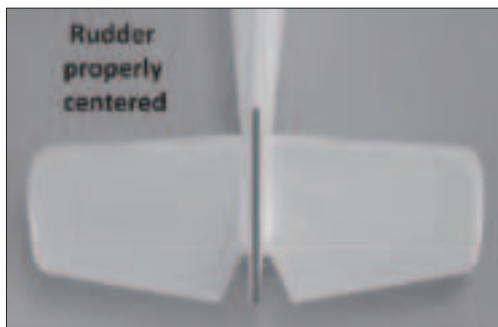


4. Setup is done. Make sure you read and follow all instructions in this manual before flying the airplane.

## Center Control Surfaces

---

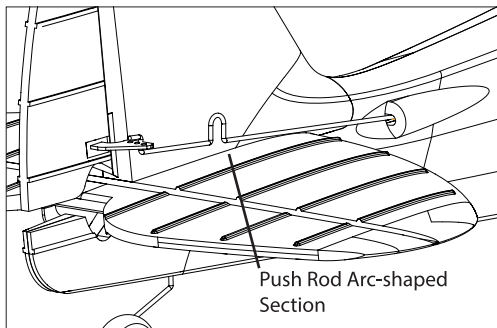
With the transmitter turned on and the battery pack connected to the battery compartment, carefully check that all control surfaces are centered.



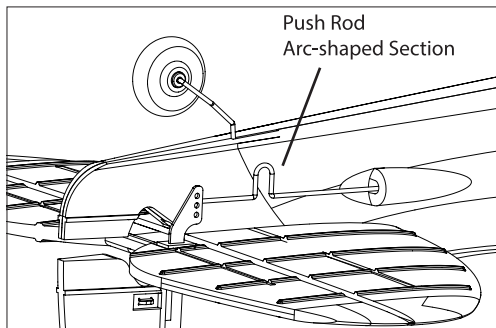
Check the rudder to ensure it is properly centered as shown above.



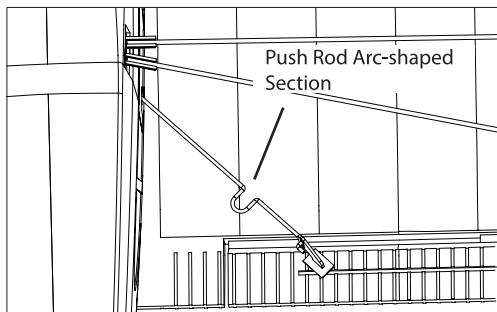
Next, check the elevator to ensure it is properly centered as shown above.



If the rudder is angled to the right or left, gently adjust the push rod at the arc-shaped section until the rudder is properly centered.



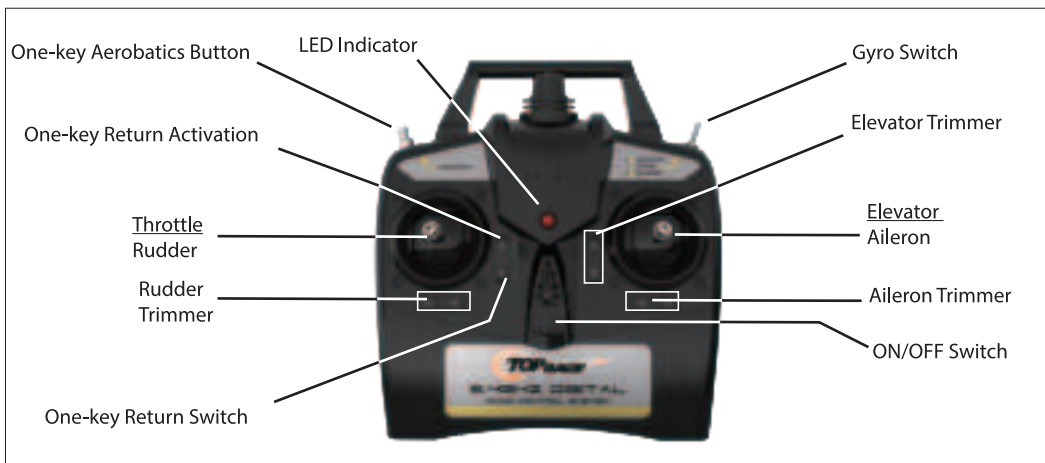
If the elevator is angled up or down, gently adjust the push rod at the arc-shaped section until the elevator is properly centered.



If the aileron is angled up or down, gently adjust the push rod at the arc-shaped section until the aileron is properly centered.

