



User Manual

E130



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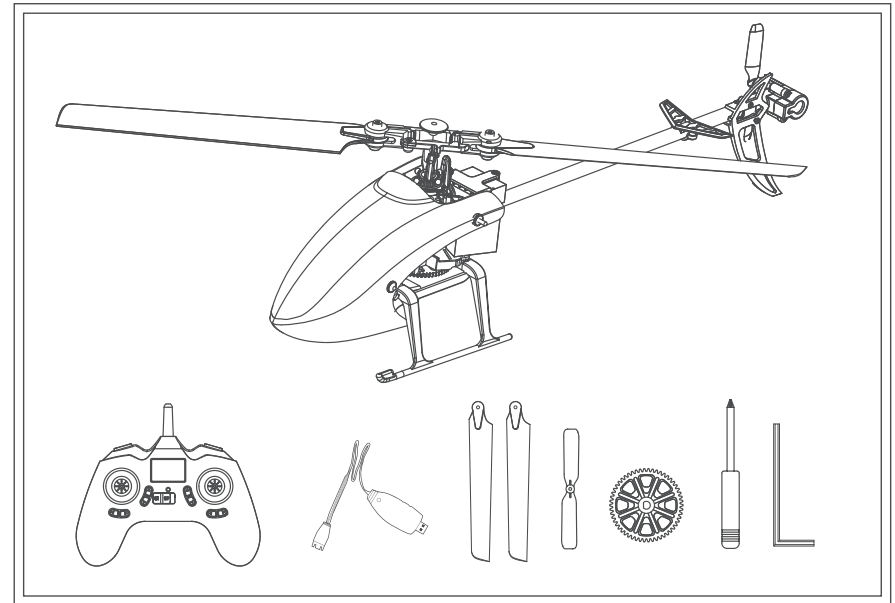


MADE IN CHINA



4CH Single-Rotor Flybarless Helicopter
6-Axis Electronic Gyroscope To Keep Fly Stably
Adopting 2.4Ghz communication protocol

ENGLISH



ITEM LIST

NO.	PARTS	QUANTITY
1	PVC packaging	1
2	User Manual	1
3	Helicopter	1
4	Transmitter	1
5	Charger	1
6	Battery 7.4v 700mah 20C	1
7	Cross Screwdriver/Hex Wrench	1
8	Main Propeller/ Tail Propeller	1Set

NOTICE

All instructions, warranties and other collateral documents are subject to change at the sole discretion of our company. For up-to-date product literature, please visit www.jjrc.com

WARNING

Read the ENTIRE user manual to become familiar with the features of the product before operating. Failure to operate the product correctly can result in damage to the product, personal property and cause serious injury. This is a sophisticated hobby product. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this product in a safe and responsible manner could result in injury or damage to the product or other properties. This product is not intended for use by children without direct adult supervision. This manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or serious injury.

ADDITIONAL SAFETY PRECAUTIONS AND WARNINGS

1. Age Recommendation: Not for children under 14 years. This is not a toy.
2. Always operate your model in open spaces away from full-size vehicles, traffic and people.
3. Follow the operation notice, warning and any support equipment (charger, battery, etc) carefully.
4. Keep away from any chemicals; keep children away from any small parts and electrical equipment.
5. Always keep away from water, especially for this product don't have waterproof function; It will be damaged by moisture.
6. Never place any portion of the model in your mouth as it could cause serious injury or even death.
7. Never operate your model with low voltage transmitter batteries.

INTRODUCTION

This is a super classic helicopter with excellent flight performance. Flybarless design decreases resistance of rotor head. Due to aerodynamics, the blades can supply strong power and keep stability. Using new type gyro, compatible with 3D and 6G modes. You can make a variety of stunts by 3D mode; 6G mode is suitable for beginners especially.

After flying this mini helicopter, you will find other mini helicopters which you have flying are eclipsed. This is an incomparable and popularized helicopter. Beginners will find it is easy to fly, masters will find it is interesting. It is worth to be possessed.

This manual with detailed instruction will help you learn more about the product. Please read it before your flying.

