



TF-350 Amphibious Aircraft

Water, Land, Air

Instruction Manual

SHENZHEN TOP RC HOBBY TECH Co.,LTD

Made in China

Guide

- ★ Before your first flight, please read this manual carefully and familiarize yourself with the use of the various function keys on the remote control.
- ★ This model aircraft is a high-speed moving object, please do not fly in crowded areas or confined spaces. If this model aircraft collides with an object and falls, the throttle should be immediately reduced to the minimum to avoid any further damage or harm.
- ★ The flying range of this model aircraft is approximately 170 meters from the remote controller, and the range from the remote controller on water should not exceed 50 meters to avoid loss of sight and issues caused by signal loss.
- ★ It is recommended for people over age 14+, and for children under age 14, it should be used under an adult's supervision.

Product Specifications	
Model Name	TF-350 Amphibious Aircraft
Model NO.	TOP120
Material	EPP
Size	29*35*10CM
charging time	over 30 minutes
Flight time	10-12minutes
Flying distance	around 170m

Product List		
No.	Item name	QTY
1	Aircraft kit	1
2	Transmitter	1
3	USB charger	1
4	3.7V 500mAh Lipo Battery	1
5	User Manual	1
6	Decal sheet	1
7	Screw driver	1
8	Prop (left and right)	2

Product Features

- The appearance is quite novel, with the vertical and horizontal tails fused together, similar to a tandem wing structure, which provides the aircraft with better stability and improves its gliding ability. The two ends of the wing include some dihedral, which helps to automatically correct yaw and increases flight stability, making the model easier to control.
- The aircraft's electrical board is equipped with a high-precision gyro, which automatically corrects the aircraft's flight direction controlled with the left and right motors. This also makes control easier.
- The TF-350 model uses a very light EPP material, that is more durable and crash resistant. The lightweight makes for a low impact force. By adopting a pusher propeller design, it is safer and also more resistant to crashes.
- The aircraft is equipped with colorful LED light strips that can be controlled by the remote control to make night flight possible with cool fashion colours.
- With a fully charged battery, flying at 100% throttle, the aircraft can perform a looping maneuver. To perform this maneuver, the aircraft should be flown to a certain altitude first, so that it won't cause any crashes due to the looping maneuver at an insufficient altitude. Lower the throttle to cancel the looping maneuver.
- This aircraft is suitable for people over the age 14+ and it has been designed according to the latest model aircraft standards.
- The aircraft has excellent gliding performance and good controllability. It can be used in three ways: fly in the sky, take off from water, and take off from the ground. It is a very versatile foam electric model aircraft that provides great leisure and entertainment.

Operation

Charge the supplied battery with the included USB charger which must be connected to a USB Power Supply or USB port on a laptop or PC (not supplied) A full charge from flat will take approximately 30-40 minutes.

In order to prevent the propeller from being triggered by mistake, the receiver electric board in the model has a throttle protection function. Lower the throttle stick to the bottom then plug in the battery to the aircraft. Then power on the remote control. To bind the aircraft and 'arm' the throttle function, please push the throttle stick to max, then pull the throttle stick to the minimum. At this point the red LED indicator on the remote control should stay solidly on. The bind/arming process is now completed and the propellers can work and rotate.

If the red LED light is flashing, it means it is still searching for a signal or has timed out and has not bound successfully. Please repeat the bind processes until the LED light is solidly on.

After the flight is completed, unplug the battery from the aircraft first, then power off the remote control.

When the remote control or the aircraft have a low battery, the operational range will be reduced. If the red LED indicator light on the remote control is flashing, it means low battery power for the remote control. Please replace the batteries of the remote control (3 x AAA batteries). If the aircraft is sluggish during flight, it means low battery power for the aircraft. Please land safely and quickly and charge the aircraft's battery.

