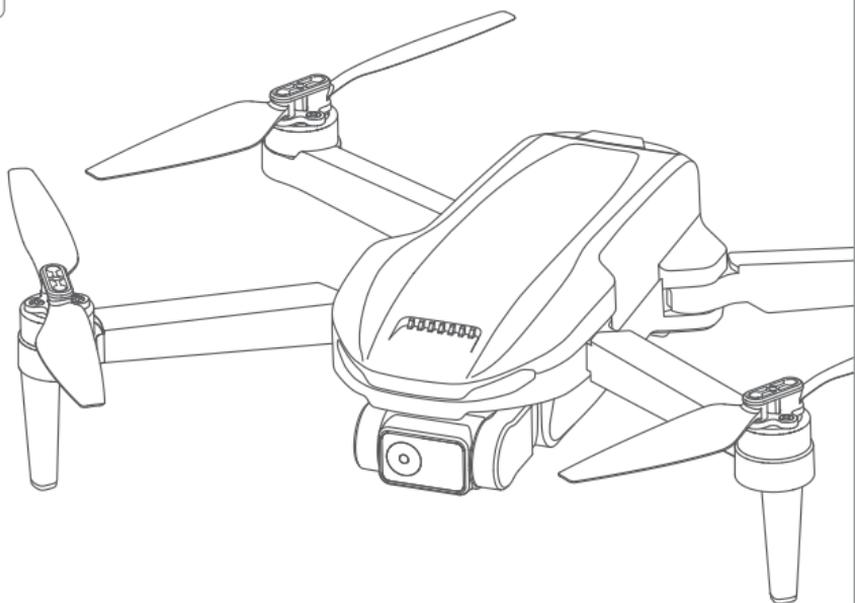




S50 Lite

■ Beginner GPS Drone

FOR AGES
14+



USER MANUAL

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

Model: No.DR-ATS50G

- For your safety, please follow the rules and safety guidelines whether you're a beginner or an expert at flying drones.
- According to the relevant laws and regulations in US, all drones must be registered, except those that weigh 0.55 pounds or less (less than 250 grams) and are flown exclusively under the Exception for Recreational Flyers. Please log in to the website of <https://faadronezone-access.faa.gov/#/> to complete the registration. Make sure to observe local laws and regulations about the take-off weight. If the buyer does not register timely, Ameta will not be responsible for any losses, penalties and injuries caused by illegal flights.
- To meet the electromagnetic requirements of aviation on the radio station, it is forbidden to fly drones within 6.21 miles(10km) on both sides of the runway centerline, or within 12.43 miles(20km) of both ends of the runway. It is also prohibited to fly a drone on the route of an airline. In the area that is prohibited by the relevant authority or department of your country, stop using all flying models and unmanned quadrotors.
- Please download the B4UFLY App from Google Play or App Store, which provides real-time information about airspace restrictions and other flying requirements based on your GPS location.
- Beginning September 16, 2023, all drone pilots who are required to register their UAS must operate in accordance with the rule on Remote ID.

ENGLISH



Where Sky Exploration Begins

Thank you for choosing our product and putting your trust in us.
Contact us if you have questions or concerns about the product.

✉ North America: support.na@ametasmart.com

✉ Europe: support.eu@ametasmart.com

We hope our products will make flying a whole new experience for you!

Please read the manual carefully for the best use of this product.

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FLIGHT SAFETY

* Please fly the drone indoors or in a windless open area. The maximum flight height is limited to 120 m (393 ft), and the maximum flight distance is limited to 500m (1640ft). Before your first flight, please read the **User Manual** and **Quick Guide** carefully. For detailed operations, refer to the **Flight Control** section.

1. Do not use the drone in bad weather conditions like rain, snow, fog, wind, smoke, hail, lightning, tornadoes, or hurricanes.
2. For the safety of your property, keep the drone within your visual range during flight.
3. The drone is made of materials including metal, fiber, plastic, and electronic components. Avoid prolonged exposure to direct sunlight and keep them away from any heat sources. Excessive heat can cause deformation and damage.
4. The drone consists of various precision electronic and mechanical parts. Therefore, make sure that moisture and water do not enter the drone to prevent mechanical or electronic component failures that could lead to accidents.
5. The performance of the drone and battery can be affected by environmental factors such as air density and temperature. Exercise caution when flying at altitudes above 1000 m (3281 ft) above sea level, as the performance of the battery and drone may be reduced.
6. Do not use the drone near traffic accidents, fires, explosions, floods, tsunamis, avalanches, landslides, earthquakes, dust storms, or sandstorms.
7. To avoid interference between the drone and other wireless devices, please turn off other wireless devices while using the drone.
8. A reminder that the toy shall be used with caution since skill is required in order to control the flight and avoid collisions with the user, objects or third parties.

9. Precautions to be observed such as “Do not touch the rotating rotor, avoid loose clothing or hair that could be caught in the rotor, do not fly near the face.”
10. Advice to adult supervisors to teach children how to safely fly and control the toy.
11. Conditions to be observed when using the toy (e.g. flying room/area needed, indoors or outdoors, no obstacles and persons within flying range to keep the toy in line of sight, maximum operating distance).
12. A device to keep the instructions for use.
13. Instructions shall be provided that give details concerning cleaning and maintenance when necessary for the safe use and operation of the electric toy. Instructions for use shall be provided with the appliance so that the electric toy can be played with safely.
14. How to remove and insert the batteries.
15. Non-rechargeable batteries are not to be recharged.
16. For electric toys with rechargeable batteries, the batteries should be charged under adult supervision. ,The battery may only be recharged by a person who is at least 8 years old.
17. Different types of batteries or new and old batteries must not be mixed.
18. Batteries should be inserted with the correct polarity (+ and -).
19. Exhausted batteries should be removed from the toy.
20. The power supply terminals must not be short-circuited.
21. This toy contains non-replaceable batteries.
22. This toy is only to be connected to equipment bearing either of the following symbols:



23. Avoid flying in areas where magnetic or radio interference may occur, such as near Wi-Fi hotspots, routers, Bluetooth devices, high-voltage power lines, high-voltage power transmission stations, mobile base stations, or broadcast towers. Flying in areas where interference can disrupt communication between the drone and remote may adversely affect flight direction and positioning accuracy, possibly resulting in loss of control. Interference can also cause errors in the video downlink connection.

