

Age:14+

4 CHANNEL RC DRONES INSTRUCTION MANUAL



2.4G

4 CHANNEL

T-SMART
4-AXIS AEROCRAFT



Built-in Barograph for Altitude Hold Function

Thank you for purchasing our product. In order to use it correctly and make sure safety, please read the instruction book carefully before using. Please well keep it for your further reference.

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Disclaimer and Warning

Before using the product, please make sure to read all the following instructions carefully, and learn about all your legal rights, responsibilities and safety instructions; otherwise, it may lead to potential property damage, accidents and personal safety risks. When using this product, it treats that you have understood, recognized and accepted all the terms and contents. The user promises to be responsible for his behavior and the consequences arising.

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Pre-flight Checklist

1. Only use original parts and ensure that all parts in good working condition;
2. Make sure the remote controller, drone and mobile device battery are charged fully;
3. Make sure that the flight place is outside the restricted area, and it's suitable for flight;
4. The user must control the drone without drunkenness or influence of drugs;
5. Make sure that all parts of the drone are assembled securely;
6. Before flying the drone, you need to pull down the two joysticks of the controller inward diagonally to calibrate the barograph. (Since barograph will change in different environments.)

Parts Using Instructions

To avoid any possible injury and loss, make sure to follow the instructions below:

A. Original Parts

1. Use the original parts. The non-original parts may be dangerous to the safe use of the drone.
2. Make sure the drone and all internal parts without any foreign objects (such as water, oil, sand, soil, etc.).

B. Remote Controller

If change the remote controller please, re-adjust the frequency then operate the drone.

Product Maintenance

To avoid any possible injury and loss, make sure to follow the instructions below:

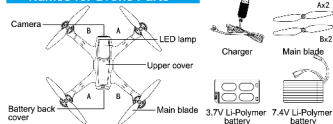
1. As the wire and small parts may be dangerous for children, so make sure to keep children away from the drone parts.
2. Keep the battery in a dry and ventilated place; without direct sunlight to avoid the battery overheating. If do not use the battery for over 3 months, the recommended storage temperature range is between 22 and 28 degrees Celsius. Do not store batteries in a place less than 20 degrees Celsius or above 45 degrees Celsius.
3. Check if each part of drone has been impacted strongly.
4. Regularly check the battery power.

Flight and Height Restrictions

Flight restricted: flight restricted areas including large international airports, the border between 2 countries, and the metropolitan area, etc.

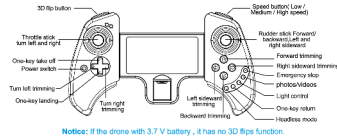
Height restriction: drone should fly away from any tall building.

Names for Drone Parts



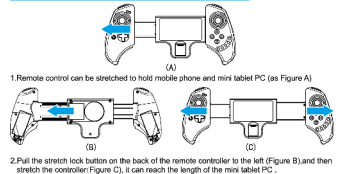
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Each Button of Remote Controller

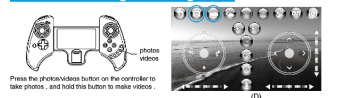


Notice: If the drone with 3.7 V battery, it has no 3D flips function.

Remote Controller Stretch Instruction



Video / Image Shooting



Notice: The will camera blue light stays on if power on; and this light flashes slowly after connecting to APP successfully; while making videos by controller or phone APP, this light flashes quickly.

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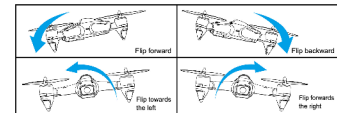
Attention:

This product has Gyroscope technology, please follow Gyroscope setup instructions below before operating.

1. Please place the drone on a flat ground, and hold the drone power switch to open it, the drone lights flash slowly now.
2. Open the switch of the controller, the controller will sound "di-di-di" while catching the frequency, and red indicator light on controller flashes slowly, after connecting frequency successfully, the green indicator light on controller stays on and drone lights stay on too.
3. Please operate as below after connecting frequency successfully: Re-calibrate the gyroscope first by pulling the two joysticks inward diagonally together, the lights flash several times and then stay on; secondly, unlock the drone by pulling the two joysticks outward diagonally together, the blades rotate slowly now, then you can push the throttle joystick to fly the drone normally.
4. If the drone power wire is disconnected, it needs to re-start the remote controller for check frequency after connecting the power, so it can be normal for flight.
5. Basic Functions: The drone uses 2.4G frequency and can be operated in long distance. This frequency also allows other drones to be used at the same time. Flight function: ascend, descend, forward, backward, right, left and so on.
6. 3D flip function: you can use remote controller to make the drone flip forward and backward, flip left and right, and other functions after proficiency.
7. Headless mode: If switch to the headless mode, the drone will take your remote controller direction as the standard direction, it can fly without identifying the direction.
8. One-key return: when the drone has a certain distance from the remote controller, you can start one-key return function, the drone will automatically fly back, push the forward joystick or re-press the return button to end.
9. Height Measurement Function: pushing the throttle too fast would cause slow response of air pressure detection and drone jumps, it is time for barograph to search target altitude, then the throttle should be pushed slowly.
10. You can pull the left throttle to the end to let the drone landing till the blades stop and then loose the joystick.
11. If the drone crashes something while flying and you need to stop it rapidly, you can press the emergency stop button (for more details, refer to emergency stop instruction).
12. Low voltage tip: drone's lights will flash quickly if it is in low voltage.

