

Ages 14+



ALTAIR AERIAL

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Equipped with 120°wide-angle 720P HD WIFI Camera



AA108

Operations Guide

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Liability

Thank you for buying our product. People who are under 14 years of age are not qualified to use this for important safety reasons. Please read this brochure carefully before using it to ensure that you readily understand how to use it to the best of your current ability.

This product is not an ordinary toy. It is a piece of complicated equipment which is integrated with professional knowledge by mechanics, electronics, air mechanics, and high-frequency emission technician. The user must be responsible for their behavior when using this drone and the app that is used with it. The user is also in charge of to use to obeying all local laws and regulations that have been set by the government, authorities, and the FAA.

We undertake no liability for any accidents caused by the environment, illegal behavior, improper operation or refitting of the drone after the final sale.

We have entrusted the distributor to provide technical support and after-sale service. If you have any questions about use, operation, repair etc., please contact the local distributor.

Please only use the attached spare parts or purchase original UDIRC accessories for replacement. However, if any incident arises from the spare parts or original purchased spares, we at UDIRC do not assume any responsibility.

Keep the packing and user manual to refer to the information.

Safety Precautions:

This drone is suitable for experienced RC drone users at the age of 14-years-old and above. This product contains small parts that must be kept out of a small child's reach.

(1) Flying Area

The flying field must be legally approved by your local government. Do not fly the drone near or into any of your local airports. By law, you must not fly a drone anywhere near an airport that is at least 3 miles away. The area you choose to fly in must be spacious enough to ensure that no accidents occur. We suggest flying in an area that is at least 26 feet(length)*26 feet (width)*16 feet (height) at the very least, such as an open field, for example.

(2) Correct Use of the Drone

For safety reasons, please only use UDIRC's spare parts to replace the damaged ones if the need arises. Improper assembly, a broken main frame, defective electronic equipment or unskilled operation may cause unpredictable accidents. For example, damage to the drone or bodily injury. Please pay special attention to safety measures during operation and have understanding of potential accidents that the user may cause as a result of ignoring such.

(3) Keep Away From Obstacles and Crowds

The speed and status of a flying RC drone is uncertain at times and may cause potential danger. With this in mind, keep away from crowds, buildings, power lines, etc. when operating a drone. Do not fly a drone in the rain, during a storm, through thunder and lightning, and, for the safety of user, around other people and their property.

(4) Keep Away from Humid Environments

The internal components of a drone consist of precise electronic equipment. Humidity or water vapor may cause damage to them and result in an accident, so take care to where you are flying it.

(5) Safe Operation

Please operate the drone in accordance with your flying skill and overall experience

level. Fatigue, lightheaded episodes, and improper operation may increase your chances of an accident occurring.

(6) Keep Away From the Rotating Parts

Rotating parts, such as the propellers and even the motors, may cause serious bodily injury and damage to the drone. Keep your face, hands, and all body parts away from rotating parts of the drone.

(7) Keep Away From the Overly Heated Weather

The RC drone is made of metal, fiber, plastic, electronic components, etc. Ergo, you must keep the drone away from heat and sunshine to avoid distortion and damage. This is only relevant for areas and regions that undergo extreme heat.

The drone should be controlled within the maximum control distance.

Do not fly the drone near buildings, high-voltage cables, or any other area that can cause signal interference. An interference in the signal will cause the drone will go out of control, resulting in a possible accident.

Do not touch the hot motor to avoid being burnt.

Please use the recommended charger only.

Power off the drone before cleaning it. Not doing so will result in bodily injury and damage to the drone.

Check the USB cable and the charging plug regularly to ensure they are functioning properly. If there is any damage, or they are not charging the drone as they should be, stop using it immediately until they can be replaced or fixed.

