

TAIYO R/C

10+

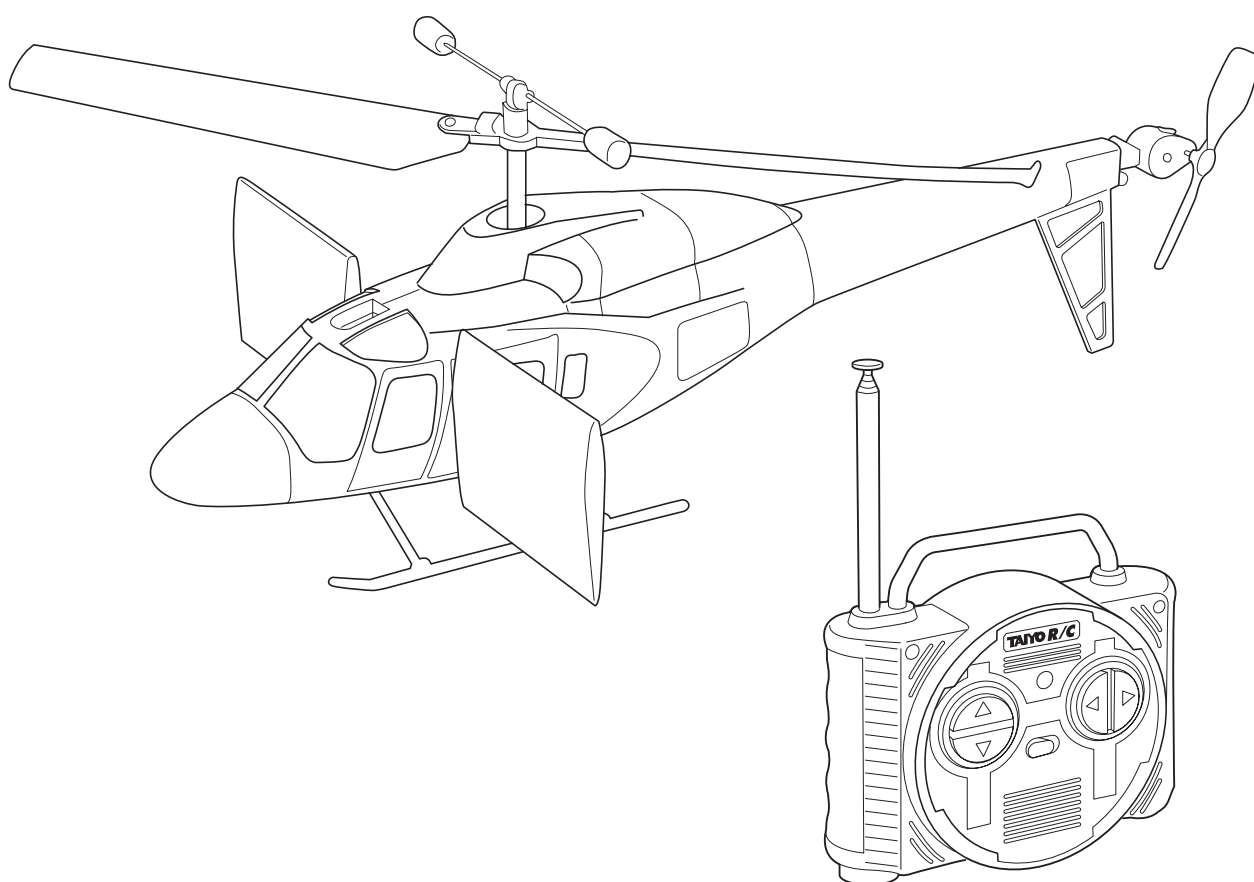
HELICOPTER R/C

**7.2V POWER
HELICOPTER R/C**

JETHELIO

STABILIZER AND FLAP-WING OF JET HELIO MAKES BETTER FLYING

OWNER'S MANUAL



- This helicopter is the first in the industry that can be turned in the right and left directions with simple operation of the transmitter.
- Rigid structural design and materials are used.
- The power is automatically shut off gradually when the helicopter is out of the radio wave range to prevent the helicopter from dropping suddenly.



English

BEFORE USING THE PRODUCT

Thank you for purchasing this TAIYO product.

Please read this owner's manual thoroughly to get the most use from the helicopter and to learn how to operate it safely.

Also, keep this manual with you when using the helicopter.



WARNING

Be sure to read the following.

If the 7.2 V Ni-MH battery pack is used incorrectly, it may overheat, explode, or start a fire. Pay attention to the following items.

- Be sure to follow the charging instructions in this manual.
- Do not try to charge any battery pack other than the included 7.2 V Ni-MH battery pack.
- After playing with the helicopter, be sure to turn off the switch.
- If the battery pack is short-circuited, a large current will flow and this is a dangerous situation. Do not ever short-circuit the battery pack.
- Never drop the battery pack into water, throw it into a fire or disassemble it.
- Do not use, charge, or store the battery pack near a fire or in any place where exposed to high temperatures or high humidity.
- When using the 7.2 V Ni-MH battery pack for the first time, be sure to charge it. Even if the 7.2 V Ni-MH battery pack is not used, it will self-discharge over time. If the battery pack has not been used for about six months, be sure to charge the battery pack before using the product. Once the battery pack is charged, make sure to use it until it is completely dead before recharging it.
- Even when the battery pack has been charged correctly, if the flying time is noticeably reduced, the 7.2 V Ni-MH battery pack may have reached the limit of its useful life.
- If the 7.2 V Ni-MH battery pack is still warm after use, do not recharge it.
- Do not recharge the battery pack within reach of infants or children.
- Do not recharge the 7.2 V Ni-MH battery pack once it is already recharged. The battery pack may become very warm.
- Use the dedicated charger to recharge the 7.2 V Ni-MH battery.

If you use a cigarette lighter inside the car to recharge the 7.2 V Ni-MH battery pack, pay attention to the following items.

