

AGE 14+

RC HELICOPTER INSTRUCTION MANUAL

1. Smart R/C system
2. Full scale remote control
3. Omnidirectional flight
4. Smooth hover performance
5. Newly designed electricity saving functionality
6. Longer battery life

This manual applies to the 3 channel and 3.5 channel helicopters.

Please read instruction manual carefully before using helicopter. See NOTICES throughout the manual for important CAUTIONS. Retain instruction manual for future reference.

Included Parts Name:

Throttle Stick	Power charger light
Antenna	Left/Right rudder control lever
Rotation adjustment knob	Charger
Power switch	

Assembly Transmitter

1. Install antenna: To install the antenna, screw it clockwise into the top of the remote controller.
2. Install batteries: Using a small Phillips head screwdriver open the battery case cover. Insert 6 AA batteries (size 1.5V AA) following the proper polarity as indicated in the battery case. (Batteries not included)

NOTICE:

Do not mix old batteries and new batteries.

Do not mix different types of batteries. Use either alkaline batteries or rechargeable batteries, but not both.

Charging the Helicopter

Always turn off the helicopter power before charging. Connect the charge wire on the helicopter to the connector of the charger and plug into a wall socket. When charging, the LED is **red**; when the charge is complete the LED is **green**. Charge time is about 100 to 110 minutes. Do not overcharge.

(Fig. 3) While charging, make sure the helicopter power switch is in the “OFF” position.

NOTICE:

When you are finished playing, turn off the power switch on the chopper and the remote controller to extend battery life.

Make sure the charger that came with your helicopter fits (is compatible with) your local power supply.

Battery Safety

The helicopter is equipped with a Lithium Polymer battery. Please pay attention to the following cautions for safe usage.

1. Do not use or leave the battery near a heat source such as fire or a heater. Doing so can cause damage, fire, or explosion of the battery.
2. Do not immerse the helicopter or the battery in water. Keep the battery in a cool, dry environment.
3. Use only the charger that is made for use with this model helicopter. Use of other chargers can cause damage, fire, or explosion of the battery.
4. Do not disassemble the battery.
5. Never leave the helicopter unattended during charging.

Flight Environment

1. This remote control helicopter is designed for outdoor play. Select a large, wide-open area for flying making sure there are no obstructions, power lines, vehicles, animals or people nearby.
2. Fly on a day with little or no wind. Do not fly in strong wind conditions. Windy conditions will overcome the flight controls of your helicopter causing the possibility of loss or damage.
3. Do not fly in extreme temperature. Do not fly in temperatures above 113° F (45° C) or below 50° F (10° C). Flying the helicopter in extreme temperatures will affect performance and may damage it.

Ready to Fly

1. Set your helicopter on a clear area of ground. Turn on the power switch and the indicator lights.
2. Step about 2 meters (6 ½ feet) away making sure the helicopter's tail is aimed at you.
3. Be sure there are no obstructions, power lines, vehicles, animals or people nearby.
4. Extend the antenna to its full length and make sure the throttle (accelerator) control stick (left stick on remote) is at its minimum position (down).
5. Turn on the remote controller. Move the throttle (accelerator) control stick to full throttle (all the way up) and return to the minimum position. The indicator light  will change to continuously on. This establishes the connection between the remote and the helicopter.
6. Now you can use the remote controller and prepare for taking off.

NOTICE:

If the remote controller power indicator is flashing after establishing a connection with the helicopter, the batteries are low on power and should be replaced. This will ensure maximum range of remote to helicopter and avoid sudden loss of control.

Control Method

Ascend		Push up the left stick (throttle, accelerator), the rotational speed of the main rotor blade is increased and the helicopter will go up.
Descend		Pull down the left stick (throttle, accelerator), the rotational speed of the main rotor blade is decreased and the helicopter will go down.
Steering		Moving the right stick (Rudder control) to the left causes the nose of the helicopter to turn left. Moving the Rudder stick to the right causes the nose of the helicopter to turn right.
Forward		Push up the right stick (Rudder control) causes the helicopter's nose to go down and the helicopter to move in a forward direction.
Backward		Push down the right stick (Rudder control) causes the helicopter's nose to go up and the helicopter to move in a backward direction.

Setting the Gyroscope

Place the helicopter on a flat surface after turning it on. Do not hold it in your hand. After letting the helicopter remain still on the flat surface for 2 seconds, you can start to use the remote control and helicopter. (The internal gyroscope stabilizes the flight of the helicopter.)

Controlling Spin

If the helicopter tends to spin in one direction more than the other and you are not using the Rudder control, there is a rotation adjustment knob in the center of the remote control (just below the power switch). Adjusting this knob a little one way or the other will reduce or eliminate the chaotic spinning and restore control to the helicopter. If this doesn't seem to work, power off the helicopter, power it back on, fly it and try fine tuning with the rotation adjustment knob again.

NOTICE:

When the helicopter is less than 30 cm from the ground it will suffer an instability called ground effect. The lighter the helicopter, the more pronounced this ground effect instability will be.

Troubleshooting

Problem	Cause	Check This
Remote Controller doesn't work	Controller power switch is OFF	Turn the power switch ON
	Batteries inserted improperly	Check that the batteries are inserted according to their polarity (+, -)
	Weak batteries	Replace with new or freshly charged batteries
Cannot control the helicopter	You haven't operated the controller	Turn controller power switch "ON"
		Turn helicopter power switch "ON"
	Loses control in a short distance	Install antenna to controller and extend it to its full length.
	Loses control in the wind.	Do not play with the helicopter in significant winds (no more than 3 or 4 mph)
Helicopter cannot rise	Main rotor blades are rotating too slowly	Push up on the throttle stick (left)
	Helicopter battery is too weak	Make sure the helicopter battery is fully charged
Helicopter lands too fast	The throttle stick is pulled down too hard or fast	The throttle stick should be pulled down slowly to land the chopper smoothly
	Flying out of range of the remote control	Stay in range of the remote control (200 feet or 60 meters). This range is reduced with weak batteries in the remote.

CAUTIONS

- The control range of the helicopter will be reduced when the batteries are not fully charged or when weak batteries are used in the remote controller.
- When the helicopter batteries are not fully charged the helicopter will have trouble going up.
- If the helicopter becomes damaged, repair it before using it again otherwise it may lead to injury.
- If you don't use the remote controller for a long period of time, remove the batteries to avoid battery leakage that would damage the product.
- Don't allow the helicopter to drop from too high or crash it as this may damage the chopper seriously and shorten its usable life.
- Disconnect the battery cable when not using the helicopter.
- The motor is hot while in operation. Never touch it until it cools down.
- After starting the helicopter, do not touch any moving or turning parts (i.e., blades, rotor, gears) as this may cause injury.

Parts List

Main frame	Head cover (body)	Skids (landing gear)	Main frame	Main shaft connection
Main blade grip set	Main blade A	Main blade B	Chopper tail unit module	Gear set
Gear	Balance bar	Connect buckle	Tail blade	Motor protection
Battery protection	Tail support pipe	Tail decoration	PCB box	Charger
Tail rotor rack module	Rear motor set	Front motor set	Li-poly battery	Remote controller
Antenna for remote controller	Screwdriver	Clip-on fan	Cross	Missile
Main motor cover				