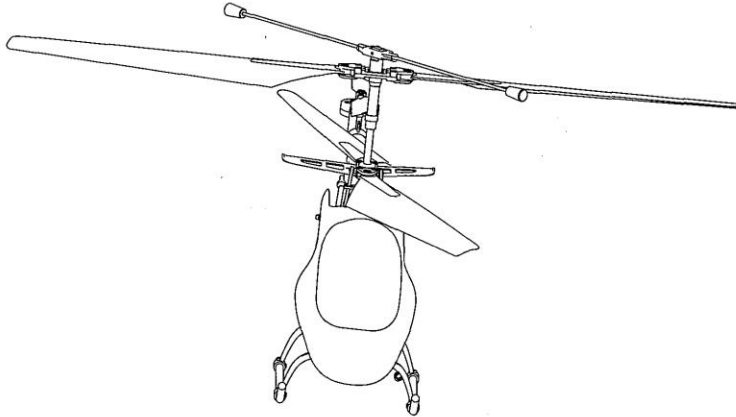




SHUANG MA™



**WIRELESS RC HELICOPTER
INSTRUCTION MANUAL**

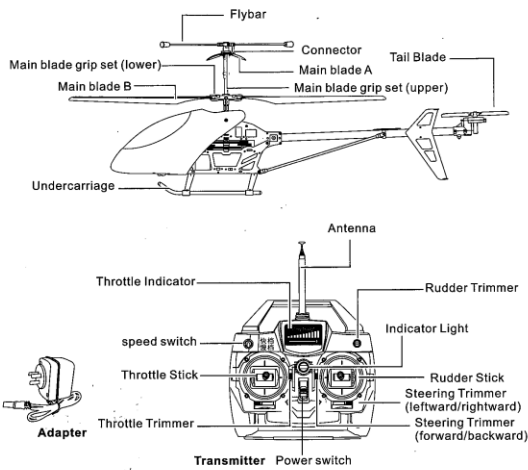
9053

Attention:

Gyroscope technology is applied to this product.
Please read the following instructions before use.

1. Push the transmitter switch to "ON" position and pull down the throttle stick to the end.
2. Connect the power on the fuselage and push the fuselage switch to "ON" position, then, lay the fuselage on a flat level. It takes 5 seconds to finish the gyroscope check before fly.

ALL PARTS INCLUDED:



TO ASSEMBLE THE TRANSMITTER:

1. Install the antenna: screw the antenna clockwise into the top of the transmitter.
2. Install the batteries: open the battery case cover, and insert 6 batteries (1.5V AA) properly according to pole indications. (batteries to be purchased)



Fig.1

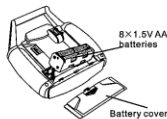


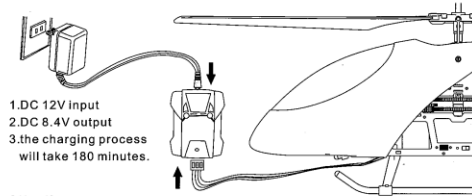
Fig.2

Attention:
 1. Match the batteries with pole indications before installation.
 2. Do not mix new batteries with used ones.
 3. Do not mix different types of batteries.

TO CHARGE THE FUSELAGE BATTERY:

Charge the power battery

1. Push the helicopter switch to OFF.
2. Insert the DC 12V output plug of the adapter into the input socket of the charging case, the light on the case turns red and this indicates that power switches on.
3. Insert the three-pin plug of the power battery into the output socket, the flickering of the green light shows that the charging begins. Charging is finished when



1. DC 12V input
2. DC 8.4V output
3. the charging process will take 180 minutes.

Attention:

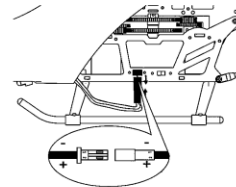
1. Make sure the adapter fits the local electricity supply.
2. The battery is overcharged if it overheats. Please stop charging immediately for it could cause damage to the battery.
3. Do not leave the battery aside when charging.
4. The advanced balance charging mode is applied to the product. Do not use other chargers on the battery in consideration of safety.
5. Recharge the battery 30 minutes after flying, because the battery temperature could be too high and charging could damage the battery.
6. Do not leave the battery in the fire in consideration of safety.
7. Do not short circuit the battery. Do not leave the battery together with tiny metal parts in consideration of safety.

TO INSTALL THE FUSELAGE BATTERY:

Connect the battery wire with the circuit board socket carefully.

WARNING ⚠

1. If the helicopter is not in use, please push the fuselage switch to "OFF" position.
2. If the helicopter is not in use for a long time, please disconnect the battery wire from the circuit board.



