- **If at any time during the charge or discharge process the battery begins to balloon or swell, discontinue charging or discharging immediately. Quickly and safely disconnect the battery, then place it in a safe, open area away from flammable materials to observe it for 30-45 minutes. Continuing to charge or discharge a battery that has begun to balloon or swell can result in a fire. A battery that has ballooned or swollen even a small amount must be removed from service completely.**
- Store the battery at room temperature in a dry area for best results.
- When transporting or temporarily storing the battery, the temperature range should be from 0-7° degrees Fahrenheit. Do not store the battery or model in a car or direct sunlight whenever possible. If stored in a hot car, the battery can be damaged or even catch fire.
- **Do not over-discharge the Li-PO flight battery. Discharging the battery too low can cause damage to the battery resulting in reduced power, duration or failure of the battery entirely.**

Li-PO cells should not be discharged to below 3V each under load. In the case of the 1S Li-PO battery used for the FREE SPIRIT MICRO/SOLO, you will not want to allow the battery to fall to below 3V during flight.

The FREE SPIRIT MICRO/SOLO's 5-in-1 control unit features a soft low voltage cutoff (LVC) that occurs when the battery reaches 3V under load. When the soft cutoff occurs, the ESCs of the 5-in-1 unit will reduce power to the motors (regardless of the power level you have set with the throttle stick) in order to prevent the voltage of the battery from dropping below 3V. This reduction in power usually requires that you land the model immediately, at which point you should power down the model and unplug the flight battery.

And while it is possible to power the model up and to fly again after the soft LVC occurs, this is NOT recommended as continued discharging to the soft LVC will cause permanent damage to the LiPo battery that results in lost power and duration when using the battery for subsequent fights, or failure of the battery entirely. Continued attempts to further discharge the battery may also result in loss of control while the motors are running as the voltage of the battery may drop

below the minimum operating voltage of the receiver and other electronics.

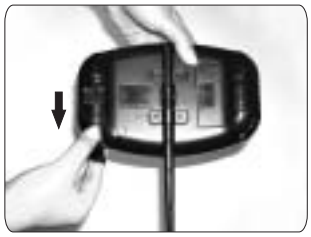
Also, it is not recommended that you fly to the soft LVC every time you fly. Instead, you should be aware of the power level of the battery/helicopter throughout the flight, and if at any time the helicopter begins to require more throttle than typical to maintain hover or flight, you should land the helicopter immediately. Routinely discharging the battery to the soft LVC can still cause permanent damage to the battery.

Note: When the battery power/voltage is getting low you will typically find that significant rudder trim and/or rudder stick adjustments are needed to prevent the helicopter from spinning. This usually occurs before soft LVC, and indicates a good time to stop flying.

If you have any further questions or concerns regarding the handling, charging and/or use of the included Li-Po battery pack, please contact TEL: 0086-21-52919366, EMAIL: SALES@NINEEAGLE.COM

Battery Charging

A. Ensure the transmitter contain batteries with enough power



B. Take off the battery cover of the transmitter.

C. Slide the Li-PO battery into the slot on the transmitter until you make the connection successfully. the indicative led light on the charger will solid red.

D. when the battery is fully charged the Led light will go out entirely

E. You must take out the Li-PO when it finishes the charge process.

Installing the Transmitter Battery

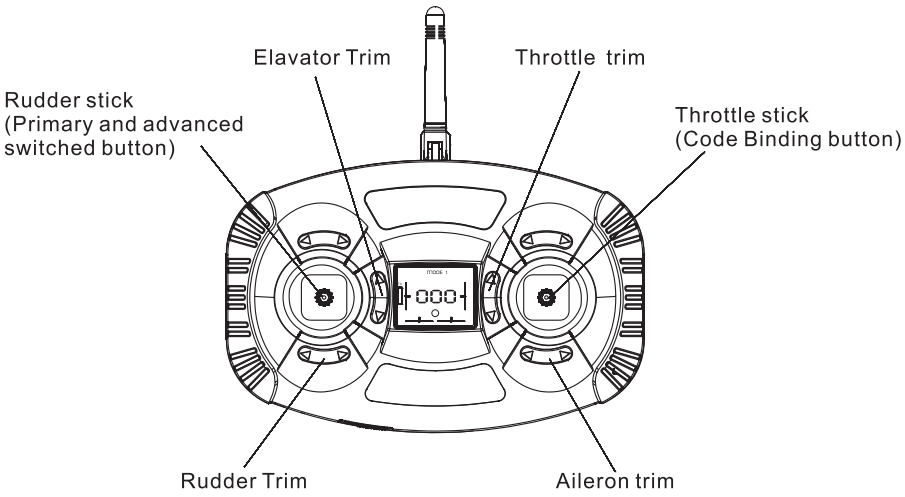
1. Take off the transmitter cover
2. Install four(4) AA batteries in the transmitter
3. Turn on the power , check if there is any content showed on LCD

