

Troubleshooting

Problem	Reason	Solution
The Power Indicator LED (2) is not bright on the handset	The Power Switch (1) is in the OFF position Batteries are not correctly loaded as per the polarity shown Batteries are exhausted	Switch the Power Switch (1) to ON Check and make sure the batteries are loaded as per the correct polarity shown in the battery compartment Replace with new batteries
Handset is not working	The Power Switch (1) is in the OFF position The Copter ON/OFF Switch (10) is in the OFF position Wind is too strong	Switch the Power Switch (1) to ON Switch the Copter ON/OFF Switch (10) to ON Do not fly the Sonar Copter in windy conditions.
The Sonar Copter is not flying very high	The speed of the propellers is too slow Insufficient battery power for the Sonar Copter	Push the Throttle Joystick (5) upwards Charge the Sonar Copter until the battery is full
The Sonar Copter is landing too quickly	The Throttle Joystick (5) is being pulled back too quickly It's daylight and Mode Switch (8) is on IR It's daylight and Mode Switch (8) is on Sonar and flying over grass. Neither sensors work well It's not daylight and Mode Switch (8) is on Sonar and flying over grass	Slowly pull back the Throttle Joystick (5) and let the Sonar Copter land gently Move the Mode Switch (8) to Sonar Do not start with Juice Button (7) (simply move Throttle Joystick (5) forward) Switch Mode Switch (8) to IR
Outdoor flying giving unstable flights with Juice Button (7)	Copter is in direct sunlight and Mode Switch (8) is on IR Copter is on carpet and Mode Switch (8) is on Sonar	Move the Mode Switch (8) to Sonar
Indoor flying giving unstable flights with Juice Button	Copter has crashed	Press and hold down Juice Button (7) for emergency stop
Copter is out of control		

Manufacturer's Name:
Manufacturer's Address:
Type of Equipment:
Model Number:
Year of Manufacture:
Application of Council Directive(s):

China Industries Ltd. T/A Wow! Stuff
Creative Industries Centre, Wolverhampton Science Park,
Wolverhampton, WV10 9TG, UK
Sonar Copter
TX-1014
2015
1999/5/EEC The Radio Equipment and Telecommunications Terminal Equipment
2000 (and its amending directives)

Standard(s) to which Conformity is Declared: EN62479, EN62115, EN301 489-1/3, EN300 440-1/2

"Hereby, China Industries Ltd. T/A Wow! Stuff, declares that this Sonar Copter is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC."

Place: Wolverhampton, UK
Date: May 2015

Dr. Graeme Taylor
Director

CE 0678

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Designed by TX Juice in the UK, California and Asia.
Manufactured and assembled in China.

www.wowstuff.com

For the most updated instructions as well as Tips & Tricks go to: www.txjuice.com

Operating Safety Instructions

- When using indoors, choose a spacious, obstacle-free area and ensure that the device is operated away from fans and air conditioners as these may affect air flow.
 - When using outdoors, choose a fine, calm day. It is not recommended to fly the product in winds over 5mph. Power consumption will increase when operating in strong winds, which can also affect proper control of the product and may result in damage. Operation away from crowds, ponds, residential buildings and trees is recommended. Do not operate in the rain or snow or near to any high voltage cables.
 - This product is not intended for use by individuals (including children) with reduced physical, sensory or mental capabilities or lack of experience and / or knowledge, unless they are supervised by a person responsible for their safety and is able to give instructions about how the product should be used.
 - After you have used the product, always allow the motor, electronics and battery to cool down especially before recharging.
- Safe Usage and Maintenance**
- If not in use for a long time, remove batteries from the controller.
 - Ensure that the device is placed away from heat sources.
 - Do not place in water as this may cause a short circuit of the circuit board.
 - Do not expose the product to extreme temperatures.
 - Always keep the product clean, use a damp cloth to clean, followed by a dry cloth to wipe water away. Never use chemicals to clean the product.
 - Long operation time may generate high heat levels causing wear and tear. To extend product life, operators are recommended to allow a 10-15 minute cool down period before recharging batteries.
 - Keep this instruction manual for future use.