- Do not recharge the power pack while you are driving.
- The inside of the cigarette lighter socket becomes hot after you use it to light the cigarette. Use the cigarette lighter socket after it becomes sufficiently cool.
- Do not pull the cable to remove the cigarette lighter plug. Doing so may break the cable.
- In some cars, recharging can be performed after removing the key from the car. Remove the cigarette lighter plug from the socket and stop recharging when you leave the car.
- Soon after playing with the helicopter, the included 7.2 V Ni-MH power pack becomes hot. Be sure to cool down the included 7.2 V Ni-MH power pack before recharging it again. In recharging, the cigarette lighter plug, charger body and the included 7.2 V Ni-MH power pack will have a little heat, but this phenomenon is not an indication of trouble.
- Do not get the 7.2 V Ni-MH power pack or the charger body wet. Doing so may cause malfunction. In addition, never throw the included power pack into a fire, disassemble it or short-circuit it.
- Leave the engine running while recharging the 7.2 V Ni-MH power pack.

- When a child recharges the 7.2 V Ni-MH power pack, an adult with a valid driver's license should be with the child until the battery is charged and the power pack is disconnected. Also, do not recharge the power pack within reach of infants or young children.
- Do not recharge or leave the battery pack in any place where exposed to strong direct sunlight.
- Be sure to remove the charger from the car when the battery is not used.
- The cigarette lighter plug is for exclusive use with cars that have a 12 V cigarette lighter (accessory socket). This plug cannot be used in cars with a 24 V or 100 V cigarette lighter.

If the batteries for the charger (D alkaline batteries / TAIYO 9.6 V Power Pack) and transmitter (006P-9 V battery) are used incorrectly, they may overheat, explode, start a fire, or let electrolyte leak. Pay attention to the following items.

- Never use the charger as a DC power source for any other purpose. Never recharge the power pack using any other charger.
- Use eight D alkaline batteries for the charger.
- Use a 006P-9 V battery for the transmitter.
- Never use a rechargeable battery such as a Ni-Cd battery.
- Do not use a combination of new and old batteries or different kinds of batteries.
- Turn off power to the charger before replacing the batteries.
- Set the batteries so that the ⊕ and ⊖ are correctly positioned.
- Be sure to remove the batteries after use.
- Never short-circuit the batteries, charge them, heat them, throw them into a fire, or disassemble them.
- If any electrolyte from the battery is splashed into an eye, immediately flush it with clean water and consult a physician. If the electrolyte gets on your skin or clothes, wash it off with water.
- When you use the TAIYO 9.6 V Power Pack to recharge the batteries, follow the instructions on the manual of the charger set.

Precautions when playing with the helicopter

- After use, never store the helicopter within reach of the children under 3 years of age.
- Incorrect use of the helicopter may cause an accident. Do not let children 15 years old or younger operate the helicopter. Children should operate the helicopter only under the supervision of an adult.
- Play with the helicopter in a wide-open, safe location with no obstacles nearby. Do not fly the helicopter in a place where other people or animals are nearby.
- Do not launch the helicopter toward another person. Some one may be injured.
- Never store the helicopter in any place where exposed to high temperatures, such as in a closed car in summer. Do not put it in front of a heater which blows hot air.
- Do not fly the helicopter on windy days or when there is lightning.
- Never fly the helicopter on the road, a railroad, near power lines, any place where there are lots of people, or in narrow areas.
- If the helicopter gets caught in a tree, on a building or in power lines, it is dangerous. Do not try to recover it. Notify the owner of the property. (If the helicopter gets caught in power lines, contact the electric power company.)
- Keep face and hands away from the rotating rotor. Wear goggles for safety. It is dangerous if the rotor should come near your face.



English

- When the helicopter is broken, disfigured and unrecoverable, do not use it.
- Do not take your eyes off the helicopter while it is flying.
- Do not touch the helicopter or the charging terminal of the charger (metal part) with your hands.
- Do not operate the helicopter indoors. It can be used only outdoors.
- Do not point the transmitter antenna at people or animals. It may cause an accident. Do not bend the antenna.
- Do not look steadily at the flashing LED on the charger. You may feel sick.
- Do not disassemble or modify the helicopter.
- Do not bend or pull the parts with force.
- Do not operate the helicopter with the main rotor locked.
- Do not drop the helicopter or subject it to shock.
- Do not subject the helicopter to shock while charging. It may cause damage to the charging port.
- After charging is complete, turn off the power switch of the charger.
- Before playing with the helicopter, be sure to check that no one operates an R/C model using the same frequency with you.

Before flying the helicopter, be sure to read the following.

The conditions of the location where the helicopter is operated, or incorrect operation by the operator may cause injury to another person, damage property or result in unexpected accident. In such case, the operator may be responsible for the trouble. It is recommended to have liability insurance when playing with the helicopter.

7.2 V Ni-MH battery service life

The included 7.2 V Ni-MH battery can be charged and discharged about 200 times in ordinary use.

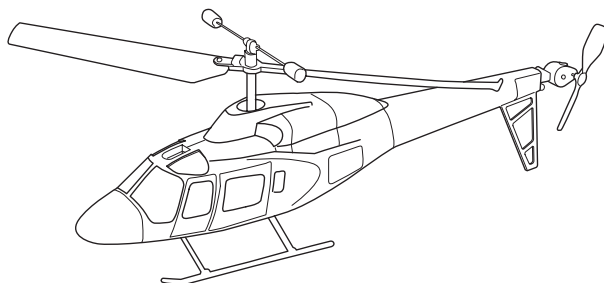


This product uses a recyclable 7.2 V Ni-MH battery. The spent 7.2 V Ni-MH battery is reused as a valuable resource. When you dispose the battery, observe local waste regulations or bring it to a cooperating battery recycle shop. Do not disassemble the battery when you dispose it.

