

# AGRAS MG-1S

MG-1S / MG-1S RTK

## DISCLAIMER AND SAFETY GUIDELINES

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### Searching for Keywords

Search for keywords such as “battery” and “install” to find a topic. If you are using Adobe Acrobat Reader to read this document, press Ctrl+F on Windows or Command+F on Mac to begin a search.

### Navigating to a Topic

View a complete list of topics in the table of contents. Click on a topic to navigate to that section.

### Printing this Document

This document supports high resolution printing.

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# Safety at a Glance



The AGRAS™ MG-1S / Agras MG-1S RTK (abbreviated as “MG-1S” / “MG-1S RTK”) aircraft is **NOT** a toy and is not suitable for children under the age of 18.

Note that ‘Safety at a Glance’ only provides a quick overview of the safety tips. Make sure you read and understand the remaining sections of this document and the User Manual.

## 1. Pesticide Usage

- Pesticides are poisonous and pose serious risks to human safety. Please use them in strict accordance with their specifications.
- Residue on the equipment caused by splashes or spills when pouring and mixing the pesticide can **irritate your skin**. Be sure to clean the equipment after mixing.
- Use **clean water** to mix the pesticide to **avoid blocking** the strainer. **Clear any blockages** before using the equipment.
- Wear **protective clothing** to prevent direct body contact with the pesticide. Always **rinse your hands and skin** after handling pesticides. Clean the **aircraft** and **remote controller** after applying the pesticide.
- Effective use of pesticides relies on **pesticide density, spray rate, spray distance, aircraft speed, wind speed and wind direction**. Consider all factors when using pesticides, but **NEVER** compromise the safety of people, animals and the environment in doing so.
- **DO NOT contaminate** rivers and sources of drinking water.
- **Avoid** the use of **powder pesticides** as much as possible or else they may reduce the service life of the spraying system.

## 2. Environmental Considerations

- Always fly at locations that are **clear of building and other obstacles**.
- **DO NOT fly above or near large crowds**.
- Avoid flying at altitudes above **164 feet (50 m)**.
- Be very careful when flying over **6,560 feet (2,000 m)** above sea level.
- Fly in moderate weather conditions with temperatures between **32° to 104° F (0° to 40° C)**.
- **DO NOT operate any parts of the aircraft indoors**.

## 3. Pre-flight Checklist

- Remote controller and aircraft batteries are **fully charged**.
- **Landing gear and spray tank** are firmly in place.
- All **screws** are firmly tightened.
- Propellers and frame arms are **unfolded**, and arm sleeves are **firmly tightened**.
- Propellers are in **good condition** and **firmly tightened**.
- There is **nothing obstructing the motors**.

- Spraying system is without any blockage and works properly.
- Compass is calibrated at every new flight location.

#### 4. Operation

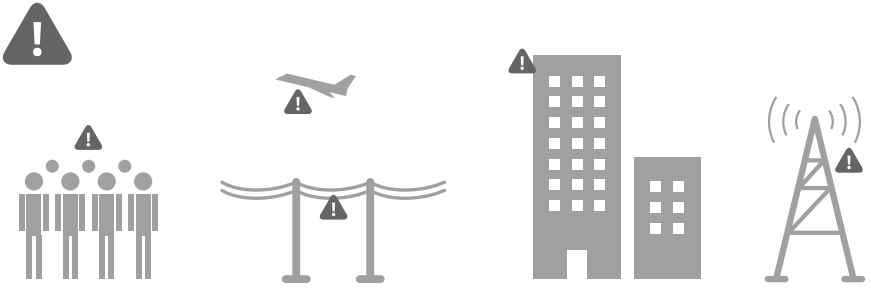
- Stay away from the rotating propellers and motors.
- The takeoff weight must **not exceed 24.8 kg (taking off at sea level)**.
- Maintain a visual line of sight (VLOS) to your aircraft at all times.
- **DO NOT** use the Combination Stick Command (CSC) or other methods to stop the motors when the aircraft is airborne unless in an emergency situation.
- **DO NOT** answer incoming calls during flight.
- **DO NOT** fly under the influence of alcohol or drugs.
- During the Return-to-Home procedure, you can adjust the altitude to **avoid obstacles**.
- In the instance of a **Low Battery Warning**, land the aircraft at a **safe location**.
- After landing, first stop the motors, then power off the aircraft, and then turn off the remote controller.
- Please maintain full control of the aircraft at all times and do not rely on the DJI MG app. Please keep the aircraft within your visual line of sight and visually observe the flight. Please use your sound discretion to operate the aircraft and avoid obstacles timely and manually. It is important to set an appropriate Failsafe and Return-to-Home altitude before each flight.

#### 5. Maintenance and Upkeep

- **DO NOT** use aged, chipped or broken propellers.
- **Remove or empty** the spray tank during transportation or when not in use to avoid damaging the landing gear.
- Recommended storage temperature (**empty spray tank**): **between -4° and 104° F (-20° and 40° C)**.
- **Clean** the aircraft immediately after spraying.
- **Inspect** the aircraft every 100 flights or after flying for over 20 hours.
- For more maintenance guidelines, refer to the Product Care section in this document.

