roinch

4-Channel Single-Propeller Manual

Preface

Please read carefully about this Manual, and please preserve the Original Manual properly for your reference.

(2.4G) Helicopter adopts Highly-Simulated Form Design, using the brand-new 2.4G Frequency Hopping Technique, which has the following advantages, Dynamic, Stable to Flight, Quick-Response and High Noise Rejecting Ability.

Cautions

Declaration

- (1) This Product Applies only to experienced people over 14 years of age.
- (2) The airfield for Remote-Controlled Aircraft must be legal locally.
- (3) We do not take any safety responsibility caused by operation, usage and manipulation once the goods are sold.

Safety Cautions

Remote-Controlled Aircraft is a high-risk commodity. Please keep it away from crowd while working. It could cause unpredictable accidents such as aircraft damage and personal injury by improper-installed, airframe breakdown, electronic control unit dysfunctional and unfamiliar operation. Please drive safe and be aware of the consequences by your own carelessness.

- (1) Please keep away from obstacle and people.
- (2) Do not leave this product under a humid environment.
- (3) Make sure every part of your body is not close to the rotating propeller to avoid accidents

Cautions before flight

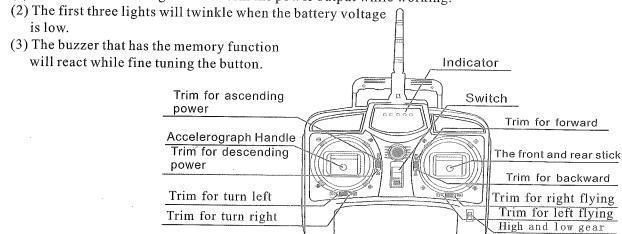
- (1) Please make sure the battery voltage of the transmitter and the receiver is full.
- (2) Please make sure the accelerograph handle is in the lowest position before you turn on the switch.
- (3) Please abide by the sequence of the power switch. Turn on the transmitter power switch first, and then switch on the power of the aircraft while starting it up; Turn off the power of the aircraft first and then the power of the transmitter while shutting it down. Improper sequence could cause the aircraft out of control and affect you and other people's safety. Please form a habit of proper-use of the power switch.
- (4) Make sure the direction is correct and smooth while the steering engine is executing the controlling command. Using the dysfunctional steering engine would causes unpredictable dangers.

Instruction manual and cautions of the Transmitter Main features of the Transmitter

It Adopts the 4-Channel Microcomputer System. It has the 2.4G Frequency Hopping Technique. And the Transmitting/Receiving System has the only ID, which can control multi-planes and has the following advantages, Dynamic, Stable to Flight, Quick-Response and High Noise Rejecting Ability.

Name and effect of the Function Keys

(1) The LED indicator light will inform the power output while working.



Introductions of Code Check (Simulating Aircraft and Transmitter)

We have already checked the code before its ex-works date. You can recheck it if necessary.

And the method is as follows

- (1) Pull down the two handles of the transmitter to the bottom right corner. Then turn on the power switch of the transmitter. And the indicator light of the transmitter will twinkle like running water.
- (2) Then turn on the power switch of the aircraft, the LED lights will twinkle.
- (3) The Code Check process is successful when the LED lights change from twinkling to steady and the steering engine is automatically reset with a mechanical sound of pulling up the swashplate.
- (4) Switch off the transmitter power and then turn it on. Then you are ready for a trial.

Code Checking Cautions

- (1) Please do not check the code at the same time.
- (2) Using the automatic frequency scanning method, so while checking the code, it might have some failing situation. But please do not worry, it is only because the ID matching fails during the process of automatic frequency scanning. So under such a situation, you need to switch off the aircraft power, the transmitter in order and then turn on the transmitter power and the aircraft power in order after 10 seconds. Then it will be in the code-checking condition again.
- (3) You can operate your simulating aircraft at the same time, same spot after the code-checking.

Charging Cautions

- (1) Make sure the batteries must be taken off from the aircraft while charging. And make sure there will be people watching over in case of any accident.
- (2) Please do not charge the batteries when they are right before flight and still not cool on the surface. Otherwise it would cause expansion and even fire accident.
- (3) Please make sure the power polarity is correct before you connect the batteries and the charger.
- (4) Please follow the manual to use the equipment and the batteries from original factory to ensure your safety using.
- (5) If the fully charged batteries do not remove from the charger, then the batteries will automatically discharge and thus cut down the voltage. The charger will recharge the batteries until it is full again when it finds out the battery voltage is lower than the rated voltage. However, it will cut down the battery lifespan after a long-term repeatedly charge and discharge.