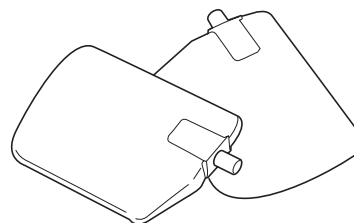
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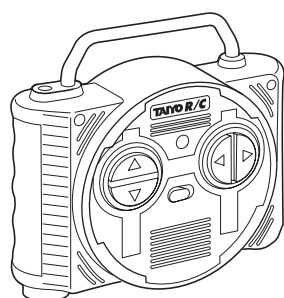
PRODUCT DETAILS



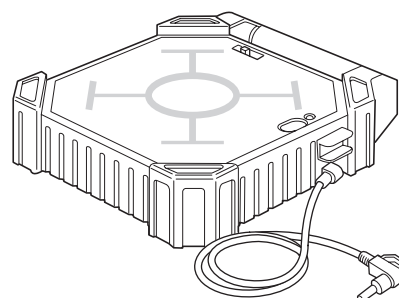
Completed Helicopter: 1



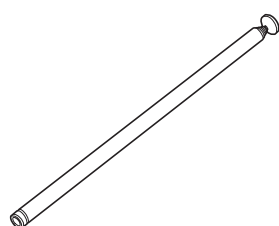
Flap Wing: 2



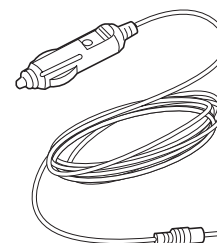
Transmitter: 1



Charger: 1



Transmitter Antenna: 1



Socket Cable for 12 V Cigarette Lighter: 1

To the customer: The box and packing materials are needed to prevent the helicopter from being damaged when transporting it or when sending it for repair. Keep them in a safe place.

* The actual components may differ slightly from the illustrations.

SPECIFICATIONS

Fuselage length	: 510 mm
Overall width	: 240 mm
Weight	: Approx. 160 g
Switch-ON time of motor	: Approx. 1 minute
Operational Distance	: Approx. 30 m or less, outdoors

Batteries and Charger

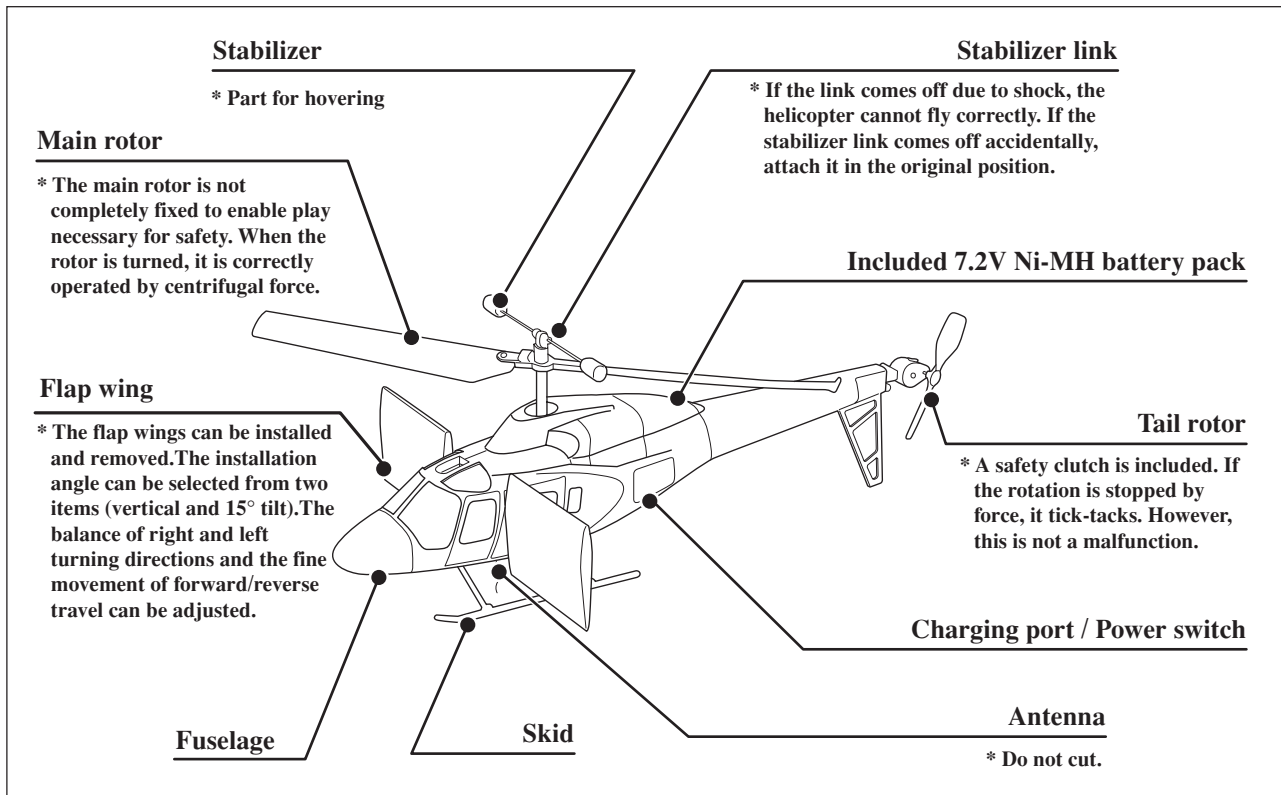
Helicopter	: 7.2V Ni-MH battery pack <included>
Transmitter	: One 006P 9V battery <not included>
Charger	: Eight D alkaline batteries <not included> One TAIYO 9.6 V Power Pack <optional set that includes a charger > Charged from car cigarette socket lighter (12 V)
Charging condition	: Charging time / Approx. 4 minutes (However, the alkaline batteries in the transmitter must have sufficient charge.)