3D Flip Flying

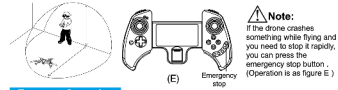
User can perform breathtaking 3D flips with the drone. Fly the drone to the height of 2M, and press the 3D flip button on the top left of the remote controller. The remote controller will make a beeping sound, once it keeps move the right joystick in the desired direction of the flip.



Notice: If the drone with 3.7 V battery, it has no 3D flips function. For 7.4V battery version, the 3D flips function will close automatically if drone in low voltage.

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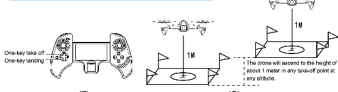
Emergency Stop



Protect function



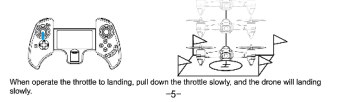
One Key Take Off and Landing



1. The drone will ascend automatically to the height of about 1 meter if press upward the one-key take-off button. The drone lights will flash slowly during ascending but stay on after the drone flies to the height of about 1 meter.
2. The drone will descend automatically slowly if press downward the one-key landing button. The drone lights will flash slowly during descending but stay on after the drone lands on the ground for 3-5 seconds.

Note: It can operate forward/backward/left/right/sideward flying when operate the one-key take-off function.

Throttle Landing



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One key Return

The drone will return automatically if press the one-key return button,press the button again or push the forward joystick to exit. The front lights of drone stay on but back blue lights flash quickly if start one-key return function and stay on after exiting this function.

Headless Mode

The drone can fly without identifying the directions while start headless mode,and its lights will flash quickly. In order for the drone to fly in straight line,please make sure the drone is set on the flat surface facing forward, and then the gyro will check the straight line.Press the headless button again to exit the function.

Special Attention!

Special Attention!The drone is impacted by objects during flying, headless mode may not keep flying in straight, drone will fly in sidling. Please place the drone on the ground and reset the gyro by pulling down both joysticks inward diagonally together as depicted in the picture above. (Figure K).

Transmitter Battery Installation

Open the two battery covers on the back of the controller, put 2 pcs 1.5V AAA alkaline batteries to each battery box according to the electrode indicated on the box.

CAUTION: 1.Make sure the battery and its polarity in the battery compartment should be correct. Please don't load the batteries upside down. 2.Please don't mix the old batteries with the new ones. 3.Please don't mix using batteries of different brand.

The Instruction Of Lithium Battert Charging

7.4 V battery charging instruction:
① Open the battery cover of the drone and take out the battery from the battery case.
② Insert USB into power supply,the red light of USB flashes, then connect the battery to the USB. The light of USB will stay on while charging and go out after charging is completed. It takes about 120 minutes.
③ Put the battery into the battery case and connect the circuit board plug in correct pole.

3.7 V battery charging instruction:
Please insert the USB into the power supply, then connect the USB to the charging port of the drone. The LED light on the drone will stay on while charging and go out after charging is completed. It takes about 120 minutes.

WARNING: 1. If you do not want to play this drone, please disconnect the battery wire from the circuit board.

Attention:

1. Make sure the voltage of the USB charger fits the local electricity supply.
2. The Charging plug will overheat if overcharged. Please stop charging immediately as it may cause damage to the battery.
3. Do not leave the battery aside when charging.

Flying Environment:

1. Fly in good weather condition(sunny and no wind).
1.Do not fly in extreme temperature(too cold or too hot).
2. Do not fly in windy days. The performance and control of the drone will be influenced by winds. Windy condition may cause the missing and damage of the drone.
2. Select a wide-open space for flying and make sure no obstructions, animals or people nearby.

How To Control

Ascending: Push up the left throttle stick, and the rotation speed of the main blades will increase. The drone begins to ascend.
Descending: Pull down the left throttle stick, and the rotation speed of the main blades will reduce. The drone begins to descend.
Turn left: Push the left throttle stick to the left, and the drone will turn to left. Push the stick to the right, and the drone will turn to right.
Turn right: Push the left throttle stick to the left, and the drone will turn to left. Push the stick to the right, and the drone will turn to right.
Forward: When the right rudder stick is pushed forward, the drone will fly forward.
Backward: When the right rudder stick is pulled backward, the drone will fly backward.