Safety Warning for the Drone's Battery

- Keep all LiPo batteries away from children and animals.
- Never charge a LiPo battery that has ballooned or swelled in size.
- Never charge a LiPo battery that has been punctured or damaged.
- After a crash, inspect the battery pack for signs of damage.
- Never overcharge a LiPo battery.
- Do not charge LiPo batteries near flammable materials or liquids.
- Do not put the battery near anything with a high temperature, such as an open flame, to reduce the risk of fire or explosion.
- Always store any LiPo batteries inside a suitable container.
- Do not put battery packs in pockets or bags where they can short circuit or can come into contact with sharp or metallic objects.
- Do not attempt to disassemble, modify, or repair a LiPo battery.
- Do not use the battery after crashing or hitting a hard surface unless you inspect it to ensure it's not destroyed.
- Do not put the battery directly into any amount of water.
- Keep the battery stored at room temperature in a dry place.
- Do not leave the battery without supervision when charging.
- Make sure that there is no short circuiting of the power wire before you use it.
- Only use the recommended charger.

Check the charger's wire, plug, and surface regularly. Do not use a charger that is either damaged or broken.

Charging Instructions for the Drone's Battery

1. Connect the battery to the USB cable and choose one of the charging methods below.
2. The red USB indicator light is bright while charging, which will turn green when fully charged.

*** For faster charging, it is recommended to use an adapter with a 5V 2A output current (not included) to charge the battery.**



Phone Charger



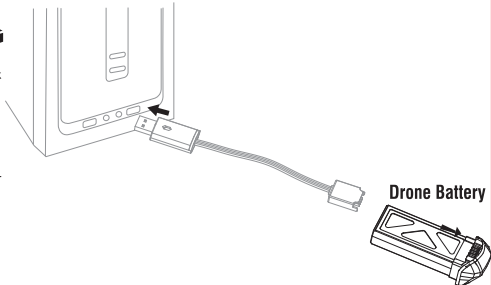
Power Bank



Computer Charging



Car Charger



Drone Battery



LiPo Battery Disposal & Recycling

Lithium-Polymer batteries must not be placed with household trash.
Please contact your local environmental waste agency,
the supplier of your mode, I or your nearest LiPo battery recycling center.

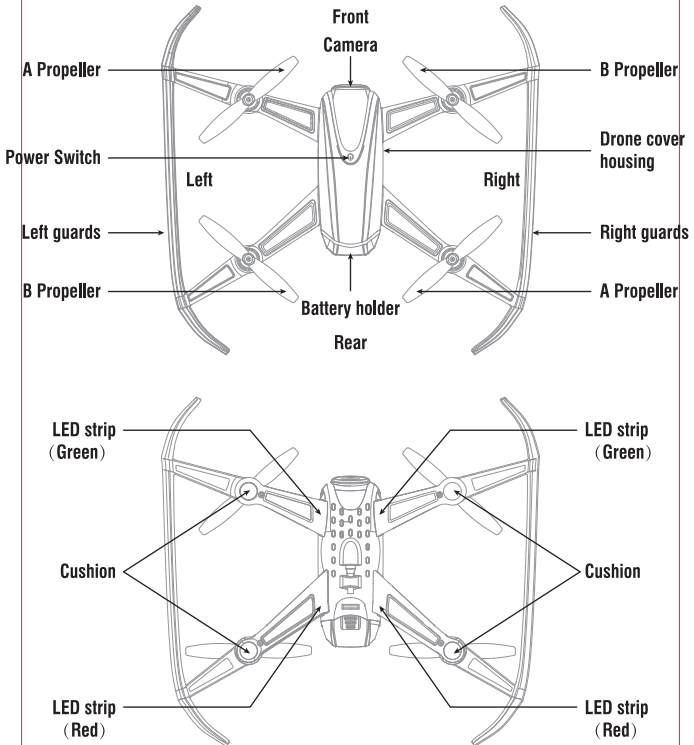


Checklist Before Flight

- Make sure the drone battery and transmitter batteries are fully charged.
- Make sure the Left stick of the transmitter is in the middle position.
- Turn on the transmitter power first and then turn on the drone; turn off the drone first and then turn off the transmitter power when you are finished with flying.
- Make sure the connection is solid between the battery, the motor, etc; the ongoing vibration may cause a bad connection with the power terminal and cause the drone to fly out of control.

