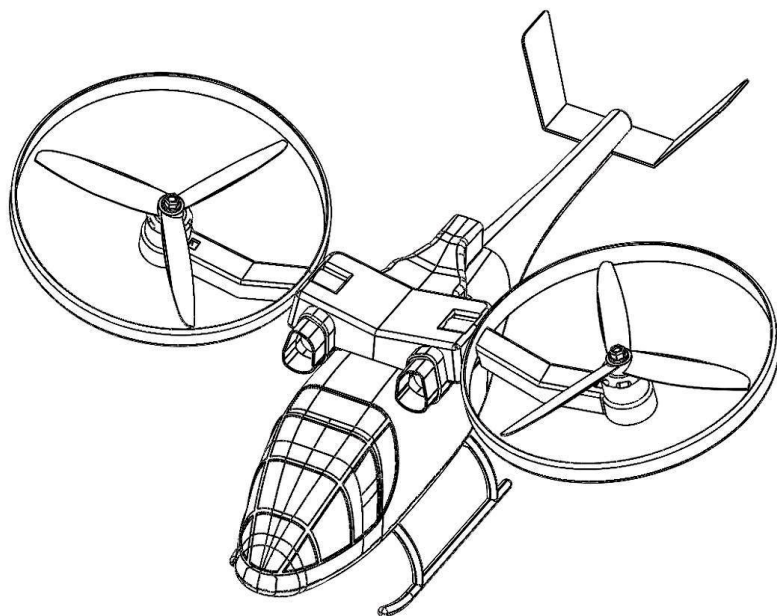


KAI YIN Z2-2 User's Manual

Kai yingZ2-2

Disclaimer and Safety Operational Guidelines



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Vocabulary

This product uses the following terms to illustrate the potential hazard classification due to improper operation.

notice **notice:** Failure to follow instructions may result in property loss and minor injury.

attention **attention:** Failure to follow instructions may result in property loss and serious injury.

warning **warning:** Failure to follow instructions may result in property losses, major accidents and serious injuries.



warning

By reading the entire user manual, familiar with the functions of the product before operation. If the product is not properly operated, it may cause serious injury to itself or others, or lead to product damage and property loss. This product is complex, it needs a period of familiarity before it can be used safely, and it needs some basic knowledge before it can be operated. If there is no strong sense of safety, improper operation may lead to product damage and property loss, and even cause serious harm to oneself or others. This product is not suitable for children. Do not use parts which are not provided or recommended by Ying Hang. Installation and use of products must strictly follow Hawk Ying Hang's instructions. This guidance document contains instructions on security, operation and maintenance. Be sure to read all the instructions and warnings in the user manual carefully before assembling, setting up and using them.

Pre-flight Checklist

- 1) Only use KYZ2-2 original parts and ensure that all parts work well.
- 2) Ensure that the remote control, flight batteries and equipment have sufficient battery power.
- 3) Ensure that all propellers are properly installed on the motor. The motor can start normally.
- 4) Ensure that the flight site is outside the flight restriction area and that the flight site is suitable for flight.
- 5) Users should ensure that they do not operate the aircraft under the influence of drunkenness and drugs.
- 6) Familiar with each flight mode. Familiar with aircraft behavior in out-of-control return mode and one-key return mode.
- 7) Users should be aware of local laws and regulations concerning aircraft. If necessary, users should apply to the relevant departments for authorization to use the aircraft.

Disclaimer and Warning

This product is not a toy, please do not let children touch. If there are scenes for children to operate, please pay special attention.

Please read this document carefully before using this product. This statement has an important impact on the safe use of this product and your legitimate rights and interests.

This product is a twin-rotor aircraft, which will provide a comfortable flight experience when the power supply is working normally and the components are not damaged.

Be sure to read this document carefully before using the product to understand your legitimate rights and interests, responsibilities and safety instructions; otherwise, it may cause property losses, safety accidents and personal safety risks. Once you use this product, you will be deemed to have understood, approved and accepted all the terms and contents of this statement. The user is committed to being responsible for his or her actions and all consequences. The user undertakes to use the product only for legitimate purposes and agrees to this clause and Ying Hang Innovation.

Ying Hang Yuan(KYZ2-2) shall not be liable for any direct or indirect personal injury or property damage caused by the use of this product in accordance with the safety guidelines. Users should understand and implement the safety guidelines, including but not limited to this.

