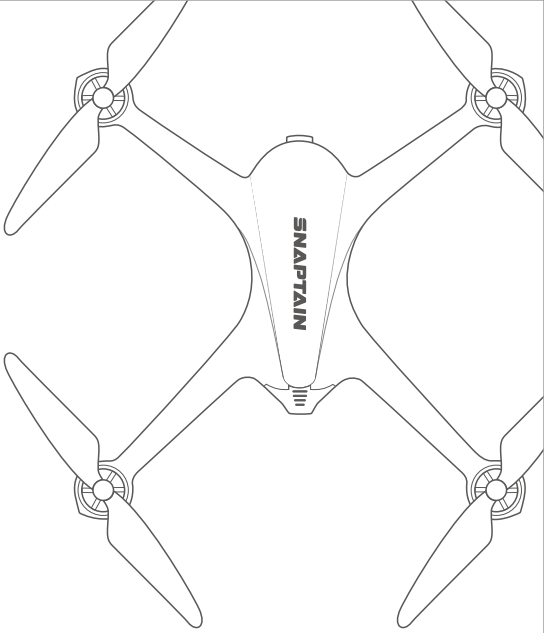

SNAPTAIN

SP700

4-Axis GPS Drone

14+ FOR AGES

USER MANUAL

Please read this manual carefully before flying and keep it well for future reference.

V3.02

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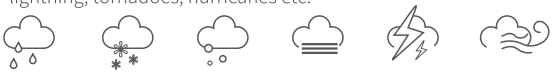
DISCLAIMER AND SAFETY GUIDELINES

Please read the disclaimer carefully before using this product. By using it, you hereby agree to this disclaimer and signify that you have read them fully.

1. Before flying, please make some practice with a simulator or seek for the instruction from a professional.
2. DO NOT fly above or near obstacles, crowds, open water, public road, high voltage power lines or trees.

3. DO NOT use the drone in severe weather conditions, such as a rainy day or windy day (the wind speed is more than 5.5m/s), snow, hail, lightning, tornadoes, hurricanes etc.



4. DO NOT fly the drone in the magnetic interference area, radio interference area, and government regulated no-fly zones.

5. The fast rotating motors and propellers are a potential hazard to cause serious damage and injury. A safe distance of 5m must be maintained from the drone at all times while it is operational. Fly with responsibility.

6. Please maintain line-of-sight of your drone at all times after it is powered up. Do not rely on the camera image to control your drone.

7. This product is not a toy and not recommended for users under age 14.

8. This product is not intended for professional aerial drone photography.

9. All parts must be kept out of the reach of children to avoid CHOKE HAZARD.

10. CAUTION: Dispose of drone and batteries in accordance with local regulations. DO NOT treat it as household waste.

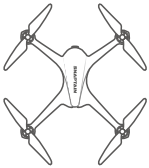
11. Be sure to observe all local regulations, obtain appropriate authorizations and understand risks. Please note it is solely your responsibility to comply with all flight regulations.

SNAPTAIN accepts no liability for damage, injury or any legal responsibility incurred directly or indirectly from the use of this product. The user shall observe safe and lawful practices including, but not limited to, those set forth in these Disclaimer and Safety Guidelines. SNAPTAIN reserves the right to update this user manual.

MAINTENANCE AND CARE

1. Thoroughly check the drone after a crash or a violent impact.
2. Do not use or store the battery near fire.
3. Do not charge the battery if it is hot. Let it cool down first.
4. Do not charge the battery next to inflammable materials, such as carpet, wood floors etc., or on surfaces that are electrically conductive. Do not leave the battery unattended while charging.
5. ONLY use the original charger provided. Unplug the charger once it's fully charged.
6. Remove the batteries from the drone and the remote if they will not be used for a long time.
7. Store the drone and remote in a cool, dry place away from direct sunlight.
8. Be sure to clean off your drone with a dry cloth to prevent any moisture from getting onto the electronics.
9. Do not try to disassemble or repair the product yourself. Please contact SNAPTAIN for more help.

PACKING LIST

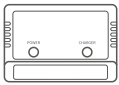


SP700 Drone

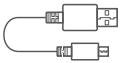
Remote
(Batteries not included)

