AMETA SUPPORT

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Android Version | iOS Version | APP Version

ameta

Model: DR-ATS22G

USER MANUAL

Please thoroughly read this manual before first use.

Distinguish similar products from manufacturer based on model name and appearance.

V1.0

- For your safety, please follow the rules and safety guidelines whenever you're charging/use or are expect 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. Please read the Federal Aviation Administration's Guidance Kit for Recreational Pilots. Please log in to the website of **https://faadronezone.faa.gov/#/** to complete the registration process. Please ensure that you adhere to the rules when the UAS is airborne. Pay attention to airspace limits, weather conditions, and other factors that may impact flight safety, and be cautious of potential risks caused by illegal flights.
- To avoid the electromagnetic interference of wireless and the radio waves, it is forbidden to fly drones within 5.5 miles (9km) from airports, heliports, military bases, power plants, power grids, or other sensitive areas. If you are within 5.5 miles, please contact the local authorities to authorize the flight or at airport. If the area that is prohibited by the local laws and regulations, please do not fly the drone, stop using all flying boards and unauthorized guidance.
- Please download the Blue4Fly App from Google Play or App Store, which provides real-time information about airspace restrictions and flight safety to ensure compliance with local regulations.
- Beginning September 16, 2019, all drone pilots are required to register their UAS to operate in accordance with the Law of Remote ID.
- Failure to register a drone may result in regulatory and criminal penalties.

ENGLISH

Where Sky Exploration Begins

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

North America: support.us@ametaamart.com
Europe: support.eu@ametaamart.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 outdoors in a wireless open area. The maximum Flight Height is limited to 164.2ft(50m), and the maximum flight distance is limited to 492.1ft(150m). Please fly the drone according to the **Manual** and **Flight Guide** carefully. For detailed operations, refer to the **Flight Control** section.

1. For the safety of your property, keep the drone within your visual range during flight.
2. Do not fly in the vicinity of materials including metals, fibers, powders, and electronic components. Avoid prolonged exposure to direct sunlight and keep them away from any heat sources. Excessive heat can cause deformation and damage.
3. The drone consists of various precision electronic and mechanical parts. Therefore, it takes some final moulds and needs tests before the drone is ready for sale. Any unauthorized modifications to the drone will void its warranty.
4. Do not use the drone in the drone zone and battery is only allowed to be in environmental factors such as and density and temperature. Exercise caution when operating the drone in adverse weather, such as rain, snow, or fog, as the performance of the battery and drone may be affected.
5. To avoid interference between the drone and other wireless devices, ensure that the drone is operated in a wireless-free environment.
6. Avoid flying in areas susceptible to radio interference may cause, such as near Wi-Fi hotspots, routers, Bluetooth devices, high-voltage power lines, cell towers, and broadcast towers. Flying in such areas may lead to unexpected issues. Flying in areas where interference can disrupt communication between the drone and remote may adversely affect flight control and stability, potentially causing the drone to crash. Additionally, interference can also cause errors in the app, rewards or prevention.

FLIGHT SAFETY

7. The camera is more fragile, avoid placing fingers on the rotating propellers.
8. Inside the packaging are small accessories. Do not swallow them. Seek medical assistance if ingestion is suspected.
9. Ensure accurate time zoning when flying to prevent accidental damage due to operational errors.
10. Ensure the propellers and motors are not to be damaged.
11. • Do not mix Flying and damaged batteries. • Fully batteries should be charged under adult supervision. For batteries charged using a battery charger, ensure the charger is suitable for the battery type. • Batteries should not be charged in proximity of at least 3 meters of: - different types of batteries or new and used batteries are not to be mixed. - combustible materials or flammable gas. - Damaged or defective batteries are not to be charged. Place the charging battery in a safe area. • Ensure the charger and battery are not to be stored in extreme temperatures.
12. Do not use the drone in the following conditions: • Flying in rain that could be caught in the drive, do not fly near fire flies. Drone is rated in protection to prevent damage caused by water ingress.
13. Use the drone under adult supervision.
14. Adult supervision is required when children are using the drone, and children should learn flying techniques to avoid collisions with people or objects. Children should not use the drone alone.
15. Avoid touching the rotating propellers and have nothing in hot areas. Adults should read the safety guidelines and manual before guiding children in flying the drone under supervision.
16. Rotor blades that are designed to be replaceable and are manufacturing transitions that closely indicate the steps necessary to remove and securely replace the rotor blades.