**NOTE: When making adjustments to the push rod use care to not over adjust or bend the rod too much.**

## Transmitter Instructions



## Gyro Switch

---

- 2 - Push Forward - Manual / Gyro Off (EXPERT)
- 1 - Middle Position - Some Gyro Assist (MID RANGE)
- 0 - Towards You - Strong Gyro Assist (BEGINNER)



TR-C385 comes with pre-installed Gyro to assist flight control. The switch has 3 levels of Gyro control. To turn on the Gyro, pull switch to the upper most position (towards you). To fly without Gyro assist, push switch to lowest position (away from you).

**CAUTION:** It is strongly suggested to use Gyro assist while flying the TR-C385.

## Frequency Pairing Instruction

---

Pairing is the process of programming the receiver (plane) to recognize the GUID (Globally Unique Identifier) code of a single specific transmitter. When the plane is paired to a transmitter, it will only respond to that specific remote control transmitter.

To pair the TR-C385 to the transmitter, please follow these steps:

1. Keep the transmitter switched OFF, throttle joystick at the bottom position.

**NOTE:** Keep the Gyro switch at the Middle or Beginner position.

**NOTE:** Keep the plane still and in a calm environment to allow the Gyro to calibrate.

2. Connect the battery to the plane, then turn on the transmitter within 5 seconds.

3. The receiver LED will flash for 3-8 seconds and pair automatically.

4. Once the receiver LED stops flashing, it means the pairing process is complete.

Follow these steps to operate the plane after it has been paired:

1. Power on transmitter first.

2. Connect the battery to the plane within 3 seconds.

3. The receiver LED in plane will flash and then turn solid within several seconds.

4. Switch the Gyro control stick to Gyro assist level (MIDD or BEGINNER).

**NOTICE:** Keep the airplane still for 3~5 seconds in a calm environment when you first turn on the Gyro, to allow it to calibrate. When the Gyro starts to react, it is activated.

5. Turn throttle stick up to max and then down to min to start the motor.

**CAUTION:** Do **NOT** operate around people or property, otherwise it may cause serious damage!

## Throttle Unlock (Arming)

---

To avoid accidental damage, the throttle channel is locked each time the transmitter is powered up. Follow these instructions to unlock the throttle.

**CAUTION:** Keep the propeller away from your body for safety.

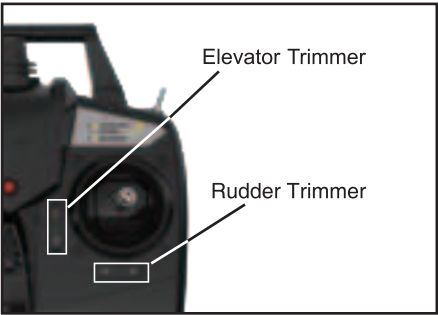
Turn the throttle stick up to max position until you hear a "beep" sound. Then turn the throttle stick down to min position until it "beeps" again.

The throttle should now be unlocked.


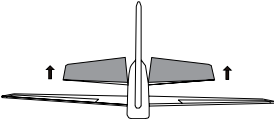

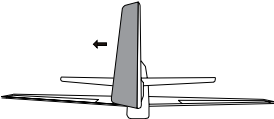
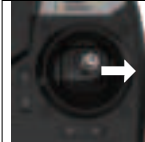
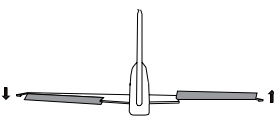
## Digital Trim Control


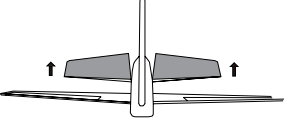

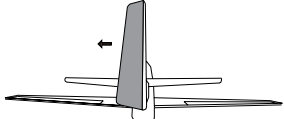

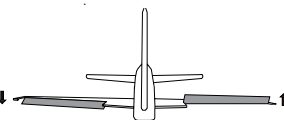
Digital trim allows for adjustments to be made to center the position of the rudder or elevator surfaces.

Each time the trim control is pressed, the servo adjusts one step. If the trim control is held down, the servo component will move in that direction until the button is released or the furthest position is reached. When a short "beep" sounds, the trim is centered.



## Checking Flight Controls

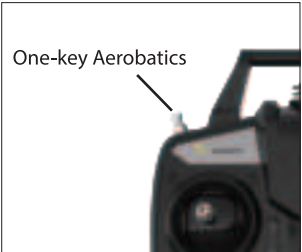
| Transmitter Operaton  | Reaction   |
|---|--|
|   |   |
|   |   |
|  |  |

| Swing The Plane  | Gyro Reaction   |
|--|---|
|   |   |
|   |   |
|  |  |

With the plane in a neutral position, check the flight controls as follows: Move the right joystick (NOT the throttle stick) to see if all control surfaces react correctly as shown in the left diagram above. Next, move the plane around (as shown above right) to see if the gyro assist is moving the control surfaces in the correct manner.