User Manual

Li-ion Battery



Charger

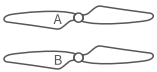


USB Cable

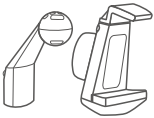
Screwdriver

Propeller Removal Wrench

Screw Set



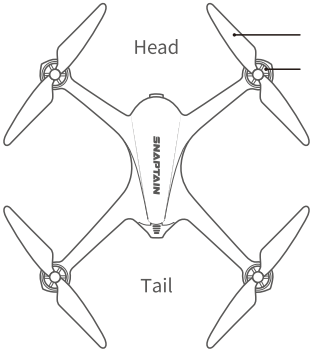
Spare Propeller
A x2, B x2

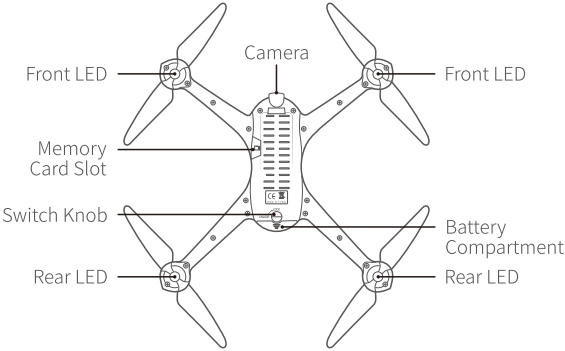


Phone Clamp

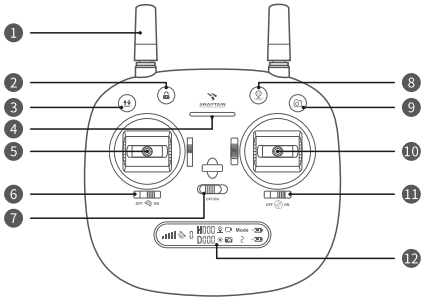
PRODUCT OVERVIEW

SP700 Drone



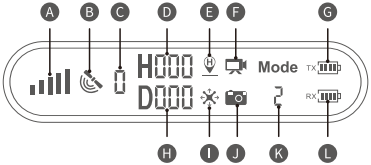


Remote



1. Antenna
2. One Key Unlock/Lock
3. One Key Take-off/Landing
4. LED Indicator
5. Left Control Stick
6. GPS Mode(ON)/ Attitude Mode(OFF)
7. ON/OFF
8. Smart Return-to-Home(RTH)
9. Photo/Video(long press)
10. Right Control Stick
11. Headless Mode On/Off
12. LCD Screen

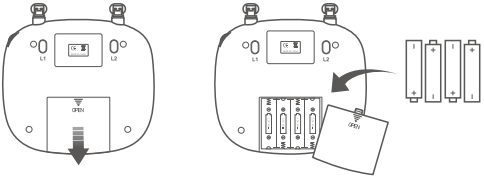
LCD Screen



- A Received Signal Strength
- B GPS Mode Enabled
- C Number of Satellites
- D Flight Altitude
- E Smart RTH Enabled
- F Video
- G Remote Battery Status
- H RTH Distance
- I Headless Mode Enabled
- J Photo
- K Remote Mode
- L Drone Battery Status

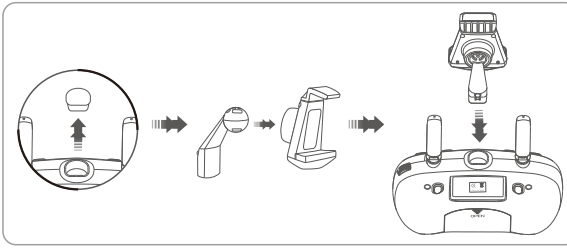
FLIGHT PREPARATION

1. Take out the remote from the bottom of the white foam box, then install the batteries.

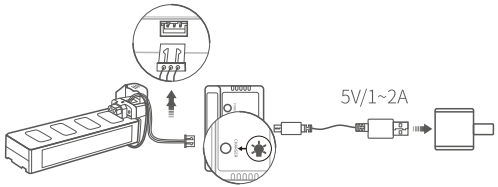


4 x AA (1.5V) (batteries not included)
* Please use new batteries, and do not mix the battery type.

2. Install the **Phone Clamp** and unfold the **Antenna**.



3. Charge the drone battery with the original charger.

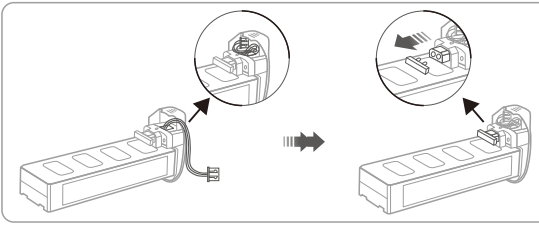


Charging: Flash green slowly
Fully Charged: Solid green
Incorrect connection or malfunction: Flash green quickly

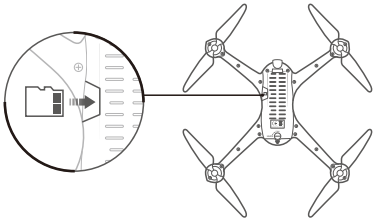
Notes:

* It takes around 3 hours to reach a full charge.
* Please use the original battery and charger provided.
* Keep the battery away from any sharp objects that could puncture into the battery to avoid risks of explosion and fire.
* It's not recommended to charge the battery from the USB port of PC.
* Battery capacity may be significantly reduced when flying in low-temperature environments. Flight time may be reduced, too. Please keep the battery indoors or insert it into the drone for 1-2 minutes to warm it if flying in such environments is inevitable.