FLIGHT SAFETY

1. Do not fly in the vicinity of or near, or in or near airports, heliports, or other areas where flying is prohibited or restricted.
2. Do not use the drone in adverse weather conditions such as strong winds, rain, snow, or fog. Bad weather may cause loss of control or equipment damage.

Joining Flight

Before Joining Flight: Always keep the drone within your line of sight and avoid flying at a distance of over 492.1ft(150m). Flying beyond this range may lead to loss of control or the drone going missing.

Avoid Obstacles: Ensure there are no obstacles around the flying zone. Maintain sufficient safe distance from obstacles to prevent collisions or legal penalties.

Monitor Battery: Keep an eye on battery levels and ensure sufficient time for safe return to the starting point before the battery depletes.

Avoid Interference: Stay away from interference sources such as airports, power lines, and radio towers. Poor interference may cause loss of control or signal loss.

FLIGHT SAFETY

After Flight

Land Safely: Choose a flat, open area for landing to avoid collisions. Also, improper landing may damage the drone or human safety.

Power Off: Turn off the drone first, then the remote control after landing. Failure to power off may lead to accidental activation or battery damage.

Inspect Equipment: Check the drone for damage and clean debris from the propellers. Poor maintenance damage may cause accidents during flight.

Storage and Transportation:

Store Properly: Keep the drone in a dry, cool place, avoiding direct sunlight and high temperatures. Poor improper storage may cause equipment damage or aging.

Secure Battery: Ensure the battery is fixed during transportation to avoid shaking or short circuits. Also, Shaking or short circuits may cause fire or equipment damage.

Low Pressure Low: Transport the drone in a dedicated protective case or box to prevent collisions and pressure. Risk: Improper transportation may cause equipment damage.

WEEE Statement:
1. Maximum total UK weight of **0.55** kilo(0.55 kilo)(**1.2** lb)(**1.2** lb), including battery + accessories.
2. Contact UK Environment Farm using equipment or other than the list of UK.

Do not operate this UAS while drinking alcohol or taking drugs, or in experiencing dizziness, nausea, or otherwise ill or discomfort.

FLIGHT SAFETY

Fly in Open Areas | Strong GPS Signal | Maintain Line of Sight | Maintain Safe Flight Altitude (Not More than 492.1ft)

Avoid Buildings, Crowds, Power Lines, Trees, and Bodies of Water

DO NOT use the drone in adverse weather conditions such as rain, snow, fog, and wind speeds exceeding 8 m/s or 17 mph.

Stay away from the rotating propellers and motors

No Fly Zone

For your safety and that of those around around you, it is prohibited to fly drones near airports, heliports, military bases, power plants, or other sensitive areas. Before flying, please ensure you comply with local laws and regulations.

BATTERY SAFETY

⚠ WARNING

- DO NOT DISPOSE BATTERY IN WATER OR IN HIGHLY CHARGED TYPE
- DO NOT DISPOSE OF LIGHT BATTERIES ACCORDING TO THE INSTRUCTIONS
- BATTERY MUST BE RECYCLED OR DISPOSED OF PROPERLY