#### 6. Observe Local Laws and Regulations

- **DO NOT** fly in any No Fly Zones. You can find a list of these areas at <http://www.dji.com/flysafe/no-fly>
- The DJI No Fly Zone is not a replacement for local government regulations or good judgment.
- **Avoid flying in areas where rescue teams are actively using the airspace.**



Avoid flying over or near crowds, high voltage power lines or bodies of water. Strong electromagnetic sources such as power lines, base stations, and tall buildings may affect the onboard compass. It is recommended to use MG-1S RTK. Always stay alert about surroundings in flight.



DO NOT use the aircraft in adverse weather conditions such as rain (precipitation rate exceeding 25 mm or 0.98 inches in 12 hours), wind speeds exceeding 8 m/s or 17 mph (28 kph), fog, snow, and lightning.

Stay away from the rotating propellers and motors.

No Fly Zone

Learn more at: <http://www.dji.com/flysafe/no-fly>

## Notice

All instructions and other collateral documents are subject to change at the sole discretion of SZ DJI TECHNOLOGY CO., LTD. For up-to-date product information, visit <http://www.dji.com> and click on the MG-1S product page.

## Glossary

The following terms are used throughout the product literature to indicate various levels of potential harm when operating this product:

**NOTICE** NOTICE: Procedures, which if not properly followed, create a possibility of physical property damage AND possibility of injury.

**CAUTION** CAUTION: Procedures, which if not properly followed, create the probability of physical property damage AND possibility of serious injury.

**WARNING** WARNING: Procedures, which if not properly followed, create the probability of property damage, collateral damage, and serious injury OR create a high probability of serious injury.



### WARNING

**Read the ENTIRE user manual to become familiar with the features of this product before operating. Failure to operate this product in a safe and responsible manner can result in damage to the product or personal property and cause serious injury.**

**This is a sophisticated product. It must be operated with caution and common sense and requires some basic mechanical ability. Do not use with incompatible components or alter this product in any way outside of the documents provided by SZ DJI TECHNOLOGY CO., LTD. These Safety Guidelines contain instructions for safety, operation and maintenance. It is essential to read and follow all of the instructions and warnings in the user manual, prior to assembly, setup or use, in order to operate the product correctly and avoid damage or serious injury.**

**AGE RECOMMENDATION: NOT FOR CHILDREN UNDER THE AGE OF 18. THIS IS NOT A TOY.**

## Pre-flight Checklist

1. Use only genuine parts in good condition.
2. Remote controller and aircraft batteries are fully charged.
3. Propellers are in good condition and mounted onto the motors correctly and securely.
4. Propellers and frame arms are unfolded and arm sleeves are firmly tightened.
5. Motors start and function normally.
6. Landing gear and spray tank are firmly in place.
7. All screws are firmly tightened.
8. All parts are mounted securely, and cables are connected correctly and firmly.
9. Calibrate the compass.
10. The aircraft firmware and DJI MG app have been upgraded to the latest version.
11. Your flight area is outside any No Fly Zone and flight conditions are suitable for flying the aircraft.
12. Be sure that you are NOT flying under the influence of alcohol, drugs or any substance that may impair your cognitive abilities.
13. Be familiar with the selected flight mode and understand all safety functions and warnings.
14. Be sure to observe all local regulations, obtain appropriate authorizations, and understand the risks.  
REMEMBER: It is solely your responsibility to comply with all flight regulations.
15. Ensure the DJI MG app is properly launched to assist your operation of the aircraft. WITHOUT THE FLIGHT DATA RECORDED BY THE DJI MG APP AND STORED IN YOUR REMOTE CONTROLLER, IN CERTAIN SITUATIONS (INCLUDING THE LOSS OF YOUR AIRCRAFT) DJI™ MAY NOT BE ABLE TO PROVIDE AFTERSALES SUPPORT TO YOU OR ASSUME LIABILITY.

# Disclaimer and Warning

This product is NOT a toy and is not suitable for children under the age of 18. Adults should keep the aircraft out of the reach of children and do NOT operate this aircraft in the presence of children.

While the product adopts advanced technology, inappropriate use of the product could result in personal injury or property damages. Please read the materials associated with the product before your first use of the product. These documents are included in the product package and are also available online on the DJI product page at <http://www.dji.com>.

This product is a multirotor flying platform intended for agricultural applications in farmland, woodland and orchards only. It offers easy flight when in good working order as set forth below. Visit <http://www.dji.com> for the most current instructions and warnings and <http://knowbeforeyoufly.org/> for more information about flight safety and compliance.

The information in this document affects your safety and your legal rights and responsibilities. Read this entire document carefully to ensure proper configuration before use. Failure to read and follow the instructions and warnings in this document may result in product loss, serious injury to you, or damage to your aircraft.