Battery Maintenance

- (1) Please take good care of the battery before a long-term storage, which is charging till the battery is 50-60% full.
- (2) If the stagnation period is over one month, please check the voltage of the single battery cell and make sure the voltage is not lower than 3V.

Taking-off operation

Cautions

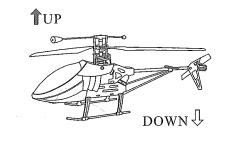
- (1) Please stick to the principle of "Starting up the transmitter first and then the aircraft power" while turning it on. Please wait 10 seconds after you turn on the transmitter switch, and then you can switch on the aircraft power. Then the red light from the receiver will twinkle. And if it turns to a steady light and you can hear mechanical sound of the steering engine reset. That means the receiver has already received the signal from the transmitter and the code check is completed. You are good to go.
- (2) The first three lights will twinkle when the battery voltage from the transmitter is low. Thus you need to replace the batteries to avoid affecting flight.

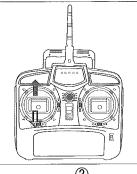
Swashplate Adjustment

If the swashplate is not in a horizontal position, you can adjust it as follows,

- (1) Steering engine adjustment. Screw off the swing-arm screw from the steering engine, taking off the swing-arm, and then reconnect the aircraft power.
- (2) connecting-rod adjustment. Please adjust the connecting-rod from the steering engine till it is the same level as the swashplate.

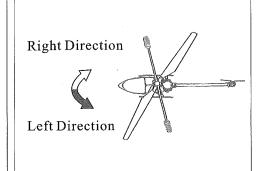
Operating Demonstration of flying exercises and flying actions

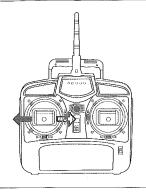




Throttle Fine-tuning

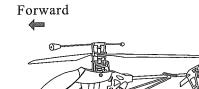
If your rotor blade rotates without any throttle power, then you need to adjust your throttle fine-tuning system, and vice versa. And if it rotates, you may pull down the throttle fine-tuning stick till it stops. If it does not rotate even if you add up the throttle, then you may pull up the stick till it starts to rotate

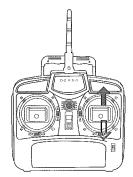




Rotating Direction Fine-Tuning

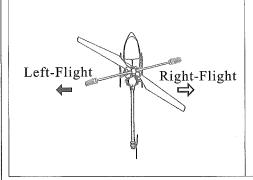
If your prow begins to rotate when you are not operating the direction handle while rotating, then you may need to adjust the rotating direction fine-tuning system. If the prow turns left, then you may pull the stick to the right till it stops, and vice versa.



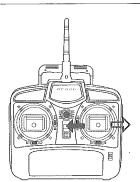


Forward/Backward Fine Tuning

If your helicopter begins to move back and forward when you are not operating the stick while rotating, then you may need to adjust the back/forward fine tuning system. If it moves forward, pull down the fine tuning stick till it stops, and vice versa.



ラ Backward



Side-Direction Fine-Tuning

If your helicopter begins to move left and right when you are not operating while rotating, then you may need to adjust your side-direction fine-tuning system. If it moves left, then you may turn the stick to the right till it stops moving left, and vice versa.

Attachments



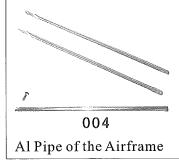
001 Prow

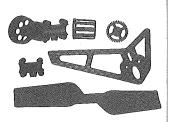


002 Wind Wheel



003
Balancing Stick





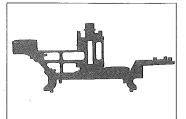
005 Last Blade Parts



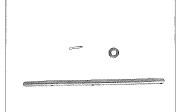
Hardware of the airframe



Main shaft



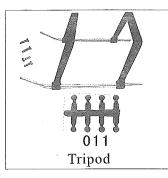
008 Main engine sea



009 Middle Stick



010 Wing weighing parts



012 Bearing



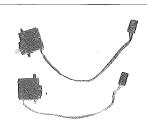
013 **Bottom Electric Machinery**



014 Main Electric Machinery



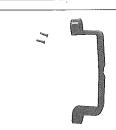
015 Wind Wheel Components



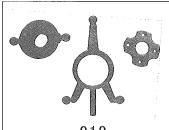
016 Steering Engine



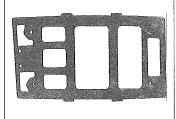
017 Servo Pull Rod



018 Steering Engine Fixing



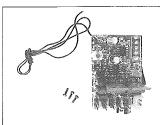
Universal Steering Wheel



020 Chassis



021 Upper aluminum fixed piece



022 Receiver Plate



024

Battery



025 Charger



026 Screw Driver



027 Transmitter