BATTERY SAFETY



- RISK OF EXPLOSION BATTERY IS REPLACED BY AN INCORRECT TYPE
- DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS
- BATTERY MUST BE RECYCLED OR DISPOSED OF PROPERLY
- Under no circumstances should the battery touch any liquids. Avoid using the battery in rainy or wet conditions, as it may catch fire or explode unexpectedly.
- It is not allowed to use batteries that are not provided by the manufacturer. Additionally, it is advisable to use the package-included USB charging cable for charging the batteries.
- Batteries that are swollen, leaking, or damaged are strictly forbidden.
- It is recommended to use the battery between 0°C and 40°C; overheating may lead to a fire or explosion. A battery's performance can be adversely affected by extremely low temperatures.
- Do not insert or puncture the battery with any sharp object.
- Battery liquid is highly corrosive, so stay away if it leaks. If skin or eyes are contacted, rinse immediately with plenty of water and seek medical attention.

- Please keep the battery out of children's reach. Immediately seek medical attention if a child swallows parts.
- After being dropped or impacted, the battery should not be used again.
- Place the battery away from heat sources, such as a car in direct sunlight or on a hot day, a fire or a stove.
- To prevent a battery from entering an over-discharged state, avoid storing it for extended periods of time once it has been fully discharged. If a battery is over-discharged, the battery cell will be damaged and unable to be recharged.

WHAT'S INCLUDED



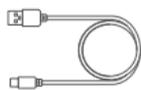
Drone x1



Remote x1



Battery x2



USB Cable for
Charging



Spare Propellers
(Ax2 Bx2)



Screwdriver x1



Screws



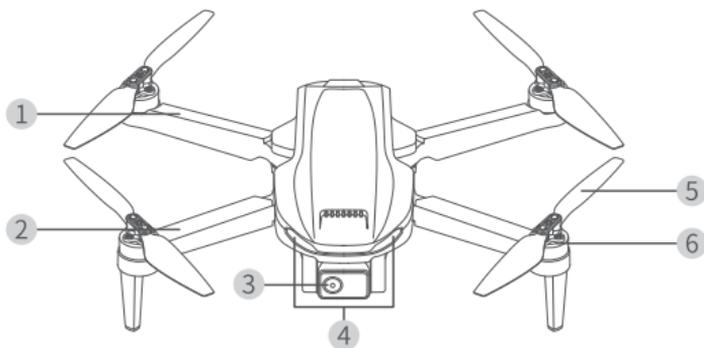
Storage Bag x1



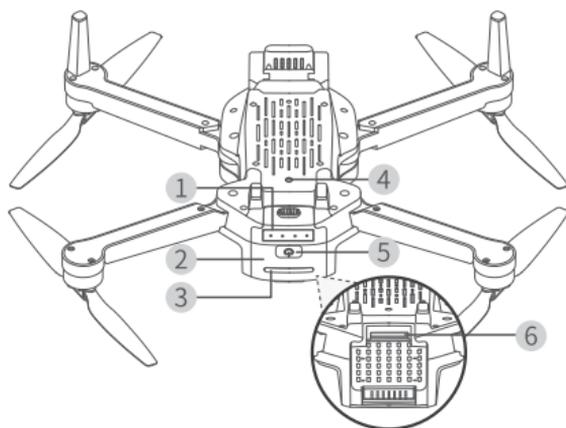
Quick Guide x1

PRODUCT OVERVIEW

Drone



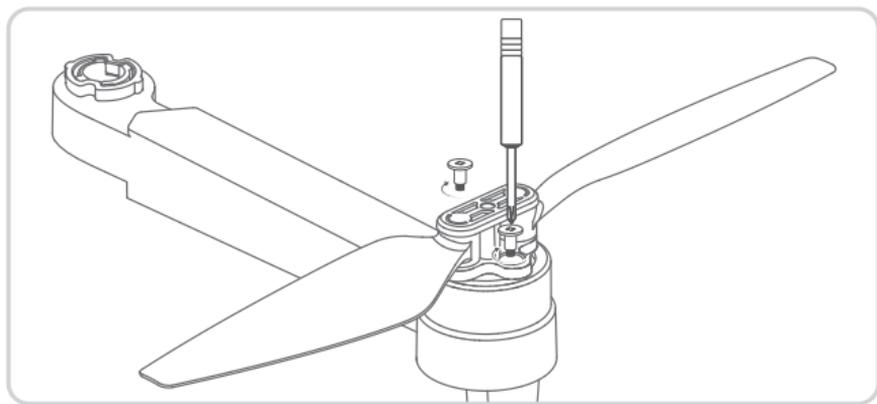
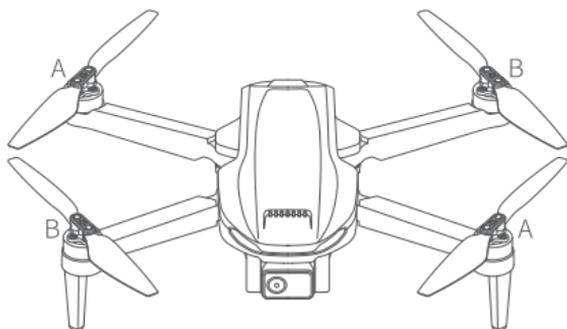
- | | | | |
|---|-----------|---|----------------------|
| 1 | Rear Arm | 4 | Front LED Indicators |
| 2 | Front Arm | 5 | Propeller |
| 3 | Camera | 6 | Motor |