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HELICOPTER PARAMETERS

Length	345 MM
Height	108 MM
Weight	131g
Length of Main Propeller	320MM
Landing gear width	62MM
Battery Specification	7.4v 700mah 20C
Flight Time	15-20 Min
Main Brushless Motor	050
Brushless Tail Motor	8520

WARNING AND THE GUIDE OF BATTERY USAGE

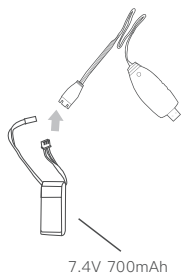


To ensure safety, please use the included standard charger

WARNING: It is recommended to use the original power supply charger when charging, otherwise property damage and injury will occur.

Notice: When it is lower than 7.4V, the lithium battery may be damaged, or it may no longer be charged. When the battery voltage is lower than 7.4V when the aircraft is flying, the power of the aircraft drops significantly. Please immediately land and charge the battery in time.

BATTERY CHARGING



1. The user should connect to the power adapter with a USB port or connect to the USB port of computer.
2. Connect the USB cable to the power adapter, at the same time the USB charger red light flashes.
3. The partial voltage charging head of the battery is connected with the USB cable. At this time, the USB charger's red light always on and charging is in progress.
4. When the USB charger red light is off, charging is completed.

Warning

1. To ensure safety, please charge under the supervision of someone.
2. Children cannot charge alone, they should charge with the assistance of an adult.
3. Please use the original standard charger of this product for charging. The charger of unknown origin may cause a fire and explosion accident.
4. It is recommended that users prepare their own 2A current adapter, which will shorten the charging time.

NOTICE BEFORE FLIGHT

1. Make sure the battery power is full both for TX and helicopter.
2. Before open the power of TX, please make sure the TH. Stick at the bottom and the switch of TH.HOLD and 3D mode in back position (back cover direction).
3. Make sure the TX has paired with helicopter, or please pair them again.
4. Please open TX first, then connect the battery with the RXboard on helicopter to pair with TX. When close, please cut the power of helicopter first, and then turn off the TX.
5. Keep away from crowd, cars, high-tension towers and pond. Then you can start your flying.

PAIR THE TRANSMITTER WITH THE RECEIVER

You buy the original model. The pairing has been reset before factory. If you need to pair again, please comply with the following steps.

1. First open the remote control, make sure the throttle joystick is in the bottom position, 3D/ IDLE switch in the OFF position.
2. Take down the canopy for touching the code switch.
3. Charge the helicopter, the red lamp flashes slowly, press the code button for 1 second, then the red lamp will go out and get ready for pairing.
4. When the red and blue lights turn solid, the pairing has been successful.
5. Ensure there are no other remote controllers of the same type at work to avoid interference.

Tips: This product is compatible with all FUTABA 2.4GHZ S-FHSS remote controller.

Notice: If the throttle of the transmitter has not been positioned at the lowest position with the throttle switch and 3D mode switch turned on, the transmitter will beep to prompt you that it fails to proceed to pair.

Notice:

1. When the remote control is turned on, the throttle hold switch is in the ON state, and the remote control beeps. The switch should be turned back to the OFF position.
2. When the remote control is turned on, the 3D switch is in the ON state, and the remote control will beep. The switch should be turned back to the OFF position.
3. When the remote control is turned on, the throttle stick is not in the lowest position, and the remote control will beep. The throttle stick should be pulled down to the lowest position.

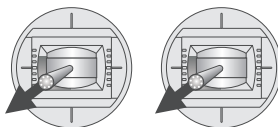
MATCHING FOR RECEIVER AND TRANSMITTER

1. Make sure the throttle joystick is in the bottom position. Turn on the remote control. The remote control will sound a long Di and the power indicator will flash.
2. Power up the aircraft receiver and the indicator light flashes, Move the throttle Joysticks to the top position and then to the bottom position, and the remote control will sound Di, At this time, the light of remote control turns to long light, and the indicator light of receiving board also returns to long light, and frequency matching is completed.
3. If the frequency alignment is unsuccessful, disconnect the aircraft power and turn off the transmitter. Repeat the above steps to reset the frequency.