Left forward fly

When push right the rudder stick to the right,the drone will fly sideward to the right.
When push the right rudder stick to the left, the drone will fly sideward to the left.

Right forward fly

When push right the rudder stick to the right,the drone will fly sideward to the right.
When push the right rudder stick to the left, the drone will fly sideward to the left.

Notice

If the drone is rotating in the air uncontrollably, adjust the rudder trimming buttons until the drone is stable.

Attention:

When the drone ascends to 30cm high, it will suffer the blades vortex itself, and become unstable. This is called 'ground effect'. The lighter weight of the drone, the more influenced.

When the drone spins to the left, pressing the right trimming button, until the drone does not spin.

When the drone spins to the right, pressing the left trimming button, until the drone does not spin.

If the drone moves backward while hovering, press the forward trimming button, until the drone stops moving backward.

If the drone moves forward while hovering, press the backward trimming button, until the drone stops moving forward.

If the drone flies to the left while hovering, press the right sideward trimming button, until the drone stops flying to the left.

If the drone flies to the right while hovering, press the left sideward trimming button, until the drone stops flying to the right.

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Flying Practice

To master the drone, please try the following flying practices.

Fixed-point revolving: The drone is shown revolving around a fixed point. The controls are indicated by arrows and text.

Forward and backward: The drone is shown flying forward and backward. The controls are indicated by arrows and text.

left and right sideways fly: The drone is shown flying sideways. The controls are indicated by arrows and text.

Fixed-point landing: The drone is shown landing at a fixed point. The controls are indicated by arrows and text.

Problems And Solutions

PROBLEMS	CAUSES	SOLUTIONS
Transmitter not working	1. The transmitter switch is on 'OFF'.	1. Turn on the transmitter.
	2. Install the batteries improperly.	2. Check with the pole indications and reinstall the batteries correctly.
Control failure	1. The transmitter switch is on 'OFF'.	1. Turn on the transmitter.
	2. The drone battery is unconnected.	2. Connect the drone battery in the correct orientation connector.
Ascending failure	1. The rotation of main blades is too slow.	3. Do not fly under the environment of wind, as too strong wind may cause flying limitation to the drone or it may transport your controlling or flying.
	2. The fuselage battery is not charged completely.	1. Push up the throttle stick.
Landing too soon	1. The throttle stick is pulled down too fast.	2. Recharge the fuselage battery.
	2. The throttle stick is not pulled to the end, but moving frequency is completed so the drone automatically rise.	3. Pull down the throttle stick slowly to perform a smooth landing.
Out of control	1. The throttle stick is not pulled to the end, but moving frequency is completed so the drone automatically rise.	The throttle stick should be pulled to the end in the process of revving frequency.
	Exceed the effective control distance.	The effective control distance is about 100m.

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Influence of air pressure

Drone jumps up and down slightly.

Drone shakes easily.

The drone keeps spinning although the rudder trim buttons have been adjusted, and the back two rudders repeat first, right blades.

1. Blade is out of shape.

2. Motor is abnormal.

Joystick needs to be pushed slowly.

Change the blade.

Change the motor.

Precautions:

1. The remote controlled distance will be shorter when the power (drone or transmitter) is insufficient.
2. It is difficult to take off or fly not high when drone's power is insufficient.
3. When the drone is damaged, please repair it in time and stop operating, if serious one (such as blades crack or damage) or it may lead to injury.
4. If you do not use the transmitter for a long time, please remove the batteries to avoid the batteries' leakage and damage of the product.
5. Do not drop the drone from the high altitude or crash it badly, otherwise, it will shorten the aerospace's using life.
6. When the parts are damaged, please purchase them from our company, or it may affect the safety and performance.

Pictures Of Parts

Notice: Please check the parts list according to the model you buy.

001 Upper cover

002 Bottom cover module

003 Drone lights cover

004 720P version fuselage electrode parts

005 1080P version fuselage electrode parts

006 Main blade

007 Motor

008 Receiver board

009 3.7V Li-Polymer battery

010 7.4V Li-Polymer battery

011 Battery back cover

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Help



1. Turn on the product (Four axis aircraft).
2. Enter the "Settings" menu of your mobile device, and open the Wi-Fi.
3. Search this product Wi-Fi from the Wi-Fi list, and then connect it till succeed.
4. Click  icon into the control interface, you would see the real-time video from the aircraft camera.



