Technical Data

Flying time: 7-9 minutes
Charging time: 120 minutes
Operation range: 30m
Operating Voltage for the controller: DC(4.8 × AA)(not included)
Battery for helicopter: DC 3.7V 1000mAh Li-Po
Frequency: 27MHz
Channel: 3CH, can fly backwards/forwards, left/right, up/down
Main blade length: 34.5cm
Helicopter length: 36cm
Helicopter height: 20cm
Helicopter weight: 182g

Spare Parts List

Canopy	Main Blades	Tail Blade	Controller
Li-Po Battery	Stabilizer	Main Motor	Tail Motor

Further Details
For more information and tips please visit our website

www.woddontoys.com

CE 2150

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

Salvation23.
Item No.: WDD023

INSTRUCTION MANUAL

AS NICE AS YOU EXPECT

3CH

WODDON INDUSTRIAL LIMITED
http://www.woddontoys.com

Welcome to Woddontoys

Congratulations on your purchase of this state-of-the-art helicopter. The helicopter uses the latest technology in electronic and battery to give you a fantastic flight experience you will not forget.
Remember – Although the Salvation 23 is designed to be easy to fly and extremely stable in the air, it is an aircraft and so it will take time to master. Please refer to the user manual for tips on take-off / landing and also trim control adjustment. Always practice a few feet above the ground and master your take-off and landing before trying to fly forwards / backwards. You are more likely to need spare parts if you do not master the basics first!

Warning with regard to placing the product

- Do not use this product in an environment where it is exposed to extreme heat or cold, to dust or to damp.
- Avoid placing the product in an area that is not properly ventilated; do not cover the product and do not place it on carpeting or similar surfaces.
- Do not place cables behind the product's support, if the cables move (for example as a result of stumbling) the product can fall to the floor!
- Do not expose the product to direct sunlight, fire or other sources of heat that have an extreme effect on the temperature.

Intended use

1. The Salvation 23 is delivered 'ready to fly' and does not need to be charged before your first flight. When you first receive it DO NOT CHARGE IT, JUST FLY IT. When the helicopter will no longer take off from the ground, LEAVE FOR 5 MINUTES FOR BATTERY TO COOL BEFORE CHARGING, the charge it (as per the charging instructions shown on Page 7.)
2. The Salvation 23 is delivered with partial-charged LiPo battery separately, and never over charge the battery. Normally, for first few charges, will take you 1.5-2 hours. Then about 120 minutes for a full charge. Once the light appears on the charging plug, switch off the charger at the mains and remove the charging cable from your battery LEAVE FOR 5 MINUTES FOR BATTERY TO COOL BEFORE CONNECTING AND FLYING.
3. Changes or modifications of this helicopter is not permitted except the technicians assigned by Woddontoys, as this may lead to damage to the product. In addition, it can involve other risks such as short circuit, fire, electric shock, etc.

NO PART OF THE PRODUCT COULD BE MODIFIED OR CONVERTED BY THE UNAUTHORIZED PERSON.

⚠ **The safety instructions contained in this manual have to be observed without fail!!**

Trouble diagnoses

Problem	Cause	Solution
No function to controller	Power switch is turned 'OFF'	Switch 'ON' controller and helicopter
	Low battery in the helicopter	Charge battery in helicopter
	Low battery in the controller	Replace battery in controller
	Controller needs to be armed	Push left hand lever fully forward then fully backwards
No control of helicopter	Controller is turned 'OFF'	Turn controller 'ON'
	Controller antenna is not screwed in / extended	Check antenna is screwed in and fully extended
	Strong windy day	Do not fly in in strong wind as this will twist or distort your control
Helicopter is not flying high enough	Blade speed is too slow	Ease the left throttle stick further forward
	Battery is not fully charged	Recharge your helicopter(see 'Charging Salvation 23' section)
Helicopter lands too quickly	Left throttle stick moved too quickly	Gently move the left throttle stick backwards when landing. Remember to give a slight burst of power just prior to touch down
Helicopter spins / flies off course	Trimming adjustment	See 'Trimming Salvation 23' section

Flying tips

1) You can expect a flight time of 7-9 minutes after fully charging the battery.
2) When taking off, do not move the left lever too quickly as this will cause the helicopter to topple over. Move the left lever smoothly and continuously forwards until the helicopter takes off. Be smooth with your movements.
3) When landing, give the helicopter a burst of power just before touching down the floor to slow down the speed and land smoothly.
4) Until you get used to 'control reversal'. Always try to fly the helicopter with the nose pointing away from you. By doing this, the movement of the helicopter will be the same as the movement of the right hand lever, e.g. move lever right to turn helicopter right.
5) Salvation 23 has a range of up to 30m. Be aware that the presence of electrical interference from lights and wires may reduce this range.
6) During your first few flights, try to keep the helicopter close to the ground. This will allow you to cut the throttle and safely land if you become disorientated.
7) Always turn the Salvation 23 off immediately after flight.
8) After flying and before recharging, always turn the Salvation 23 and controller off.
9) When not in use, the battery should be disconnected to avoid the battery completely discharging.
10) Recharge the battery before putting it away.
11) Check for any damage, examine everything including the blades, landing gear, tail blade and body of the helicopter. If anything is damaged it must be repaired before flying again.
12) To avoid damage to the motors, always turn the throttle off if the blades become entangled in anything or are prevented from turning otherwise motors may burn out!!