- | | | | |
|---|-----------------------|---|---------------------|
| 1 | Battery LED Indicator | 4 | Optical Flow Sensor |
| 2 | Battery | 5 | Power Button |
| 3 | Rear LED Indicator | 6 | TF Card Slot |

*How to Replace the Propeller Assembly(Optional)

The marks on the propellers (A/B) should match the marks on the drone arms when you replace the propellers.

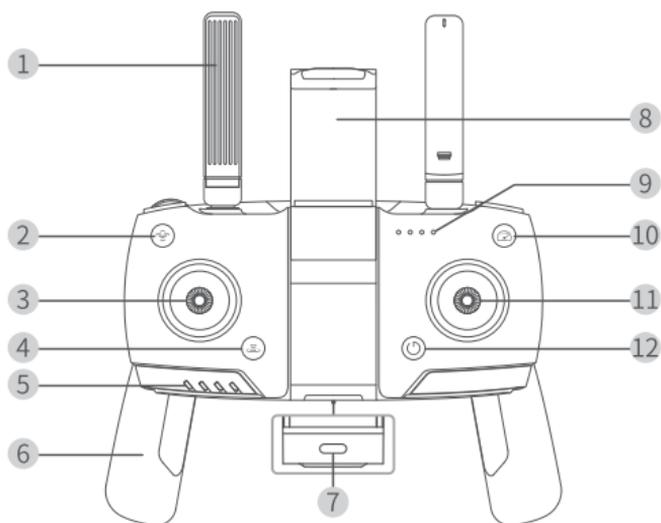


A propeller assembly: Starting with letter A, like A1, A2, etc.

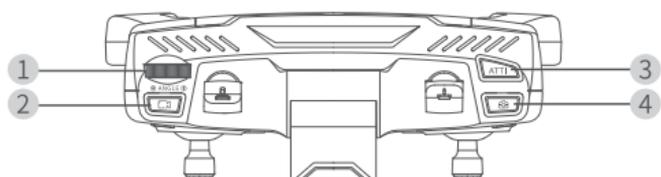


B propeller assembly: Starting with letter B, like B1, B2, etc.

Remote



- | | |
|--------------------------------|----------------------------|
| 1 Antenna | 7 Charging Port |
| 2 One Key Take-off and Landing | 8 Phone Holder |
| 3 Left Control Stick | 9 Battery Power Indicators |
| 4 One Key Return | 10 Speed Switch Button |
| 5 Status Indicators | 11 Right Control Stick |
| 6 Handle | 12 Power Button |

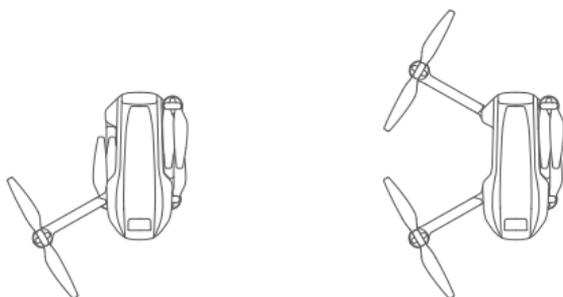


- | | |
|----------------|-----------------|
| 1 Camera Tilt | 3 Attitude Mode |
| 2 Record Video | 4 Take Photo |

FIRST-TIME USE

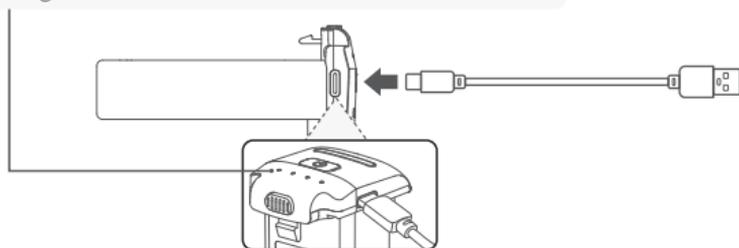
Flight Preparation

1. The propellers and arms of the drone are folded for packaging purposes. Please unfold the front arms, then the rear arms.



2. Charge the battery with the USB charging cable provided in the box. The cable can connect to a plug with a maximum output of 5V/2A.

Charging: Light up from one to four in a repeating cycle
Fully Charged: Solid

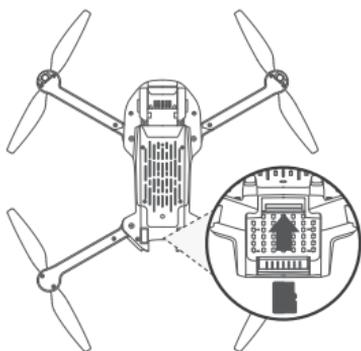


When the battery gets low, the rear LED indicator flashes slowly.