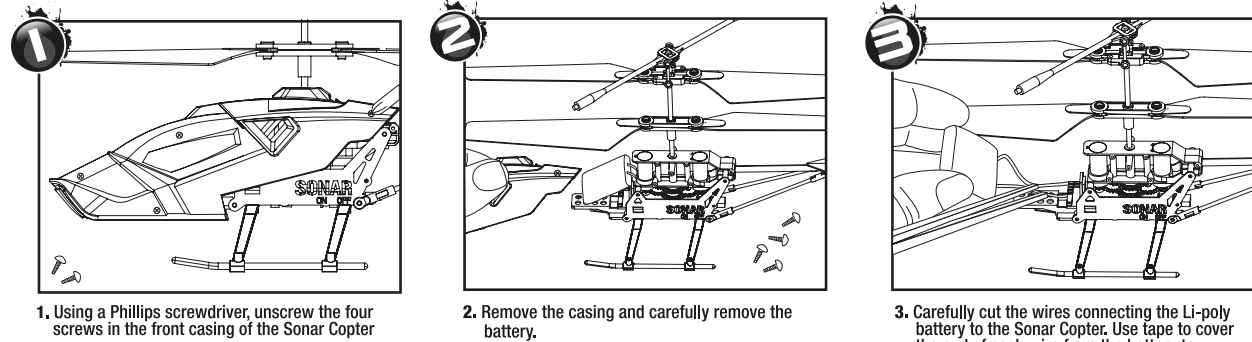
Emergency Stop press and hold down the Juice Button (7) if you loose control of the Copter at any time.
To land the Sonar Copter press and release the Juice Button (7).

Replacing the Propellers

Top Propellers: The four propellers can easily be unscrewed and replaced. Using a Phillips screwdriver, unscrew the propeller you wish to replace. Each propeller is engraved with a letter to help identify its position. The top propellers are A and the bottom propellers are B. Match this up with the replacement propeller and then reinsert the screw into the framework.
Rear Propeller: It is recommended to use tweezers in order to replace the rear propellers. Use the tweezers to remove the propeller from the center axle by pulling it upwards. Then use a new propeller and insert this by pushing in onto the axle.

Disposal of Sonar Copter

Disposal of Li-poly battery instructions
(Only follow these instructions when you wish to dispose of your Sonar Copter).
Warning: Batteries should only be removed by an adult. Children should not be allowed to carry out the following procedure.



WARNING: CUTTING BOTH WIRES AT THE SAME TIME MAY CAUSE A SHORT CIRCUIT & POTENTIALLY DANGEROUS RISK OF THE BATTERY OVERHEATING

⚠ WARNING: ⚡

CHOKING HAZARD – Small Parts
Not suitable for children under 3 years
Please retain this information for future reference.
Adult supervision required. Operates on 2.4 GHz frequency.

Before first use : read the user's information carefully together with your child. Keep the instructions and packaging after reading it. •Check if the product is assembled as instructed. •Do not change or modify anything on the product. •Warning! Do not touch the rotating propeller. •Keep face, eyes, fingers, hair, body parts etc away from moving parts. •Always fly in an open space. •Do not expose to rain or moisture. •Do not fly in a crowded environment. •Do not fly in a dusty area. •Do not fly in complete darkness. •Ensure people know that you are flying the product. •Use only the handset included in this package. •Always turn "OFF" when not in use. •Contains battery. Battery must be recycled or disposed of properly. •Do not start the product when persons, animals or any objects are within flying range of the product. •Children should be supervised when playing with the product. •Do not fly near your face to avoid injuries.

Caution! Risk of eye injuries! Keep a safe distance of at least 2.5m.

Battery Information

- Non-rechargeable batteries are not to be recharged.
- Rechargeable batteries are only to be charged under adult supervision.
- Rechargeable batteries are to be removed from the toy before being charged.
- Do not mix old and new batteries.
- Do not mix alkaline, standard (carbon-zinc) or rechargeable (Ni-Cd) batteries.
- Batteries are to be inserted with the correct polarity.
- Exhausted batteries are to be removed from the toy.
- The supply terminals are not to be short-circuited.
- Contains Li-poly battery. Battery must be recycled or disposed of properly.

Always :

- Make sure battery compartments are secure.
- Use batteries of the correct size and type.
- Fit batteries correctly observing the plus and minus marks on the battery and compartment.
- Replace a whole set of batteries at one time.
- Remove exhausted batteries from equipment.
- Remove batteries from appliance that will not be used again for a long time.
- Please remember that all batteries should be kept away from young children as they could be easily swallowed. Seek medical advice if you believe a cell has been swallowed.
- Please ensure that batteries are installed by an adult prior to use.

Never

- Never dispose of batteries in a fire.

Consumers have a significant role to play in reducing the impact of waste, electrical and electronic equipment on the environment, you can help by re-using or recycling such equipment.

The crossed out wheelite-bin symbol indicates that the product & batteries must not be disposed of in domestic waste as they contain substances which can be damaging to the environment and human health. If you cannot re-use or recycle the product or batteries, please use designated collection points, or civic recycling facilities to dispose of them.

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.
Warning: Changes or modifications to this unit 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 9 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.