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SOME JURISDICTIONS MAY PROHIBIT A DISCLAIMER OF WARRANTIES AND YOU MAY HAVE OTHER RIGHTS THAT VARY FROM JURISDICTION TO JURISDICTION.

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EXCEPT AS OTHERWISE AGREED UPON BETWEEN YOU AND DJI, THE AGGREGATE LIABILITY OF THE DJI ENTITIES TO YOU FOR ALL CLAIMS ARISING OUT OF OR RELATING TO THE USE OF OR ANY INABILITY TO USE ANY PORTION OF THE PRODUCT OR OTHERWISE UNDER THESE TERMS, WHETHER IN CONTRACT, TORT, OR OTHERWISE, IS LIMITED TO \$100.

**Data Storage and Usage**

When you use our mobile apps or our products or other software, you may provide DJI with data regarding the use and operation of the product, such as flight telemetry data (e.g., speed, altitude, battery life, and information about the gimbal and camera) and operations record. Please refer to DJI Privacy Policy (available at [dji.com/policy](http://dji.com/policy)) for more information.

DJI reserves the right to update this Disclaimer and Safety Guidelines. Please visit <http://www.dji.com> and check your email periodically for the latest version. This disclaimer is made in various language versions; in the event of divergence among different versions, the English version shall prevail.

# Before You Begin

The following documents have been produced to help you safely operate and make full use of your aircraft:

*In the Box*

*Disclaimer and Safety Guidelines*

*Quick Start Guide*

*User Manual*

Check all of the included parts listed in the *In the Box* document and read the *Disclaimer and Safety Guidelines* before flight. Complete the assembly and learn the basic operations with the help of the *Quick Start Guide* and the video tutorial on DJI's official website (<http://www.dji.com>). Refer to the *User Manual* on DJI's official website for more comprehensive information. Make sure you fully understand the functionality of each individual part, the flight condition requirements, the key contingency warning functions / systems, and all government regulations before each flight. If you have any questions or problems during the assembly, maintenance or use of this product, please contact DJI or a DJI authorized dealer.

## Individual Parts

### Regarding Genuine and Functional Parts

#### **WARNING**

**To avoid component malfunction, serious injury, and property damage, observe the following rules:**

1. **Use only genuine DJI parts or parts certified by DJI. Unauthorized parts or parts from non-DJI certified manufacturers may cause system malfunctions and compromise safety.**
2. **Ensure there are no foreign objects (such as water, oil, soil, sand, etc.) inside of the aircraft or its components.**
3. **Ensure the aircraft and its components—including but not limited to the remote controller, landing gear, compass, propulsion system, Radar Terrain Follow System, and spraying system are all in good working order, damage-free, and functioning well. Refer to the remaining sections in this document for more details on how to ensure the functionality of these components.**

### Remote Controller

#### **WARNING**

**To avoid component malfunction, serious injury, and property damage, observe the following rule:**

1. **Use the ports on the remote controller in strict accordance with their specifications.**

#### **NOTICE**

1. Ensure the remote controller is fully charged before each flight.
2. If the remote controller is powered on and has NOT been used for 5 minutes, it will sound an alert. After 6 minutes it will automatically power off. Move the sticks or perform some other action to cancel the alert.
3. Ensure the antennas of the remote controller are unfolded and adjusted to the proper position to achieve optimal transmission quality.
4. Repair or replace the remote controller if damaged. A damaged remote controller antenna will greatly decrease performance.

5. Replacement remote controllers have to be linked to the aircraft. Linkage is only considered safe if through testing the transmission distance can reach 300 meters. Refer to the User Manual for details.
6. For the GPS in the remote controller to function properly, ensure the DJI logo is facing the sky and keep the remote controller away from any metal objects.
7. Fully charge the battery at least once every three months to maintain battery health.

## Aircraft Body

### WARNING

To avoid component malfunction, serious injury, and property damage, observe the following rules:

1. Use the ports on the aircraft body in strict accordance with their specifications.
2. DO NOT short out the ports on the aircraft body.
3. DO NOT obstruct the GPS module located at the center of the aircraft, as this will reduce the GPS signal strength.

## Battery

### WARNING

To avoid component malfunction, serious injury, and property damage, observe the following rules:

1. Only use DJI designated batteries.
2. The voltage on the aircraft can reach 50.4 V. Read the battery's safety guidelines and take necessary precautions when handling the batteries to ensure your own safety.

## Landing Gear

### WARNING

To avoid component malfunction, serious injury, and property damage, observe the following rules:

1. The left and right landing gear legs cannot be interchanged. Ensure that the landing gear leg with the compass cables is mounted on the aircraft's right side (looking from the rear).
2. Connect the two compass cables to the landing gear mount and attach the cable protectors before mounting the right landing gear leg. Be careful not to damage the compass cables or cable protectors when mounting or removing the landing gear leg.
3. Apply threadlocker when mounting the landing gear. Ensure threadlocker is dry and solid before flight.

