


SJ20series

Flight in all directions: Up | Down|Forward|Backward
Turn left / right | Circling | Precise positioning | Hovering
Dual-speed mode | Switch lamp | DEMO function.



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3-CHANNEL INFRARED GYRO ALLOY VERSION

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I Introduction

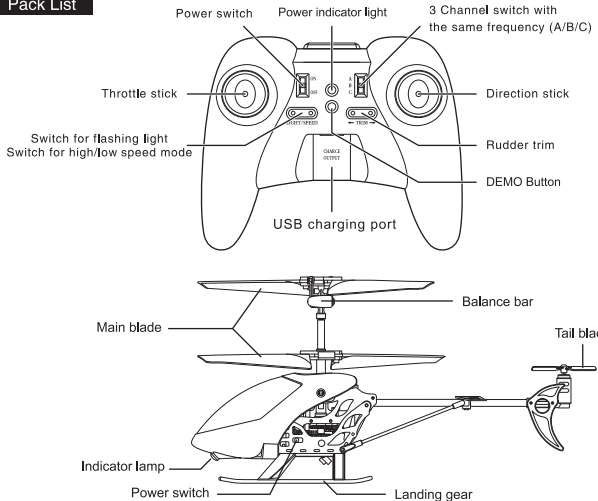
Thank you for purchasing this helicopter,please read this manual carefully before use and retain it for future reference!

With the excellent control functions and advanced balanced systems,SJ20 series adopt the latest infrared auto connection technology,three helicopters can be operated simultaneously,so that it can bring you into a wonderful and exciting world .Further more,as the built-in gyro insure more stable performance and make the operation more easier. It is the best choice for the beginner.

II Safety Guidelines

- 1.Please read the instruction manual carefully before operating the product.
- 2.Ensure the helicopter be operated indoors.
- 3.Keep batteries away from fire or high temperature environment.
- 4.When operating the helicopter,keep it 1-2 meters away from the player or others to avoid injury in case of collision.
- 5.Do not decompose or modify the product which may cause malfunction and accident.
- 6.Fly the helicopter within your eye vision and safety control.
- 7.Need the adult supervision once the helicopter is being played by the children.
- 8.Should be charged by the original USB cable ,and charging time shall be about 30 minutes.
- 9.Only batteries of the same or equivalent type that recommended can be used.Do not mix the new and old batteries.
- 10.Do not touch the heating motor composesments that avoid scald.

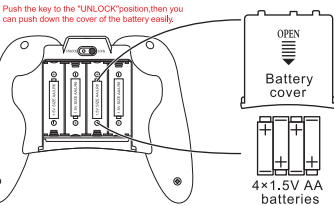
III Pack List



IV Battery Installation & Charging

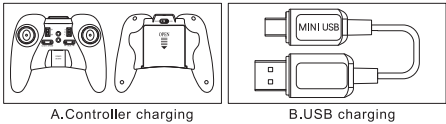
1.Install the Remote Control

Take out the battery cover from the back of remote control,and install 4 batteries (size AA) into the battery case correctly (Refer to the followed picture),then shut the battery cover.



2.Charging the helicopter

SJ20 series adopt:High efficiency electronic-saving is reaching 85%, saving 2*1.5V AA batteries;constant current design make charging time more efficient and stable to protect the batteries.



- ① Move the power switch of the helicopter to the "ON" position,
- ② **Charging way A:** Move the power switch of the controller to the "ON" position,the power light will be flashing, and insert the USB wire into the USB Charging port of the controller,then correctly connect another end of the wire to the interface of the helicopter,when the searching light of the helicopter is flashing quickly ,the helicopter is in charging.Charging time is about 30 minutes.After finishing charging,the searching light will change normal light.
- Charging way B:** Insert the USB wire into the USB interface of the computer,then connect another end of the wire to the interface of the helicopter,the searching light of the helicopter is flashing quickly .Charging time is about 30 minutes.After finishing charging,the searching light of the helicopter will change normal light.

V Preparation for flight

SJ20 Series adopt the latest infrared auto connection technology,following the steps before operating the helicopter:

- 1.Move the power switch of the helicopter to the "ON"position, putting the helicopter on the ground or any flat place when the searching light keep flashing rapidly,after 2 seconds,as the searching light turns to normal blinking light,the helicopter keeps in the holding state.
- 2.Move the channel frequency switch of the controller to the "A"or"B"or"C"position,select the one channel frequency,opening the power switch of the controller,slowly push up the throttle control stick to the top position,and then push it down to the bottom position,now the controller will keep in the holding state when the indicated light of the controller turn to the normal blinking light.

