INSTRUCTION MANUAL

14+ YEARS

SPEED BOAT

SURGE

ITEM NO.: X03

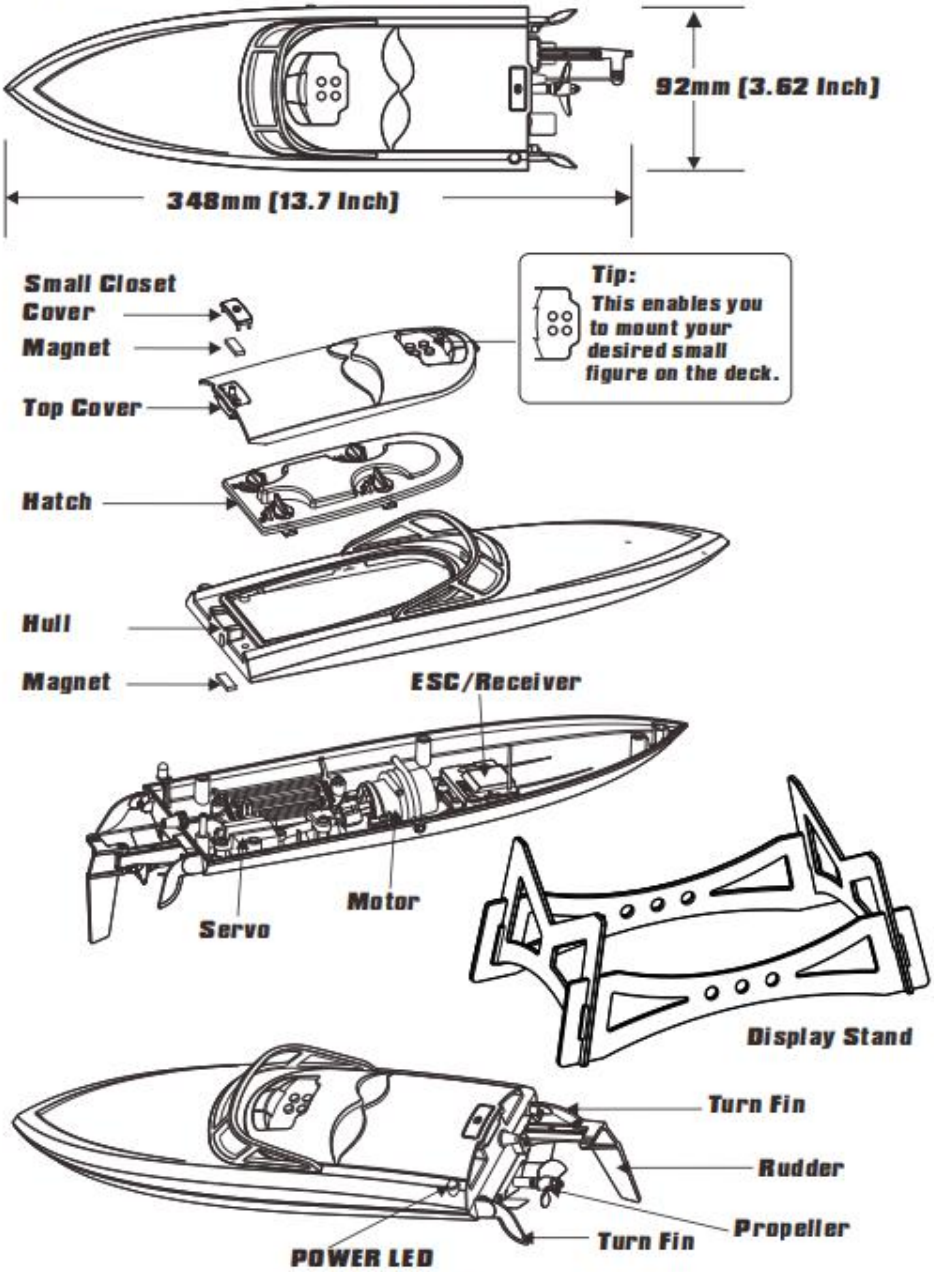
2.4GHz RADIO CONTROLLED ELECTIC POWERED RACE BOAT

Information:

- Please read and understand the instructions before using, assembling and/or disassembling.
- This product is not a toy but an authentic model, which is not intended for person under 14 years. Operators under 14 years should NOT operate this product unless closely supervised by adults.
- Never attempt to run the boat by low battery power. Please charge the battery pack immediately when the boat runs slowly.
- Never charge the battery pack unattended. Never overcharge the battery pack.
- All pictures, descriptions, and specifications found in this instruction manual are subject to change without notice.