- Do not use the battery if it is damaged or leaking. Avoid using the battery in extreme temperatures. Ensure the battery is fully charged before first use.
- Avoid using the battery in environments that are not provided by the manufacturer. Failure to do so may lead to a fire hazard or cause injuries. Ensure the battery is used in a safe and suitable environment.
- Batteries that are swollen, leaking, or damaged are strictly forbidden. Ensure the battery is in good condition before use to prevent potential hazards. Damaged batteries may pose a risk of fire or explosion. Regularly inspect the battery for any signs of damage and replace it if necessary.
- Do not insert or puncture the battery with any sharp objects.
- Battery liquid is highly corrosive, so clean any it leaks. If any liquid gets on your skin or clothing, immediately rinse the affected area with water and seek medical attention.
- Ensure that the battery cover of children's toys is denitrately water-tinted or affixed with a child-resistant seal.
- After being dropped or impacted, the battery should not be used again.
- Do not expose the battery to high heat sources, such as an oven or direct sunlight or in a hot car, to prevent damage.
- To prevent a battery from entering an over-discharged state, avoid storing the battery for extended periods with a charge level below 30%. If the battery is over-discharged, the battery will not be damaged and cannot be recharged.

WHAT'S INCLUDED

Drone x1 | Remote x1

Drone x1 | Remote x1 | Charging Cable x1 | Charging Adapter x1 (Charging Adapter x1 is optional, please prepare it yourself according to your local standard)

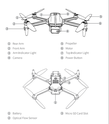
Spare Propeller x4 (Spare Propeller x4 is optional, please purchase it yourself according to your local standard)

Charging Cable x1 | Screws | Screwdriver x1

Storage Bag x1 | User Manual x1 | Quick Guide x1

PRODUCT OVERVIEW

Drone



***How to Replace the Propeller(Optional)**

The blades on the propellers are fit should match the marks on the drone arms when you replace the propellers.

A propeller - Starting with letter A, (Re-fly: A1, etc)

A propeller - Starting with letter B, (Re-fly: B1, etc)

Remote

FIRST-TIME USE

Flight Preparation

1. The propellers and some of the drone are fixed to avoid damage during transport. Please remove the fixed parts before flying.

2. Charge the battery with the USB charging cable provided in the box. The LED will remain lit in a solid green when charge is complete.

Charging Battery: 1. Ultra: Red indicator light flashes red slowly. 2. Fully charged: Red indicator light remains solid green. Fully charged: Top indicator light remains solid green.

When battery is low, the UAV reduces flight from two rotors, when battery is critically low, the UAV indicator lights flash red, mainly while the two indicator light turns solid red.

Notes:
1. 18 W USB recommended for charging the battery using the USB port on PC.
2. Please ensure that your Wi-Fi is functioning properly. Connecting to the Wi-Fi network may be required.

3. Avoid a memory card in the memory card slot. Memory cards must be pre-formatted separately. However, you can still use the drone's camera to capture photos and videos, but the app will not support viewing photos and videos. You may also encounter lag or high-definition lag.

4. Avoid the battery slots the drone after it's fully charge.

5. Install the phone holder and handles. Then insert your mobile phone in the phone holder.

Note

The phone holder can accommodate smartphones with a width up to 85.5(3.36inch) millimeters.

1. Please remove the protective film on the Remote Flying.

2. Place the drone on a flat and level surface, then press and hold the power button on the drone for 2 seconds.

3. Press and hold the power button on the remote for 3s to power it on. The remote will prompt you to enter pairing mode and the drone will automatically pair with the remote. If the drone does not pair, turn off the drone and then try again.

- **Pairing:** Status indicators flash green rapidly.
- **Successful Pairing:** Status indicators turn solid green.

4. Upon the drone is ready for UAV signal and enter UAV mode, the one-key power lights and Green for flashing, green to solid green, and the Ready mode is off.

Notes

- If the drone fails to search for a UAV signal within a few minutes, it will automatically exit pairing mode. If pairing fails, please try again. Please ensure the drone and remote are within a distance of no more than 3 feet (1 meter) during pairing.
- To return to pairing, the drone needs to acquire more pairing information. Ensure the drone is in a stable environment with no interference or obstacles and wait for at least 10 seconds. Press the signal or remote button to initiate pairing. If the drone fails to pair, it will automatically exit pairing mode after 10 seconds. Please ensure the drone is in a stable environment without interference.

Calibration (Optional)

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

Gyroscope Calibration: Ensure the drone is on a flat, level surface and avoid any movement during calibration. Open the app, go to **Control** > **Gyroscope** > **Calibration**, and follow the instructions to complete the calibration process.