Notes

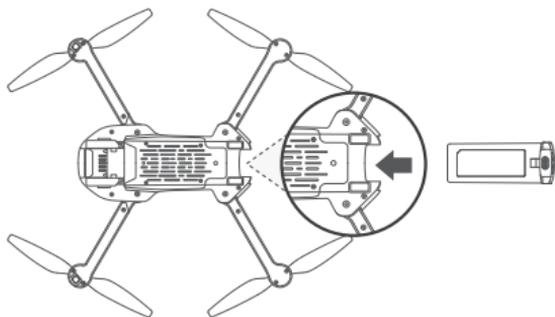
- ① It's not recommended to charge the battery using the USB port of a PC.
- ② Please note that when flying in low-temperature environments, the flight time of the drone may be reduced.

3. Insert a memory card into the memory card slot, which is located inside the battery compartment. (Memory cards must be purchased separately. However, you can still use the drone's camera even if a memory card is not inserted, although the resulting videos and pictures may not be in high-definition quality).

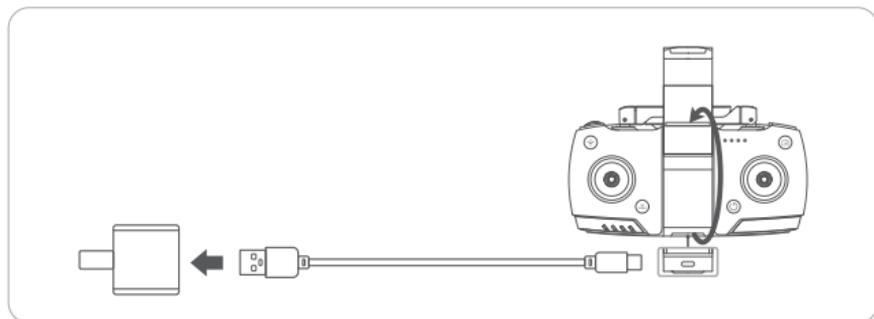


- * Support up to 128GB
- * Support FAT32 and EXFAT formats

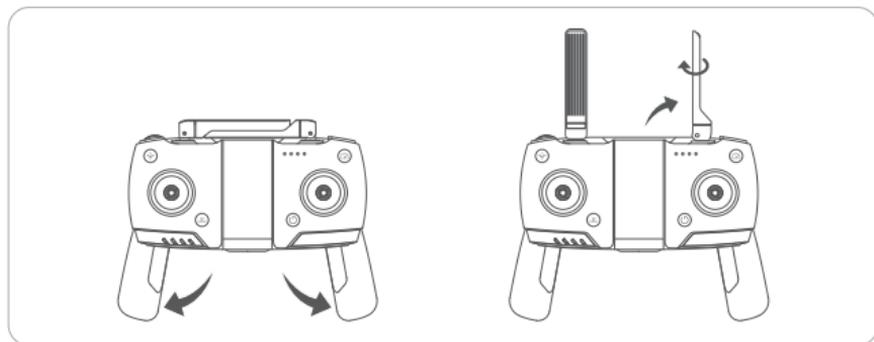
4. Install the battery into the drone after it's fully charged.



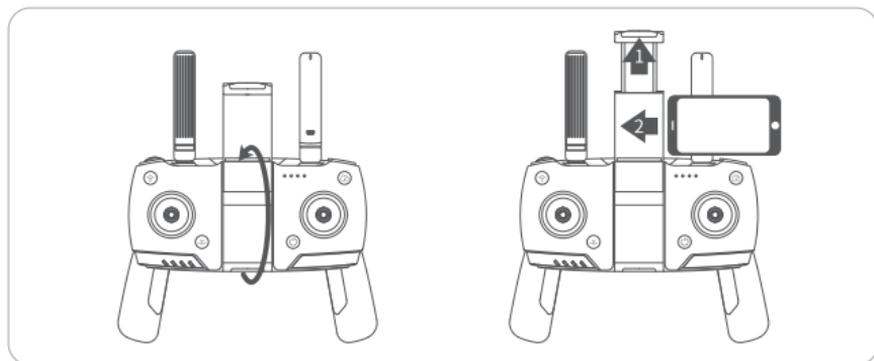
5. Charge the remote with the USB charging cable provided in the box. The cable can connect to a plug with a maximum output of 5V/2A.



6. Unfold the handles and antennas.



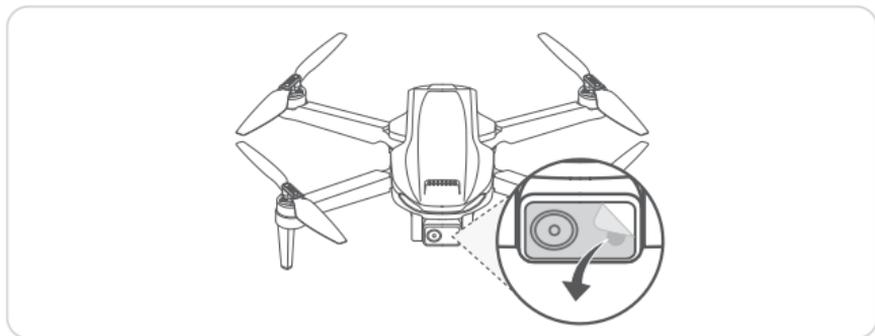
7. Unfold the phone holder to mount your mobile phone.



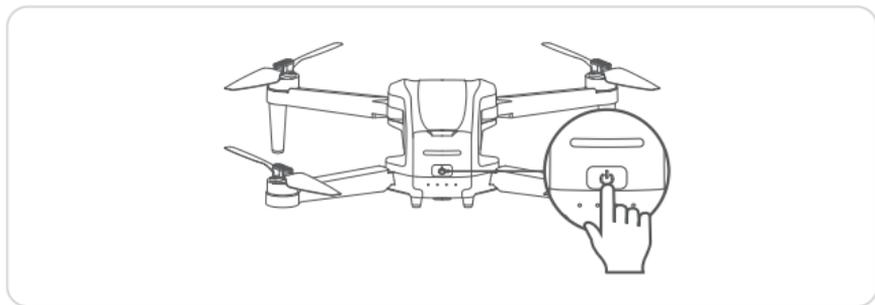
Note

The phone holder can accommodate smartphones with a width up to 80 mm (3.15 inches).

