AIRIS3 Maintenance Manual V1.0

Drone Delivery Solutions

图片包含 游戏机, 物体

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| <https://arc.delivery> |

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**UPDATE LOG**

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| Version | Updates |
| V1.0 | First Draft |

# PREFACE

## About the Company

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## About the Documentation

ARC provides users with the following documentation:

* *List of items*
* *Disclaimer and Safety Guidelines*
* *User Manual*

It is recommended that the user uses the *List of Items* to check to ensure that the parts are consistent with the list. First, please read the *Disclaimer and Safety Guidelines*. Please refer to the *User Manual* for details. Before using this product, please make sure that you are familiar with the functions and operation methods of each component, and if you have any questions when using this product, please contact ARC or ARC's authorized agent for technical support.

The service life of the drone is determined by how well you take care of it. To extend the service life of the drone, we recommend that you perform maintenance in the following ways.

Spare or replacement parts for your drone are sold separately. Please contact sales for an up-to-date list of all available spare parts.

# INTERVAL INSPECTIONS

**1. Every Flight:**

* After each flight, clean the aircraft after it returns to normal temperature. Do not clean the aircraft immediately after it is working.
* Make sure the fuselage structure is intact, clean the fuselage with a soft brush or wet towel, and then wipe off the water stains with a dry towel.
* If there are foreign objects such as sand attached to the surface of the motor or propeller, it is recommended to clean the surface with a wet towel first and then wipe off the water stains with a dry towel.
* Store the aircraft in a dry place.
* Wipe the surface of the remote control and the display with a clean wet towel (wring out the water).

**2. Every 20 Hours or 100 Landings:**

* Check if the propeller has cracks. If so, replace the blades.
* Check if the propeller is loose. If so, replace the gasket and evaluate whether the core blades need to be replaced.
* Check if the plastic and rubber parts are aging.

**3. Every Year or 1000 Hours:**

We recognize that our users put ARC equipment into a variety of demanding applications and rely on their equipment to perform reliably. ARC recommends that users return their equipment for inspection at the above intervals to ensure optimal long-term performance and reliability. Services include:

* Service bulletins and firmware updates.
* Comprehensive cleaning and fastener replacement (as needed).
* Full cleaning and fastener replacement (as needed).
* System-level testing and recertification.
* Do not repair the aircraft yourself. If there is any damage, please contact ARC or an ARC authorized agent for technical support.

# BATTERY SUGGESTIONS

## Battery Storage

Appropriate storage power can extend battery life. It is recommended to keep the power at 30% or above during long-term storage and charge the battery at least once every 5 months to avoid over-discharge.

1. Do not store the battery at room temperature above 45°C or below -20°C. If the battery is stored for a long time (more than three months), it must be placed in an environment with a temperature of -20°C to 40°C. The battery needs to be disconnected from the aircraft. It is recommended to use a special explosion-proof box for the battery. Long-term high-voltage storage will shorten the battery life.
2. Do not store the battery for a long time after it is completely discharged to avoid the battery entering an over-discharge state, causing damage to the battery cell and making it impossible to restore it to use.
3. Please keep the battery out of the reach of children. If a child accidentally swallows a part, seek medical help immediately.
4. If the battery is left idle for a long time, its performance will be affected.

Recharge and discharge the battery every 3 months to maintain battery activity.

## Battery Transportation

After each use, disconnect the aircraft from the battery and check whether there is any debris in the battery power interface. If there is any, please clean it up in time.

1. During transportation, please ensure that the battery is disconnected from the aircraft or other equipment.
2. If the battery is seriously low at the end of the flight, you need to charge it to about 25% before storing it. Otherwise, long-term storage may cause damage to the battery.
3. The environment where the battery is stored should be kept dry. Do not place the battery in water or in places where water may leak.
4. It is prohibited to store or transport batteries together with metal objects or flammable and explosive items.
5. Do not transport damaged batteries or batteries with a charge level higher than 30%. Please discharge the battery to about 25% before transporting.
6. When placing the battery, make sure the ground is flat to prevent sharp objects from damaging the bottom of the battery.

## Battery Maintenance

To minimize the effects of battery aging on performance, it is recommended that the following be performed on the battery every 200 cycles or every 3 months:



# CHARGER SUGGESTIONS

## Charger Storage

When charging is complete or the charger is not in use, disconnect the battery charging cable from the battery and the power cord, and cover the battery charging port protective cover to prevent the main charging port from being oxidized. Store the charger in a cool and dry place for protection.

## Charger Transportation

Keep it upright during transportation to avoid collision with other objects. Do not transport it together with sharp objects.

# PARTS REPLACEMENT

## Propeller Replacement

1. Use the appropriate tools to take out the two propeller fastening screws in and replace them with intact propellers. If you need to replace the propeller clips, continue to take out the fastening screws and replace the whole set of propeller clips and propellers.
2. Installing the propeller clip blades

Firstly, install the bottom cover on the motor, followed by the propeller blades, propeller gaskets, upper cover (propeller clips) and the final screws in order; pay attention to the installation of the propeller screws.

1. After clamping, the propeller should rotate freely, and make sure that the propeller clamp and the motor fastening screw are tightened, and screw glue is used at the same time.

A drawing of a drone

AI-generated content may be incorrect.

## Arm Replacement

1. Set aircraft on a stable level work surface. During disassembly, take care to note the location of fasteners and orientation of parts, as this will greatly help with reassembly.
2. Please remove the 4 fixing screws (M3 x 10) between the motor and the arm.
3. Please remove 1 fixing screw (M6 x 50) and other 4 fixing screws (M3 x 10) between the arm and the body.
4. Unplug the XT60 power cable and PWM cable of the relevant arm motor from the power distribution board and pull out the motor cable.
5. Prepare the new arm assembly and replace it.
6. Feed the wiring harness through the hinge, slide the arm into place and temporarily secure by tightening the bottom plate bolts.
7. Use a bubble level to level the motor and tighten the remaining screws.
8. Connect the XT60 power cable and PWM cable.

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# CONTACT US

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