Pre-use Instructions

In order to enable you to use this product safely, KYZ2-2 provides users with the following documentation:

1. List of Goods
2. Disclaimer and Safety Operations Guidelines
3. Guidelines for the Safe Use of Flying Batteries
4. Quick Start Guide
5. Pre-takeoff Operational Procedures

Users are advised to use the Item List for checking. First read the Disclaimer and Safety Operations Guidelines, then watch the instructional videos and use the Quick Start Guidelines to understand the use process. Before flying, be sure to read the "Pre-take-off Operational Steps" carefully to get more product information. For users who have used KYZ2-2 products, please read the Quick Start Guide. Make sure that before using this product, you are familiar with the functions of its components, and know about flight restrictions, the process of emergency return, and local laws and policies related to flight. If you have any questions, please contact Ying Hang Yuan or KYZ2-2 authorized agents.

Instructions for the Use of Components

Original fittings

In order to avoid possible injuries and losses, the following must be observed:

- 1) Use original parts or parts certified by Ying Hang. The use of non-original parts may pose a risk to the safe use of aircraft.
- 2) There are no foreign bodies (such as water, sand, soil, etc.) inside the aircraft and its components.
- 3) Ensure that the aircraft and its components, including remote controls, power systems and batteries, work properly.

Remote Control

notice

- 1) Before each flight, ensure that the remote control has sufficient power.
- 2) Turn off the power supply when the remote controller is idle.

Item List

notice

KYZ2-2Item list:

One aircraft, one remote controller, one power battery, one charger, one user's manual and one pair of spare propellers.

Dynamic System



High-speed rotating propellers and motors may cause injury or loss to people. The following items must be observed:

Propeller

- 1) Be sure to check the propellers before each flight.
- 2) Ensure that the propeller is operated when power supply of the aircraft remains closed.
- 3) Because the blade is thinner, please operate carefully during installation .
- 4) Use auxiliary tools when necessary to install and disassemble propellers.
- 5) Before each flight, please check whether the propeller is installed correctly and tightly.
- 6) Do not close to the rotating propeller and motor to avoid cutting.

Electric machinery

- 1) Ensure that the motor is firmly installed and can rotate freely.
- 2) Do not modify the physical structure of the motor by yourself.
- 3) Do not touch the motor directly with your hands immediately after the motor stops turning, otherwise it may cause scald.



In order to avoid possible injuries and losses, the following must be observed:

- 1) Do not block the motor vent.
- 2) Do not block the ventilation holes on the aircraft housing.



Electric machinery

- 1) Ensure that there is no foreign body in the motor.
- 2) If the motor can not rotate freely, please immediately perform the locking and breaking action to stop the motor rotation.

Battery

The temperature of the power battery is high after use. Please do not touch the battery with your hand immediately after landing, otherwise it may cause burns.

Electric modulation

- 1) Ensure that when the power supply of the aircraft is turned on, the electrical modulation will give a prompt sound.

Storage and Transportation



In order to avoid possible injuries and losses, the following must be observed:

- 1) Because wires and small parts may pose a danger to children, it is important to keep children away from aircraft parts.



- 1) Store flying batteries in dry and ventilated places to reduce direct sunlight to prevent overheating of batteries. If the battery needs to be stored for more than a month, please balance the single-chip voltage at 3.85V. Battery is 4S battery of 15.4v. You can plug the battery into the charger to check the voltage. The recommended storage temperature range is 22 to 28 degrees Celsius. Do not store batteries in places below - 20 degrees Celsius or above 45 degrees Celsius. Transport them remotely in the original package as far as possible.

Flight Conditions Requirements

Weather and Environmental Requirements



Please fly in good weather and environment. In order to avoid possible injuries and losses, the following must be observed:

- 1) Do not fly in bad weather, such as gale (wind speed level 5 or above), snow, rain, foggy weather, etc.
- 2) When flying, please keep the control in sight so that the aircraft can keep at least 10 meters away from obstacles, crowds, water surface and other objects at any time.
- 3) No aircraft shall be used in the event of collision, capsizing, fire, explosion, lightning strike, storm, tornado, rainstorm, flood, earthquake, sandstorm and other disasters.