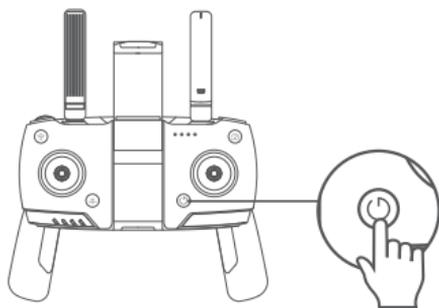
8. Please remove the protective film on the lens before flying.



9. Place the drone on a flat and level surface, then press and hold the power button on the drone for 3s to power it on.

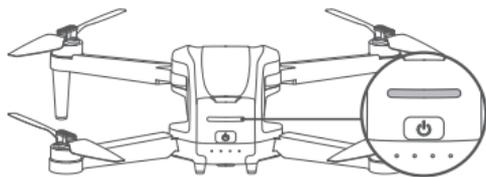


10. Press and hold the power button on the remote for 3s to power it on. The drone will automatically pair with the remote. If the pairing does not succeed within 30 seconds, please power off the remote and drone and then try again.



- * **Pairing:** The rear LED indicator on the drone flashes red.
- * **Successfully Paired:** The rear LED indicator on the drone flashes green twice, and you will hear a beep from the remote.

11. Wait for the drone to search for GPS signals (about 60 seconds) and enter GPS mode. The rear LED indicator will turn from alternating green and yellow to solid green. Then, it is ready for take off.



Alternating green and yellow → Solid Green

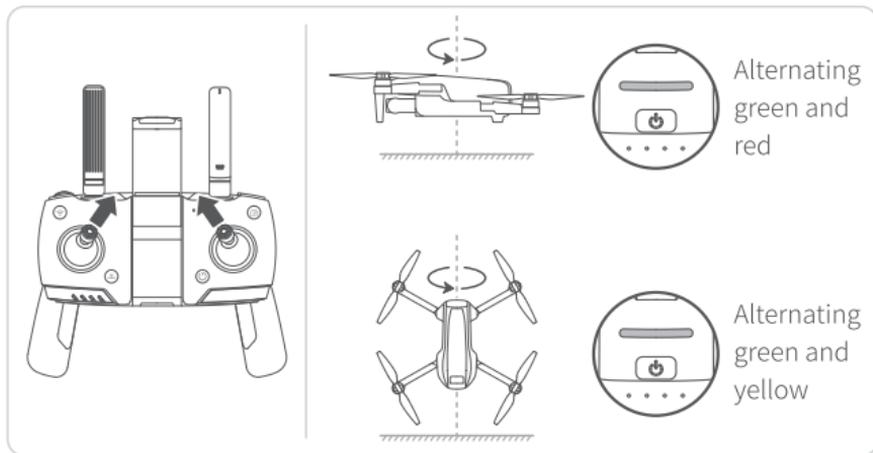
Notes

- * If the drone fails to search for a GPS signal within a few minutes it indicates that the signal strength at your current location is weak. Please move your drone to an open area with a stronger signal and try again.
- * To return accurately, the drone needs to acquire home point info using GPS positioning when takeoff, so please launch the drone in an outdoor area with strong GPS signal. Poor GPS signal or indoor takeoff will switch the drone to Attitude mode, potentially leading to unstable control.

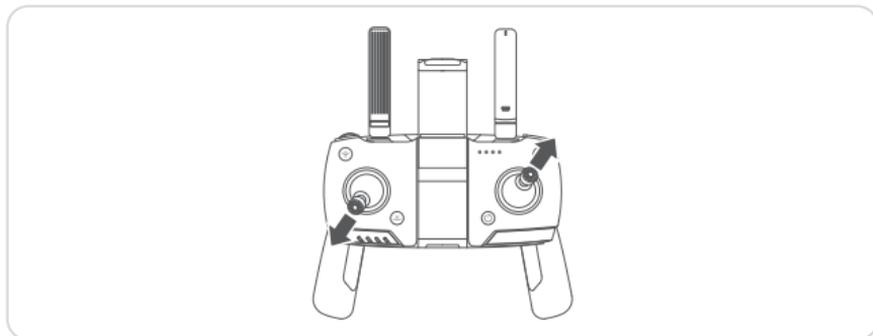
Calibration (Optional)

For the first time use, it is recommended to calibrate the drone.

Compass calibration: Simultaneously push the left control stick to the upper right corner and the right control stick to the upper left corner to prepare the drone for compass calibration. Or, launch the app, go to **Control > Compass > Calibration**, and follow the instructions to perform horizontal and vertical calibration.



Gyroscope Calibration: Simultaneously push the left control stick to the lower left corner and the right control stick to the upper right corner, or launch the app, go to **Control > Gyroscope > Calibration**, and follow the instructions to perform calibration.



Connect the AMETA Drone App with Your Drone

Step 1:

Download and install AMETA Drone from Google Play™/App Store™ or scan the QR codes below.



For Android 8.0 and later



For iOS 8.0 and later

Step 2:

Simply navigate to the WiFi setting of your mobile phone and search for AMETA S50 Lite-XXXXXX WiFi to connect.



Step 3:

Launch the AMETA Drone app, then tap START to enter the main page to see the live preview.