INTRODUCTION

The Surge is engineered to be fast, reliable and easy to drive.
The installed water cooling system for the motor helps to keep the boat cool after long-time run. The steerable outdrive with adjustable trim deliver precise control and high-performance tuning options. Surge features forward/reverse running, left/right steering navigation, and self-righting (flip) function.



SAFETY PRECAUTIONS

1) Adult supervision is strongly recommended! Children should be warned about the dangers of playing in close proximity to water.

2) Do not attempt to charge battery packs in the immediate vicinity of swimming pools, lakes, rivers, oceans, inland seas, etc.

NEVER ATTEMPT TO OPERATE A CHARGER IF YOU, THE CHARGER, OR THE BATTERY PACK ARE WET.

3) Before turning your radio transmitter and boat "ON", make sure no one else in the area is operating a radio on the same frequency (channel).

4) Do not touch the propeller anytime the electronics are turned "ON". Pay close attention to items such as loose clothing, shirt sleeves, ties, scarves, long hair or any loose objects that may come in contact with the spinning propeller. If your fingers, hands, etc. come in contact with the spinning propeller, you may be severely injured.

5) The speed and mass of this boat can inflict property damage and severe personal injury if a collision occurs. Never run this boat in the presence of swimmers or where the possibility of collision with people or property exists.

6) Electric motors can generate considerable heat. Do not touch any part of your motor until it has cooled. Touching the motor immediately after running the boat may result in a serious burn.

7) The edges of the propeller are very sharp and can cut your fingers if you are not careful. Never attempt to stop the propeller with your hand. In the event that weeds become entangled in the propeller, turn the power "OFF" before attempting to remove them.

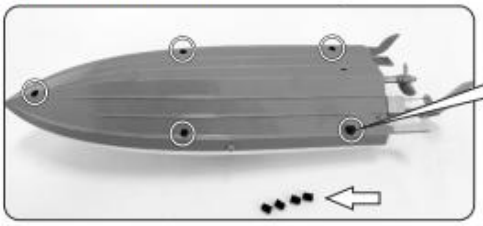
Important Note: The transmitter is not water-resistant and should never come in contact with water.

WARNING

Users should ONLY operate the boat when it is placed in water. Do not attempt to operate the boat when it is out of water. Failure to do so may cause damage to the propeller, the motor, and the drivetrain.

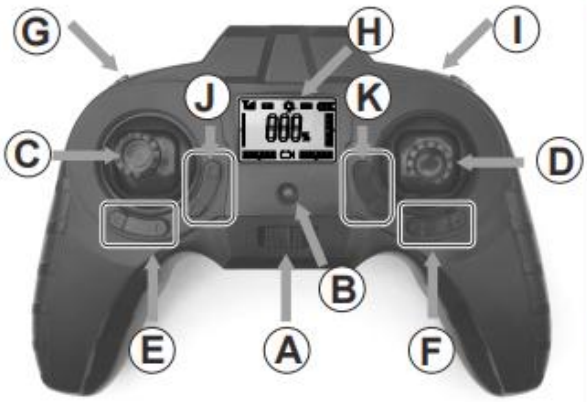
RECOMMENDED PROTECTION

Please install the nose cone to protect against damage from bankside rocks or walls when needed.



Rubber plugs are provided for installation if required. If installed they will assist with the performance of the boat and help reduce drag.