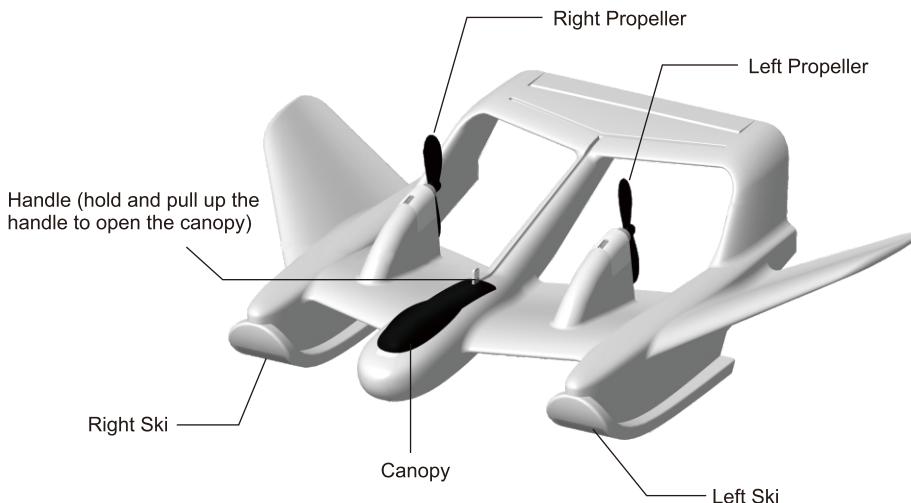
When not in use for a long time, remove the remote control batteries, charge the aircraft's LiPO battery to 4V and place it in a cool dry place.

If the aircraft collides with an obstacle during flight, you should immediately pull the throttle back to its minimum position. If damage or any deformation of the model occurs, it is necessary to effect repairs and confirm that the operation is normal before flying again.

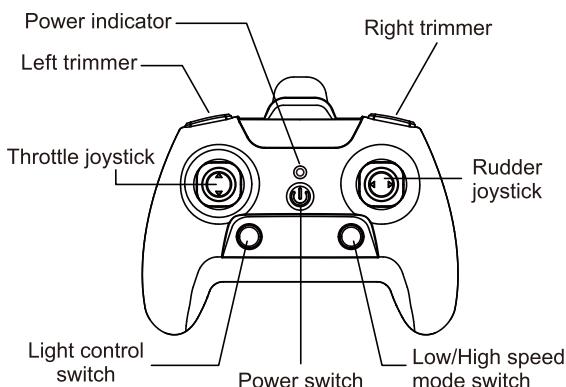
The control distance of this model is 170 meters. Please fly it within this range. If you exceed this range, it may cause the aircraft to lose control.

This model is an amphibious aircraft and can operate on water, land, and in the air. When using it on water, if the aircraft accidentally enters the water, it is necessary to dry any water inside the fuselage as much as possible before use. If there is a situation where the model does not bind after water ingress to the aircraft, it will be necessary to wait until the electric board has completely dried before use. If the model is submersed in salt water you should flush it thoroughly with fresh water and then check the operation very carefully once it is completely dried out. This model is NOT waterproof and salt water is extremely corrosive to the electronic components and may cause permanent irreversible damage.

Aircraft parts description



Remote Control Function



Item	Description
Power indicator	Transmitter switch status
Left trimmer	Yaw adjustment
Right trimmer	Yaw adjustment
Throttle joystick	Control aircraft to climb up/ down
Rudder joystick	Control flight direction L-R
Light control switch	Turn on/off the light
Power switch	Power on/off the remote control
Low/High speed mode switch	Control flight mode

Notice: 3pcs AAA battery required for remote control.

Flight Modes

Advanced flight mode is suitable for experienced pilots. The two modes are designed for different uses: low speed and high speed. This changes the turn radius.

The Airplane defaults to the low speed mode when turned on. Press the low/high speed mode switch, and the power LED indicator on the transmitter will flash. At this time, the airplane switches to the high speed mode, which has a smaller turning radius and more responsive control. But, in this mode, the airplane can more easily stall and drop. Pressing the low/high speed mode switch again, and the power LED indicator is then solidly on, switching back to the low speed mode.