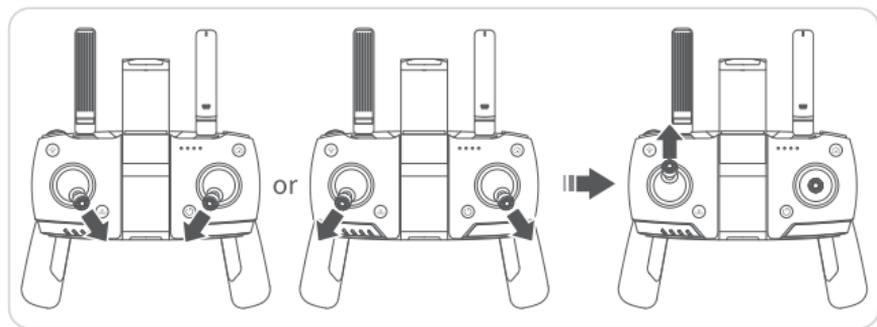
FUNCTION OVERVIEW

Flight Control

1. Take-off

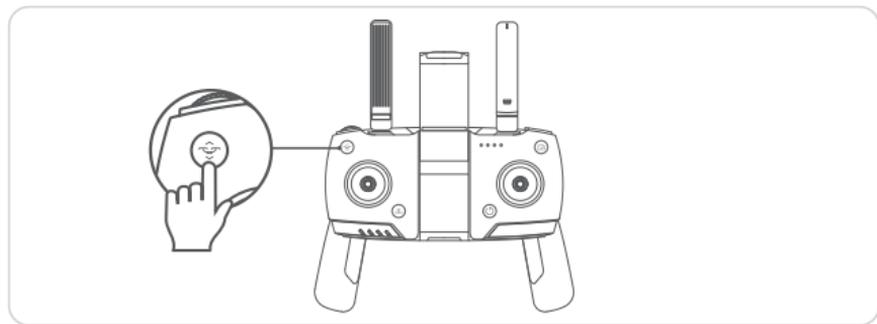
Option 1:

Unlock the drone by simultaneously pushing the **Left Control Stick** to the lower right at 45° and the **Right Control Stick** to the lower left at 45° (or **Left Control Stick** to the lower left and **Right Control Stick** to the lower right) until the propellers start rotating. Then, push the **Left Control Stick** forward.



Option 2:

Press and hold the **One Key Take-off** button for 1s.



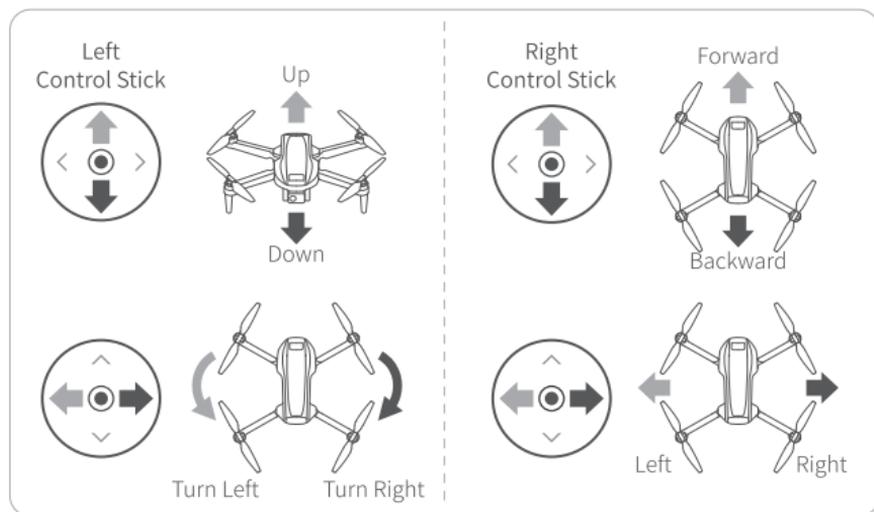
Note

Before taking off, ensure the drone is on a level surface and the surrounding area is obstacle-free.

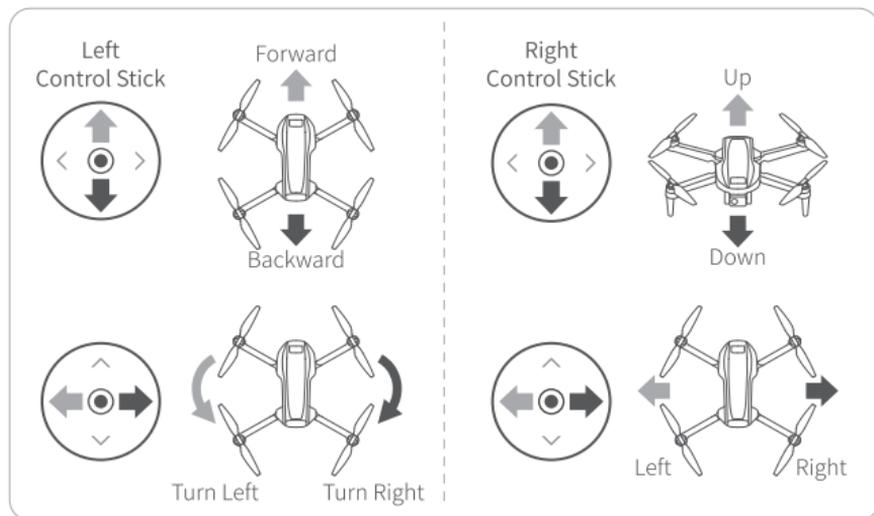
2. Flight Directions

The default remote mode is Mode 1 (used for manual illustration). To switch the mode: with the remote turned off, press and hold the **ATTI** button; while holding the **ATTI** button, press and hold the **Power** button until the remote is turned on.