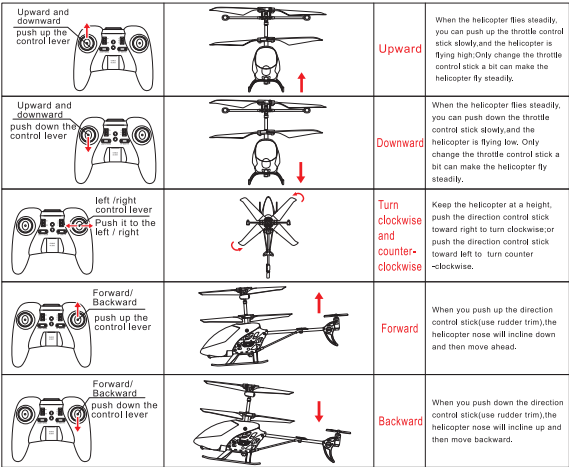
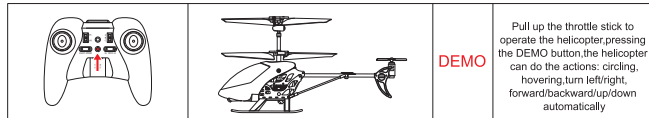
Remark:

- 3.Slowly push up the throttle stick while the helicopter takes off.

Note:

- 1.When you turn on the power switch of the helicopter,the helicopter will search for the frequency channel single automatically;the channel will not be changed at the first time unless you turn off the power switch of the helicopter.
- 2.When 2 or 3 helicopters will keep in the same frequency to fly simultanously,please move the frequency channel power switch to the "A"or"B"or"C"position,also do not pair 2 or 3 helicopters at the same time,you should select the frequency channel one by one, otherwise,you can not connect it.
- 3.The helicopter is installed the protective procedure:when you turn on the power switch of the controller, and then turn on the power switch of the helicopter,you should push down the throttle stick to the bottom position to start the helicopter.

VIHow to control the helicopter



Hovering:Push up the throttle stick to keep the helicopter in a definite height,using the rudder trim to adjust its direction;then the helicopter can rest in the air for a moment without using the controller.

VII Set the flight mode

Speed mode:high/low speed:

- 1.It is suitable for the beginner that the controller will be defaulted the low- speed mode once you open the controller.
- 2.The player can fully enjoy themselves for changing the high/low speed mode.

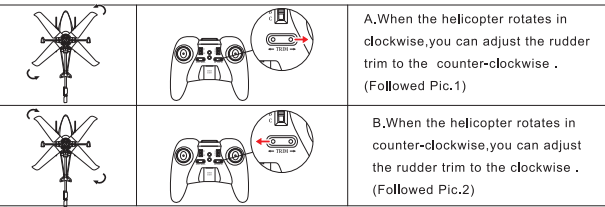
The power switch of the flashing light:

Press the switch of flashing light whether you would like to turn on the light or not.

Note:

When there is spinning happened during forward or backward,you can operate the direction rudder to rectify its flying route in the same time.

If you do not push the steering lever during the flight,however, the helicopter is still spinning in the air, you just simply trim the direction rudder on the transmitter until the helicopter is balanced and won't spin any more.



VIII System protection

- 1.If the helicopter in not operated within 5 min,it will be in state of dormany automatically and all the indicator light will be off,now only little electric current consumption make the quantity of electricity kept for a long time.When the power switch move to the "OFF"positon and then move it to the "ON" position,the system of the helicopter will be restarted .
- 2.Fan jamming protection:When the helicopter is stricken by sth and then fell down,the fan doesn't work and the motor doesn't drive automatically,now the searching light keeps flashing quickly,the throttle stick should be move to the lowest position and then the helicopter can be restarted.
- 3.Low electricity protection:When the battery voltage is lower than 2.8V,the indicator light will be off,and the helicopter will be in state of dormany ,little electric current consumption make the battery can be kept for a long time,and then you can charge the helicopter.
- 4.Move the power switch to the "OFF"position,the quantity of battery can be kept for a long time.

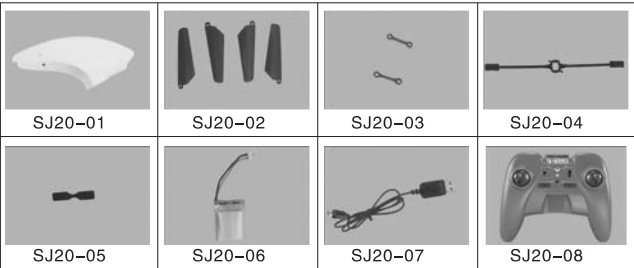
IX Maintainance and repair

- 1.Avoid the product to be exposed in the sunlight or the heated place.
- 2.Please turn off the power switch of the helicopter and remote control when it is not used.
- 3.Please take out the batteries from the remote control when it is not used for a long time.
- 4.Please check the plug and other accessories in a fixed time .If any damage is discovered, please do not use it until it is completely repaired.

X Trouble shooting and deal with

Problem	Cause	Solution
No reaction from the helicopter	1.The helicopter is underpowered. 2.The remote control is underpowered. 3.The channel of the controller does not comply with the channel of the helicopter.	1.Charging the helicopter. 2.Replace new batteries to the controller. 3.Turn the channel switch to get the correct channel.
Reaction from the helicopter is not sensitive	1.Influenced by the sunlight or strong light. 2.Another RC nearby is sending out infrared signal of the same frequency. 3.Another helicopter with the same channel is being played nearby.	1.Choose a better place to avoid the sunlight or strong light to the helicopter. 2.Change another place without infrared. 3.Move the channel switch of the RC to another channel.

XI Spare parts list



User Manual Note:

changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.