4. Insert the charging cable of the battery into the battery case and remove the plastic connector cap after the battery is fully charged.

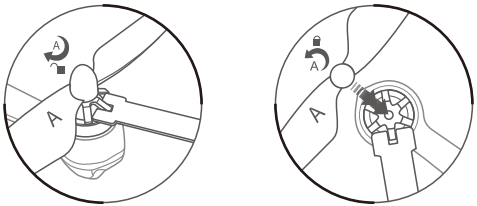


5. Install a memory card(not included) into the drone. (Optional)



*FAT 32 format of the memory card is required.
*Support up to 32GB.

6. Replace the propeller when it's needed. (Optional)



1. Use the wrench to keep the motor in place, then rotate the propeller by hand as directed by the mark A/B to remove it.
2. Fit the spare propeller into the drone. Make sure the mark(A/B) on the propeller is the same as the mark on the arm of the drone.
3. Keep the motor in place, then rotate the propeller following the direction of mark A/B until it's fixed and reaches to the top of the motor.

IMPORTANT

* For all flight functions and modes, the operator and tail of the drone must be aligned.
* We recommend flying in the open air and within the control range for beginners.
* Do repeat the pairing procedure each time the drone or the remote is restarted.
* Take out the battery from the drone when stop flying.

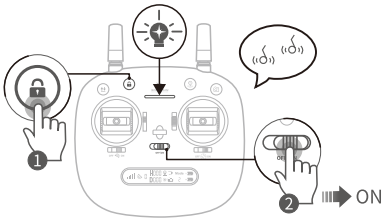
FLIGHT OPERATION GUIDE

Remote Operation Guide

Pair the Remote with the Drone

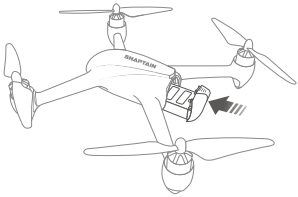
Step 1:

Press and hold the button, then turn on the remote. Release the button when you hear two beeps from the remote and the LED indicator on it starts to flash.



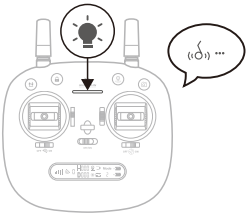
Step 2:

Install the battery into the drone and rotate the **Switch Knob** 90° clockwise to lock it. Then place the drone on a flat surface with the head forward.



* Locking the battery is a must, preventing it from falling out during flight.

Pairing completes when you hear a long beep from the remote and the LED indicator on it turns solid on. Then you will see the received signal strength on the remote screen.

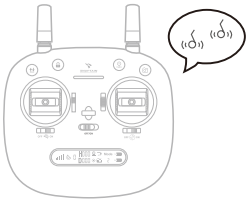


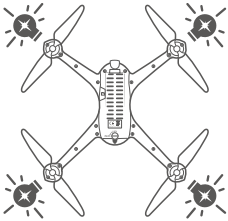
Flight Calibration

1. Initialization and Self-check

The drone starts initialization and self-check after pairing; there are beeps from the drone and the LEDs on the drone flash red, green and yellow alternately.

The drone finishes initialization and self-check when you hear two beeps from the remote and the LEDs on the drone flash yellow alternately.



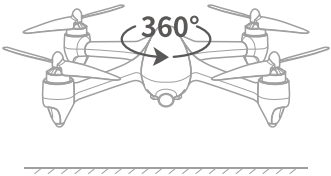


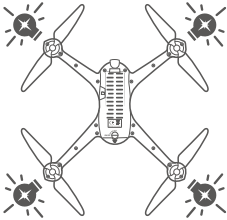
flash yellow alternately

2. Compass Calibration

Step 1:

Hold the drone horizontally and make a 360 degrees rotation at least two times until the LEDs on the drone flash green.

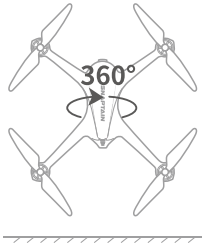


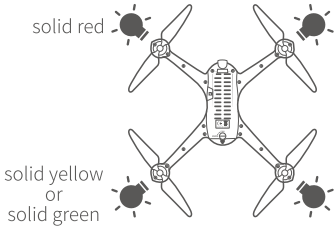


flash green

Step 2:

Hold the drone vertically with the camera facing up, and make a 360 degrees rotation at least two times until the front LEDs turn solid red and the rear LEDs solid yellow or solid green.