Battery requirement for Handset
Rating: 4 x 1.5V AAA batteries (not included)

txJuice
RADIO CONTROL

8+



COPTER
INSTRUCTION MANUAL

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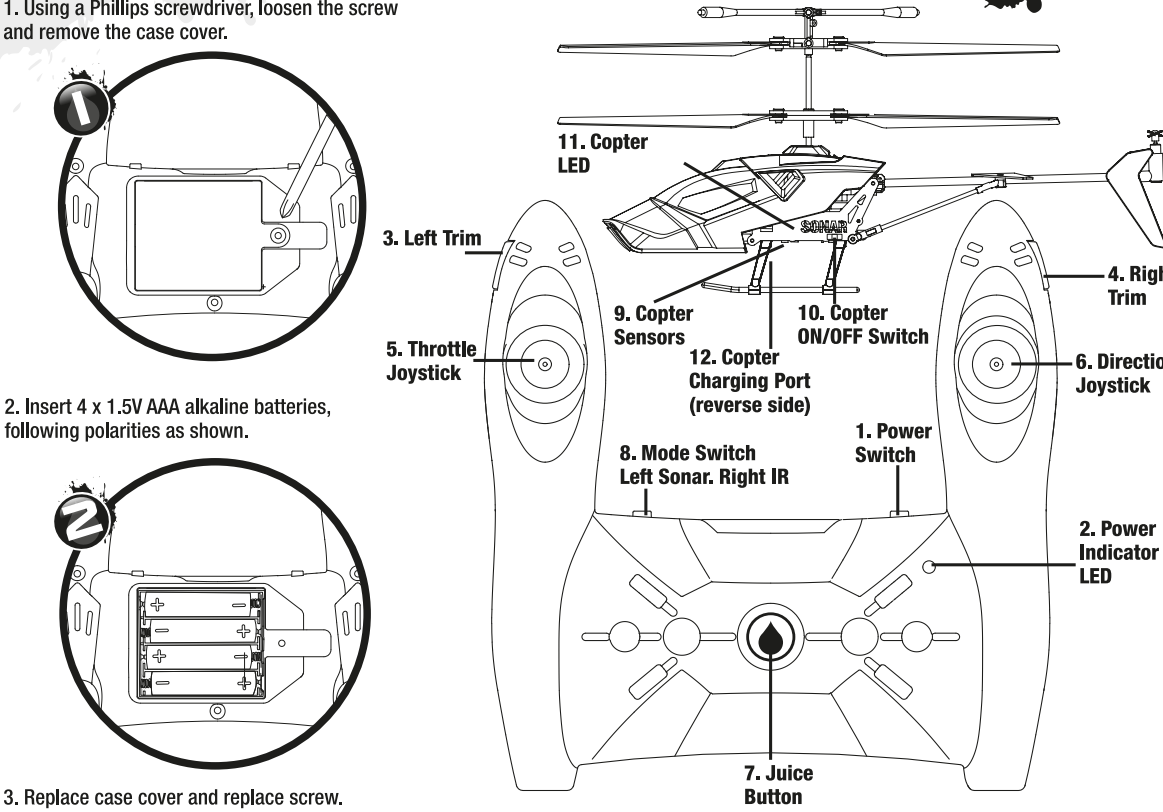
For the most updated instructions as well as Tips & Tricks go to: www.txjuice.com

Contents

- Sonar Copter includes rechargeable Li-po
- 2.4 GHz TX handset uses 4 x AAA 1.5V bat
- USB charging cable
- 1 x spare set of propellers
- Full instructions for use



Handset and Copter Controls



For the most updated instructions as well as Tips & Tricks go to: www.txjuice.com

Charging

Handset Charging
The handset is charged and powered by the 4 x AAA batteries inserted into the handset as shown on page 2.

Sonar Copter Charging
The Sonar Copter is charged using the USB charging cable provided. Do not use any other means to charge the Sonar Copter.

1. Turn the Copter ON/OFF Switch (10) to OFF position.
2. Connect the Charging Cable into the Copter Charging Port (12), and the other end to a USB power port. This can be plugged into a computer or via the adapter of a suitable USB plug.
3. While charging, the Copter LED (11) will be ON.
4. Charging is complete (and Copter fully charged) when the Copter LED (11) is OFF.
5. Charging takes around 30 minutes, for approximately 5 minutes of flying time.

Where to Fly the Sonar Copter

The Sonar Copter is best flown indoors. In calm weather conditions, it can also be flown outside. Note that the IR proximity sensors will not work outside in daylight, so Mode Switch (8) needs to be set to Sonar position, or the Copter to be flown without any sensors by using just the Throttle Joystick (5). (See Advanced Flying section on page 4).
When flying indoors, choose a spacious, flat, obstacle free area, away from strong drafts, fans or air conditioners, as these can affect airflow and make controlling flights very difficult.
Only attempt to fly outdoors on a very calm day (wind less than 5mph) with no rain, snow or water on the ground. Never fly near crowds of people, pets or other animals, ponds or any other water and keep well away from any high voltage power lines.