Mode 1



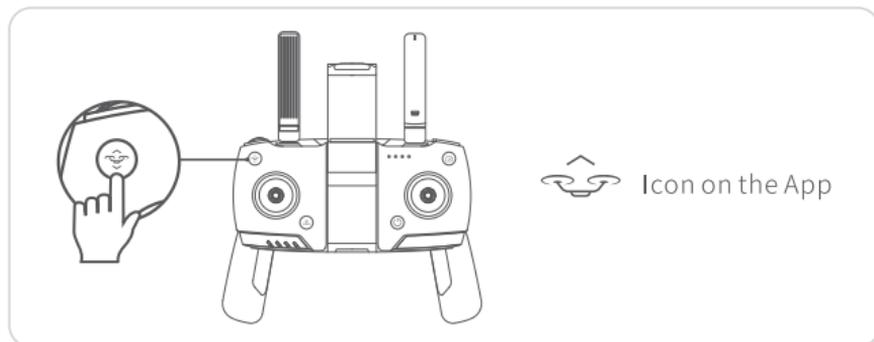
Mode 2



Functions

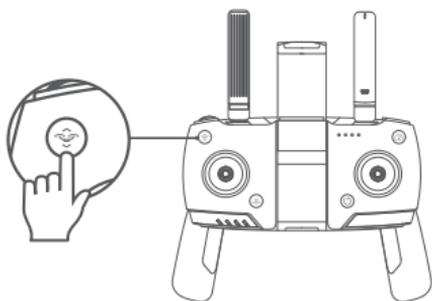
One Key Take-off and Landing

* Place the drone on a flat and level surface without any obstacles then press and hold the  button for 1s to make it ascend and hover at a height of 1.2m (3.9ft).



Icon on the App

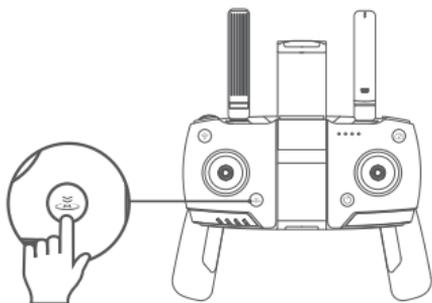
* Land: When the drone hovers in the air without any obstacles, press and hold the  button for 1s to make it descend and land until the propellers stop rotating.



Icon on the App

One Key Return

Press the  button on the remote. The drone will automatically return to the recorded takeoff point (home point). To cancel this function, press the  button again .



Icon on the App

Note

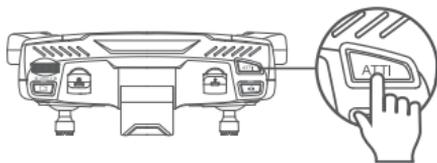
When the drone's battery level is critically low or the drone and the remote disconnect, it will initiate a return. You can manually control its return within a 30-meter distance between you and the drone, and if the drone is within 5 meters of the home point, it will descend and land directly.

GPS Mode / Attitude Mode

When GPS signal is strong (outdoors or areas with weak signal interference), the drone automatically switches to **GPS Mode**, making all GPS-related functions available. In areas with weak GPS signal, the drone will not take off for safety reasons. To proceed with takeoff, manually switch to **Attitude Mode** by pressing and holding the  button on the remote for 3 seconds. The drone will remain in **Attitude Mode** until the drone is restarted.

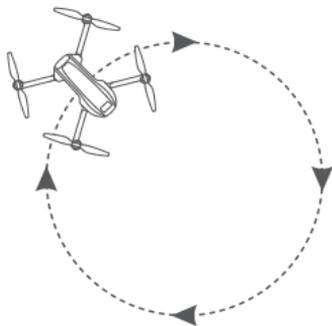
Note

In Attitude Mode, all GPS functions are unavailable and the drone cannot automatically return home, affecting flight safety. For safety purposes, please maintain a safe distance from crowds, fly in open areas, and keep the drone within your line of sight.



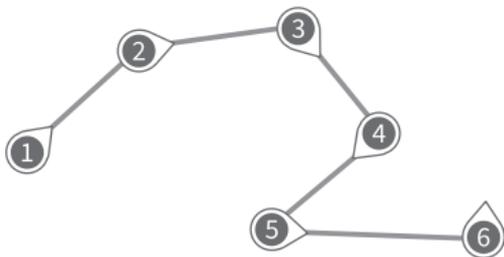
Circle Fly

Ensure there are no obstacles around the drone. Launch the app, tap  on the flight control interface and select  to set the desired radius, then confirm to initiate the circular flight pattern. You can use the left control stick to adjust the circular flight altitude and the right control stick to stop circular flight.



Waypoints

To initiate a Waypoint Flight, launch the app, tap  on the flight control interface and select . Follow the instructions to choose up to 6 waypoints within the circle on the map, and then tap **Start** to begin the flight. The drone will then fly to each waypoint in sequential order.



Intelligent Shooting

You can access the intelligent shooting modes next to the shutter icon  on the on the app's flight control interface.

Far Away:

The drone will fly backward and upward from the current position for about 15 meters (49.21 ft) while recording a video. Afterward, it will return to the original position.

Rocket:

The drone will vertically ascend about 15 meters (49.21 ft) from the current position while recording a video. Afterward, it will return to the original position.

Panorama:

Tap the  button to start capturing, and then manually control the drone to rotate horizontally. Tap the  button again to stop capturing.

Time-lapse:

Choose the desired time-lapse interval, and then tap the  button to start capturing. Tap the  icon again to stop capturing.