Instruction for Drone and the Transmitter

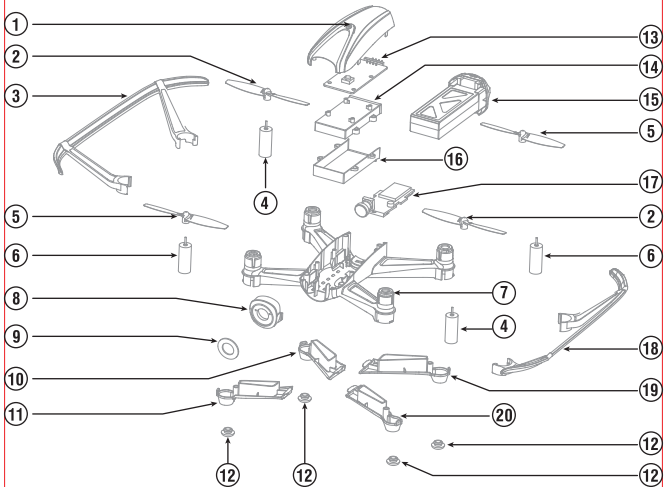
Drone



Specification

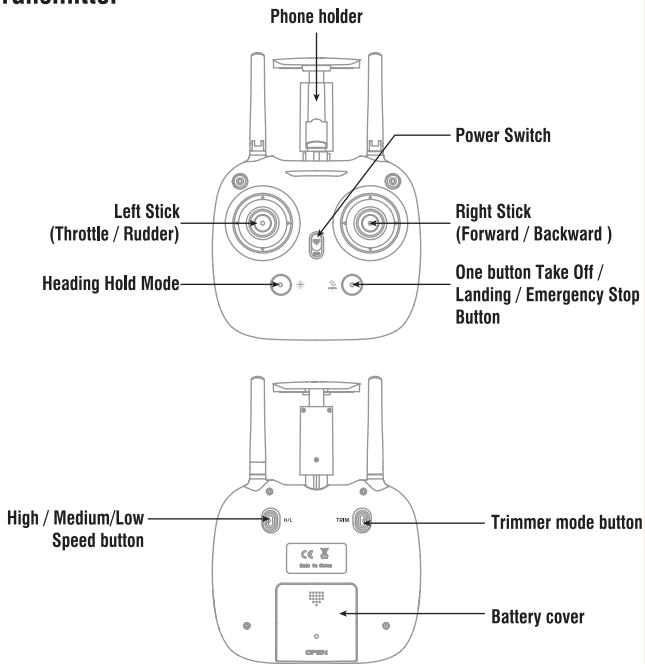
Drone size	198.5x183.2x42.8mm	Drone Battery	3.7x2 350mAh
Weight	85g	Charging Time for Drone Battery	60mins
Propeller Diameter	66mm	Max Flying Distance/Radius	50m
Flying Time	5.5~6.5mins	Streaming video Range	30m
Frequency	2.4Ghz	Camera Resolution	1280x720P
Main Motor	8520x4		

Expanded View



No.	Name	No.	Name
1	Drone cover housing	11	Right Front LED hood
2	A Propeller (Clockwise)	12	Cushion
3	Right Guards	13	Receiver board
4.	Clockwise Motor (Red connector)	14	Battery Upper holder
5	B Propeller (Counterclockwise)	15	Drone battery
6	Counterclockwise Motor (White connector)	16	Battery Lower Holder
		17	Camera Board
7	Drone Bottom Housing	18	Left Guards
8	Camera Head Cover	19	Left Rear LED Hood
9	Lens	20	Left Front LED Hood
10	Right Rear LED Hood		

Transmitter

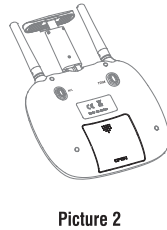
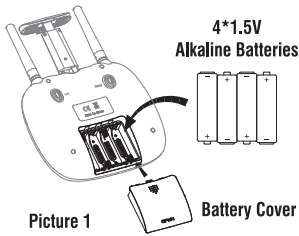