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Safety instructions

Read the user manual completely before commissioning, then refer to below important information for correct operation.

1. To ensure safe operation, the user must comply with the safety instructions and warnings contained in this manual.
2. The charger is designed in compliance with protection class, ensuring that the insulation (of the housing or the output cable) is neither damaged nor destroyed.
3. The charger should be kept out of the reach of children!
4. In schools, training centers, computer and self-help workshops, etc., the use of charger and accessories must be supervised by trained personnel in a responsible manner.
5. Avoid charging operation under adverse ambient conditions. This can lead to damage to the sensitive electronics on the inside of the charger and thus to possible danger for the life of the user. Adverse ambient conditions are:
   - excessive humidity (> 75% relative, condensing)
   - wetness and dampness, petrol
   - dust or combustible gas, vapour or solvents
   - excessive ambient temperature (> approx. + 40 °C)

In the case of incorrect handling (excessive charging current or incorrect polarity), the charger may be overcharged or destroyed. In the worst case, the charger can explode and in doing so cause appreciable damage.

6. Never unplug the plug-in power unit from the mains socket by the connecting cable! Only hold it by the housing when disconnecting it.
7. Keep transmitting devices (mobile telephone, radios, etc.) away from charger, the transmitter radiation arose can lead to interference in charging operation or to destruction of the charger.
8. Never connect your charger to the mains voltage immediately after it has been taken from a cold room to a warm one. The resulting condensation could, under adverse circumstances, destroy the device. Allow the device to reach room temperature before connecting it to the power supply.

Never touch the charger with wet or moist hands. There is the risk of a fatal electric shock!

Battery care information

Your Salvation 23 is powered by dedicated Li-Po battery. Do not attempt to disassemble the battery or replace with any after-market model.
1) Use only batteries recommended in this user manual. Ensure that batteries are installed with the correct polarity.
2) Batteries should be installed under adult supervision.
3) Never allow the battery to become hot during charging. Warm is fine, hot is not!
4) Never leave the battery charging overnight-switch off once the LED lights on the charger.
5) Never use an after-market charger as this can damage the battery.
6) Do not short circuit the charging terminals.

PLEASE RETAIN THIS INFORMATION FOR FUTURE REFERENCE.

Always:

- Make sure battery compartment is secure.
- Use batteries of the correct size and type.
- Fit batteries correctly observing the plus and minus marks on the battery and compartment.
- Replace a whole set of batteries at one time.
- Remove dead batteries from equipment.
- Remove batteries from appliance that will not be used again for a long time.
- Please remember that small button cells and AA batteries should be kept away from young children as they could be easily swallowed. Seek medical advice if you believe a cell has been swallowed.

Never:

- Mix different types of batteries.
- Mix old and new batteries.
- Dispose of batteries in a fire.
- Attempt to recharge ordinary batteries.

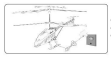
For user who is willing to protect the environment.
The container has a significant role to play in reducing the impact of waste electrical and electronic equipment on the environment, through re-using or recycling such equipment.
Some of the components used in electrical and electronic equipment may contain hazardous substances that can damage the environment and present a risk to human health if not properly disposed of.
The crossed out wheelie-bin symbol on the controller is to remind you that waste electrical and electronic products should not be disposed of with household waste. If you are unable to re-use or recycle your product it should be disposed of at a civic amenity site. Alternatively, you may take your old product (of similar function) back to the store where you purchased your new product within 10 days of purchase. You must take proof of purchase of your new product when returning your old product to the store.

If the blades are damaged, it may not be repaired but has to be replaced with a new one.
Broken plastic parts can be sharp-edged. For your own safety, use protective gloves.

Charging Salvation 23

1. Ensure helicopter is switched 'OFF'.
2. Plug AC/DC adaptor into power socket, the LED light on the adaptor will be ON.
3. Connect the end of the charging cable to the charging slot from the helicopter. Do not force, if correctly installed the cable will attach with ease.
4. When connected, the LED light will be off. Charging is complete when LED light will be on.
5. Remove AC/DC adaptor from power socket and detach charging cable from helicopter.
6. Leave battery to cool for five minutes and then you can fly your helicopter.