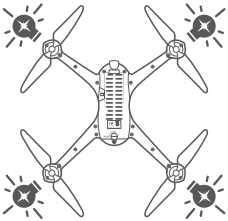


Notes:

* The drone starts searching satellites after powering up. The rear LEDs will be solid yellow when the drone is searching satellites, or solid green when the drone has found enough satellites.
* Make sure to keep away from ferromagnetic substance and other electronic equipment when calibrating.

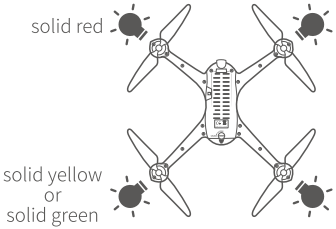
3. Gyro Calibration

Place the drone on a flat surface with the head forward. Push both control sticks to lower left to start gyro calibration, and the LEDs on the drone will flash green quickly.



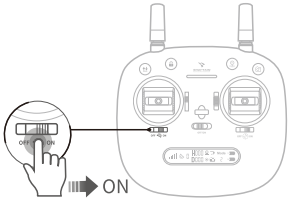
flash green quickly

Gyro calibration completes when the front LEDs turn solid red and the rear LEDs solid yellow or solid green.

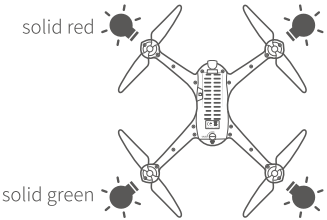


GPS Satellites Searching

Wait for the drone to search GPS satellites if it hasn't found enough satellites after you finish gyro calibration. Please make sure that **GPS Mode** is **ON**.



The drone is ready to take off in **GPS Mode** when its rear LEDs are solid green and its front LEDs solid red.

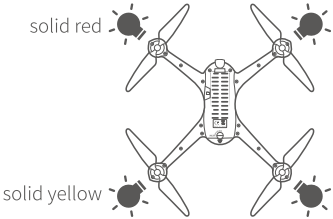


Ready to take off in GPS Mode

GPS Mode works only when there is a strong GPS signal (number of satellites＞7). Please fly the drone outdoors where the GPS signal is strong enough.

In **GPS Mode**, the drone utilizes the GPS module to locate itself and make a precise hovering flight. We strongly recommend this mode for beginners.

The drone will automatically switch to **Attitude(ATTI) Mode** when GPS mode is unavailable; its rear LEDs remain solid yellow and its front LEDs solid red.



Ready to take off in ATTI Mode

In **ATTI Mode**, the drone will maintain a specific flight altitude, but it will drift around in the wind. We recommend this mode only when the pilot has proficient skills in operating the drone.

Notes:

* In **ATTI Mode**, functions based on **GPS Mode**, including **RTH**, **Follow Me**, **Waypoints** and **POI**, can't be activated.
* Slide to **OFF** to manually activate **ATTI Mode**.

Connecting to Your Mobile Device

App Downloading and Installation

Download and install **Snaptain Eco** into your mobile device from **App Store/Google Play** or by scanning the QR code below.

for Android 4.4 and later

for iOS 8.0 and later

App Launch

Step 1:

Turn on cellular data and location service of your mobile device, then open **Snaptain Eco** App, and tap **Go** to enter the App.

Step 2:

Tap **Next** and **Click** to enter the operation interface.

Step 3:

Tap the **Live Map** on the lower left corner of the screen to load the map first.

Step 4:

Turn off the cellular data, then go to the Wifi setting of your mobile device and connect to the Wifi of **Snaptain-SP700-xxxxxx**.

! Notes:

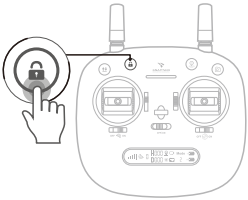
* If the **Snaptain-SP700-xxxxxx** Wifi is not listed in your Wifi list or the App does not show the preview image, remove and reinsert the battery of the drone, then repeat the pairing and calibration procedures follow the section on **Page 10-14**.
* Make sure the **Snaptain-SP700-xxxxxx** Wifi is only connected to one mobile device.
* It's recommended that you turn off the cellular data when connecting to the Wifi of **Snaptain-SP700-xxxxxx.** Otherwise, the Wifi connection with the drone may be interrupted.

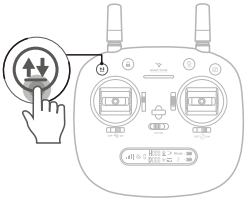
Flight Instructions

Take-off

Option 1:

Short press the button to unlock the drone and the four rotor blades start rotating, then press the button to take off at a height of around 1.2m.