## One-key Aerobatics Instruction

The one-key aerobatics feature allows beginner pilots to perform aerobatic actions by simply pressing the button on transmitter. During flight, using manual or gyro control mode, press the one-key aerobatics button. The transmitter will beep several times. While beeping, move the aileron stick (right)left or right for an auto-roll to either side. Or move the elevator stick up or down to perform an auto-flip.



## One-key Return Instructions

---

The TR-C385 comes with one-key return functionality, enabling the plane to return in the opposite direction of the take off.

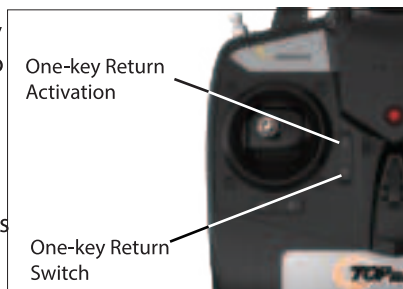
To activate one-key return:

1. Place your plane heading in the direction you want it to take off.
2. Do **NOT** unlock the throttle, press the one-key return activation button and hold for several seconds until you hear a "beep" sound. The rudder surface will respond, meaning the one-key return function is now activated.

**NOTE:** Each time you power on the plane, you have to re-activate the one-key return function. To use this function during flight, press the one-key return button and the plane will turn around toward the opposite direction where it lifted off.

To quit, just press the one-key return button, or manually control the rudder/elevator stick and the plane returns to your control immediately. Whether flying the plane under manual control or gyro assist mode, once the one-key return function is activated, the plane enters gyro assist mode automatically to help stabilize the flight back. When you quit this function, the plane returns to the previous control mode.

**CAUTION:** This function is bound to the plane, NOT the transmitter, which means the plane returns ONLY in the opposite direction that it took off from. Also, if the plane returns and passes the position where you activated the function, the one-key return function will NO LONGER return the plane back to the take-off position.



## Gyro System Calibration

---

1. Turn the throttle stick to min position.
2. Power on the transmitter and the receiver.
3. Do **NOT** unlock the throttle.
4. Keep the sticks as pictured (right) for several seconds.
5. When you hear the "beep", the gyro system is calibrated based on its horizontal positioning.



## Reversing Channel Controls

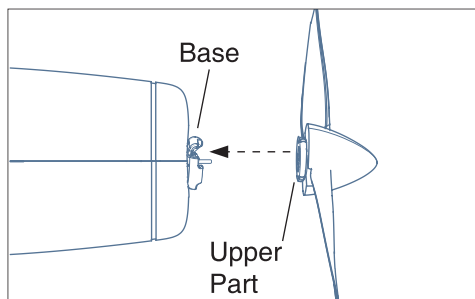
---

**WARNING:** Normally this function is not necessary. Only perform the below steps when you completely understand the channel reverse function and are an experienced flyer.

1. Turn the throttle stick to min position.
2. Power on the Transmitter and the Plane.
3. Do **NOT** unlock the throttle.
4. Turn the channel stick to max position of any side and hold for several seconds.
5. When you hear the "beep", the channel controls are reversed.

## Propeller Saver Instruction

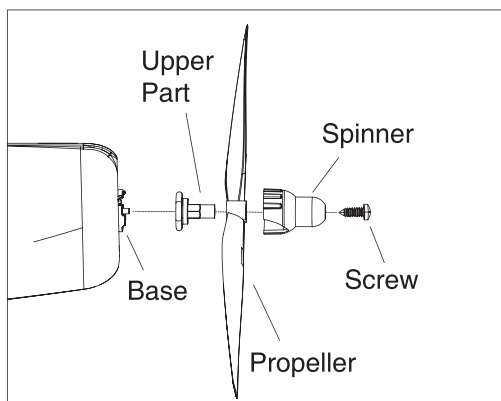
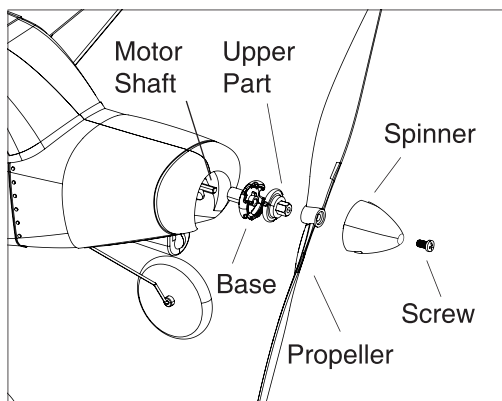
---



The propeller saver keeps the propeller from damage, and prevent the electronic components from over current. When the airplane hits any obstacle, the propeller will come loose from the base. To install the propeller back to the base, insert the upper part directly through the motor shaft, and hearing a "click" sound to ensure it is secured.