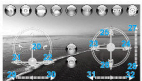
1. After entering the APP, you can press the setting icon to switch some operations.
2. This APP's default setting for videos transmitting is only 0.3 mega pixels. You can switch the preview 720P. If you need to watch clearer videos (When switch the preview 720P, the transmission will become more slowly.)



1. Return 2. Take Photo 3. Shoot Video
4. Photo/Video playback
5. Speed: Slow 30% Quick 60% High 100%
6. Altitude hold 7. Gravity Sensor Mode
8. Show / Hide control interface
9. Show / Hide setup menu
10. Headless Mode 11. Gyro Calibrate
12. Camera inversion 13. 3D view
14. One key Unlock/take-off
15. One key landing 16. Stop rapidly
17. Flight Path 18. 360° roll 19. Voice control

Remark: If want to use English to operate voice control, it needs to set the phone into English version first. After entering the voice control operation, it shows the saying information that can be used on phone.

Left Throttle Mode



20. Throttle control 21/22. Left/Right turn
23/24. Left/right side flying
25/26. Forward/backward
27/28. Forward/backward fine-tune
29/30. Left/right turn fine-tune
31/32. Left/right side flying fine-tune

Right Throttle Mode



20. Throttle control 21/22. Left/Right turn
23/24. Left/right side flying
25/26. Forward/backward
27/28. Forward/backward fine-tune
29/30. Left/right turn fine-tune
31/32. Left/right side flying fine-tune

3D View



Warning: Use VR glasses to achieve the 3D effect.

Left throttle mode



Throttle control: Press and push the throttle control ball upward, the motor will rotate. The higher you push the ball, the faster the motor will rotate (that means aircraft will fly higher). Press and pull down the ball, the motor rotation will decelerate, the lower you pull the ball, the slower the motor will rotate (that means aircraft will fly lower).

Left throttle mode



Elevator (Forward/Backward) control: When the Elevator-controlling ball moves upward, aircraft will fly forward. When the Elevator-controlling ball moves downward, aircraft will fly backward.

Left throttle mode



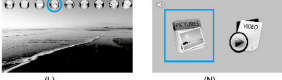
Steering Control: When the direction-controlling ball moves to the left, aircraft will rotate clockwise. When the direction-controlling ball moves to the right, aircraft will rotate anticlockwise.

Left throttle mode



Aileron (left / right) Control: When the aileron-controlling ball moves to the left, aircraft will fly to left. When the aileron-controlling ball moves to the right, aircraft will fly to the right.

Special instructions to extract images or videos in Android APP.



(L) (N)



(M) (O)

1. After entering the Android APP, click on the image/video icon (Figure L)
2. Enter into interface (Figure N), click on the picture icon.
3. The taken photos can be found in the Photos File in Android version (as Figure M), and the made videos can be found in the Videos File (as Figure O).

Instruction for wifi camera version with SD card and without SD card

Notice: This part instruction is only for 720P or more wifi camera version, please read it according to the version you have.



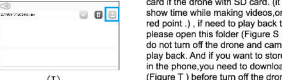
(P) (Q)

When the drone does not install a SD card, the images/videos are stored in the APP folder.



(R) (S)

The videos will be priority stored into the SD card. (It does not show time while making videos, only shows red point.) If need to play back the videos, please open this folder (Figure S), please do not turn off the drone and camera while play back. And if you want to store the video in the phone, you need to download the video (Figure T) before turn off the drone, it will not use your network traffic.



(T)

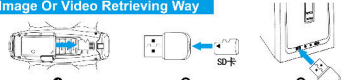
Flight Path



(U) (V)

1. When turn on the flight path, the control ball will hide automatically (as Figure U). To exit, repress the flight path button.
2. When turn on the flight path, the drone will fly follow the drawing path (as Figure V).

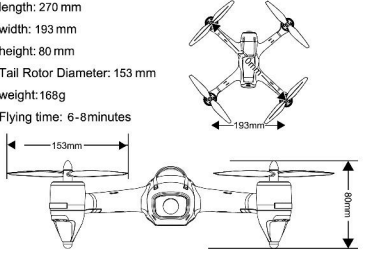
Image Or Video Retrieving Way



1. Remove the SD card from the bottom of the drone (as Figure 1 shown).
2. Insert the SD card into the card reader (as Figure 2 shown), we can transfer and store the shooting data to the computer.
3. Insert the card reader into the computer USB port (as Figure 3 shown), the sequence is as follows: My Computer → Removable Disk → Video or Image Folders.

Specifications & Equipment

length: 270 mm
width: 193 mm
height: 80 mm
Tail Rotor Diameter: 153 mm
weight: 168g
Flying time: 6-8 minutes



CE, FCC, RoHS, and other certification logos.

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

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the 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.

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This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.