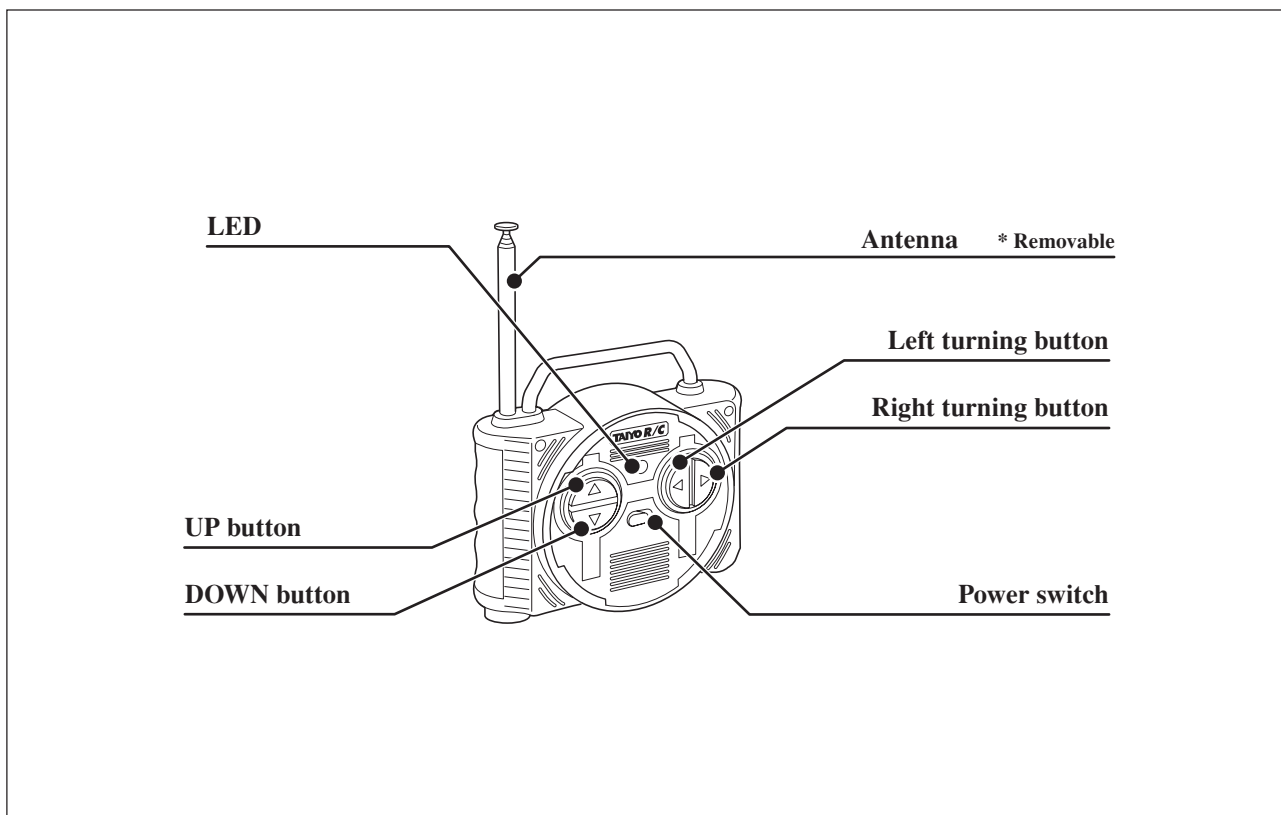
English

NAMES OF THE PARTS

Helicopter



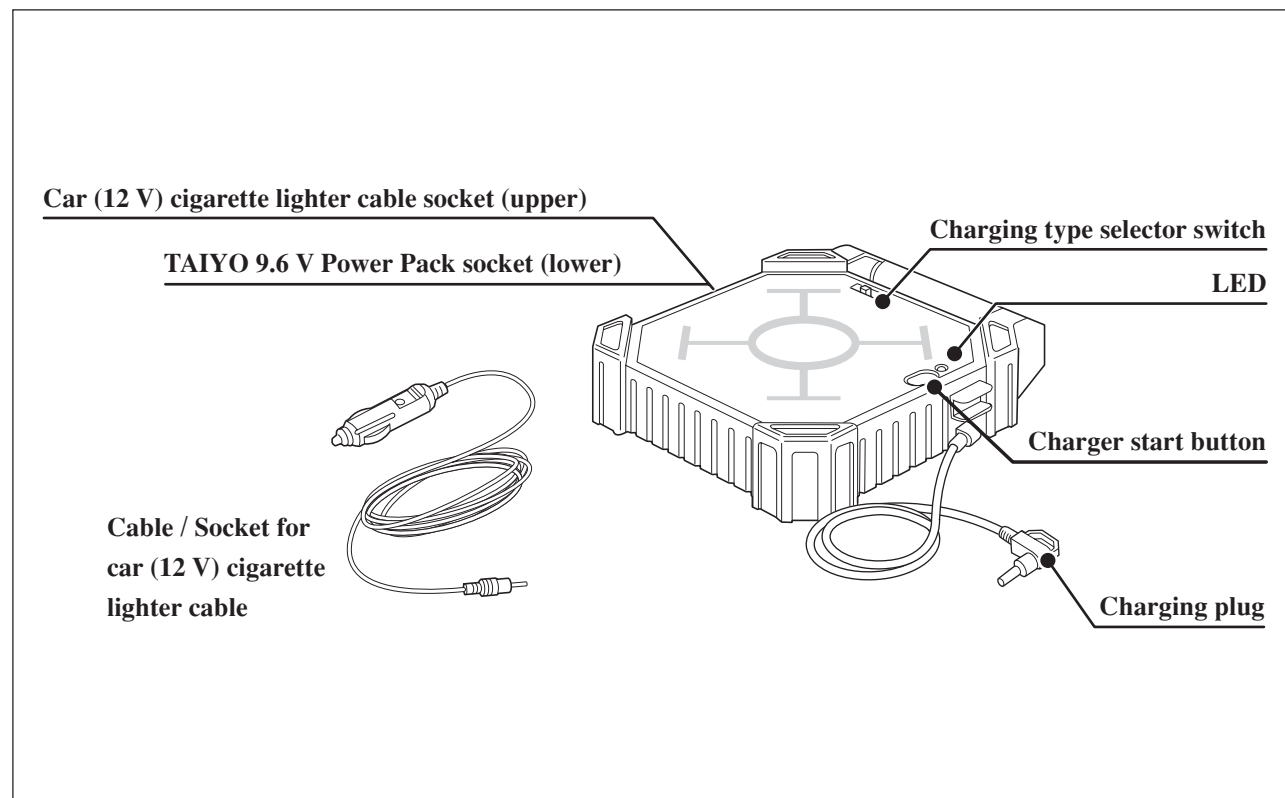
Transmitter





English

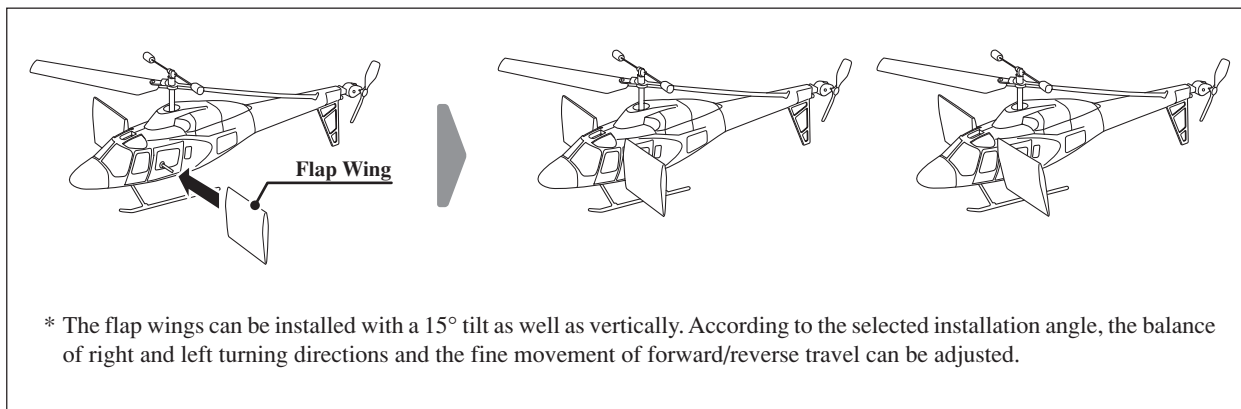
Charger



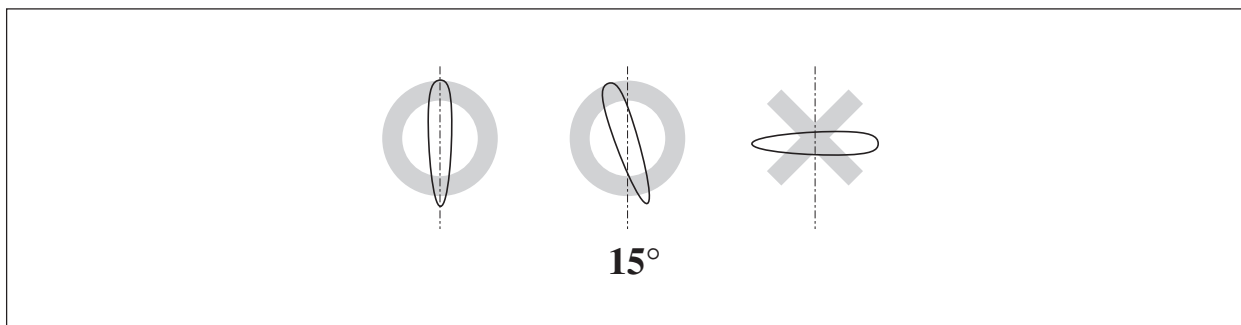
HOW TO ASSEMBLE THE HELICOPTER

1. How to Install the Flap Wing