Flying

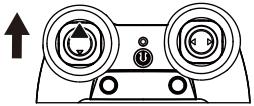
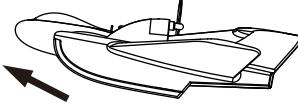
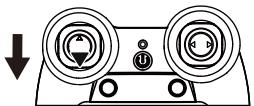
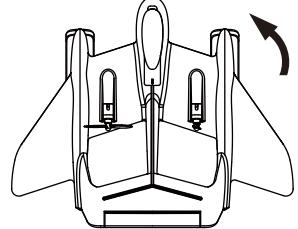
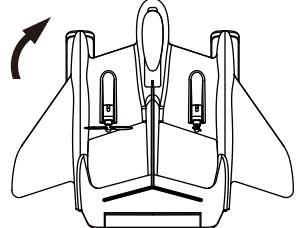
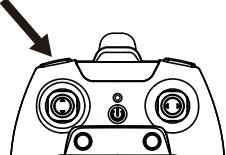
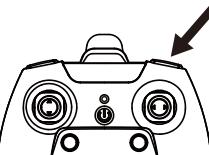
Choose an open outdoor environment, and if possible test fly this aircraft in calm or moderate conditions if you are a novice flier. Please stay far away from people, animals, and obstacles.

Check the structure of the aircraft for any deformation of the surfaces before flight. This product is made from a strong and lightweight EPP foam material, which is easy to deform if it is improperly placed or loaded for a long time. If there is any abnormal deformation, it should be corrected before flight. This can be done by bending the surface in the opposite direction for a few minutes.

Power on the aircraft, as explained above. Gently push the throttle to see whether the left and right motors rotate or not and whether the propeller airflow blow backwards or not. Lower the throttle and turn the rudder joystick left and right, and check that both the left and right motors rotate correspondingly, then the aircraft is ready to fly.

We recommend that the first test flights should be commenced with a hand launch into the wind above land. Use the low speed mode and increase the throttle to half power before launching the model in a level condition.

Remote Control Function

Left joystick (throttle) push upwards		 Accelerate the aircraft and climb upwards
Left joystick (throttle) push down		 Slow down the aircraft and fly downwards
Right joystick (Rudder) push left		 Aircraft turns left
Right joystick (Rudder) push right		 Aircraft turns right
		If there is a right yaw issue during flight. Press the left button of the rudder trimmer to correct the right yaw issue.
		If there is a left yaw issue during flight. Press the right button of the rudder trimmer to correct the left yaw issue.

Trouble Shooting

Trouble	Possible Reason	Action
Aircraft has no response	Low power of the LiPo battery	Charge the battery
	Loose contact between board plug and battery plug	Re-connect the battery
Transmitter no response	Binding is not completed between Aircraft and transmitter	Re-bind it according to the binding process.
Loss of control for distant flight	Exceed remote control distance	Ensure to fly within remote control range
	Low battery of transmitter	Replace the Transmitter batteries
Left yaw in flight	deformation of the aircraft	Press the right trimmer
	Right wing's deformation	Adjust the right wing
Right yaw in flight	deformation of the aircraft	Press the left trimmer
	Left wing's deformation	Adjust the left wing
No rotation for propeller(Motor)	Propeller entangled in debris	Check the propeller
Sudden loss of height during the turn	The steering angle is too large	Reduce the input angle on the steering joystick

Flying Tips

★ The throttle is equivalent to the elevator function of an aircraft. If you are a novice pilot you should use 1/3 or 1/2 of the throttle to fly. It is common for a novice to try and take-off with full throttle but this will cause a loop and may crash the aircraft.

- When controlling left and right turns, do not hold the joystick at the maximum angle, as this will cause the aircraft to spiral downwards. The recommended control operation is to turn with a small and gentle angle or control the direction by pulsing the joystick, which will prevent the aircraft from spiraling.
- Choose good weather conditions and fly in open areas in calm conditions, so that the aircraft is easier to control.

★ The process of landing on the water surface should be as smoothly as possible. The throttle should be slowly retracted to avoid sudden changes in pitch. This way, the aircraft will land gently on the water surface and not pitchdown in the water. During take-off from water, a large throttle input is required because of the drag of the water on body of the model, but the throttle can be appropriately reduced after the aircraft leaves the water surface.

- The standard Li-po battery supplied with this model is designed to meet the requirements of the aircraft's center of gravity. If using your own battery, it needs to be close to the weight and voltage of the standard battery.

Caution

- ★ This aircraft can fly on water, land and air. When choosing to fly on water, it is necessary to stay together with adults who can swim. Do not dive into the water to retrieve the aircraft if it falls into the water so as to avoid drowning
- ★ Do not use in restricted areas, such as airports, military bases etc.

FCC Information

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.

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