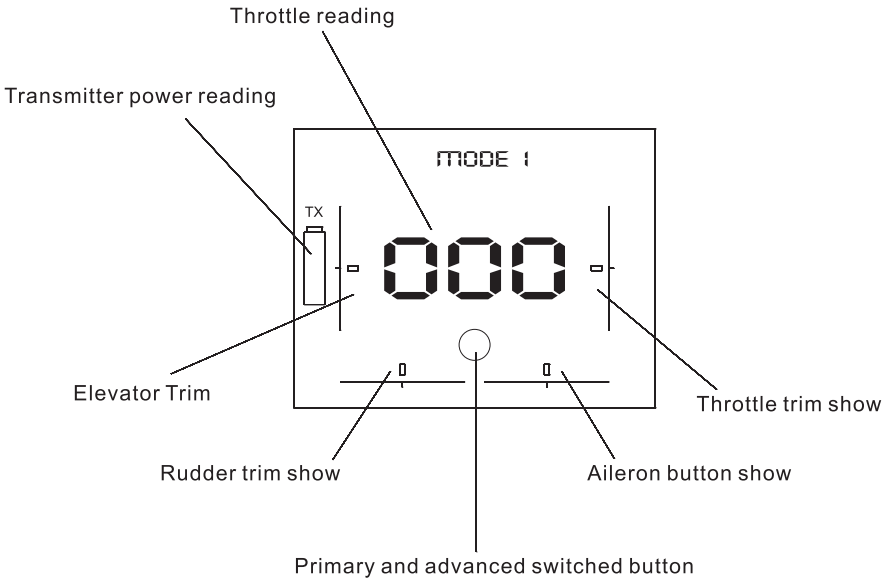
Installing Li-PO Battery to the Helicopter

Slide the Li-PO battery into the battery slot on frame of helicopter (usually with the label on the battery facing outward) .however, be sure to check for proper alignment and polarity before proceeding to the next step.