Flight Control, Location System and Wireless Communication

- 1) Be sure to control aircraft in open spaces. Tall steel buildings may interfere with the compass and GPS signals of aircraft.
- 2) In order to prevent the interference between the remote controller and other wireless devices, it is necessary to close other wireless devices.
- 3) It is forbidden to fly near the electromagnetic interference source. Electromagnetic interference sources include but are not limited to: high-voltage wires, high-voltage transmission stations, mobile phone base stations and television broadcast signal towers. If the flying place is not chosen according to the above regulations, the radio transmission performance of the aircraft will be affected by interference.
- 4) Positioning is very important. The result of positioning directly affects flight safety. Unpositioned precision may lead to abnormal operation of aircraft. When positioning is not accurate, it may not be able to return to the set position when landing automatically. When positioning in GPS mode is successful, the blue lid light in front of the nose will stop flashing and become normally on.

Safe Flight



In order to avoid possible injuries and losses, the following must be observed:

- 1) Users are not allowed to manipulate the product under the conditions of alcohol, drugs, drug anesthesia, dizziness, fatigue, nausea and other poor physical or mental conditions.
- 2) It is forbidden to carry out the action of locking and breaking the rod in the air
- 3) After landing, the aircraft must be shut down first and the remote control should be shut down.
- 4) It is forbidden to use this product to throw or launch any dangerous objects at buildings, people or animals.



- 1) Users should ensure that they have sufficient knowledge of the aircraft and are aware of all emergency return measures.
- 2) Before each flight, the user should prepare the flight plan. Do not manipulate this product recklessly.
- 3) It is forbidden to use this product for any illegal or improper acts (including, but not limited to, espionage, military operations and illegal investigations).
- 4) It is forbidden to use this product for any violation of the privacy of others.
- 5) It is forbidden to use this product to infringe other people's property rights.

Flight Mode and Warning

Flight Mode



Flight modes and warnings must comply with the following in order to avoid possible injuries and losses:

You must be familiar with the characteristics of the aircraft and various flight modes before switching from mode 1 to mode 2 or mode 3.



1) The D R channel of the remote controller sets the output of the control rudder, the small D control is suitable for novice flight, and the large R control is suitable for skilled players. The 6-channel switch sets the return position and unlock motor, the 1-mode :lock motor + turn off light, the 2-mode: unlock motor + set return position + turn on light ,the 3- mode: unlock motor + set return position + turn on buzzer alarm + light flashing.

The flight mode setting method of 5-channel switch is as follows.

No GPS manual flight mode setting

The use method of no GPS manual flight mode requires that the 6-channel unlocking switch is in the 1 position, then the throttle is pulled to the lowest position, and then the 5-channel mode switch is turned to the 1 mode. When the 6-channel unlocking switch is in the 2 position, the motor will start to operate after unlocking. At this time, the throttle can be increased to fly in no GPS manual mode. The flight mode can be switched after unlocking, and the 1-mode for flight in normal manual semi-automatic mode, 2-mode for fixed altitude flight assisted by barometer, 3-mode for emergency landing with one key at current position. Attention! The 3-mode is not recommended because the aircraft will land rapidly at the current position.

GPS flight mode setting

The GPS flight mode needs to be unlocked after satellite signal is found in outdoor flight. This mode has one key take-off function. Therefore, it is not necessary to pull the throttle to the lowest position. It is required that the 6-channel unlocking switch is in the 1 position. Then the 5-channel mode switch is moved to the 2-position. GPS signal searched, the blue lid light in front will stop flashing and become normally on after signal is found. At this time, move 6- -channel unlocking switch to 2-position to unlock. Attention! After unlocking, the aircraft will automatically climb to the 2-meter-high position for fixed altitude hover and wait for your control command. After unlocking, The flight mode can be switched, 1-mode for normal manual semi self stabilization flight, 2-mode for full self stabilization fixed altitude flight with precise hover assisted by barometer GPS positioning system , 3-mode for one key return to set position and automatic landing with the help of GPS, compass, barometer. The return height is 10 meters above the set return position. If there are tall buildings on the return route, it will affect the return safety of the aircraft. Therefore, before using the return function, judge whether it can avoid obstacles, and cancel the return if necessary.

2) Ensure that the key return function is used only in critical situations, because the return function is affected by weather, environment and geomagnetic factors.