Note: Be sure that the battery in the helicopter has been cooled down for 10-15 minutes after flying before recharging.



Charging: Connect the battery to the charger as shown in the illustration, do not force.

Notes

1) Never leave your Salvation 23 charging near a fire or other source of heat.
2) Never leave the Salvation 23 unattended during charging.
3) Always disconnect from the mains once fully charged, do not leave to 'trickle charge' as this WILL DAMAGE THE BATTERY.
4) Never disassemble the charger.
5) Only use the charger supplied with the Salvation 23.
6) NEVER STORE BATTERY WITHOUT CHARGING FIRSTLY, this will damage the battery.
7) Always charge for 10 minutes minimum after use.

Unpacking and storing Salvation 23

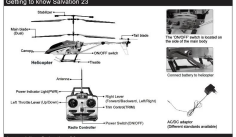
The Salvation 23 helicopter is fastened securely in place to avoid any damage during transit. The Salvation 23 is a delicate device so you must be careful when removing it from the package. Ensure the contents are complete with:

1)1×Helicopter
2)1×Radio controller
3)1×User manual
4)1×AC/DC adaptor
5)1 × Antenna

Note: Only one Connecting Pole on the helicopter as standard packing, it is more flexible for the flight of the helicopter.

Packaging box should be kept for proper storage of the helicopter after each use.
Warning: Improper storage of the helicopter may result in the blades bent or warped. This will decrease the flight performance.

Getting to know Salvation 23



The ON/OFF switch is located on the side of the main body

Connect battery to helicopter

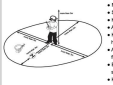
AC/DC adaptor
(Different standards available)

Assembling Salvation 23

Salvation 23 helicopter is delivered fully assembled and only requires some assembling as follow:
1. Insert the telescopic antenna into the aperture on the front of the remote control and screw it tight clockwise. (pic.1)
2. Install batteries
   1) To pull and take out the battery cover. (pic.1)
   2) Insert the batteries according to the battery cover, and then install back (Pay refrain to batteries in the batteries cage following the correct indicated polarity. (pic.2)
   Notice: When the power indicator light goes off it means the power is running out, you should renew the batteries.

Secure the Flight Area

Your Salvation 23 is designed for outdoor and indoor playing. Allow a clear space around you in all direction, 3 meters at least. As the Salvation 23 is a bit powerful when playing, so keep in mind that only play it away from human beings or animals.



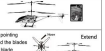
- For outdoor recommended
- Start from a flat surface
- Keep away from any obstacles
- Avoid any windy conditions
- Keep your eyes on the helicopter and be sure the helicopter is within your eyesight
- Adults accompany flying is required and children flying alone is prohibited
- Be sure that there is no same helicopter in the same room
- Keep away from any hard obstacles to avoid any **unnecessary damages**

Flying Salvation 23

Preparing to take off Salvation 23

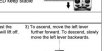
1) Extend the antenna on the Radio Controller and switch the controller 'ON'.

2) Switch the helicopter on ('ON/OFF' switch on the left side of main body).



3) Place the helicopter on a flat, hard surface with the tail pointing towards you and the nose facing away from you. Extend the blades separately, or it maybe entangle each other and cause blade breaking, or burn out the motor.

4) Make sure the left throttle lever to the lowest position firstly, and then move it fully forward and backward. By doing this, the controller will be armed and connected to the helicopter, while the red LED keep stable lighting.



Taking off Salvation 23

1) Move the left lever slowly forward – the blades will start to spin.

2) As you move the left lever past the halfway point, the helicopter will lift off.

3) To descend, move the left lever further forward. To descend, slowly move the left lever backwards.

Steering Salvation 23

1) To turn the nose of the helicopter left, move the right hand lever to the left.
2) To turn the nose of the helicopter right, move the right hand lever to the right.
3) To fly the helicopter forwards, move the right hand lever forwards.
4) To fly the helicopter backwards, move the right hand lever backwards.

Landing Salvation 23

To land the helicopter, slowly move the left lever backwards.

Trimming Salvation 23

The Salvation 23 is fitted with one trimmer control. This will allow you to adjust the flight of the helicopter and erase any unexpected turning tendencies.
If the helicopter spins, you need to use the TRIM control to adjust the flying.
Push the left lever and keep the helicopter flying upwards between 0.5 meter to 1 meter.
1) Turn the TRIM to leftwards if the helicopter spins right.

2) Turn the TRIM to rightwards if the helicopter spins left.

After trimming adjustment, you can also use the right lever to adjust the direction and stop the spinning if you still can not keep the helicopter flying stably after the TRIM adjustment.

For more details, welcome to http://www.woddontoys.com

———— 除实线为切线　　封面四色，内页单黑，双面印刷
 虚虚线为折线　　成品尺寸：147mm x 219mm

文件说明