Gyroscope Calibration: Ensure the drone is on a flat, level surface and avoid any movement during calibration. Open the app, go to **Control** > **Gyroscope** > **Calibration**, and follow the instructions to complete the calibration.

Connect the App with Your Drone

Step 1
Download and install **AMETA Drone** from Google Play/"App Store" or scan the QR codes below.

Android Version | iOS Version

Step 2
Initially, navigate to the Wi-Fi settings of your mobile phone and search for **AMETA-DR-ATS22G** to connect.

Step 3
Launch the **AMETA Drone** app, then tap **START** to enter the main page to view the live preview.

FUNCTION OVERVIEW

Flight Combination

1. Left Control Stick: Throttle/Yaw
2. Left Shoulder and Right Shoulder: Pitch/Roll

Flight Control

1. Takeoff

Option 1:
Initiate the drone by simultaneously pushing the **Left Control Stick** to the lower right and the **Right Control Stick** to the lower left, as well as **Left Shoulder** and **Right Shoulder**. Release the control sticks and shoulders once the propellers start rotating. Then push the **Left Control Stick** forward.

Option 2:
Press and hold the **One-Key Takeoff/Landing** for 1s.

Note

Before taking off, ensure the drone is on a level surface and the surrounding area is clear of obstructions.

2. Flight Directions

The default remote mode is Mode 2 (used for manual flying). To switch to Mode 1, please refer to the instructions in the app. Mode 2 is the default setting. Mode 1 prioritizes the **Power Button** and the **Return Button**.

Mode 2

Mode 1

Mode 2

Mode 1

Functions

One-Key Low-off and Landing

Initiate the drone at a flat and level surface without any obstacles then press and hold the **Takeoff/Landing** button for 3s to initiate ascend and hover at a height of 1.2m (3ft).

Upon the drone is at flat and level surface then press and hold the **Takeoff/Landing** button for 3s to initiate ascend and hover and the propellers start rotating.

One-Key Return

Press and hold the **Return** button for 2 s on the remotes. The drone will automatically return to the last recorded takeoff point. Upon the drone has arrived, press the **Return** button again.

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. Upon the drone's battery level reaches a critical low, the drone will return within 3 meters of the home point, and descend and land slowly.

GPS Mode / Attitude Mode

When GPS signal is strong (outdoors or areas with weak signal interference), the drone is automatically set to the **GPS Mode**, ensuring all the sensor functions are active for optimal stability. In GPS Mode, the drone can hover for safety reasons. To pressure with weak, manually switch to **Attitude Mode** for better control. In Attitude Mode, the drone will not hover automatically. The app 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, offering flight safety. For safety purposes, always maintain a safe distance from it. Failure to fly in open areas, and keep the drone within your line of sight.

One-Key Flip

Ensure there are no obstacles around the drone. Launch the app, tap **Flip**, and select a direction (forward, backward, left, right). The drone will perform a single flip in the chosen direction. You can use the left control stick to adjust the direction during the flip. Release the control stick to cancel the flip.

Waypoints

To create a **Waypoint Flight**, launch the app, tap **Flip** on the flight control interface, and select **Waypoint Flight**. The drone will automatically record waypoints within the UAV's on the map, and then tap **Start** to begin the flight. The drone will fly along the waypoints in sequence or return home.

Intelligent Shooting

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

The Keys:
Photo: Tap on the **Photo** button on the remote or tap on the app to take a photo. Video: Tap on the **Video** button on the remote or tap on the app to start video recording. Tap the button again to stop recording.

Record Video:
Press the button on the remote or tap on the app to start recording. The drone will flash green while recording. Tap the button again to stop recording. The video will be saved locally on your mobile phone or tablet.

Tip

To adjust the camera's tilt angle, press the **Camera Up** and **Camera Down** buttons on the remote. The adjustment range is from 0° to 90°.

Switch Speeds / Reset Drone's WiFi Password

Switch speeds: Toggle the **Speed Switch** to select between two speed levels: Low and High. The default setting is Low.