Brief Introduction for Button Functions

Left Stick	Move the Stick to forward / backward / left / right / up / down / turn left / turn right.
Right Stick	Move the Stick to go forward / backward / left / right.
Power Switch	Push up the power switch up to turn on the transmitter, and pull down to turn off.
Heading Hold Mode	Press the button to enter heading hold mode, and press again to exit from heading hold mode.
High / Medium/Low Speed button	Press down this button to switch to High /Medium/ Low Speed.
Take Off / Landing / Emergency Stop Button	Press the button and the drone will fly up automatically. Press the button again and the drone will land on the ground automatically. Press and hold the button more than 1s, the drone propellers will stop and fall down immediately.
Trimmer mode Button	Press down this button,move the right stick to the required trimmer direction, then it will adjust the direction accordingly, when loose the stick, then ESC from the trimmer mode.

Battery installation

Open the battery cover on the back side of the remote and put 4 alkaline batteries (AA, not included) into the box in accordance with the electrode instructions, as picture 1 and 2 shows.

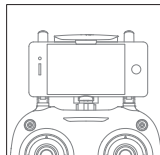
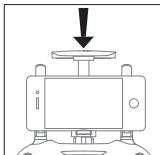
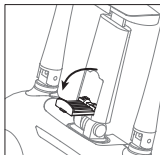
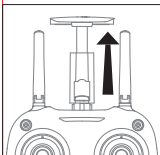


Notice:

1. Make sure the electrodes are correct.
2. Do not mix new with old batteries.
3. Do not mix different kinds of batteries.
4. Do not charge the non rechargeable battery.

Phone Installation Instruction:

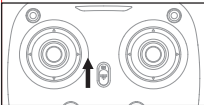
1. Pull up the phone holder (Picture 3), open the lower clamp, then pull the upper holder until you can hold the phone (Picture 4).
2. Put the phone into the holder and release the clamp. The clamp will hold the phone tightly (Picture 5/6).



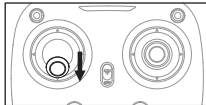
Pre-flight Operation Instruction

Frequency Pairing

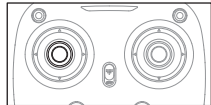
1. Turn on the transmitter switch (Picture 7) and the power indicator light will flash rapidly. Pull the Left stick all the way down to the lowest position and then release. The Left stick will move back to the middle position automatically (Picture 8/9). The power indicator light will then flash slowly, which indicates that the transmitter is ready for frequency pairing.



Picture 7

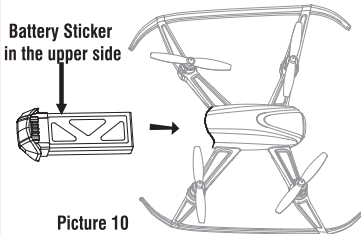


Picture 8

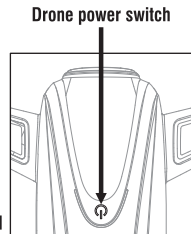


Picture 9

2. Install the LiPo battery into the drone (Picture 10) and proceed to power up the drone (Picture 11). You will need to press the button for a few seconds.



Picture 10



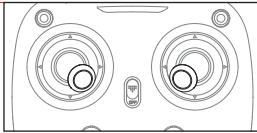
Picture 11

3. Put the drone on a flat surface, where you will notice that the drone body lights turn from flashing to a solid bright color, which indicates successful pairing.

Important Notice: Please make sure the drone is placed in a horizontal position after powering on, so that the drone functions properly.

Checklist before Flight

1. The camera is in front of the drone and that the front is facing away from you.
2. Power on the drone and check the direction of the rotating propellers; the left front and right rear A propellers rotating clockwise, while the right front and left rear B propellers rotating counterclockwise.
3. Activate (unlock) the motors: Move the Left stick and Right stick at the same time, as Picture 16 shows, (45 degree inward) to start the motors and repeat previous step again to lock the motors.