2.4GHZ FULL-FUNCTION TRANSMITTER



A) Power Switch (ON/OFF)
B) Power Indicator
C) Throttle Rod (or Steering Rod)
D) Steering Rod (or Throttle Rod)
E) Steering D/R (Dual Rate)
F) Steering Trim
G) Boat Light Switch
H) Multi-functional LCD Display
I) No Function
J) No Function
K) No Function

A) Power Switch (ON/OFF)
B) Power Indicator
C) Throttle Rod (or Steering Rod), differs in Left or Right Throttle modes.
D) Steering Rod (or Throttle Rod) , differs in Left or Right Throttle modes.
E) Steering D/R (Dual Rate) (Left button: to decrease , Right button: to increase)
F) Steering Trim (Left button: to center from the left, Right button: to center from the right)
G) Boat Light Switch **[Shortly press to switch on or switch off the boat LED.]**
H) Multi-functional LCD Display
I) No Function (Only applied in **"CALIBRATION SETTING"**)
J) and K) No Function

Installing batteries to transmitter:

1) Slide down the battery cover.
2) Install 3pcs "AA" size batteries. Do not invert the polarities.
3) Replace the battery cover.

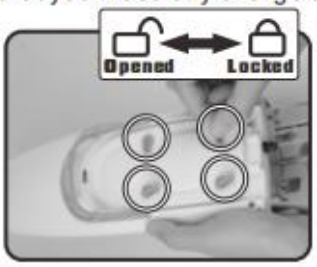
NOTE:

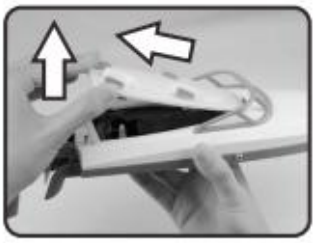
1) Always use batteries of same brand.
2) Do NOT mix old and new batteries.
3) Make sure battery power is sufficient before use.
4) Take out the batteries when not in use.

BEFORE DRIVING

CHARGING THE BATTERY PACK

It is strongly recommended that you must fully charge the battery pack before use.





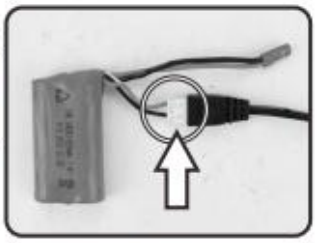
A) Gently lift up the top cover.

Note: Two built-in magnets attract each other to hold the top cover.

B) Unlock the four fasteners on the hatch to open the hatch.

C) Take out the battery pack if it is installed in the boat. The battery pack may be not stored in the boat.

Connecting USB charger onto the USB slot on the electrical appliance



Please observe and follow the instructions below to charge your battery. Take out the battery pack from the model, connect the battery pack with USB charging cable, and insert the USB label into the USB slot on the electronic equipment.

During charging, the red LED is on solid, which monitors the charging process.

The red LED will go off after the battery pack has been fully charged.

Charging Duration: For Li-ion 7.4V, 800mAh battery-(Approx. 2-2.5 hours)

Tip: Smartphone AC POWER adaptors (5V, 2A) can be applied to cut down charging period.

The RED LED flashes, which indicates:

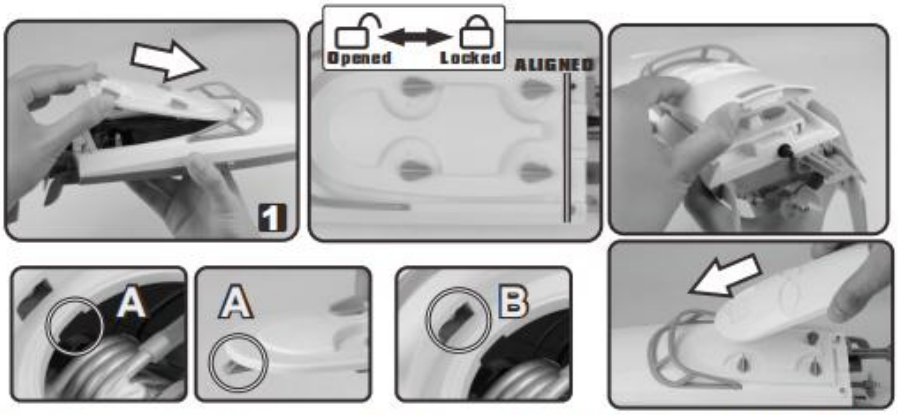
1) USB charging cable is connected with the battery pack but not being plugged on the charging slot.

2) Non-rechargeable battery pack is connected

3) Not able to charge as the battery pack is over-discharged.

4) USB cable is in an unstable connection.

-Do NOT use wet , damp or damaged charger.
-Do NOT expose battery and charger to any heat source.
-Children are not allowed to charge unless they are closely supervised by adults.
-Do NOT charge the battery pack unattended.