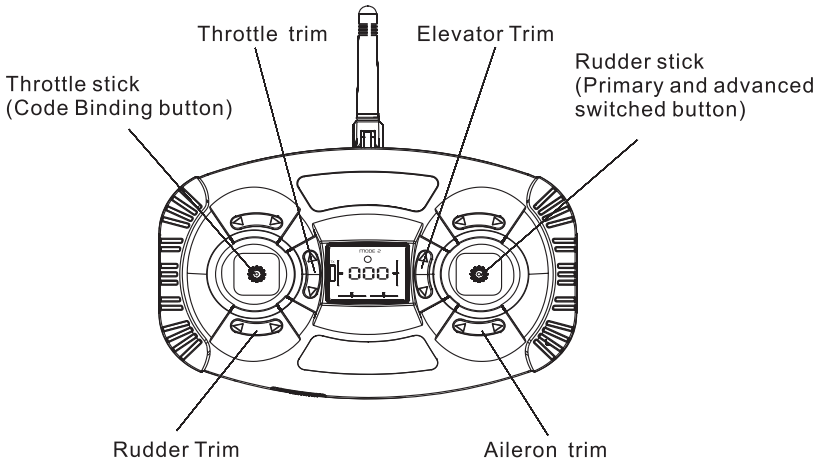
Transmitter Control Identification

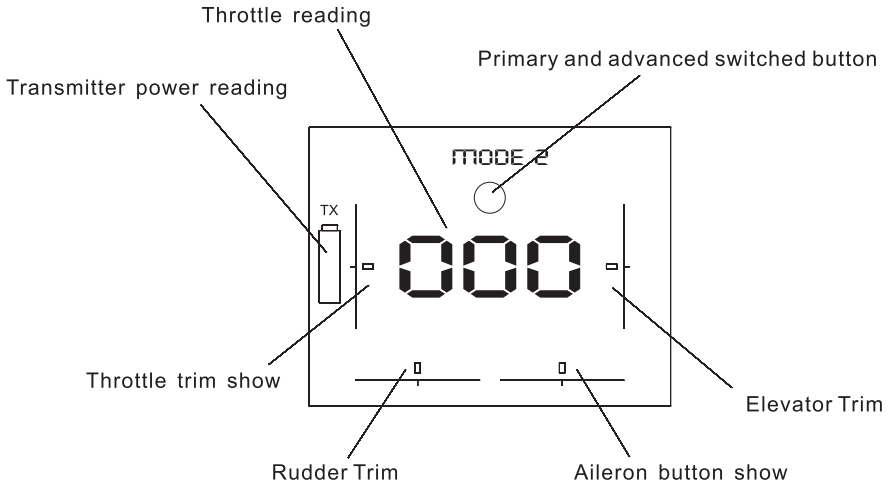
When the transmitter is MODE1：





When the transmitter is MODE2:

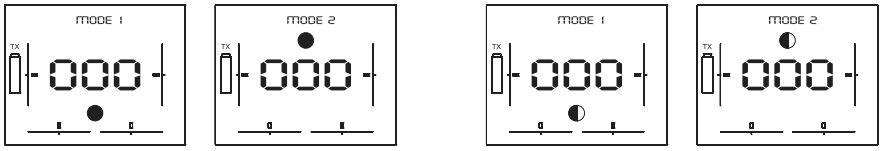




Set up the Primary and Advanced Control Switch

We have set up the primary and advanced control model to meet the different fans requirement.

1. Turn on the transmitter, check the present model of transmitter. if the mode is advanced the illustration as left, if the mode is primary the illustration as right.



Advanced mode Primary mode

2. Press the button to switch the mode of the primary and advanced.

Note: This throttle curve in the low rate mode is also different than it is in the high rate mode. This makes it much smoother and easier to control the throttle when in the low rate mode.

The advanced mode is suitable for the experienced pilot .We suggest you choose the primary mode when you first flight the helicopter.

Transmitter Mode Switch Function

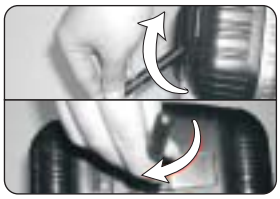
In order to meet the different customer requirement, we use the transmitter with the mode switch function . It can switch between the left and right hand mode.

Please go ahead the following process to switch the mode from Mode2 to Mode1 :

1. Turn off the transmitter.

2. Take off the fixed nut and clip on the antenna.

3. Reverse the antenna 90 degree , circumrotate the antenna shaft 180 degree, then make the antenna to cling another side of transmitter .



4. Reinstall the nut and the fix clip on the antenna.

5. Turn on the transmitter then be the mode1 operation.

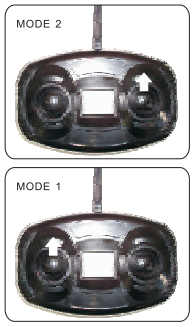
Control Test

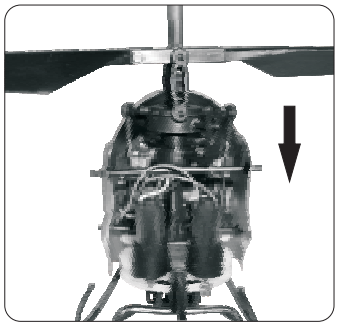
Although the FREE SPIRIT MICRO and SOLO are test flown at the factory, we still suggest you inspect the productive quality when you open the box to ensure none of the any parts were damaged during shipping and handling .

1. Turn on the transmitter.

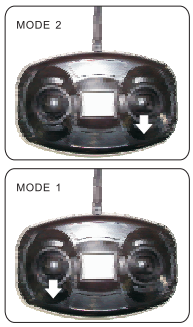
2. Slide the Li-PO into the slot of helicopter (usually the copper spring facing inward), to prevent reverse polarity connection. However, please be sure to check for proper alignment and polarity before proceeding to the next step.

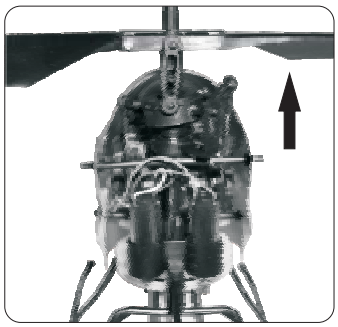
3. Move the elevator stick on the transmitter forward and after to check elevator control. When the stick is pushed forward, the right-hand servo (when viewing the helicopter from behind) should pull the swashplate downward.