Flying the Sonar Copter

The Sonar Copter has both Infra-Red and Sonar proximity sensors and can switch between these sensors using the Mode Switch (8). The mode must be selected before flying the Sonar Copter.

- Mode Options**
- Sonar Mode (left): This gives you the most stable flights for most terrains apart from carpet and grass.
 - IR Sensor Mode (right): Can be used for carpet and grass, but not in direct sunlight.
 - Pro Mode: All sensors are disabled. For this, you start the Copter by moving the Throttle Joystick (5) and not touching the Juice Button (7). This mode works in any conditions.

Getting Started with the Juice Button (7)!

1. On the Handset switch the Mode Switch (8) to either IR or Sonar.
2. Switch the Copter's ON/ OFF Switch (10) to ON, the Copter LED (11) will go ON.
3. Place the Copter on a flat surface and facing away from you.
4. Switch the Power Switch (1) of the handset to ON. The Power Indicator LED (2) will start to flash.
5. Move the Throttle Joystick (5) up and then back down again until the Power Indicator LED (2) stops flashing. The handset is now paired with the Copter.
6. Press the Juice Button (7). The Copter will Auto Take-Off and Auto-Hover at a height of around 1m. It is now over to you to take control (You can press the Juice Button (7) at any time for the Copter to Auto-Land).
7. It is highly recommended that on initial flights you do not use the Throttle Joystick (5). Simply move the Copter around using the Directional Joystick (6). Move the joystick forward, back, left and right for complete directional control. The Copter will always stay at approximately the same distance from the ground, so the novice pilot does not need to worry about the height. This is the massive benefit the Sonar Copter has over any other Copters on the market!
8. When you become a more experienced pilot, then you can use the Throttle Joystick (5) to move to your preferred height, while also controlling your direction of flight.
9. Press the Juice Button (7) at any time and the Copter will Auto-Land.

If you wish to change modes, you must stop flying the Copter, turn the Copter and handset off and switch the Mode Switch (8). Then turn both the Copter and handset back on again and your Copter will be ready to fly in the chosen mode.
Emergency Stop press and hold down the Juice Button (7) if you loose control of the Copter at any time.
To land the Sonar Copter press and release the Juice Button (7).

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Performance

MANUAL CONTROL TRIGGER	REMOTE CONTROL	MOVEMENTS
Push the Throttle Joystick (5) forward to take-off and to increase altitude. Pull downwards to decrease altitude.		
Use the Directional Joystick (6) to move the Copter forward and backwards.		
Use the Directional Joystick (6) to move the Copter left and right.		
JUICE BUTTON! Press the Juice Button (7) once to activate the Auto Take-Off and Auto-Land feature. Hold down for Emergency Stop.		

Advanced Flying (Pro Mode)
The Copter can also be flown without any proximity sensors. Follow steps 1-5 in section Getting Started with the Juice Button (7) then push the Throttle Joystick (5) forward and the Copter will take to the skies!
Not using the Juice Button (7) does make flying more difficult, as you need to control height with Throttle Joystick (5)), as well as direction (with Directional Joystick (6). However there are also advantages to this mode:

- The Copter can be used on uneven, coloured or textured ground that would normally interfere with the proximity sensors giving poor flights. For example, outdoors on a grass surface the IR sensors will not work effectively due to sunlight, while Sonar sensors are not effective with the grass. In this instance the Copter needs to be used with all sensors disabled (Pro Mode).
- The Copter can be flown very close to the ground (below the 1m height determined by the sensors in Juice Button (7) mode).

Trimming the Sonar Copter
To get best performance for the Sonar Copter, it is important to trim it. To adjust trimming we recommend:

- When the Copter is flying to the left side, push the Right Trim (4)
- When the Copter is flying to the right side, push the Left Trim (3)

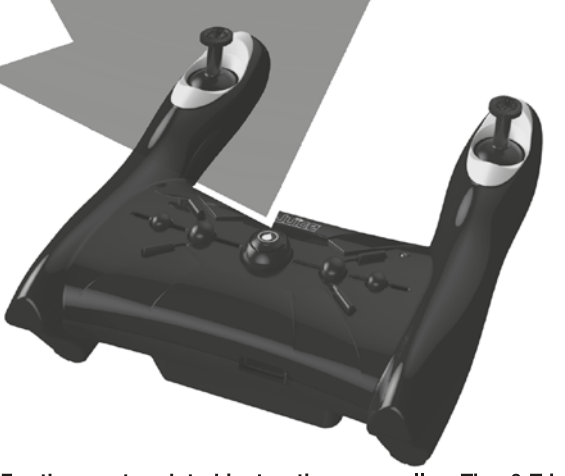
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IT'S ALL ABOUT
THE BUTTOM!

ONE PRESS!

Press the Juice Button™ for
Sonar Controlled Auto
Take-Off and Landing

Patented Sensor Technology!



Tricks & Tips for Great Flights!

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