Out-of-Control Return

notice

- 1) Out-of-control return will be invalid in the case of poor GPS signal.
- 2) When the remote control signal loses connection with the aircraft, the aircraft will automatically execute the out-of-control return order, and the aircraft will return to the set return point before takeoff for landing. At this time, when the aircraft receives the remote control signal again, the rocker will cancel the return flight. Do not force the return function to start by turning off the power supply of the remote control.
- 3) The return altitude of the aircraft is 10 meters above the set return position. If there is a tall building on the return route, it will affect the return safety of the aircraft.
- 4) During the uncontrolled return flight, the aircraft cannot autonomously avoid obstacles. Therefore, whenever you use the aircraft, try to choose an open space for flight.
- 5) Try to ensure that the aircraft controls the aircraft within range of the remote control.

Low Battery

- 1) When flying, it is necessary to fully charge the battery before flying. When the voltage is low, the aircraft will automatically alarm. After the low-power alarm is sent out, the user can still push the throttle lever to pull up the flight height and control the aircraft so that it can fly to the right place and land again.
- 2) When the low power alarm is issued, it is necessary to land the aircraft in order to prevent the danger to the aircraft, people and animals after losing power.

Legal Norms and Flight Restrictions

Legal Norm

warning

In order to avoid illegal acts, possible injuries and losses, the following must be observed:

- 1) Never fly near a manned aircraft. Landing as soon as necessary.
- 2) The use of aircraft in densely populated areas is prohibited.
- 3) Ensure that the flight of the aircraft will not affect the large manned aircraft on the route.
Always be alert and avoid other aircraft.

attention

- 1) It is forbidden to control the aircraft to enter the no-fly zone stipulated by law. No-fly zones include airports, border lines and major cities.
- 2) It is forbidden to fly beyond the limited altitude.
- 3) Make sure the aircraft is flying within your visual range. If necessary, arrange observers to help you monitor the position of the aircraft.
- 4) It is forbidden to use aircraft to carry any illegal and dangerous goods.

notice

- 1) Make sure you have a clear understanding of the types of flying activities (e.g. entertainment, business or business). Before flying, it is necessary to obtain a permit issued by the relevant departments. If necessary, local legal practitioners can be consulted about the detailed definition of the categories of flight activities. Please note that the use of aircraft for any form of commercial conduct is prohibited in some areas and countries.

- 2) It is forbidden to use aircraft near sensitive building facilities, such as power stations, hydropower stations, prisons, traffic arteries, government buildings and military facilities.
- 3) When using aircraft to shoot, we must respect the privacy of others. It is prohibited to use this product for any unauthorized surveillance activities, including but not limited to surveillance of others, groups, activities, performances, exhibitions or buildings.
- 4) Please note that in some areas and countries, although not for commercial purposes, the use of cameras to videotape or photograph other people, groups, activities, performances, exhibitions, etc. will also violate copyright disputes or the legitimate rights and interests of others. In some areas and countries, small aerial models are also prohibited from participating in any commercial activities. Therefore, before using, please carefully understand and follow the local laws and regulations.

Flight Restriction and No-fly Zone

notice

- 1) Keep the flying altitude below 120 meters, and the aircraft should stay away from any tall buildings when flying.
- 2) Check the no-fly zone address: <https://www.dji.com/cn/mobile/flysafe/geo-map>

KYz2-2 Quick Start Guide

Note: The return altitude is 10 meters above the set return position. The aircraft will not avoid obstacles when using the return position. Attention should be paid to whether there are obstacles around, and if there are obstacles, the return voyage should be cancelled immediately.

No GPS mode: Throttle in the lowest position
Unlock when mode switch is in 1 position