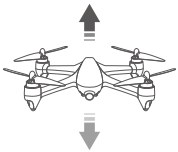
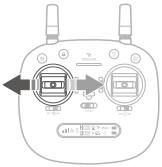
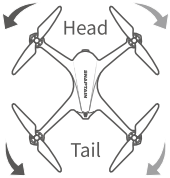
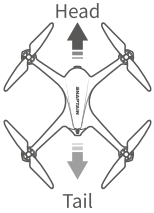
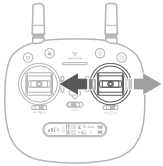
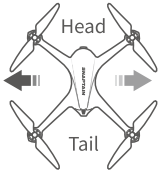
Option 2:

Simultaneously push the **Left Control Stick** to lower right at 45° and the **Right Control Stick** to lower left at 45° until four rotor blades start rotating, then slowly push the **Left Control Stick** forward to take off.

Notes:

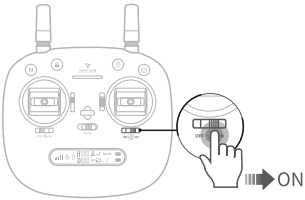
* Long press the button to lock the drone and make the four rotor blades stop rotating if you don't want the drone to take off after unlocking it.
* The propellers will stop rotating if there is no operation within 12s after unlocking the drone.

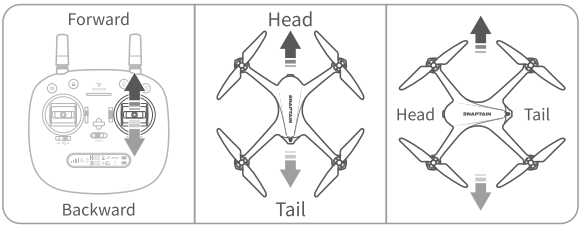
Flight Directions

		Push the Left Control Stick forward and the drone will ascend; pull it backward and the drone will descend.
		Pull the Left Control Stick leftward and the drone will rotate to the left; pull it rightward and the drone will rotate to the right.
		Push the Right Control Stick forward and the drone will fly forward; pull it backward and the drone will fly backward.
		Pull the Right Control Stick leftward and the drone will fly leftward; pull it rightward and the drone will fly rightward.

Headless Mode

Slide to **ON** to activate **Headless Mode**. In this mode, the drone will fly following the direction of the **Right Control Stick** regardless of the position of your drone's head or the tail. Slide to **OFF** to exit this mode.





Standard Mode Headless Mode

Return to Home (RTH)

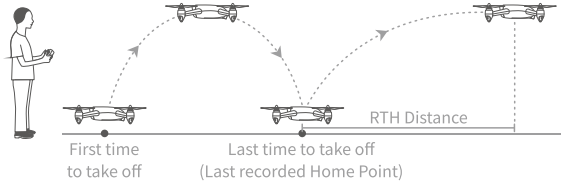
The **Return-to-Home** function based on **GPS Mode** brings the drone back to the last recorded **Home Point** where the drone took off last time if the number of GPS satellites is over 7 and the compass is functioning normally. Otherwise, this function can't be performed.

Smart RTH

Press the button on the remote to initiate **Smart RTH.**

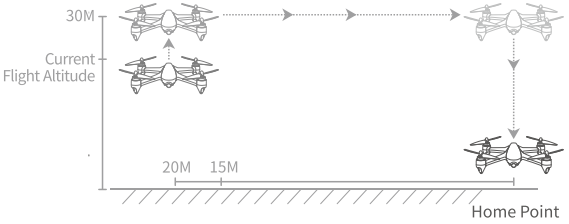
* RTH Distance:

The distance between the drone and the last recorded **Home Point** where the drone took off last time.

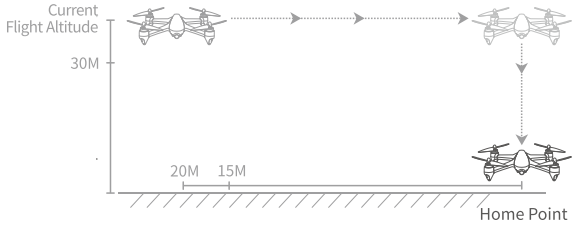


1. RTH Distance ⩾ 15m

If the current flight altitude is lower than 30m, the drone will first ascend to 30m, then fly horizontally to above Home Point and descend to land.

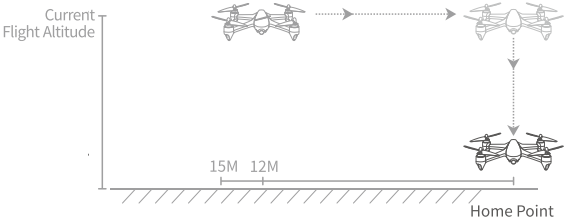


If the current flight altitude is higher than 30m, the drone will directly fly back to above Home Point at its current flight altitude and land.