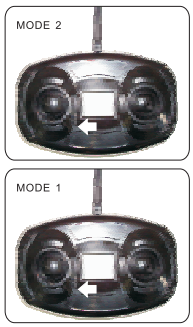


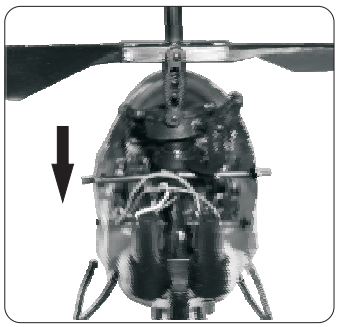
4. With the stick pulled back, the right-hand servo should push the swashplate upward.



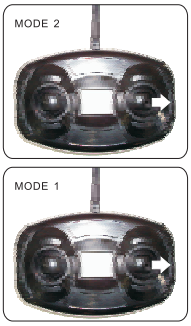


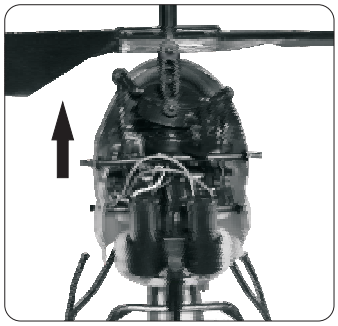
5. Move the aileron stick left and right to check aileron roll control. When the stick is pushed to the left, the left-hand servo (when viewing the helicopter from behind) should pull the swashplate downward.





6. With the aileron stick pushed right, the left-hand servo should push the swashplate upward.





5-in-1 control unit description, arming and motor control test

The unique 5-in-1 Control Unit installed on your FREE SPIRIT MICRO/SOLO is a lightweight combination of main motor electronic speed controls, mixer, gyro, servos and GFSK compatible receiver. The 5-in-1 unit is also equipped with two status indicator LEDS.

The following checklist contains the steps you must follow to ensure proper arming and operation of the 5-in-1 unit, as well as proper motor response:

- Each time before you fly you should ALWAYS turn the transmitter on before connecting the flight battery to the 5-in-1 unit. Never connect the flight battery to the 5-in-1 unit before power in the transmitter on first. After each flight, be sure that you always disconnect the flight battery from the 5-in-1 unit before powering the transmitter off.

Note: We have set the code for you before the helicopters leave factory. It is not necessary to adjust it again in the future, unless the transmitter can not control the helicopter.

- Turn on the transmitter and slide the li-po into the helicopter, If the indicative led light flashes. Please set up the throttle to zero graduation ,then the led light become solid red,thenmove the throttle stick slightly on the transmitter forwarder and after to make the blade circumrotate.Push the throttle at any direction and the blade swing against it; push any button of trim and the scale of LCD variety against it .then the helicopter is good.

Note: If you find any abnormal situation when you check your helicopter, Please do as below:

A. Reinstall the battery of transmitter.
B. Reinstall the Li-Po battery of the helicopter, and check if the battery installed reverse.
C. Rebind for the helicopter.

If your helicopter still can not work after do as above said, please call the Nine Eagle Support Team at： 0086-21-52919366 OR EMAIL: SALES@NINEEAGLE.COM

- Once you have placed the helicopter in a safe area, free of obstructions, and are clear of the rotor blades, you can safely begin to power up the model to check for proper operation of the motors.

- Advance the throttle stick upward slowly, just until both rotor blades begin to spin. **DO NOT attempt the fly the helicopter at this time.** Note the direction that each of the rotor blades spins. When viewed from the top, the upper main rotor blades should spin counter clockwise and the lower main rotor blades should spin clockwise. If either set of rotor blades is operating in the wrong direction, disconnect the battery and reverse the polarity of the corresponding motor's input power leads.

- After confirming that the direction of rotation for both rotor blades is correct, it is best to confirm that both rotor blades respond properly to rudder control inputs.

With the rotor blades spinning at a low level of power, move the rudder stick all the way to the right. This should cause the speed of the upper main rotor blade to increase, and the speed of the lower main rotor blade to decrease.

Next, move the rudder stick all the way to the left. This should cause the speed of the lower main rotor blade to increase and the speed of the upper main rotor blade to decrease. If both rotor blades are not responding properly to rudder input, simply swap the locations of their motor plugs on the 5-in-1 unit.

After confirming that both rotor blades are rotating in the correct directions, and are responding properly to rudder inputs, your FREE SPIRIT MICRO/SOLO is ready for flight. However, please be sure to review the following sections of the manual BEFORE proceeding with the first flight.