Notes

- * Please use these functions in a spacious area to prevent any potential collisions.
- * These functions only work when the drone is flying, so activate them after hovering the drone at the desired position.
- * If any unexpected situation occurs, use the control stick to interrupt the drone's actions.

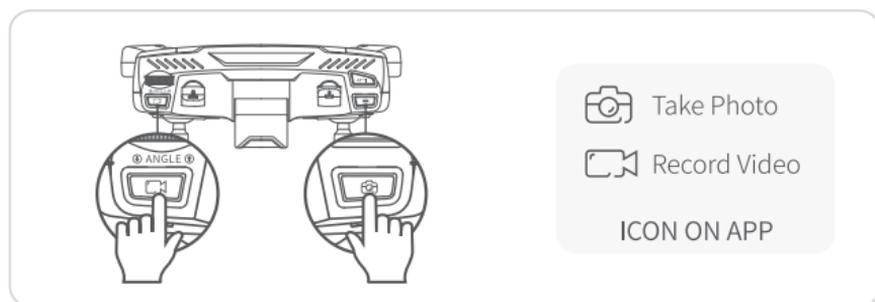
Camera

Take Photos:

Press the button  on the remote or tap  on the app to take a photo. The photo will be saved both on your mobile phone and the memory card.

Record Videos:

Press the button  on the remote or tap  on the app to start recording a video. Press the same button or tap the same icon on the app again to stop recording. The video will be saved both on your mobile phone and the memory card.



Tips:

- * To adjust the camera angle, rotate the **Camera Tilt** dial on the remote. Turning it right makes the camera go up (max 90°), and turning it left makes the camera go down (max 90°).
- * Please pay attention to the remaining capacity on your memory card when taking photos or recording videos to avoid storage failures.

Speed Switch / Reset Drone's WiFi Password

Switch speeds: Press the **Speed Switch** button to change between 3 speed levels. The default is Level 2 when powered on.

Reset WiFi password: Press and hold the **Speed Switch** button for 5 seconds to clear the drone's WiFi password. You can also clear and reset the password directly in the app.

EXPLANATION OF DRONE'S LED INDICATORS

Status	Front LED Indicators	Rear LED Indicator
Powering on	Light up	Light up
Pairing	Flash blue quickly	Flash red quickly
Pairing success	Solid blue	Flash green twice
Searching GPS signal	Solid blue	Flash alternating yellow and green
GPS signal found (GPS Mode)	Solid blue	Solid green
Attitude mode	Solid blue	Solid yellow
Reset	Flash blue 3 times	Flash from red to yellow to green
Low battery	Flash blue continuously	Flash red continuously
Returning Home	Flash blue twice in a loop	Flash green twice in a loop
Find Your Drone	Flash blue 3 times in a loop	Flash from red to green to yellow in a loop
Compass calibrating	Solid blue	Horizontal calibration: Alternating red and green Vertical calibration: Alternating yellow and green
Powered off	Off	Off

BEEPS EXPLANATION

Status	Beeps
Powering on the drone	Power-on sound
Powering on the remote	1 short beep
Powering off the drone	/
Powering off the remote	2 short beeps
Command executed successfully	1 short beep
Error	2 short beeps
Low drone battery	2 short beeps every 2s

SPECIFICATIONS

Drone

Model	DR-ATS50G
Weight(with battery installed)	<249g
Max. Flight Time	25 minutes
Operating Temperature	0-40°C (32-104°F)
Dimensions (unfolded)	320*300*56mm (12.6*11.8*2.2 inches)

Horizontal Flight Speed (no wind)	Slow: 3m/s (9.8 ft/s); Normal: 5m/s (16.4 ft/s) Fast: 8m/s (26.2ft)
Max. Relative Flight Height	120 m (400ft)
Max. Flight Distance	500m (1640ft)
Battery Capacity	7.4V / 2000 mAh Lithium Battery
Charging Time	≈210 minutes (depending on the power of the charger)
Input Voltage	5V
Transmit Power (EIRR)	≤10dBm

Camera

FOV	≈80°
Photo Resolution	3840*2160 Pixels
Video Resolution	4K@20fps
Transmit Power	≤23dBm
Operating Frequency	5.725-5.85GHz
Protocol Supported	802.11a/n

Remote

Max. Operating Distance	500m (1640ft)
Battery Capacity	3.7V 300mAh
Charging Time	≈30 minutes
Battery Life	≈10 hours
Applicable Mobile Phone Size	Up to 80 mm (3.15 inches)
Operating Temperature	0-40°C (32-104°F)
Transmit Power (EIRR)	≤10dBm
Frequency Range	2.410-2.480 GHz

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 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.

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.

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 20cm.

For Remote:

The device is compliance with RF exposure guidelines, users can obtain Canadian information on RF exposure and compliance.

Le présent appareil est conforme. Après examen de ce matériel aux conformités ou aux limites d'intensité de champ RF, les utilisateurs peuvent sur l'exposition aux radiofréquences et la conformité and compliance d'acquiescer 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.

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://ametasmart.com/pages/declaration-of-conformity>



Raccolta differenziata. Verifica le disposizioni del tuo Comune



FR
Cet appareil,
ses cordons,
et batterie
se recyclent

À DÉPOSER
EN MAGASIN

À DÉPOSER
EN DÉCHÈTERIE



OU



Points de collecte sur www.quefairedemesdechets.fr
Privilégiez la réparation ou le don de votre appareil !

APP-related vulnerability disclosure policy (1) and support period (2) are available online at (1) <https://ametasmart.com/pages/ameta-vulnerability-disclosure-policy>
(2) <https://ametasmart.com/pages/software-update>

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