## Compass

### WARNING

To avoid component malfunction, serious injury, and property damage, observe the following rule:

1. Connect the two compass cables to the landing gear mount and attach the cable protectors before mounting the right landing gear leg. Be careful not to damage the compass cables or cable protectors when mounting or removing the landing gear leg. Worn or damaged compass cables can cause serious accidents.

### CAUTION

To avoid possible serious injury and property damage, observe the following rule:

1. Land immediately when obvious drifting occurs in flight, i.e., the aircraft does NOT fly in straight lines.

## **NOTICE**

1. Ensure the compass is calibrated before every flight. Failure to calibrate may lead to poor flight performance or a crash.
2. **DO NOT** attempt to calibrate your compass where there is a chance of strong magnetic interference. This includes areas where there are massive metal objects, parking structures, steel reinforcements underground, or under bridges.
3. **DO NOT** carry ferromagnetic materials with you during calibration, such as keys or mobile phones.
4. The compass should always be calibrated when moving from indoor spaces to outdoor spaces.
5. If the Aircraft Status Indicator shows a blinking red light, compass calibration has failed. Please recalibrate.
6. After successful calibration, the compass may become abnormal when you place the aircraft on the ground. This may be because of underground magnetic interference. Move the aircraft to another location and try again.
7. When to recalibrate the compass:
  - a. Compass data is abnormal and the Aircraft Status Indicator is blinking red and yellow.
  - b. Flying in a new location or a location that is different from your last flight.
  - c. Mechanical structure of the aircraft has changed, i.e. new mounting position of the compass.
  - d. Obvious drifting occurs in flight, i.e. the aircraft does **NOT** fly in straight lines.

## **Propulsion System**

### **WARNING**

**To avoid serious injury to yourself or others, which may be caused by the rotating propellers and motors, observe the following rules:**

#### **Propellers**

1. **DO NOT** use aged, chipped, or broken propellers.
2. **Always power off the aircraft before touching the propellers.**
3. **Be aware of the sharp edges of the propellers when mounting or removing the propellers. Wear gloves or take other protective measures when touching the propellers.**
4. **Ensure that propellers are unfolded and firmly tightened before each flight.**
5. **DO NOT** turn on the motors when propellers are mounted and there are other people or animals in the immediate vicinity.

#### **Motors**

1. **Ensure that the motors are securely mounted and rotating smoothly.**
2. **DO NOT** attempt to modify the structure of the motors.
3. **DO NOT** touch or let your hands or body come in contact with the motors after flight as they may be hot.

### **CAUTION**

To avoid possible serious injury and property damage, observe the following rule:

1. **DO NOT** block any of the ventilation holes on the motors.

## **NOTICE**

1. Keep the motors free of dust.
2. If a motor is stuck and unable to rotate freely, execute the CSC (Combination Stick Command) to stop the motors immediately.
3. Ensure the motors sound a normal tune when powered on.

## Spraying System

### **WARNING**

To avoid component malfunction, serious injury, and property damage, observe the following rules:

#### Pesticide Usage

1. **Pesticides are poisonous and pose serious risks to human safety. Please use them in strict accordance with their specifications.**
2. **Residue on the equipment caused by splashes or spills when pouring and mixing the pesticide can irritate your skin. Be sure to clean the equipment after mixing.**
3. **Use clean water to mix the pesticide to avoid blocking the strainer. Clear any blockages before using the equipment.**
4. **Wear protective clothing to prevent direct body contact with the pesticide. Always rinse your hands and skin after handling pesticides. Clean the aircraft and remote controller after applying the pesticide.**
5. **Effective use of pesticides relies on pesticide density, spray rate, spray distance, aircraft speed, wind speed and wind direction. Consider all factors when using pesticides, but NEVER compromise the safety of people, animals and the environment in doing so.**
6. **DO NOT contaminate rivers and sources of drinking water.**
7. **Avoid the use of powder pesticides as much as possible or else they may reduce the service life of the spraying system.**

#### Sprinklers

1. **Avoid using insoluble pesticides such as wettable powder.**
2. **The sprinklers are delicate parts. Clean them immediately after use.**
3. **DO NOT bend the hose in an arc tighter than its minimum bend radius during installation. This is to avoid creasing, which may compromise the spraying effect.**

#### Spray Tank

1. **Apply threadlocker when mounting the spray tank. Ensure threadlocker is dry and solid before flight.**
2. **Internal load of the spray tank must not exceed 10 kg.**
3. **Battery on top of the spray tank must not weigh more than 4 kg.**

## Radar Terrain Follow System

### **NOTICE**

1. The Radar Terrain Follow System will only maintain a fixed distance from vegetation within its working range (1.5 - 3.5 m).
2. The aircraft's pitch and roll angles must not exceed 20°.
3. Observe the aircraft's distance from the vegetation at all times.
4. Operate with extra caution in any of the following situations:
  - a. Flying over inclined surfaces (depending on aircraft speed). Recommended maximum inclination at different speeds: 15° at 1 m/s, 6° at 3 m/s and 3° at 5 m/s.
5. Obey local radio transmission laws and regulations.