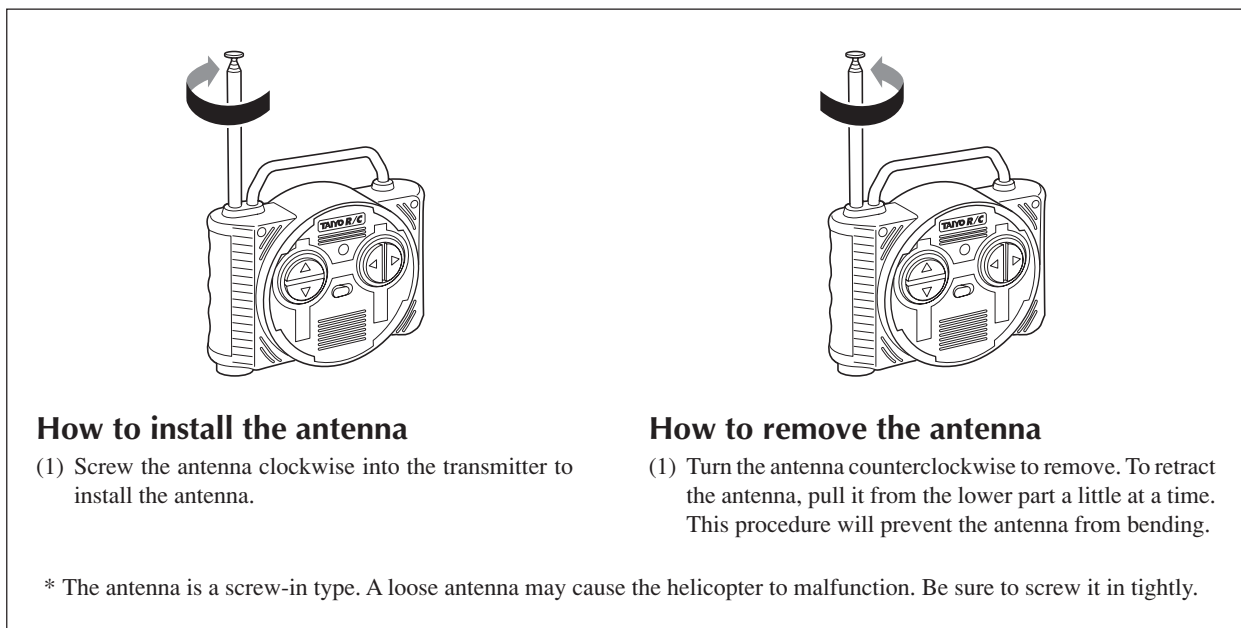
(1) As the basic installation, insert the included flap wings vertically into both sides of the fuselage as shown in the figure below.



Note: The helicopter does not turn in the right or left direction unless the flap wings are installed vertically.