ENVIRONMENT TO FLY:

1. Fly with good weather condition:

● Do not fly with extreme temperatures.

Do not fly above 113°F/45°C, or below 50°F/10°C.

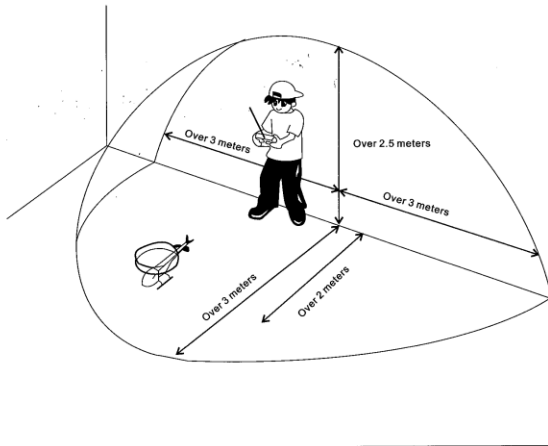
Flying with extreme temperatures may affect the performance and damage the product.

● Do not fly in windy days.

The performance and the control of the helicopter will be affected by winds.

Windy conditions may cause the missing and damage of the helicopter.

2. Select a wide-open space for flying and make sure no obstructions, animals or people nearby.



HOW TO CONTROL

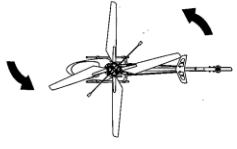

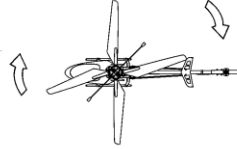

Ascending	<p>Push up the throttle stick (left stick), and the spinning speed of the main blades will increase. The helicopter begins to ascend.</p>	
Descending	<p>Pull down the throttle stick (left stick), and the spinning speed of the main blades will decrease. The helicopter begins to descend.</p>	
Steering	<p>1. Push the rudder stick (right stick) to the left, and the helicopter will turn to left. 2. Push the rudder stick (right stick) to the right, and the helicopter will turn to right.</p>	
Forward	<p>Push up the rudder stick (right stick), and the helicopter will move forward.</p>	
Backward	<p>Pull down the rudder stick (right stick), and the helicopter will move backward.</p>	

NOTICE

If the helicopter is rotating in the air uncontrollably, adjust with the rudder trimmer until the helicopter is stable.

Attention:

When the helicopter ascends to 30cm high, it will suffer the "ground effect" and its performance will become unstable.

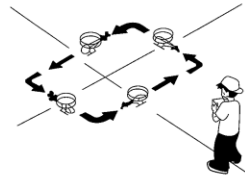
 <p>When the helicopter is rotating to the left, screw the rudder trimmer slowly to the right until the helicopter is stable.</p>	
 <p>When the helicopter is rotating to the right, screw the rudder trimmer slowly to the left until the helicopter is stable.</p>	

FLYING PRACTICE

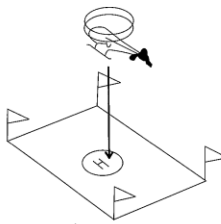
To master the helicopter, please attempt the following flying practices.



Fixed-point revolving



Rectangle flying & Circular flying



Fixed-point landing

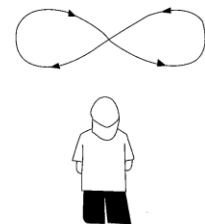


Figure eight flying

PROBLEMS AND SOLUTIONS

PROBLEMS	CAUSES	SOLUTIONS
Transmitter not working	1.The transmitter switch is on "OFF"	1.Turn on the transmitter
	2.Install the batteries improperly	2.Check with the pole indications and reinstall the batteries again
	3.Batteries are completely consumed	3.Replace with new batteries
Control failure	1.The transmitter switch is on "OFF"	1.Turn on the transmitter
	2.The fuselage switch is on "OFF"	2.Turn on the fuselage
	3.The antenna is installed improperly or is pulled out incompletely	3.Reinstall the antenna and pull it out completely
	4.Fly with strong winds	4.Do not fly the helicopter in windy conditions
	5.The transmitter indicator is flashing	5.Pull down the throttle stick to the end and replace the batteries
Ascending failure	1.The rotation of main blades is too slow	1.Push up the throttle stick
	2.The fuselage battery is well consumed	2.Recharge the fuselage battery
Landing too soon	The throttle stick is pulled down too fast	Pull down the throttle stick slowly to perform a smooth landing

PRECAUTIONS:

- 1.Insufficient electricity power will shorter the control distance.
- 2.Insufficient electricity power will lead to difficulties in taking off and ascending.
- 3.Fix the helicopter in time if there is any damage. Flying a damaged helicopter could cause injuries.
- 4.Remove the transmitter batteries if not in use for a long time in case of battery leakage.
- 5.Avoiding dropping and crashing the helicopter for it will lead to damages and shorten the use life.
- 6.Before flying, always turn on the transmitter switch first, then the fuselage switch. Otherwise, the helicopter will be confused with extraneous signal and be out of control.
- 7.After flying, always turn off the fuselage switch first, then the transmitter switch. Otherwise, the helicopter will be confused with extraneous signal and be out of control.