## Data Protection Module

### **WARNING**

To avoid component malfunction, serious injury, and property damage, observe the following rules:

1. **Change the battery within the 30 seconds period that the data protection module stores your current operation data, so as to resume your current operation after powering on. The Aircraft Status Indicator will glow solid green to indicate the data protection module is working.**
2. **The data protection module cannot supply power to the motors.**
3. **Be extra vigilant when the aircraft returns to the recorded point on the operation route. Stop the current operation if there are people or other obstacles nearby.**

### **NOTICE**

1. The data protection module is charged each time the aircraft is powered on and has a run-time of around 30 seconds when fully charged.
2. The data protection module discharges each time the aircraft is powered off and indicates this by changing the Aircraft Status Indicator solid green.

## D-RTK (For MG-1S RTK)

### **NOTICE**

1. Only use genuine DJI parts or parts certified by DJI. Unauthorized parts or parts from non-DJI-certificated manufacturers may cause the system to malfunction and compromise safety.
2. Operate in an open environment free from radio interference. DO NOT obstruct each other when used.
3. Ensure that the D-RTK™ and its components are free from contamination (e.g. water, oil, soil and sand).

## Firmware

### **WARNING**

To avoid serious injury to children and animals, observe the following rule:

1. **Keep children and animals at a safe distance during any firmware upgrade, system calibration, and parameter setting procedures.**

### **NOTICE**

1. For safety, always update the firmware to the latest version.
2. Only use official DJI firmware.
3. Be sure to update the remote controller's firmware to the latest version after you update the aircraft's firmware.
4. The remote controller may become unlinked from the aircraft after updating. Re-link the remote controller and aircraft.
5. Be sure to check all connections and remove the propellers from the motors before performing the firmware update.
6. After firmware upgrades, disconnect the Micro USB cable and power off the aircraft. Wait for the data protection module to fully discharge (Aircraft Status Indicator goes off) before powering the aircraft back on.

## DJI MG App

### **NOTICE**

1. Be sure to fully charge the remote controller before launching the DJI MG app.
2. Read all prompted safety tips, warning messages, and disclaimers carefully. Be familiar with the related regulations in your area. You are solely responsible for being aware of all relevant regulations and flying in a way that is compliant.
  - a. Using the Auto-take off and Auto-landing features.
  - b. Setting the altitude beyond the default limit.
3. Land your aircraft immediately if there is an alert shown in the app.
4. Examine and check all warning messages on the Aircraft Status List displayed in the app prior to each flight.
5. Cache the map data of the area where you intend to fly the aircraft by connecting to the Internet before each flight.
6. The app is designed to assist your operation. Please use your sound discretion and **DO NOT** rely on the app to control your aircraft.

## USB Stick

### **NOTICE**

1. A USB stick and SIM card are required for some product features in DJI MG app and users will bear the cost of these extras.
2. Be sure to use a DJI approved USB stick.
3. Use the USB stick and the SIM card according to their manuals.
4. DJI accepts no liability for accidents caused by the loss of user data or aircraft malfunctions originating from third party USB sticks and SIM cards.
5. Users can select from a list of compatible SIM cards available through official DJI channels.
6. Make sure you mount the USB stick and the SIM card correctly, or else related functions will not be available.

## Product Care

### Storage and Transportation

#### **WARNING**

**To avoid component malfunction, serious injury, and property damage, observe the following rules:**

1. **Small parts, such as cables and straps, are dangerous if swallowed. Keep all parts out of reach of children and animals.**
2. **Be sure to remove the battery from the aircraft during transportation.**
3. **Remove or empty the spray tank during transportation or when not in use to avoid damaging the landing gear.**

## Maintenance and Upkeep

### WARNING

To avoid component malfunction, serious injury, and property damage, observe the following rules:

1. Clean all parts of the aircraft daily, immediately after spraying:
  - a. Completely fill the spray tank with clean water and spray the water through the nozzle until the tank is empty then repeat two more times.
  - b. Remove the spray tank strainer, nozzle strainers and nozzles from the aircraft. Clean and immerse them in clean water for 12 hours.
  - c. Use a water filled spray washer to clean the aircraft body and wipe it with a soft brush or wet cloth before cleaning water stains with a dry cloth. DO NOT splash the aircraft body with an excessive volume of water.
  - d. Store the cleaned aircraft in a dry environment.
2. Inspect the aircraft every 100 flights or after flying for over 20 hours:
  - a. Check for and replace worn propellers.
  - b. Check for loose propellers. Replace propellers and propeller washers if needed.
  - c. Check for aging plastic or rubber parts.
  - d. Check for bad atomization of the nozzles. Clean nozzles thoroughly or replace them.
  - e. Replace nozzle strainers and the spray tank strainer.
3. Clean intake vent and replace internal air filter after flying between 50 and 100 hours (depending on operating environment). Replace air filter at least once per year.
4. DO NOT attempt to repair the aircraft. Contact DJI Support or a DJI authorized dealer if any parts are damaged.

