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Option 1:
Press and hold the button for 3s to activate ATTI Mode.
Press and hold the button for 3s again to cancel ATTI Mode.

Option 2:
ATTI Mode is automatically on when GPS signal is not strong enough for the drone to fly in GPS mode during outdoor flight.

Notes:
1 We recommend **ATTI Mode** only when the pilot has proficient skills in operating the drone.
2 In **ATTI Mode**, functions based on GPS mode including **RTH**, **Follow Me**, **Waypoints** and **POI** can't be activated.

Flight Trimming
This function is only for **ATTI Mode**, in which the drone will drift around in the wind. Proper trimming can help the drone achieve a hovering flight.

If the drone drifts forward or backward when flying, press and hold then slightly push the Right Control Stick backward or forward to adjust.

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If the drone drifts leftward or rightward when flying, press and hold , then slightly push the Right Control Stick rightward or leftward to adjust.

Release the button to cancel trimming mode.

Return-to-Home (RTH)
The **Return-to-Home (RTH)** function brings the drone back to the last recorded **Home Point** where the drone took off last time. RTH works only when the GPS signal is strong and the compass works normally.

Smart RTH
Press 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 >30m**
If the current flight altitude is lower than the preset RTH altitude, the drone will first ascend to the preset RTH altitude, then fly back to **Home Point** and descend to land.

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Preset RTH Altitude
Current Flight Altitude
35M 30M
Home Point

If the current flight altitude is higher than the preset RTH altitude, the drone will directly fly back to **Home Point** at its current flight altitude and land.

Current Flight Altitude
Preset RTH Altitude
35M 30M
Home Point

2. **RTH Distance ≤30m**
The drone will directly fly back to **Home Point** at its current flight altitude and descend to land.

Current Flight Altitude
30M 25M
Home Point

IMPORTANT
After the drone returns to **Home Point** and the rotor blades stop rotating, press on the remote to cancel **Smart RTH**. Otherwise, you can't regain control of the drone.Notes:
1 The preset RTH altitude is 25m by default. You can reset it in the **Settings** of **Snaptain Nova App** (see on page 27). However, the preset RTH altitude can not be higher than the flight altitude when resetting.
2 During the path of **Smart RTH**, the remote continuously beeps and the **RTH Indicator** keeps flashing green.Failsafe RTH
Failsafe RTH will be automatically activated when the remote disconnects with the drone for 5s. 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 drone is re-established during **Failsafe RTH**, the pilot can regain control of the drone by pressing to cancel the RTH process. If no operation is performed by the pilot, the RTH process will continue.Low Battery RTH
The **Low Battery RTH** will be triggered when the drone battery is low. You can see the low battery prompt on the App.

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1. **RTH Distance >30m**
The drone will horizontally fly back to the point where the RTH distance is 15m and hover, then the pilot regains control of the drone. The drone can't fly beyond 15m any more no matter how the pilot operates.
Please land the drone safely and timely. If the pilot doesn't land the drone, it will automatically descend from its current point to land when the battery drains.

2. **RTH Distance ≤30m**
The drone will directly fly back to **Home Point** and descend to land.

Note:
The drone cannot avoid obstacles during the flight path of **RTH**.

Landing
Option 1:
Short press the button to land the drone.

Option 2:
Slowly pull the **Left Control Stick** backward to land the drone until the propellers stop rotating.

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Emergency Stop
Press and hold for 3s, the drone will stop in the air and fall.

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

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

Android

iOS

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Launch the App
Step 1:
Turn on cellular data and location service on your mobile device, then open **Snaptain Nova App**, select **SP510** and tap **Start** to enter the App.
Step 2:
Tap the **Live Map** to load the map, then tap to have your location displayed on the center of the live map.
Step 3:
Turn off cellular data, then go to the **Wifi** setting of your mobile device and connect to the **Wifi Snaptain-SP510-xxxxxx**.

Notes:
1 If the **Snaptain-SP510-xxxxxx** Wifi is not listed in your **Wifi** list or the App does not show the preview image, please restart the drone and remote, then repeat the pairing and calibration procedures.
2 Make sure the **Snaptain-SP510-xxxxxx** Wifi is only connected to one mobile device.
3 The drone's **Wifi** has no Internet access. To prevent your mobile device from automatically switching to cellular data, it's recommended that you turn off cellular data when connecting to the drone's **Wifi**.