2. How to Install and Remove the Antenna

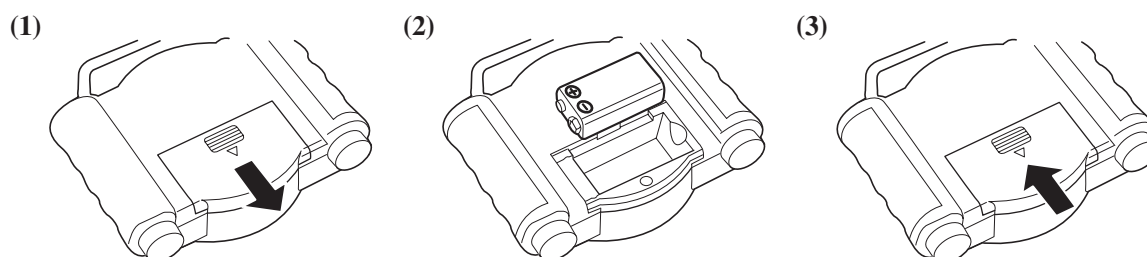




English

3. How to Load the Batteries into the Transmitter This transmitter uses a 006P-9V battery (option).

- (1) Slide the battery cover forward until detached.
- (2) Pay attention to the $\oplus$ and $\ominus$ directions of the battery when inserting it.
- (3) Reattach the battery cover in the opposite order from which it was detached.

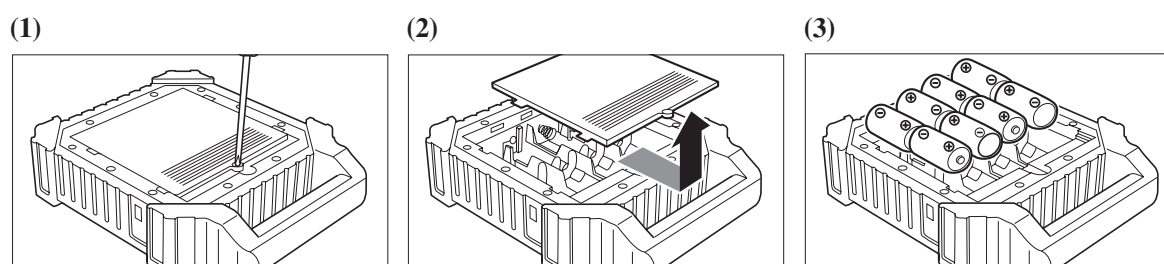


Note: Load the 006P-9V battery correctly, paying attention to the $\oplus$ and $\ominus$ directions. See the figure above.

* When the battery capacity of the transmitter becomes low, the power LED will be dark. Also, the distance that radio waves reach becomes shorter. Replace the 9 V battery (Alkaline or Zinc) with a new one soon.

4. How to Load the Batteries into the Charger (When D alkaline batteries are used) This charger requires eight D alkaline batteries (option).

- (1) Loosen the screws of the battery cover with a Philips screwdriver.
- (2) Slide the battery cover until detached.
- (3) Match the $\oplus$ and $\ominus$ marks at both ends of each battery with the $\oplus$ and $\ominus$ marks in the battery case and insert the eight D alkaline batteries.
- (4) Reattach the battery cover in the original position and tighten the screws.



HOW TO CHARGE THE HELICOPTER (There are 3 charging methods as shown below.)

The rechargeable battery is built in the fuselage of the helicopter. This battery should be charged before you play with the helicopter.

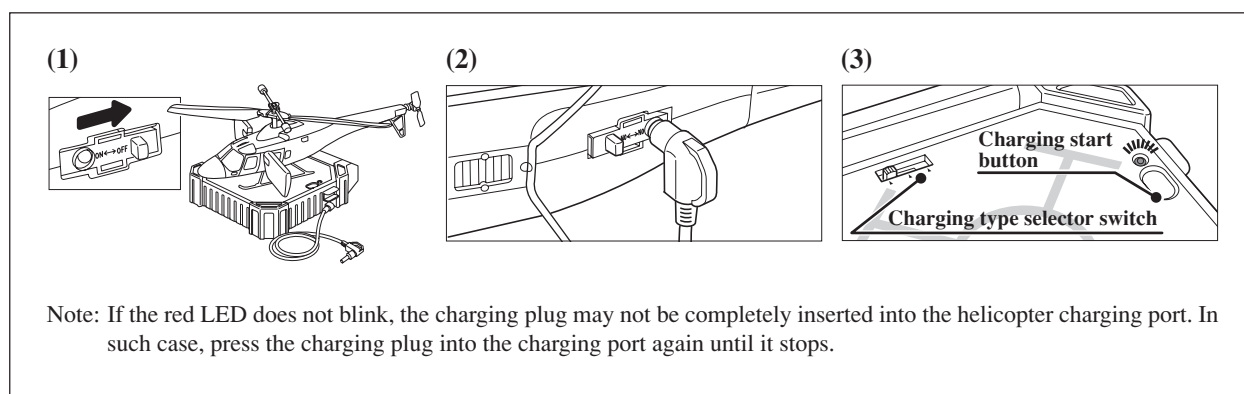
Important:

Before using the helicopter the first time after purchase, charge the included battery twice in order to fully charge it. After that, if you use the helicopter throughout the day, charge the battery only once before each use. Charge the battery twice every first time of the day before using the helicopter.

1. Using the Eight D Alkaline Batteries

The alkaline batteries can be recharged 25 to 30 times, in normal use.