### NOTICE

1. Check every part of the aircraft after any crash or violent impact. If you have any problems or questions, please contact a DJI authorized dealer.

## Flight Condition Requirements

### Weather Conditions and Surrounding Environment

### WARNING

The aircraft is designed to operate in good to moderate weather conditions. To avoid collision, serious injury, property damage or imposing health hazards, observe the following rules:

1. DO NOT use the aircraft in adverse weather conditions such as heavy rain (precipitation rate exceeding 25 mm or 0.98 inches in 12 hours), high winds exceeding 17 mph (28 kph), fog, snow, lightning, tornadoes or hurricanes.
2. Keep the aircraft at least 10 meters (30 feet) away from obstacles, people, animals, buildings, public infrastructure, and bodies of water when in flight. As the aircraft's altitude increases, keep an even further distance away from the aforementioned objects or obstacles.
3. DO NOT operate any parts of the aircraft indoors.
4. DO NOT operate the aircraft in wind speeds above 8 m/s to prevent health hazards to nearby people.



## NOTICE

1. Aircraft and battery performance is subject to environmental factors such as air density and temperature.
  - a. Be very careful when flying 6,560 feet (2,000 meters) or more above sea level as battery and aircraft performance may be reduced.
2. DO NOT use the aircraft near accidents, fire, explosions, floods, tsunamis, avalanches, landslides, earthquakes, dust, or sandstorms.

## Interference with Flight Controller and Communications

### NOTICE

1. Fly in open areas. Tall buildings, steel structures, mountains, rocks or forests may affect the accuracy of the on-board compass and block both GPS and remote control signals.
2. Avoid using wireless devices that use the same frequency bands as the remote controller.
3. To avoid interference with the Radar Terrain Follow System, turn off equipment that use microwaves for operation (e.g. parking sensors and car radar detectors).
4. To prevent transmission interference, do not operate more than three aircrafts in the same area.
5. Be extremely alert when fly near areas with magnetic or radio interference and MG-1S RTK is recommended in such environment. These include but are NOT limited to: high voltage lines, large scale power transmission stations or mobile base stations and broadcasting towers. Failing to do so may compromise the transmission quality of this product or cause transmission errors which may affect flight orientation and location accuracy. The aircraft may behave abnormally or go out of control in areas with too much interference.

## Operating the Aircraft Responsibly

### WARNING

**To avoid serious injury and property damage, observe the following rules:**

1. **Make sure you are NOT drunk, taking drugs, under the influence of anesthesia, or suffering from dizziness, fatigue, nausea or any other conditions, whether physical or mental, that could impair your ability to operate the aircraft safely.**
2. **Never stop the motors mid-flight unless in emergency situations when doing so can reduce the risk of damage or injury.**
3. **Upon landing, power off the aircraft first, then power off the remote controller.**
4. **DO NOT drop, launch, fire or otherwise project any dangerous payloads on or at any buildings, persons or animals, or which could cause personal injury or property damage.**

### NOTICE

1. Make sure you have been sufficiently trained and have contingency plans for emergency situations or for when accidents occur.
2. Make sure you have a flight plan and never fly the aircraft recklessly.
3. DO NOT use this product for any illegal or inappropriate purpose (such as spying, military operations, or unauthorized investigations).
4. DO NOT use this product to defame, abuse, harass, stalk, threaten or otherwise violate the legal rights (such as the right of privacy and publicity) of others.
5. DO NOT trespass onto private property of others.

# Flight Modes, Operation Modes, Functions and Warnings

## Flight Modes

### **WARNING**

To avoid serious injury and property damage, observe the following rules:

1. **DO NOT** use A-mode unless you fully understand the aircraft's behavior under this mode.
2. Stay clear of obstacles near the operation route. Maintain line of sight to the aircraft and observe its status at all times.
3. The aircraft will enter A-mode in the following two instances:
  - a. **Passive:** When there is weak GPS signal or when the compass experiences interference.
  - b. **Active:** Users toggle the flight mode switch to A-mode.

In A-mode, some advanced features are disabled. Therefore, the aircraft cannot position in this mode and is easily affected by its surroundings, which may result in horizontal shifting. Use the remote controller to position the aircraft.

Maneuvering the aircraft in A-mode can be difficult. Before switching the aircraft into A-mode, make sure you are comfortable flying in this mode. **DO NOT** fly the aircraft too far away as you might lose control and cause a potential hazard.

Avoid flying in areas where GPS signal is weak, or in confined spaces. The aircraft will otherwise be forced to enter A-mode, leading to potential flight hazards, please land it in a safe place as soon as possible.

### **NOTICE**

P-mode or F-mode is the safest and preferred flight mode. Some safety features are disabled in A-mode, which should not be used unless you fully understand the aircraft's behavior under each mode.