## Propeller Replacement

---



Follow below steps to replace broken propeller and shaft adaptor. You will need help of a Philips screw driver and pliers (not included).

1. Take off the spinner and propeller by loosen the screw with a Philips screw driver.
2. Take off the shaft adaptor carefully. If it is too tight, use pliers to help.
3. Replace any broken parts.
4. Install all parts back in reverse order to finish the replacement.

## Flight Checklist

---

NOTE: This checklist is NOT intended to replace the content included in this instruction manual. Although it can be used as a quick start guide, we strongly suggest that you first read through this entire manual before attempting flight.

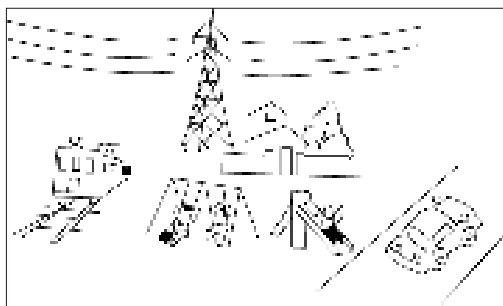
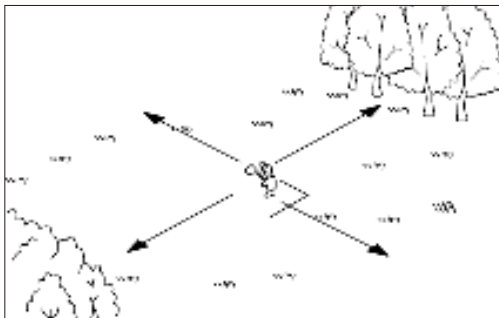
- Always turn the transmitter on first.
- Ensure the throttle control stick is at bottom position before connecting the battery.
- Fly the model (hand-launch or take off from a flat/level surface).
- Land the model (on a flat/level surface).
- Unplug the battery from the plane.
- Always turn off the transmitter last.

## Find a Safe Flight Field

---

Based on the size and weight of the TR-C385 it is typically called a "park flyer" class airplane. This means it is best to fly the plane at a local park, schoolyard, flying field or other area that is large enough and free of people and obstructions. We recommend using an area the size of at least one football/soccer field. However, larger areas are better suited and preferred especially when you are a beginner. Do NOT fly in parking lots, crowded neighborhood areas or in areas that are not free of people and obstructions.

It is best to fly over grass as it is a softer surface that causes less damage in the unfortunate event of a crash. Short grass is better for takeoffs and landings as grass that is too long can cause the airplane to flip over and be damaged. An ideal flight area allows for takeoffs and landings on a smoother surface (such as asphalt) and flight over grass.



Fly in open spaces without obstacles, people, wires, or moving traffic. Never fly the plane near a highway, railway, high tension line, crowds, airports or residential areas.

**NOTE: The plane is designed to be flown outdoors only.**

## Flight Conditions

---

It is recommended to only fly on days that are calm without wind, especially when first learning how to fly. It is strongly suggested flying only in calm conditions until you have experience with the controls and handling of the plane. Even light winds can make it much more difficult to fly, and in some cases can even carry the model out of your line of sight.

Also, if you are a beginner pilot, we highly recommend that you have an experienced pilot do a test flight and properly trim the plane before you attempt your first flight. It is safer and easier to fly a plane that has been expertly trimmed and adjusted.

After you have properly trimmed the airplane in calm conditions and are familiar with its handling/capabilities you can attempt to fly in light winds or depending on your experience and comfort level, in winds up to 5-7 mph.

**NEVER** fly on days when significant moisture, such as rain or snow, is present.



If you have questions about the TR-C385 Sky Eagle, visit us on the web  
at [www.toprace.com](http://www.toprace.com) or send an email to:  
US: [sales@toprace.com](mailto:sales@toprace.com) or UK: [order@toprace.co.uk](mailto:order@toprace.co.uk)

## FCC 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.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your 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.

### RF Exposure Information

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.