AIRCRAFT HORIZONTAL CALIBRATION

1. When the aircraft appears obvious orbit deviation, the flight attitude can be corrected by horizontal calibration.
2. Hit the left and right joystick at the same time to the bottom left corner for 1-2 seconds as shown, At this time, the aircraft indicator light enters quick flashes. The aircraft enters the horizontal calibration, waiting for the aircraft indicator lights return to long light, the calibration is completed.

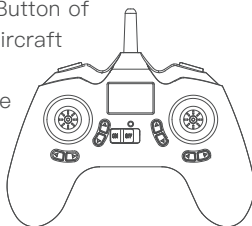
Special note: calibration needs to find a relatively flat field, as far as possible to ensure that the aircraft and the ground at the same level. After the aircraft enters the calibration procedure, it shall be ensured that the aircraft is still, and the aircraft cannot be moved until the calibration is completed.



HOVER SETTING

The aircraft you purchased has been set before leaving the factory. If the aircraft cannot enter the hover well, you can set it through the following steps.

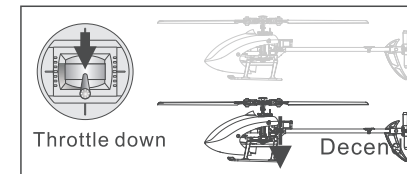
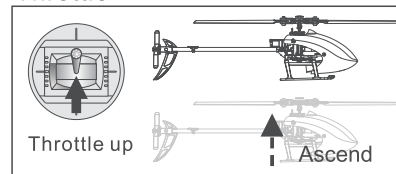
1. Power up the plane, match the frequency and take off.
2. In flight, long press the hover setting button to enter the setting. The remote control makes a dripping sound and the indicator light starts to flash.
3. According to the yaw direction of the aircraft, push the Trim Button of the corresponding channel in the opposite direction until the aircraft hovers smoothly.
4. Land the aircraft and press the hover setting button to exit the setting. At this time, the remote control will emit drops and the indicator light will return to always on.
5. Restart the plane and reset the power of the remote, matching again for fly.



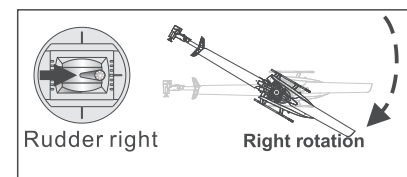
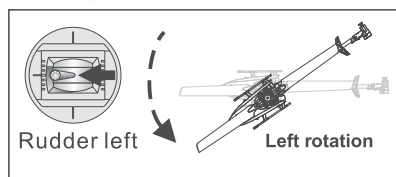
INITIAL FLIGHT

If you are not familiar with the control of the Mo3, take a few minutes to get familiar with them and then try your first flight.

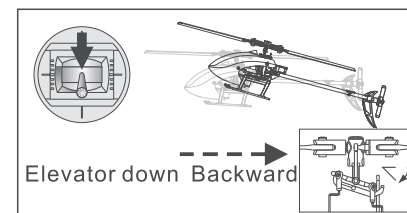
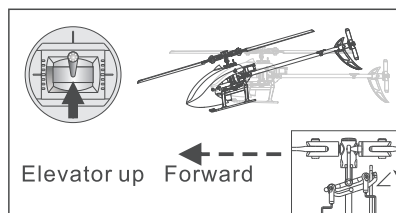
Throttle



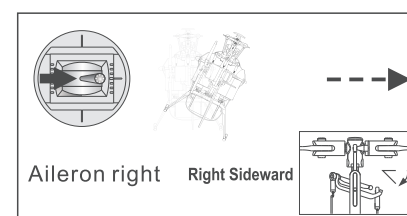
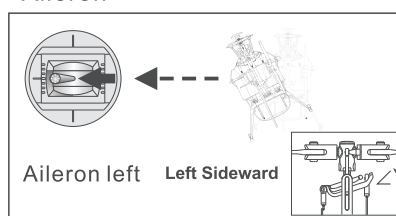
Rudder