HELICOPTER PARTS ILLUSTRATION

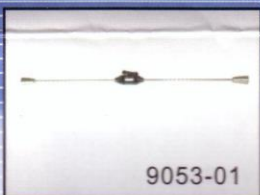
直升机配件彩图

NO.9053



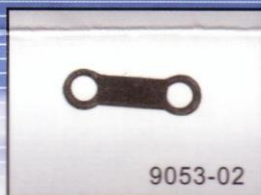
配件名称

PARTS ARE ALTERNATIVE



9053-01

平衡杆组件
Balance Bar



9053-02

连接扣
Connect Buckle



9053-03

上风叶夹
Main Blade Grip Set



9053-04

主旋翼 (A、B)
Main Rotor blade A



9053-05

轴承固定套
Bearing set collar



9053-06

轴承7×3×3
Bearing(7×3×3)



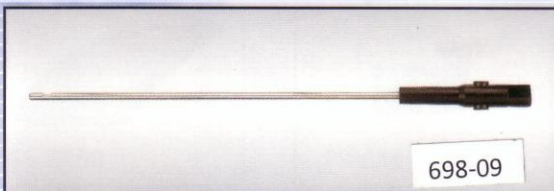
9053-07

轴承8×5×2.5
Bearing(8×5×2.5)



9053-08

轴承5×2.5×1.5
Bearing(5×2.5×1.5)



698-09

主旋轴A组件
Inner shaft



9053-10

齿轮组件B
Gearset B



9053-11

齿轮A
Gear A



9053-12

传动齿
Gear-driven



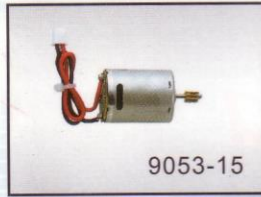
9053-13

主旋头B
Innershaft B



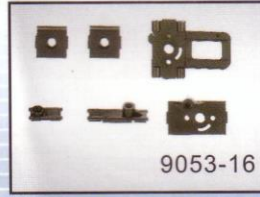
9053-14

下主架
Lower main frame



9053-15

A、B风叶主电机组件
A\B blade main motor unit



9053-16

马达固定座
fixing base of motor



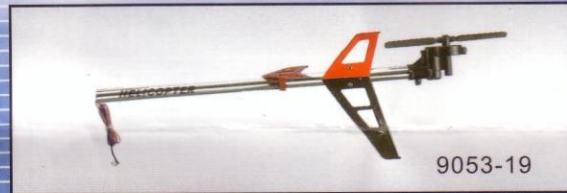
9053-17

铝片固定柱
Aluminum fixed column



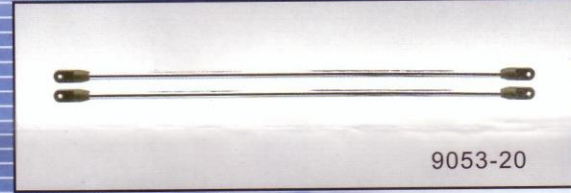
9053-18

主架装饰铝片
Main frame decorated aluminium plates



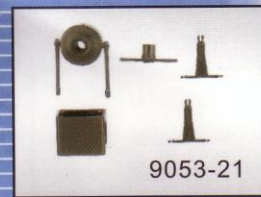
9053-19

机尾组件
Chopper Tail Unit



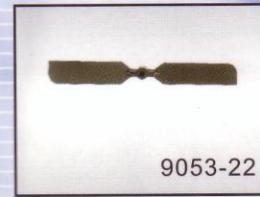
9053-20

装饰条
Decorative Bar



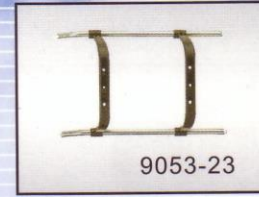
9053-21

机头、尾管固定座
Nose, tail tube fixed



9053-22

尾旋翼
Tail Blade



9053-23

起落架
Undercarriage



9053-24

电路板组件
Controller Equipment



9053-25

适配器
Charger



9053-26

充电盒
Charger BOX



9053-27

7.4伏锂离子电池
7.4V Li-ion batteries



9053-28

机头
Head Cover