Picture 12

4. After activating the motors, push up the Left stick slowly to fly the drone upward, and pull down the Left stick slowly to the lowest end; this causes the drone to safely land on the ground slowly.

5. Adjust relative remote Trimmer button to adjust the rudder if the drone tilts to one side when flying.

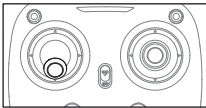
Calibration Instructions

Please follow the steps below to calibrate the drone if the drone becomes imbalanced after crashing during the flight, and cannot be adjusted by the trimmer button and causes problems in operation.

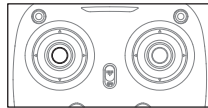
1. Power off the drone and turn off the transmitter switch.

2. Turn on the transmitter switch, push the Left stick all the way down to the lowest position (Picture 13) and then release.

3. The Left stick will back to the middle position automatically (Picture 14) and the transmitter will be ready for frequency pairing mode.



Picture 13



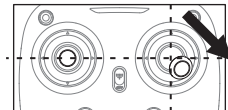
Picture 14

4. Power on the drone and put it on a flat surface in a horizontal position; you will notice the drone's body lights change from flashing to a solid bright color, which indicates successful frequency pairing.

5. Do not move the Left stick before successful calibration.

6. Push the Right stick as Picture 15 shows and then release; the drone body lights flash, indicating that the drone is calibrating.

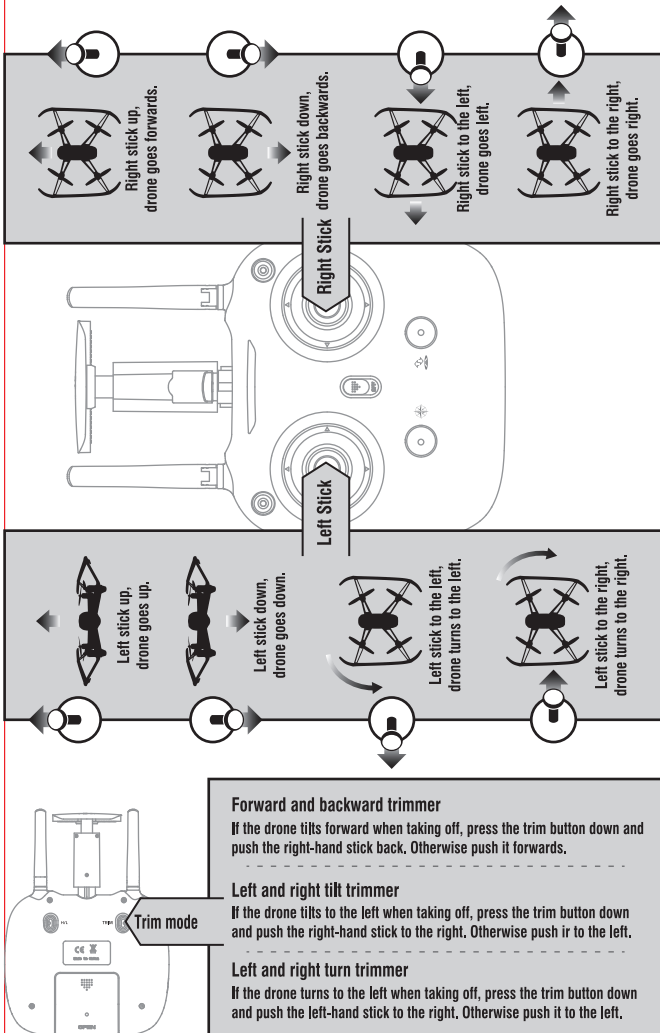
7. The drone's body lights will turn to a solid color to indicate a successful calibration.



Picture 15

Notice: When the drone is fiercely impacted, it may cause the gyro to not recover properly and cause difficult control. If this is the case, you will need to power off and power on again to calibrate.