Reset WiFi Password: Press and hold the **Type-Phone button** for 3 seconds to reset the password to "12345678". You can then enter a new password for enhanced security in the app.

Emergency Stop

If an abnormal situation occurs, you can press and hold both **Left** and **Right** buttons on the remote for 3s to initiate an emergency stop. WARNING: Use this function only in emergency situations, as it will cause the drone to lose lift and fall. Use this only if potentially severe risk of damage. Use this function with caution.

Please make an emergency stop when the drone's flight is useless, for example, if it is stuck in a tree or flying out of control. The motors will stop immediately. WARNING: Use this function only in emergency situations, as it will cause the drone to lose lift and fall. Use this only if potential severe risk of damage. Use this function with caution.

Note

After an emergency stop, if you intend to fly the drone again, please perform gyroscope calibration.

Arm Indicator Lights

Drone Status	Arm Indicator Lights
Powering on	Alternating red, green and blue
Remote signal lost	Rapid red flashing
Flying in GPS Mode	Two quick green flashes a loop
Low battery	Rapid red flashing
Critical low battery	Slow red flashing
Powered off	Off
Pre-pair status	Alternating red and green
Pairing	Horizontal: Alternating red and green Vertical: Alternating red and blue

Top Indicator Light

Drone Status	Top Indicator Light
Battery Level > 30%	Solid green
Battery Level < 30%	Solid red
Charging Battery > 30%	Slow red flashing
Charging 30%≤ Battery ≤ 70%	Slow green flashing
Fully charged (100%)	Solid green
Charging Error	Rapid red flashing

Remote Status Indicators

Remote Status	Remote Status Indicators
Powering on	Green
Powered off	Off
Connection lost	Rapid green flashing
Attitude mode	Green breathing
Low battery	Slow red flashing
Return to Home active	Rapid blue flashing

Specifications

Drone

Model	DR-ATS22G
Weight (with battery + propeller)	~250g
Max. Flight Time	20 minutes
Operating Temperature	0~40°C (32~104°F)
Dimensions (unfolded)	15.7 (W)*15.7 (L)*2.7 (H)inch
Horizontal Flight Speed (Max)	Normal: 7m/s (22.97ft/s) Sport: 8m/s (26.25ft/s)
Max. Ruptured Flight Height	492.1ft
Max. Flight Distance	492ft (150M)
Battery Capacity	3.7V, 1800mAh, 6.66wh Battery
Charging Time	1.5 hours(Max) (Recommended Charger: 2.5A Charger)
Input Voltage	5V
Transmit Power (EIRP)	< 20dBm
Frequency Range	2.4G: 2.4~2.5GHz

Camera

FOV	120°
Photo Resolution	16MP (4608*3456)
Video Resolution	4K@30fps
Frequency Range	5.725-5.850 GHz
Protocol Supported	802.11a/n
Transmit Power (EIRP)	≤ 14dBm

Remote

Max. Operating Distance	300m (1000ft)
Battery Capacity	1.5V AA Battery x 2 (not included)
Applicable Mobile Phone Size	Up to 85.5mm (3.37 inches)
Operating Temperature	0~40°C (32~104°F)
Transmit Power (EIRP)	≤ 20dBm
Frequency Range	2.4G: 2.4~2.5 GHz

FCC Caution

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

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

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.

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

RF Exposure Information:
This device meets the FCC radiation exposure limits for general population. This device should be operated with a minimum separation distance of 20cm (8 inches) between the device and your body.
FCC NOTICE: To comply with the FCC RF exposure compliance requirements, no part of the antenna used in this device may be altered or substituted without warnings.

WEEE Warning

Conformément à la directive 2012/19/UE relative aux déchets d'équipements électriques et électroniques, Business and Economic Disorder Control Services Incorporated (TRS Ventures), Operation is assigned to Ameta Technology Ltd, Ameta Technology GmbH, Ameta Technology Inc. Ameta Technology Ltd. Ameta Technology GmbH.