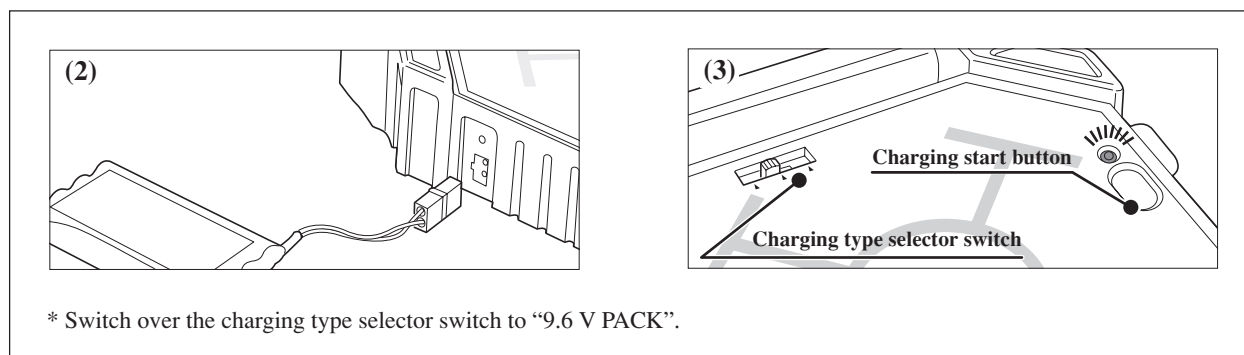
- (1) Set the power switch of the helicopter to OFF and put the helicopter on the charger. Unless the power switch is set to OFF, the charging nozzle cannot be inserted.
- (2) Insert the charging plug of the charger into the helicopter charging port till it stops.
- (3) Switch over the charging type selector switch to "Dx8" and press the charging start button of the charger. The red LED blinks while charging is in progress.
- (4) The helicopter will be charged completely in about 4 minutes. The red LED stops blinking and goes out, when charging is complete. Remove the charging plug from the helicopter charging port.



2. Using the TAIYO 9.6 V Power Pack

The fully-charged TAIYO 9.6 V power pack can be recharged about 5 times. The TAIYO 9.6 V power pack / charger set is an option.

- (1) Charge the TAIYO 9.6 V power pack. For the recharging method, read the instruction manual of the "TAIYO 9.6 V Power Pack / Charger Set".
- (2) Insert the TAIYO 9.6 V power pack into the charger socket.
- (3) Perform steps 1-(1) to 1-(4).
- (4) After recharging the TAIYO 9.6 V power pack, remove it from the charger.



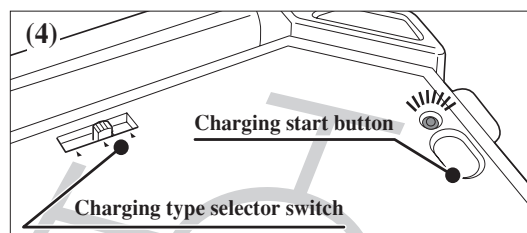
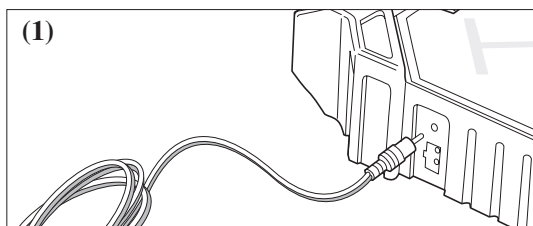


English

3. Using the Cigarette Lighter Socket of a Car (12 V)

Be sure to recharge the battery with an adult who has a valid driver's license.

- (1) Connect the cigarette lighter cable to the car cigarette lighter socket and the charger.
- (2) Check that the car is 12 V and start the engine.
- (3) Insert the plug into the car cigarette lighter socket securely till it stops.
- (4) Perform steps 1-(1) to 1-(4).
- (5) After recharging the battery, remove the plug from the cigarette lighter socket.
- (6) Stop the engine.



- * Switch over the charging type selector switch to "CIGAR ADAPTOR".
- * A glass tube fuse is set to protect the inner circuit in the cigarette lighter socket. If the fuse is blown and doesn't operate, replace it with one of the same rating.

Important:

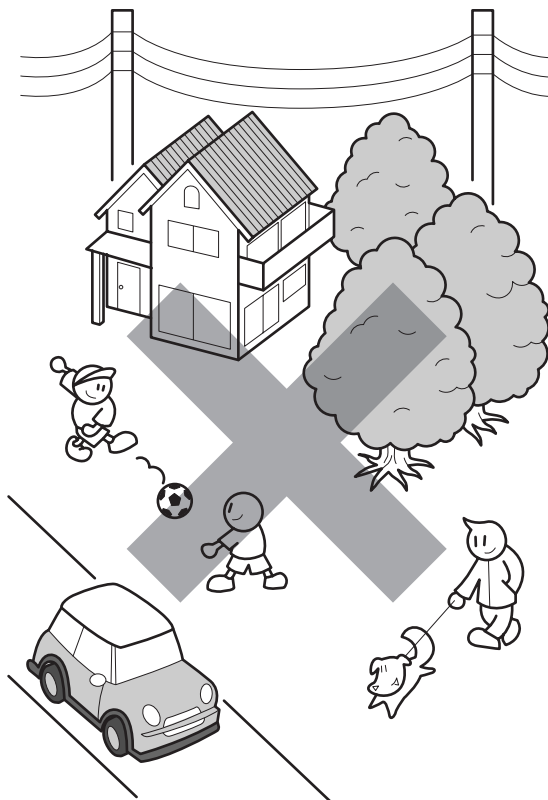
- Be sure to use alkaline batteries when you charge the battery using D batteries. An off-quality alkaline battery or manganese battery cannot perform 100% charging, therefore the helicopter cannot fly due to insufficient power.
- If you feel the flying time becomes a little shorter than usual or if you feel the propeller does not turn with full power regardless of the full-power setting of the helicopter, the capacity of the alkaline battery or the TAIYO 9.6 V power pack is insufficient. In such case, 100% recharging cannot be performed and the helicopter cannot fly due to insufficient power. (The power LED also lights darker than when a new battery is used.) If you use the alkaline batteries, replace all 8 alkaline batteries with new ones. And, if you use the TAIYO 9.6 V power pack, recharge it. After that, start recharging the helicopter.
- When you recharge the helicopter from a car cigarette lighter socket, be sure to confirm that the car runs on 12 V. You cannot recharge the helicopter with a car of other than 12 V. Recharge the helicopter with the engine running. In addition, be sure to recharge the helicopter with an adult who has a valid driver's license.
- Be sure to recharge the helicopter just before flying it. If you don't play with the helicopter just after recharging the helicopter, the charger is discharged and the helicopter cannot fly due to insufficient power.
- When battery temperature reaches a specified high value, the circuit will automatically shut off and the helicopter or charger will stop to protect the receiving circuit and the battery. In such case, it is recommended to cool down the helicopter before recharging or playing with it.
- If a rechargeable battery is repeated charged without the battery being sufficiently discharged first, the fully rechargeable capacity gradually lowers (memory effect of the battery). This is a characteristic of rechargeable batteries. Be sure to start recharging after operating the main rotor until it nearly stops.