Elevator



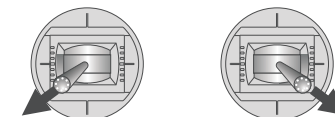
Aileron



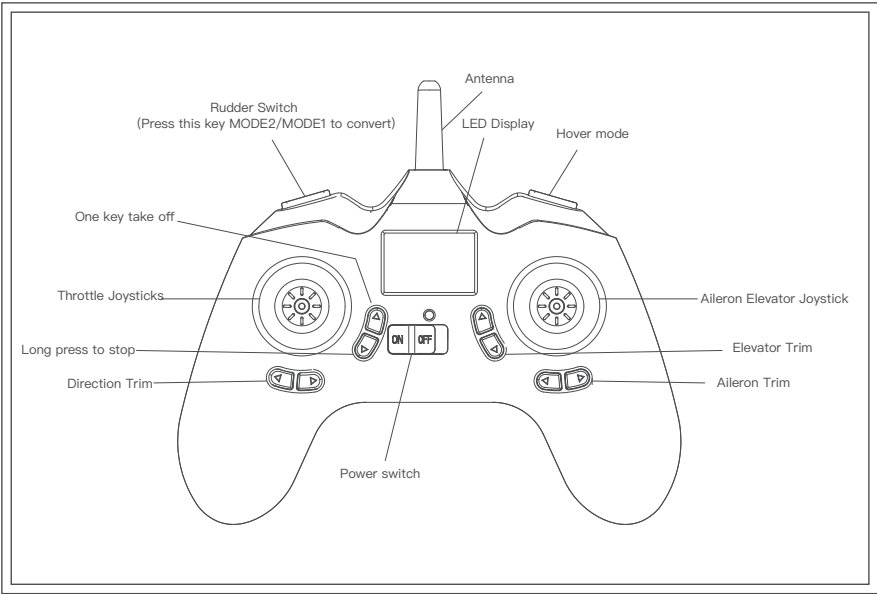
START YOUR FIRST FLIGHT

1. The binding of success of the flight level is placed on the ground, to ensure that the aircraft tail to you, head in front.
2. As the picture shows, Snail the jog sticker corner to start/stop motors.

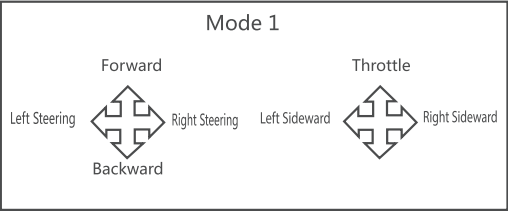
Note: After the aircraft landed on the ground, keep the throttle rocker in the lowest position for 2-3 seconds, then release the rocker after the airplane motor stops completely.



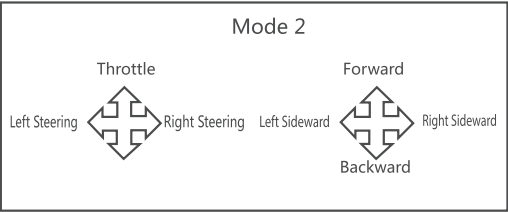
ABOUT REMOTE CONTROLLER



RIGHT HAND THROTTLE

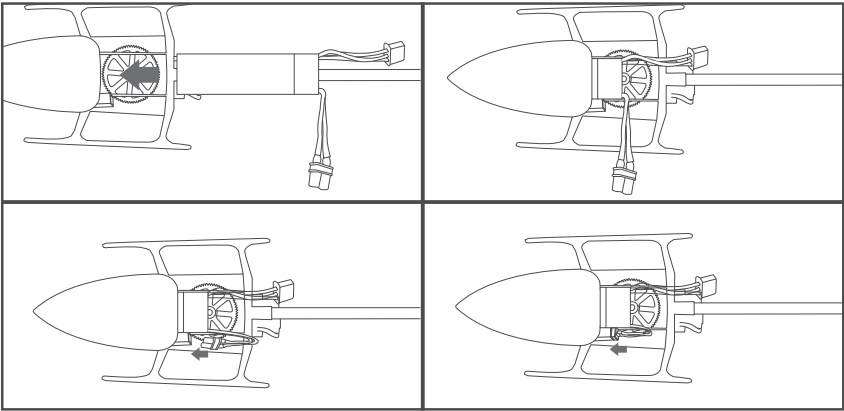


LEFT HAND THROTTLE



FLIGHT BATTERY INSTALLMENT

1. Put the throttle joystick to the bottom position.
2. Turn on the transmitter.
3. Install the battery into the rack and connect it properly with the receiving power.
4. Once the battery is connected, the signal starts to blink. Keep it still and wait until the signal light stops blinking, which means the receiver has completed self-inspection and gets ready for flight.