1. P-mode (Positioning): Your aircraft uses GPS for positioning.
2. A-mode (Attitude): GPS is NOT used for positioning and aircraft can only maintain altitude using the barometer. Aircraft can still record its position and return to the Home Point if a GPS signal is present.
3. F-mode (Function): The aircraft will operate automatically when the GPS signal is strong after planning flight routes in the app.

Consider your responsibilities carefully before switching to flight modes that disable GPS assistance (A-mode).

## Operation Modes

### **WARNING**

To avoid serious injury and property damage, observe the following rules:

1. Ensure that you fully understand the aircraft's behavior under each operation mode before use.
2. Stay clear of obstacles near the operation route. Maintain line of sight to the aircraft and observe its status at all times.
3. Only operate in Smart Operation Mode when in P-mode and receiving a strong GPS signal.

## Failsafe and Return-to-Home

### NOTICE

1. The Return-to-Home feature will NOT work if the GPS signal is insufficient or if GPS is not active.
2. If you move the throttle stick after the aircraft rises above 15 meters but below the pre-set RTH altitude, the aircraft will stop ascending and immediately return to the Home Point.
3. Tall buildings may adversely affect the RTH procedure. Please adjust the aircraft location, altitude and speed while returning home to avoid obstacles.
4. Make sure to always fly the aircraft within the transmission range of the remote controller.
5. Only use the Return-to-Home functions in emergency cases, as they may be affected by the weather, the environment, or any nearby magnetic fields.
6. The aircraft cannot avoid obstacles during the Failsafe RTH; therefore it is important to set an appropriate Failsafe altitude before each flight.

## Low Battery

### NOTICE

1. When the Critical Battery Level Warning activates and the aircraft is descending automatically, you may push the throttle up to maintain the aircraft's altitude and navigate it to a more appropriate location for landing.
2. When battery warnings are triggered, promptly bring the aircraft back to the Home Point or land to avoid losing power during flight and causing damage to the aircraft, property, animals, and people.

## Empty Tank

### NOTICE

1. Information will show in DJI MG app when the spray tank is empty. The aircraft will move according to what operation mode or flight mode it is in: Ascend 3 meters\* and hover (Smart Operation Mode or Manual Plus Operation Mode) or hover in place (Manual Operation Mode or F-mode). Refer to the User Manual for details about all operation modes.

\* The feature for hovering at 3 meters must be enabled in DJI MG app. If not enabled, the aircraft will hover in place when the spray tank is empty.

## Compliance with Regulations & No Fly Zones

### Regulations

#### WARNING

To avoid non-compliant behavior, serious injury and property damage, observe the following rules:

1. **DO NOT modify the aircraft or use the aircraft for purposes other than for agriculture.**
2. **DO NOT operate in the vicinity of manned aircraft, regardless of altitude. (Land immediately if necessary)**
3. **DO NOT fly the aircraft in densely populated areas, including cities, sporting events, exhibitions, performances, etc.**

4. **DO NOT fly the aircraft above the authorized altitude. Remain well clear of and do NOT interfere with manned aircraft operations. Be aware of and avoid other aircraft and obstacles at all times.**

## **CAUTION**

To avoid non-compliant behavior, serious injury and property damage, observe the following rules:

1. DO NOT fly the aircraft near or inside No Fly Zones specified by local laws and regulations. The No Fly Zone list includes: airports, borders between two sovereign countries or regions, major cities / regions, etc., and is continuously updated.
2. DO NOT fly the aircraft above the authorized altitude.
3. ALWAYS keep your aircraft within visual line of sight (VLOS), and use an observer to assist if needed.
4. NEVER use the aircraft to carry illegal or dangerous goods / payloads.

## **NOTICE**

1. Make sure you understand the nature/type of your flight operation (such as for recreation, for public use, or for commercial use) and have obtained corresponding approval and clearance from the related government agencies before flight. Consult with your local regulators for comprehensive definitions and specific requirements. For users operating their aircraft in the United States, please first visit <http://www.knowbeforeyoufly.org/> and take the most appropriate action that suits your circumstances.
2. Please note that remote controlled aircraft may be banned from conducting commercial activities in certain countries and regions. Check and follow all local laws and ordinances before flying as those rules may differ from those stated here.
3. DO NOT fly around sensitive infrastructure or property such as power stations, water treatment facilities, correctional facilities, heavily traveled roadways, government facilities, military zones, etc.

## **No Fly Zones**

### **NOTICE**

DJI always stresses safety during flight, and has therefore developed various aids to help users comply with local rules and regulations while flying. We strongly recommend that you update the firmware to the latest version to ensure the following features are fully updated:

#### **No Fly Zones**

1. No Fly Zones include but are not limited to major airports around world, borders between two sovereign countries or regions, major cities/regions, etc.
2. A detailed list of No Fly Zones is available at <http://www.dji.com/flysafe/no-fly> and is subject to periodic updates in line with the latest regulatory requirements without prior notice. Flight planning is important to ensure safety. Please confer with air traffic control, public security, and other legal departments to check no-fly zones in your local area.
3. Some No Fly Zones are comprised of several zones. Each zone features circles of various sizes. The aircraft will NOT be able to take off in the inner most zone of the No Fly Zone, and will descend to the specified altitude when it approaches the edge of the inner most zone.