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Function Overview of the App

1 Back
2 Media Gallery
3 VR Mode
4 More
5 Waypoints
6 Return-to-Home (RTH)
7 Follow Me
8 Mark and Track
9 One Key Take-off
10 One Key Landing
11 Gestures for Photo/Video
12 Photo
13 Video
14 Flip Image
15 Flight Records
16 Settings
17 GPS Signal
18 Wifi Signal
19 Record
20 Remote Battery Status
21 Drone Battery Status
22 Live Map
23 D: Flight Distance
H: Flight Height
DS: Flight Speed
VS: Ascent/Descent Speed

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Media Gallery:
Tap to check the photos and videos saved.
VR Mode:
Tap to activate VR mode (VR device is not supplied).
GPS Signal:
Check the signal of the GPS satellites. When the icon turns blue, the GPS Mode is available.
Flip Image:
Tap to flip the image 180°.
Flight Records:
Check all kinds of flight records here.
Wifi Signal:
Check the **Wifi** signal strength of the drone to avoid blurry and laggy video. When it shows low signal strength () , please fly the drone back immediately.
Drone Battery Status:
Check the battery status of the drone.
Remote Battery Status:
Check the battery status of the remote.

Settings
Tap to start setting up your drone.

You can reset the **Flight Distance**, **Flight Altitude** and **RTH Altitude** as needed.

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Beginner Mode:
It's **ON** by default and all the flight parameters are preset. We recommend this mode for beginners.
Flight Distance:
Tap to reset the maximum flight distance between the drone and last recorded **Home Point**.
Flight Altitude:
Tap to reset the maximum flight altitude of the drone.
RTH Altitude:
Tap to reset the RTH altitude.
Note:
RTH Altitude can't be higher than the **Flight Altitude**.
IMPORTANT
1 Before flying, please make sure the **GPS Signal** icon is blue.
2 The maximum flight distance (the maximum distance between the drone and the last recorded **Home Point**) is set to 30m by default and you can reset it in **Settings** of App.
Take-off
Step 1:
Tap to show more operation icons on the screen.
Step 2:
Simultaneously move the **Left Control Stick** to lower right at 45° and the **Right Control Stick** to lower left at 45° until the four rotor blades start rotating.

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Step 3:
Tap , then tap **Yes** on the pop-up window to take off.

Follow Me
When **Follow Me** is enabled during the flight, the drone will fly follow your mobile device with its camera lens pointing at it. Tap to show behind. Tap the second to enable **Follow Me** based on GPS, then tap **Yes** on the pop-up window.

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

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Notes:
1 The function of **Follow Me** may have deviation due to the **GPS Signal**. Please maintain a safe distance between you and the drone when enabling this function.
2 Activate this function only when there are no obstacles around you in case of unexpected accidents.
3 This function can't be activated when the drone battery is low.
Mark and Track
Tap and draw a precise box around the subject onscreen, then the drone's camera lens will keep pointing at the chosen subject.
Please make sure you're operating in a light-filled environment, and the box you draw precisely frames the subject.

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

Notes:
1 Please maintain a safe and effective distance (3~10m) between the subject and the drone when enabling this function.
2 This function is not working if the chosen subject is moving in a dim circumstance, blocked or out of sight, out of effective distance, etc.
3 This function can't be activated when the drone battery is low.

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Waypoints
Waypoints function allows you to define an exact flying route on a map during flight.
Step 1:
Tap , then tap some desired waypoints on the map. Tap **Finish** or **Cancel** to delete waypoint(s) if you want to reset.
Step 2:
Tap **Finish** to upload waypoints.
Step 3:
Tap **Yes** on the pop-up window to start.

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

Notes:
1 Up to 16 waypoints can be set at a time.
2 This function can't be activated when the drone battery is low.

Photo/Video
Tap to take a photo.
Tap to start recording a video, then tap it again to end and save the video to your memory card and mobile device.
Tap , then tap to record a video with the sound around your mobile device.