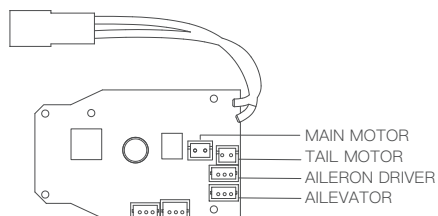


TROUBLESHOOTING

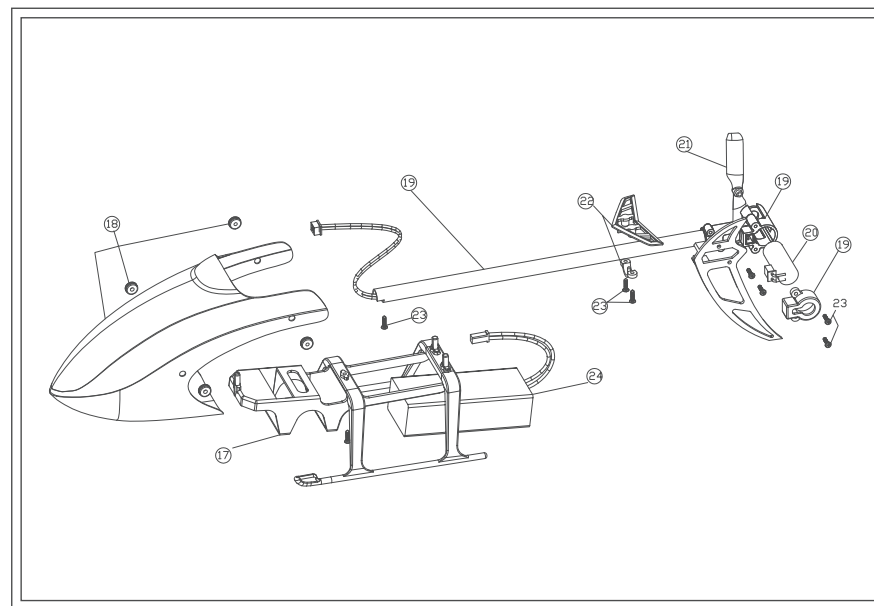
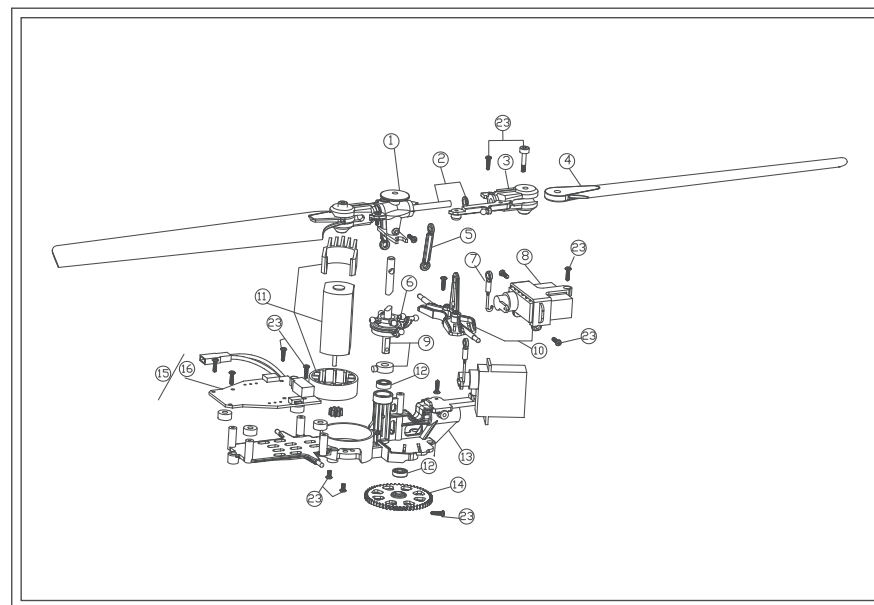
	Problem	Cause	Solution
1	LED on receiver flashes constantly with no responses after connecting batteries to transmitter.	Transmitter is not bound to receiver. Pairing of the transmitter and receiver failed.	Re-pair (Refer to P.5, Programming your Transmitter)
2	The helicopter has no response after connecting batteries to receiver.	Check whether the transmitter and receiver connecting to power; check the voltage of transmitter and receiver; Battery pole flake contact is not good.	Open the transmitter, make sure the batteries connecting is good Replace and charge transmitter batteries Make sure the battery pole flake contact is good.
3	When push the throttle pole, the rotor do not rotate and the LED on Receiver flashes constantly.	Low battery voltage; batteries connection is not good.	Replace and charge the batteries, reconnect the batteries to the receiver board.
4	Helicopter takes off immediately, once the batteries and receiver connected.	Didn't put the throttle to the lowest	Put the throttle pole at the lowest position before open the transmitter.
5	Turn on the helicopter after binding successfully, the propeller rotate constantly but the helicopter can not take off.	Low charge in aircraft batteries or main gear loose.	Replace and charge the batteries ; press the spindle with gear tightly.