Insert the hatch at a diagonal angle into the slot A (Refer to the photo 1), push the hatch until it is aligned and secured. Keep the hatch aligned and then lock the four fasteners. see the photo 2).Insert the cover at a diagonal angle into the slot B (Refer to the photo 3), and then close the cover.

NOTE: You cannot close the cover if the hatch is installed incorrectly.

BINDING OPERATION

An icon" " flashed on LCD during binding. It stops flashing after binding is finished.

Put the boat in water. The LED on the boat flashes, which indicates the boat is seeking the transmitter. Switch on the transmitter. It will take a couple of seconds before the boat is bound with the transmitter. When they are bound there goes a short beeping sound from the transmitter. In the meanwhile, the LED on the boat becomes solid on.

NOTE:

Binding operation should ONLY be handled when the boat is in water.
The boat will be launched out when the two metal parts contact water.

TO RUN YOUR BOAT

A) CALIBRATION:

Calibration is requisite to ensure performance. Press and hold the two buttons for 3 seconds , and release then until there goes one beeping sound from the transmitter. Calibration has been fulfilled in system.

Toggling Between Left Hand Throttle and Right Hand Throttle Modes:

1) Disconnect the boat power by taking it out from water. The Power LED on boat goes off.
2) Switch on the transmitter. Pull and hold the two rods outwards and downwards for 5 seconds. Do not release the rods until the transmitter goes one beeping sound.

L.H **Indicates: Left Hand Throttle Mode**

R.H **Indicates: Right Hand Throttle Mode**

Note: *Make sure the boat has been switched off before you toggle modes. Ensure that you have selected the desired mode before operating the boat.*

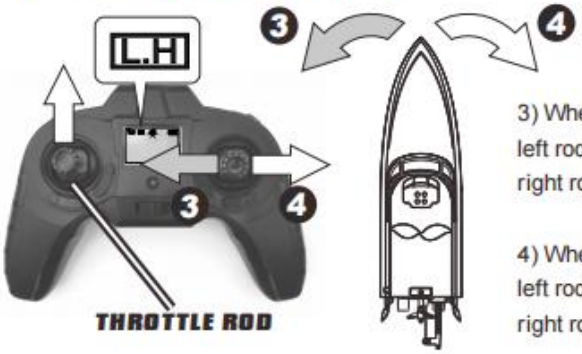
B) RUNNING FORWARDS/BACKWARDS:

LEFT HAND THROTTLE MODE

1) When you push the Throttle Rod (the left rod), the boat moves forwards.

2) When you pull the Throttle Rod (the left rod),the boat moves backwards.

C) STEERING (LEFT OR RIGHT):



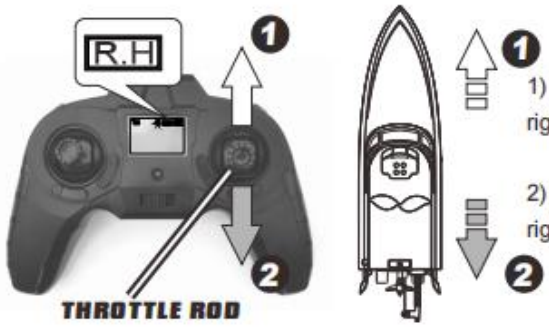
LEFT HAND THROTTLE MODE

3) When you push the Throttle Rod(the left rod) ,and pull the Steering Rod(the right rod) to the left, the boat turns left.

4) When you push the Throttle Rod(the left rod) ,and pull the Steering Rod(the right rod) to the right, the boat turns right.

D] RUNNING FORWARDS/BACKWARDS:

RIGHT HAND THROTTLE MODE



1) When you push the Throttle Rod (the right rod), the boat moves forwards.

2) When you pull the Throttle Rod (the right rod),the boat moves backwards.