#### **Altitude Limit**

1. Fly NO higher than 50 meters (164 feet) above ground level and stay away from any surrounding obstacles.
2. If you intend to fly above the default altitude limit, you are required to accept the prompted disclaimer to enable the new altitude limit.

# Compliance Information

## FCC Compliance Notice

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.

## RF Exposure Information

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm during normal operation.

## IC RSS 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.

## IC Radiation Exposure Statement:

This equipment complies with IC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

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

## KCC Warning Message

"해당 무선설비는 운용 중 전파혼신 가능성이 있으므로 인명안전과 관련된 서비스는 할 수 없습니다."

"해당 무선설비는 운용 중 전파혼신 가능성이 있음"

## NCC Warning Message

低功率電波輻射性電機管理辦法

第十二條 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

**EU Compliance Statement:** SZ DJI TECHNOLOGY 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 [www.dji.com/euro-compliance](http://www.dji.com/euro-compliance)

EU contact address: DJI GmbH, Industriestrasse. 12, 97618, Niederlauer, Germany

**Declaración de cumplimiento UE:** SZ DJI TECHNOLOGY CO., LTD. por la presente declara que este dispositivo cumple los requisitos básicos y el resto de provisiones relevantes de la Directiva 2014/53/EU.

Hay disponible online una copia de la Declaración de conformidad UE en [www.dji.com/euro-compliance](http://www.dji.com/euro-compliance)

Dirección de contacto de la UE: DJI GmbH, Industriestrasse. 12, 97618, Niederlauer, Germany

**EU-verklaring van overeenstemming:** SZ DJI TECHNOLOGY CO., LTD. verklaart hierbij dat dit apparaat voldoet aan de essentiële vereisten en andere relevante bepalingen van Richtlijn 2014/53/EU.

De EU-verklaring van overeenstemming is online beschikbaar op [www.dji.com/euro-compliance](http://www.dji.com/euro-compliance)

Contactadres EU: DJI GmbH, Industriestrasse. 12, 97618, Niederlauer, Germany

**Declaração de conformidade da UE:** A SZ DJI TECHNOLOGY CO., LTD. declara, através deste documento, que este dispositivo está em conformidade com os requisitos essenciais e outras disposições relevantes da Diretiva 2014/53/EU.

Existe uma cópia da Declaração de conformidade da UE disponível online em

[www.dji.com/euro-compliance](http://www.dji.com/euro-compliance)

Endereço de contacto na UE: DJI GmbH, Industriestrasse. 12, 97618, Niederlauer, Germany

**Dichiarazione di conformità UE:** SZ DJI TECHNOLOGY CO., LTD. dichiara che il presente dispositivo è conforme ai requisiti essenziali e alle altre disposizioni rilevanti della direttiva 2014/53/EU.

Una copia della dichiarazione di conformità UE è disponibile online all'indirizzo Web

[www.dji.com/euro-compliance](http://www.dji.com/euro-compliance)

Indirizzo di contatto UE: DJI GmbH, Industriestrasse. 12, 97618, Niederlauer, Germany

**Déclaration de conformité UE:** Par la présente, SZ DJI TECHNOLOGY CO., LTD déclare que cet appareil est conforme aux principales exigences et autres clauses pertinentes de la directive européenne 2014/53/EU.

Une copie de la déclaration de conformité UE est disponible sur le site [www.dji.com/euro-compliance](http://www.dji.com/euro-compliance)

Adresse de contact pour l'UE : DJI GmbH, Industriestrasse. 12, 97618, Niederlauer, Germany

**EU-Compliance:** Hiermit erklärt SZ DJI TECHNOLOGY CO., LTD., dass dieses Gerät den wesentlichen Anforderungen und anderen einschlägigen Bestimmungen der EU-Richtlinie 2014/53/EU entspricht.

Eine Kopie der EU-Konformitätserklärung finden Sie online auf [www.dji.com/euro-compliance](http://www.dji.com/euro-compliance).

Kontaktadresse innerhalb der EU: DJI GmbH, Industriestrasse. 12, 97618, Niederlauer, Germany



CAUTION: RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS

### Environmentally friendly disposal



Old electrical appliances must not be disposed of together with the residual waste, but have to be disposed of separately. The disposal at the communal collecting point via private persons is for free. The owner of old appliances is responsible to bring the appliances to these collecting points or to similar collection points. With this little personal effort, you contribute to recycle valuable raw materials and the treatment of toxic substances.

DJI Support

<http://www.dji.com/support>

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<http://www.dji.com/mg-1s>

If you have any questions about this document, please contact DJI by sending an email to [DocSupport@dji.com](mailto:DocSupport@dji.com).