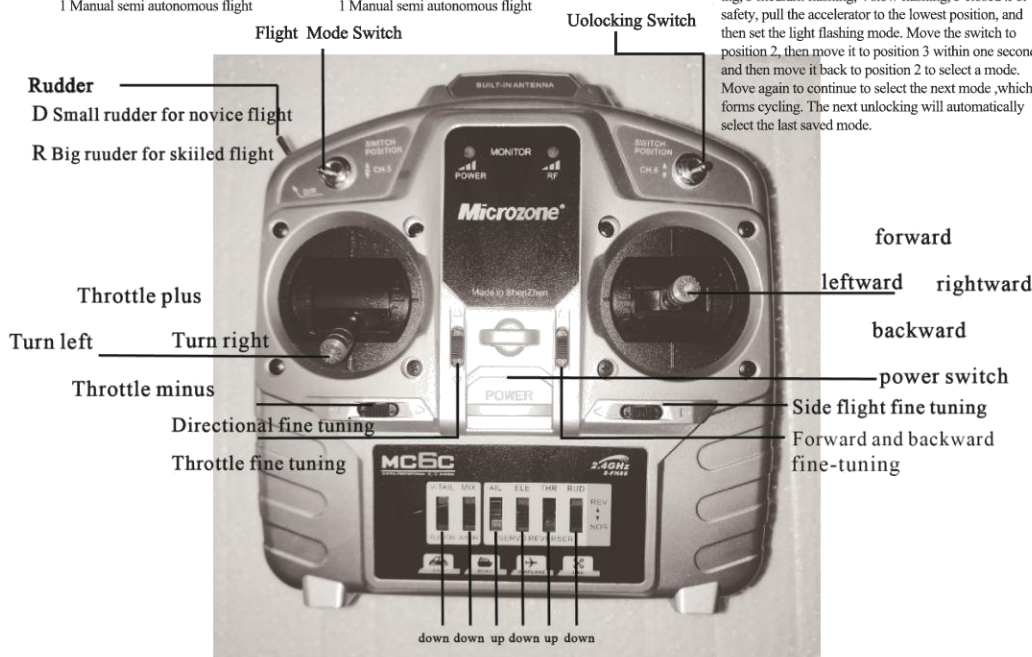
Function of switch of no GPS mode
3 One key landing at current position
2 Automatic fixed height flight
1 Manual semi autonomous flight

GPS mode: Throttle in the middle position
Unlock when mode switch is in 2 position

Function of switch of GPS mode
3 One key return at set position
2 Automatic fixed height and point flight
1 Manual semi autonomous flight

3 Unlock motor + set return position + turn on alarm + flashing
2 Unlock motor + set return position + turn on saved light mode
1 Lock motor + turn off light

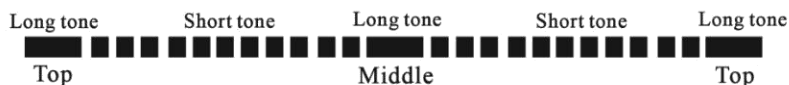
There are five light modes. 1 normally on, 2 fast flashing, 3 medium flashing, 4 slow flashing, 5 closed. For safety, pull the accelerator to the lowest position, and then set the light flashing mode. Move the switch to position 2, then move it to position 3 within one second and then move it back to position 2 to select a mode. Move again to continue to select the next mode, which forms cycling. The next unlocking will automatically select the last saved mode.



Note that all fine-tuning forbidden adjustments must be returned to the middle

If there is any wrong adjustment, it can be judged according to the length of the sound.

The operation mode of adjusting to the middle position is shown in the figure.

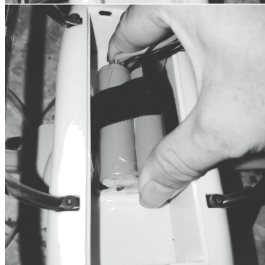


Pre-take off Operation Steps

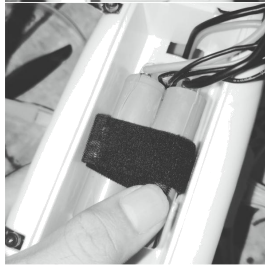


Fully charge battery before use. Please refer to the instruction of charger for charging method.

Step 1: Put the battery whose cable faces toward the rear of the aircraft into the battery box slot.



Step 2: Fix the batteries on the plane. Press the higher part with your thumb as shown in the figure, and clip into the battery box slot.



Step 3: Fix the battery on the aircraft, as shown in the figure, press one end of the strap with the thumb, and then pull the other end firmly to make it stick with the thumb. The battery must be fixed. If it shakes, it will affect the normal flight of the aircraft.



Step 4: Connect the battery plug and the power plug, plug extra wires into the fuselage, install the battery cover and put on the battery board, and then prepare to take off.



Step 5: Place the aircraft on a relatively level ground and prepare for takeoff in an empty and open area. For takeoff mode, please refer to "flight mode" on page 7 and "Quick Start Guide" on page 9 of the user's manual, and make sure that the user's manual and how to use the aircraft have been certified before takeoff. Do not use this product recklessly to avoid unnecessary loss.

The guideline will be updated without notice

Ying Hang has been trying to provide users with better instructions.

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