2. RTH Distance < 15m

The drone will directly fly to above Home Point at its current flight altitude and descend to land.



* The pilot can manually navigate the drone to avoid obstacles during the flight path of **Smart RTH**. The Ⓗ icon will be displayed on the LCD screen too.

Press the button on the remote to cancel **Smart RTH** and regain the control.

Failsafe RTH

Failsafe RTH will be automatically activated when the remote disconnects with the drone for more than 6s. The drone will fly back to the last recorded Home Point under the control of the flight system itself.

If the connection between the remote and the drone is re-established during the process of Failsafe RTH, the pilot can regain control of the drone by pressing the button to cancel the RTH process. If no operation is performed, the RTH process will continue.

! Note:

* If the remote disconnects with drone for more than 6s and the **GPS Mode** is unavailable, the drone will slowly descend from the current point till landing.

Low Battery RTH

The **Low Battery RTH** will be triggered when the drone battery is low and the RTH Distance is over 150m.

Drone Battery Status shows 2 Yellow bars on the App.	There are continuous short beeps from the remote.

The drone will fly back to above Home Point and descend to the point where flight altitude is 30m and hover. Then RTH is cancelled automatically.

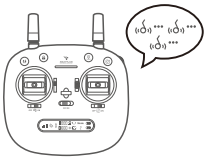
The drone can't fly beyond the point where RTH distance is more than 150m any more no matter how the pilot operates.

! Notes:

* **Low Battery RTH** can be cancelled manually by pressing the button on the remote. After cancelling RTH, the Low Battery RTH will not be triggered again unless the battery is critical low.
* Please land the drone timely, then charge the battery.

Critical Low Battery RTH

The **Critical Low Battery RTH** will be triggered when the drone battery is critical low and the RTH Distance is over 15m.

	
Drone Battery Status shows 1 Red bar on the App.	There are continuous long beeps from the remote.

The drone will automatically fly back and land to the last recorded Home Point at the current height, then RTH will be cancelled automatically.

Notes:

* **Critical Low Battery RTH** can be cancelled manually by pressing the button on the remote, then the drone will land automatically. Move the sticks to control the drone while it's landing.
* Please land the drone timely, then charge or replace the battery.

Critical Low Battery Landing

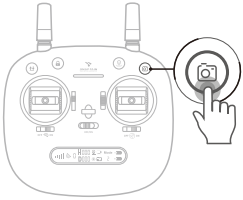
The **Citical Low Battery Landing** will be triggered when the drone battery is critical low and the RTH Distance is within 15m. The drone will start landing.
However, the pilot can use the remote to land the drone to a safer placeduring the process of landing.

Note:

* Please land the drone timely, then charge the battery.
* The drone cannot automatically avoid obstacle during the flight path of RTH.

Photo/Video

Short press to take a photo.
Press and hold for 2s to start recording a video, press and hold it again for 2s to end and save the video to the memory card (not included).

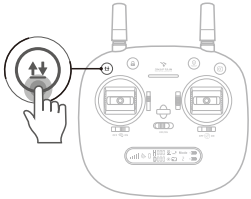


Tip:

We recommend to use this function combined with **Snaptain Eco** App on the mobile device to clearly view the photo/video you are taking.

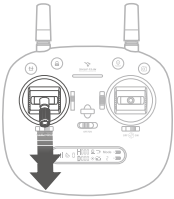
Landing

Option 1:
Short press the button to land during the flight.



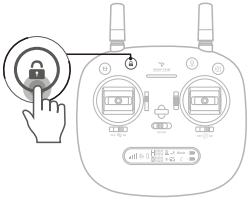
Option 2:

Pull the **Left Control Stick** backward to the bottom to land the drone, and hold it for at least 3s until all the rotor blades stop rotating.



Emergency Stop

Press and hold for 3s, the drone will stop mid air and fall.

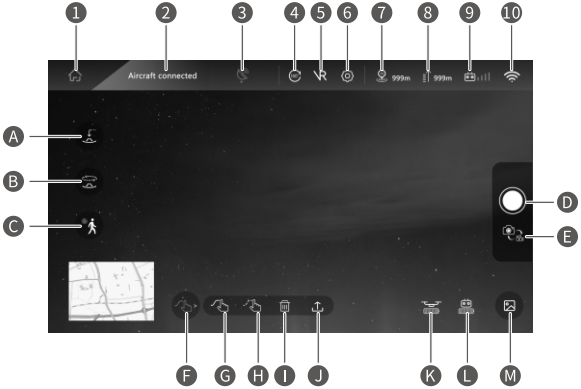


Note:

* It's **NOT** recommended to use this function during normal flight for landing, which may result in serious damage for your drone.