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Go to **Media Gallery**, select the photo or video preferred and tap to share with your friends.
Gestures for Photo/Video
Tap to activate this function. Within 3m under light-filled circumstances, please make a gesture with your **Right Hand** for taking a photo, a gesture for starting and ending the recording.
Smart RTH
Tap to activate **Smart RTH** during the flight and have the drone returned 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 control.

IMPORTANT
Tap on App to cancel **Smart RTH** after the drone lands in the **Home Point** and the rotor blades stop rotating, otherwise you can't regain control of the drone.

Landing
Tap to land the drone during flight.

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» TROUBLESHOOTING
Q1. The LEDs of the drone keep flashing red after pairing.
* Please turn off the drone and the remote, then turn them on and do the pairing again.
Q2. The image keeps shaking when I fly the drone.
* Please don't fly the drone in strong wind. If the image is still shaking in light wind, please check whether the arm of the drone is shaking; if yes, please replace the propeller of this arm.
Q3. The video is lagging.
* Please fly the drone within **FPV** range. If the video is still lagging when the drone flies within **FPV** range, please move to another place to fly.
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 **GPS Mode** is available (check if the **GPS** signal icon is blue on App). 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.

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Q10. Is it necessary to fly the drone back when the drone battery is low?
* Please fly the drone within a distance of 30m when the battery is low. When the battery is critical low, the drone will automatically fly back and land.

» SPECIFICATIONS

Drone		
Operating Temperature	32°F to 104°F (0°C to 40°C)	
Frequency Range	Model SP510: 5150-5250 MHz	
Transmit Power (EIRP)	Model SP510: 5 GHz<18 dBm	
Remote		
Frequency Range	Model SP510R: 2405-2478 MHz	
Transmit Power (EIRP)	Model SP510R: 2.4 GHz<10 dBm	
USB Cable (5V/2A)		
	For Remote	For Drone Battery
Input	4.2V ±0.4A	4.2V ±1.2A
Rated Power	1.68W	5.04W

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FCC Caution:
Any 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.
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.
For Remote:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.
For R/C QUADCOPTER:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.
This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

ISED/C Warning:
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.

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For R/C QUADCOPTER:
The device is compliance with RF exposure guidelines, users can obtain Canadian information on RF exposure and compliance. The minimum distance from body to use the device is 20cm.
Operation of this device in the band 5150-5250 MHz is restricted to indoor use only.
L'appareil est conforme aux directives d'exposition aux RF, les utilisateurs peuvent obtenir des informations canadiennes sur l'exposition aux RF et la conformité. La distance minimale du corps pour utiliser l'appareil est de 20 cm.
Le fonctionnement de cet appareil dans la bande 5150-5250 MHz est limité à une utilisation en intérieur uniquement.
For Remote:
The device has been tested and compliance with SAR limits, users can obtain Canadian information on RF exposure and compliance.
Après examen de ce matériel aux limites DAS et/ou aux limites d'intensité de champ RF, les utilisateurs peuvent sur l'exposition aux radiofréquences et la conformité et compliance d'acquies les informations correspondantes.
This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
Cet émetteur ne doit pas être colocalisé ou fonctionner en conjonction avec une autre antenne ou un autre émetteur.
CAUTION
RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS
 The symbol indicates DC voltage
RECYCLING
 This product bears the selective sorting symbol for Waste electrical and electronic equipment (WEEE). This means that this product must be handled pursuant to European directive 2012/19/EU in order to be recycled or dismantled to minimize its impact on the environment. User has the choice to give his product to a competent recycling organization or to the retailer when he buys a new electrical or electronic equipment.
This product can be used across EU member states.
The device is low power device, it can meet the requirement of the RF exposure.
EU Compliance Statement: Shenzhen VanTop Technology & Innovation Co., Ltd. hereby declares that this device is in compliance with the essential requirements and other relevant provisions of the Directive 2014/53/EU.
A copy of the EU Declaration of Conformity is available online at <https://doc.vantop.com>.

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AT BE CY CZ DK EE FI
FR DE EL HU IE IT LV
LT LU MT NL PL PT SK
SI ES SE UK BG RO HR

In all EU member states, operation of 5150-5250 MHz is restricted to indoor use only.

BATTERY MUST BE RECYCLED OR DISPOSED OF PROPERLY

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