Flying Control

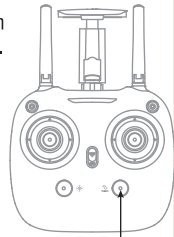


Introduction to the Functions

Take off/ One button take off/Landing modes

Method 1 (Take off): After frequency pairing is successful, push the Left and Right stick, as Picture 12 shows, to start the motor. Release the sticks and push up the Left stick to fly upward to a certain altitude and then release it.

Method 2 (One-Button Take Off): After frequency pairing is successful and the motors have activated, press the Take Off/Landing/Emergency Stop Button (Picture 16) and the drone will fly up automatically. The drone will continue the flight at an altitude of approximately 1.2 meters.



Take Off / Landing /
Emergency Stop Button
Picture 16

Landing Methods

Method 1 (Landing): When flying, push the Left stick all the way down to the lowest position (Picture 13) and hold it until the motors stop. From there, the drone will land on the ground slowly.

Method 2 (One-Button Landing): When flying, press the Take Off/Landing/Emergency Stop Button once (picture 16) and the drone will land on the ground automatically. When using this function, you can not touch the Left stick or the function will fail.

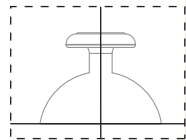
Emergency Stop: If the drone is in an emergency situation and going to hit people, an obstacles etc., press the Take Off/Landing/Emergency Stop Button immediately and hold it for more than one second (picture 16). The propellers will stop immediately.

Tip: Do not use the emergency stop function unless you are in an emergency situation. The drone will fall out of the air very suddenly after all propellers stop.

Altitude Hold Mode

Altitude hold mode indicates that the drone maintains a consistent altitude while allowing roll, pitch, and yaw to be controlled normally. It's much easier to control the drone for beginners and allows for more stability during aerial photography.

Push the Left stick up (down) to fly the drone up (down) at certain altitude and then release the it. The stick will go back to the center position (Altitude Hold Center), as Picture 17 shows. The drone will then keep flying at the current altitude. Repeat above steps if you want to change the drone's current altitude to Default Mode.



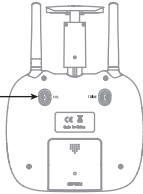
Altitude Hold Center
Picture 17

Note: The Altitude Holding Mode can not be used when the blades are deformed or damaged.

High / Medium/Low Speed Mode Switch

Press this button and wait for the indicated Low Speed Mode “L” with one beep; when it sounds two beeps it means medium speed “M”; three beeps means high speed mode “H”.

High / Medium/
Low Speed
Mode Switch
(Press Down)



Low Speed Mode (Mode 1)

1. Low Speed Mode is suitable for those at a beginner level.

Medium speed Mode (Mode 2)

2. Medium Speed Mode is suitable for skillful pilots to play in the gentle breeze.

High Speed Mode (Mode 3)

3. High Speed Mode is suitable for experts to experience aerial stunts in an outdoor setting.

Heading Hold Mode

Drones generally have a front and rear that is further indicated by LED lights or colored propellers. By default, the users are required to tell which are the front and the rear of the drone when flying. Under Heading Hold Mode, the user can operate the drone without worrying about the orientation of the direction your drone is facing. Heading Hold Mode is designed for beginners, flying in daylight, from a far distance, or if the user is having difficulty in identifying the drone orientation.

The default setting is NOT Heading hold Mode.

You are allowed to activate this function before taking off or while already in flight. When flying with Heading Hold Mode, you're required to ensure that the front direction of the drone is properly aligned with the direction that you, the user, are currently facing. DO NOT change the direction of your transmitter and ensure that you are facing where your drone is flying at all times. (See below picture)

WARNING: DO NOT USE HEADING HOLD MODE BEFORE YOU ARE SURE THAT THE DRONE'S FRONT IS IN THE DIRECTION YOU ARE FACING. OTHERWISE, IT MIGHT GO OUT OF CONTROL OR FLY AWAY.