App Operation Guide

Function Overview of the App



1. Home
2. Wifi Connection Status
3. GPS Signal
4. Flip Image
5. VR Mode
6. Settings
7. RTH Distance
8. Flight Altitude
9. Remote Signal
10. Wifi Signal

A. Return-To-Home(RTH)
B. Point of Interest(POI)
C. Follow Me
D. Shutter
E. Photo/Video
F. Waypoints
G. Trajectory
H. Point
I. Delete
J. Upload Waypoints
K. Aircraft Battery Status
L. Remote Battery Status
M. Media Gallery

GPS Signal:

Show the number of the GPS satellites.

* Blue: Satellites >7, GPS mode can be activated to fly.
* Yellow: satellites ⩽7, GPS mode cannot be enabled.
* Red: no satellites, GPS mode cannot be enabled.

VR Mode:

Tap VR to activate VR mode(VR device is not supplied).

Flip Image:

Tap to flip the image 180°.

RTH Distance:

Check the distance between the drone and the last recorded Home Point.

Flight Altitude:

Check the flight altitude of the drone.

Remote Signal:

Check the signal strength of the remote to avoid losing control. When it drops to 1 red bar ( ) , please fly the drone back.

Wifi Signal:

Check the Wifi signal strength of the drone to avoid blurry and laggy video. When it show low signal strength (⩽ 1 bar) , please fly the drone back immediately.

Photo/Video:

Tap to switch between photo mode and video mode.

Shutter:

Tap to take one photo in photo mode.

Tap to start recording; tap again to end and save.

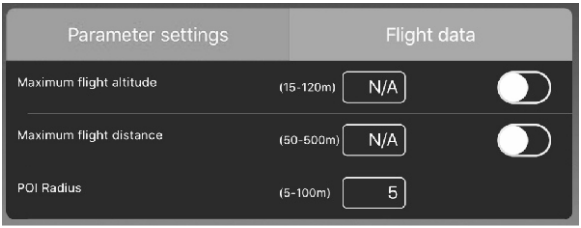
Drone Battery Status:
Check the battery status of the drone.

Remote Battery Status:
Check the battery status of the remote.

Media Gallery:
Tap to check the photos and videos saved.

Settings

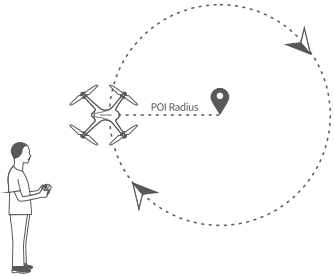
Tap to start setting up your drone.



You can reset the **Maximum Flight Altitude**, **Maximum Flight Distance** and **POI Radius** as well as check the **Flight Data** including **Date**, **Distance**, **Altitude**, **Longitude** and **Latitude** here.

Point of Interest (POI)

POI function based on **GPS Mode** enables the drone to fly around a desired subject. The default point of interest is 5m ahead of the drone. Tap to activate POI function, then tap **Yes** on the pop-up window to start. Tap **No** to exit this window.



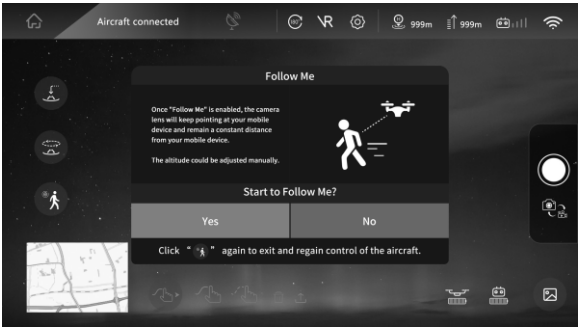
Tap again to cancel this mode and regain control of the drone.

Notes:

* Push the **Left Control Stick** forward or backward to adjust the flight altitude as needed.
* You can reset the **POI Radius** in the **Settings**(see on **Page 29**).
* This function can not be activated when the battery of the drone is critical low.

Follow Me

Tap to enable **Follow Me** function based on **GPS Mode**, then tap **Yes** on the pop-up window to start. When this function is enabled during flight, the drone's camera lens will keep pointing at your mobile device and maintain a constant distance from it.



Tap again to cancel this mode and regain control of the drone.

Notes:

* The function of **Follow Me** may have deviation due to the GPS Signal. Please maintain a safe and effective distance (5~35m) between you and the drone when enabling this function.
* Activate this function only when there are no obstacles around you in case of unexpected accidents.
* Push the **Left Control Stick** forward or backward to adjust the flight altitude as needed.
* This function can't be activated when the drone battery is critical low.

Waypoints

Waypoints function based on **GPS Mode** allows you to define an exact flying route on a map. Tap to enter the interface of waypoints.