	Problem	Cause	Solution
6	Helicopter vibrates or shakes in flight.	Damaged rotor blades and lateral axis blade grips too tight causing the movement of the main rotor isn't smooth.	Change the main rotor blades, and lateral axis. Loosen the blade grips properly.
7	Main rotor blades are shaking in flying.	Lateral axis is bent Lateral axis screw is not tight .There are some debris in the servo, causing shakes . The loose between the swashplates. Deformed or damaged tail rotor blades.	Replace the lateral axis. Tighten the lateral axis screw.Change the Bearing. Remove the servo,and clear debris. Compress the swash plates. change the tail rotor blades.
8	The sound of the main rotor becomes smaller.	Low battery voltage of helicopter.	Charge the battery or change a fully charged battery.
9	Helicopter has no reaction or can not fly smoothly.	Failure of binding	Rebind the helicopter and transmitter, make sure you place the helicopter static level next to the transmitter.
10	3D/6G model helicopter appeared yaw	Swashplate servos not back in to mid-position or damage	Length adjustment rod, so thatthe vertical spindle swashplate Replace the servo
11	Helicopter yaw occurs in 6G mode,	Helicopters hover need to reconfigure	Reference helicopter 6G mode setting
12	Helicopter took off spin to the left.	Tail motor power shortage loose blades Tail motor damage	Check with the tail rotor blades and the motor shaft, If loose replacement tail rotor blade. Motor damage Replace the tail motor.
13	Helicopter power is turned supreme speed governor electric sound	Brushless speed governor fault or poor contact	Check the connectors replace speed governor

RECEIVER INTERFACE DIAGRAM



EXPLODED VIEW



ACCESSORY LIST

NO.	PARA NAME	QUANTITY
1	Rotor Head Set	1
2	Horizontal Axis Group	2
3	Rotor Clip Set	1
4	Paddle Group	2
5	Link Group	1
6	Swash Plate Group	1
7	Lower Link Group	2
8	Rudder Unit	1
9	Spindle Group	2
10	Servo Pressure Plate Group	1
11	Main Motor Unit	1
12	Bearing Set	1
13	Main Rack Group	1
14	Big Gear Set	2
15	Flight Control Motherboard	1
16	Governor Group	2
17	Landing Gear Group	1
18	Chassis Group	1
19	Tailstock Group	1
20	Tail Motor Unit	2
21	Chassis Group	1
22	Rear Wing	1
23	Screw Set	1
24	Battery	1
25	USB Charger Set	1
26	Remote Control Unit	1