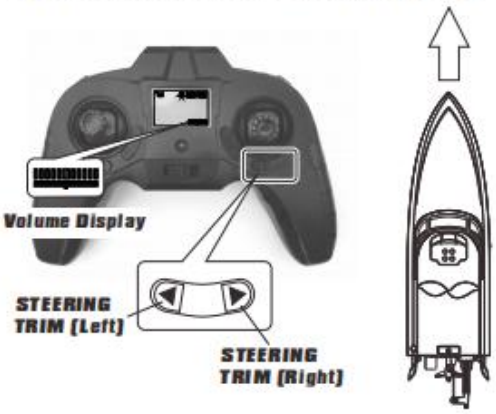
E] STEERING (LEFT OR RIGHT):

RIGHT HAND THROTTLE MODE

3) When you push the Throttle Rod(the right rod) ,and pull the Steering Rod(the left rod) to the left, the boat turns left.

4) When you push the Throttle Rod(the right rod) ,and pull the Steering Rod(the left rod) to the right, the boat turns right.

F] STEERING TRIMS (Left/Right):



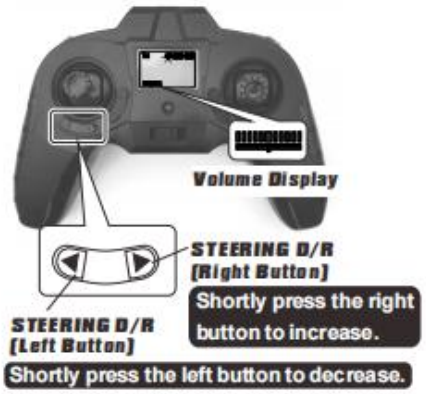
Steering Trims are used to set the steering neutral point on the bow of the boat. If the boat's bow yaws in one direction while the steering rod is centered, press the buttons in the opposite direction until the boat drives straight.

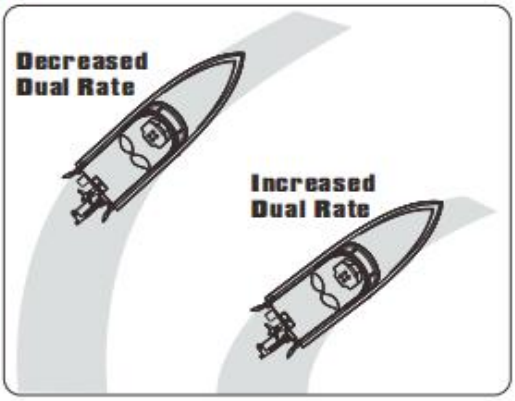
1)If the boat's bow yaws left, shortly press the Steering Trim(Right) until the boat is aligned.

2)If the boat's bow yaws right, shortly press the Steering Trim(Left) until the boat is aligned.

Volume Display:
It reads the volume of each press of the button.

G) STEERING D/R (DUAL RATE):





It allows you to change the amount of steering servo travel compared to the amount of physical movement of the boat. For example, by increasing the steering dual rate (shortly press the right button, as shown in the photo.), you can make the steering servo travel more which might prevent the boat from pushing during turns. If the boat oversteers during turns, you can reduce the amount of steering dual rate (shortly press the left button, as shown in the photo.)

Volume Display: It reads the volume of each press of the button.

H) SELF-RIGHTING FUNCTION (180-Degree Flip)

LEFT HAND THROTTLE MODE

RIGHT HAND THROTTLE MODE

When the boat is turned over, center the Throttle rod and then flip it up and down several times to enable the boat to turn over.

Note:

Throttle Rods differ in Left/ Right Hand Throttle Mode.

I) SWITCH ON/OFF BOAT LED

Shortly press the button to switch on or off the boat LED as desired.

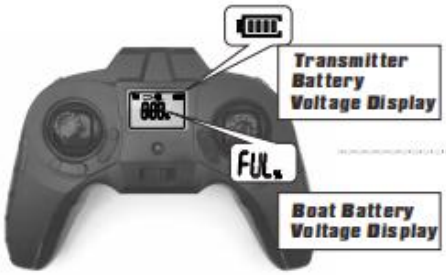
J] OUT-OF-RANGE ALARM

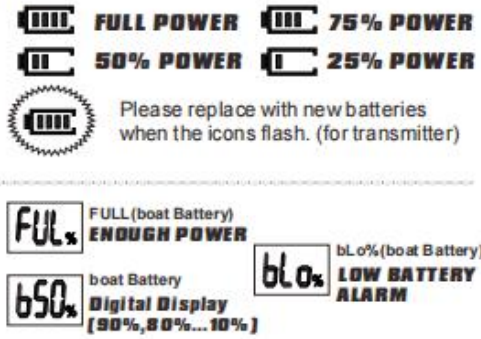
When the boat is about to cross over the control range or the receiving signal is poor, the transmitter will start to beep twice every 5 seconds.