Option 1:

Select Waypoints

Step 1:

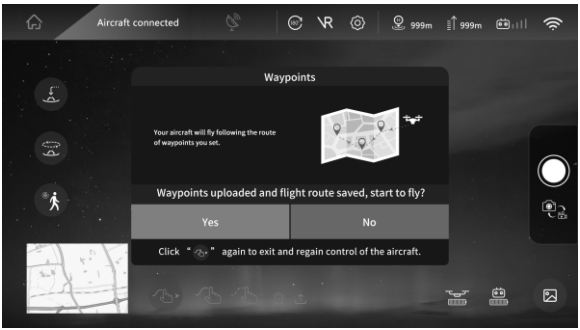
Tap , then tap some desired waypoints on the map. Tap to delete waypoints if you want to reset.

Step 2:

Tap to upload waypoints.

Step 3:

Tap **Yes** on the pop-up window to start to fly following the route of waypoints.



Option 2:

Draw a Trajectory

Step 1:

Tap , then draw a path on the map.

Step 2:

Tap to upload waypoints.

Step 3:

Tap **Yes** on the pop-up window and the drone will fly following the path.

Tap again to cancel this mode and regain control of the drone.

Notes:

* Up to 18 waypoints can be set at a time.
* Push the **Left Control Stick** forward or backward to adjust the flight altitude as needed.
* This function can't be activated when the drone battery is critical low.

Photo/Video

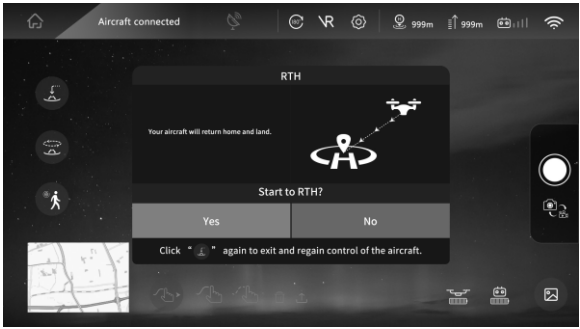
Tap to take a photo.

Tap to switch to **Video Mode**. Tap to start recording a video, then tap it again to end and save the video to your memory card and mobile device.

Go to **Media Gallery**, select the photo or video prefered and tap to share with your friends.

Smart RTH

Tap to activate RTH and have the drone return to the last recorded Home Point. Tap **Yes** on the pop-up window to start RTH; tap **No** to exit this window.



During the path of RTH, tap again to cancel RTH and regain the control.

PARAMETERS

Motor	1806 Brushless
Control Range	⩽500m
FPV Range	⩽400m
Maximum Flight Relative Height	120m
Flight Time	About 18mins
Charging Time	about 3h
Photo Resolution	2048 x 1152
Video Resolution	2048 x 1152@20fps
Photo Format	JPG
Video Format	MP4
Storage	Save to the mobile device or memory card
Mobile App Requirement	Android 4.4 and later, iOS 8.0 and later

TROUBLESHOOTING

Q1. The LEDs of the drone keep flashing red after powering on.

* Please make sure that the drone battery is fully charged.

Q2. Why can't I turn on the remote after installing AA batteries?

* Please install four 1.5V AA batteries and make sure the batteries have enough power.

Q3. Fail to pair the drone with the remote.

* Please press and hold the button, then turn on the remote. Next, install the battery into the drone to power on it. Pairing completes when you hear a long beep from the remote, and you can see the received signal strength on the remote screen.

Q4. Fail to connect to the drone's wifi after enabling wifi on my mobile device.

* Please make sure that only ONE device is connecting to the drone's Wifi.

Q5. Why can't I see the map after launching the App?

* Please make sure that you've installed a map App. The drone's wifi has no internet access, please disconnect to it and turn on your cellular data to preload the map, then turn off your cellular data and connect to the drone's wifi again.

Q6. The drone can't make a precise hovering; it drifts after taking off.

* Please make sure that you've turned on GPS Mode and check the satellite number that the drone has found on the remote screen. GPS Mode works only when the number of satellites is more than 7. Please fly the drone in the open air.

Q7. The FOLLOW ME function is unavailable.

* Please make sure that you've turned on location service on your mobile device, and the drone is flying in GPS Mode.

Q8. How can I fly the drone back when I can't tell the head or tail of the drone?

* Please make sure that you've turned on GPS Mode, press the button to trigger RTH function, then the drone will automatically fly back home.

Q9. How to cancel Failsafe RTH?

* Press the button to cancel Failsafe RTH when the remote receives the signal from the drone again.

Q10. Is it necessary to fly the drone back when the drone battery is low?

* Please fly the drone within a distance of 150m when the battery is low. When the battery is critical low, the drone will automatically fly back and land.

SNAPTAIN SUPPORT

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