This reminds you to be on alert.

⇨ **Please pull back the boat near you until the alarm is gone. Otherwise, you may lose control of the boat.**

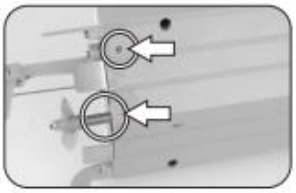
K] LOW BATTERY VOLTAGE ALARM





We strongly recommend that users run back the boat and charge the battery pack when the boat battery indication reads b20%-30%. The icon "bLo%" appears on the LCD display when the battery indication goes blow b20%. In the meantime, transmitter goes a long beep alarm. It is a must that you should run back the boat and charge the battery pack.

TO STOP RUNNING YOUR BOAT



Take the boat out of the water and switch off the transmitter. Clean the boat with a dry, clean cloth. Disconnect and remove the battery pack from the boat when not in use. Keep the inside of the hull dry and clean condition before storing the boat.

Note: The boat may not stop immediately as it is taken out of the water. If the two conductive metal parts are still wet the boat will keep running. Take care not to get injured by moving propeller. Please carefully wipe off any moisture.

PART LIST

Main Body+Hull Bottom(assembled)

Top Cover/Hatch

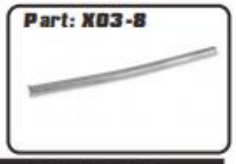
Display Stand

Inside Plastic Fittings

Ruddle/Turn Fins

Propeller+Post

Drive Device+Shims



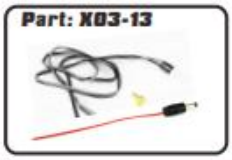
Spindle Tube

Steering Rod/ Silicone Cover

Motor Device

Electronic Speed Control/Receiver

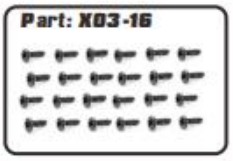
Servo



Wires+Contact

Battery Strap

Li-ion Battery Pack 7.4V



Screws Complete

USB Charger

Magnets(One Pair)

2.4GHz Transmitter

Rubber Plugs+ Nose Cone

NOTIFICATION: The part image may vary from your received item.

14+ YEARS

MAINTENANCE

1) Make sure battery pack is disconnected before you store the boat.
2) Take out the batteries from transmitter when not in use.
3) Check if propeller, rudder, or other moving parts are intact before storing the boat. Regularly lubricating the drive shaft.
4) Clean the boat with a dry cloth.
5) Store it in a cool, dry and clean place when not in use.
6)Fully charge the battery pack before storing it. Fully charge the boat battery pack before use.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Extra noise or extra vibration	1) Damaged propeller, shaft or motor 2) Propeller is out of balance	1) Replace damaged parts 2) Balance or replace propeller
Reduced runtime or boat underpowered	1) Boat battery charge is low. 2) Boat battery is damaged. 3) Blocking or friction on shaft or propeller. 4) Too little lubrication on drive shaft 5) Vegetation or other obstacles block the rudder or propeller.	1) Completely recharge battery 2) Replace boat battery and follow battery instructions 3) Disassemble, lubricate and correctly align parts 4) Fully lubricate drive shaft. 5) Remove vegetation or obstacles from rudder or propeller.
Boat tends to dive in the water or takes on water	The boat hull is not completely closed.	Dry out the boat and ensure the hatch is fully closed on the hull before returning the boat to the water.
Rudder does not move	1) Rudder, linkage or servo damage 2) Steering servo wire is damaged or connections are loose. 3) Transmitter is not bound correctly 4) ESC is damaged.	1) Replace or repair damaged parts and adjust controls. 2) Do a check of steering servo wires and connections, connect or replace as needed. 3) Re-bind 4) Replace with the new ESC.

Produce name: Radio controlled boat

Model: X-03

Manufacturer: Shantou Haiboxing Technology&Education Model Co., Ltd.

Address: Guangyi Road, Chenghai District, Shantou, Guangdong, China

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.
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.