LOCATIONS AND CONDITIONS FOR FLYING THE HELICOPTER

Locations

Look for a good place for flying.

Before flying the helicopter, be sure to check no obstacles are nearby. Do not fly the helicopter around a road, people, animals, trees, overhead power lines, or other obstacles. Play in an open area with good visibility.



Fly the helicopter after making sure that no obstacles are above or around you.

Flying Conditions

If the ambient temperature is low, the flying performance of the helicopter may decrease. Fly the helicopter on a warm day.

If wind blows, it is hard to control the helicopter. It is recommended to fly the helicopter under no-wind conditions.

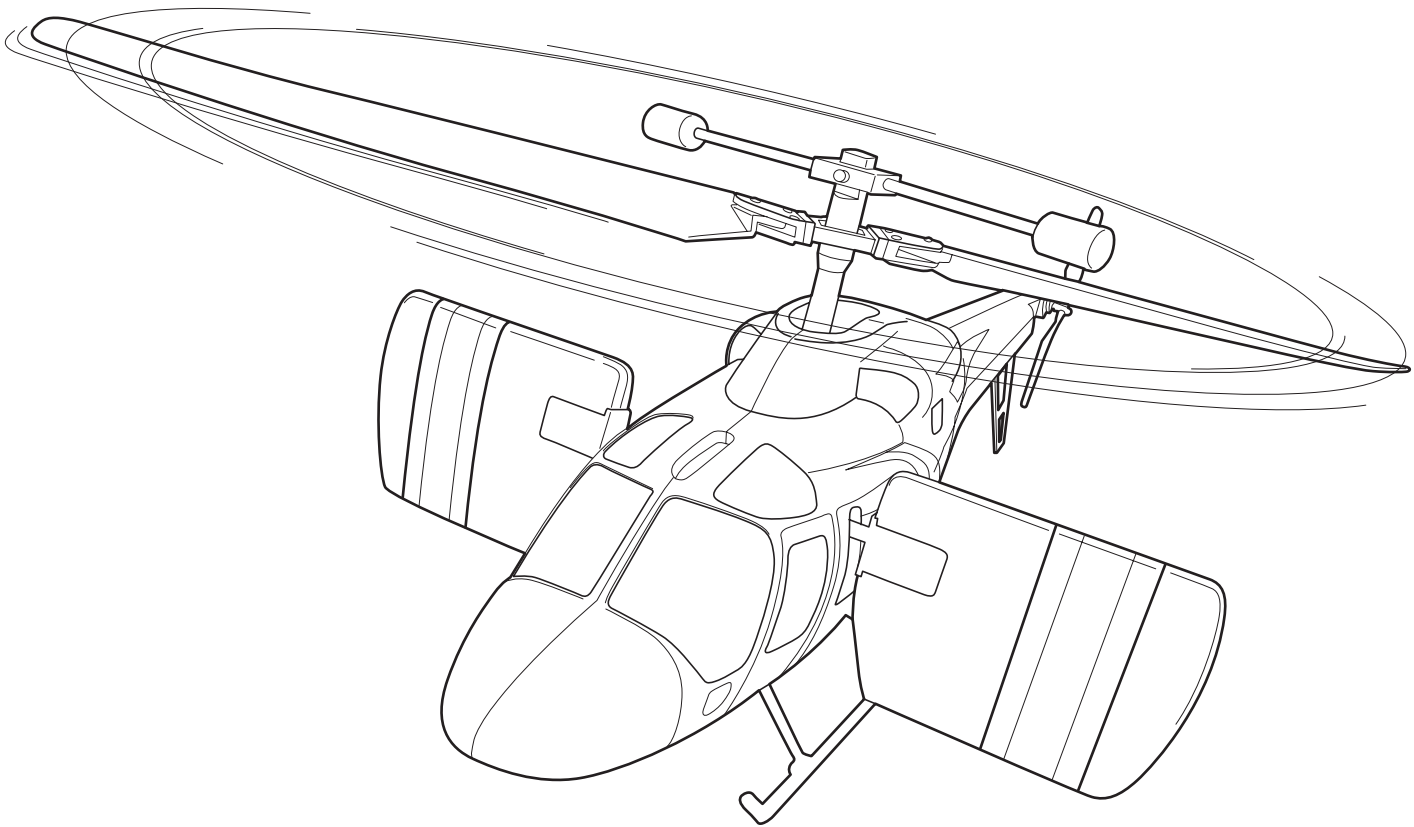
Do not fly the helicopter in heavy thunderstorms, rain, sleet, snow or other bad weather.

Important:

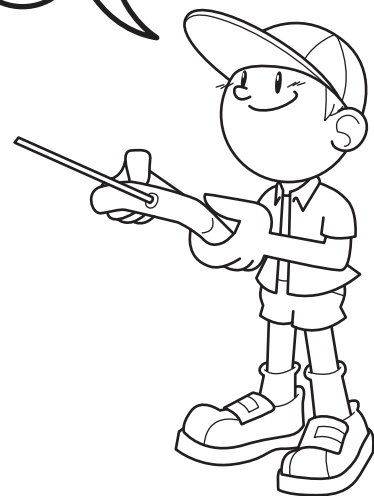
- * Before playing with the helicopter, be sure to check that no one operates an R/C model using the same frequency as you.
- * Do not take your eyes off the helicopter while flying it.
- * A child who cannot fly the helicopter confidently should fly it with the supervision of an adult.



English



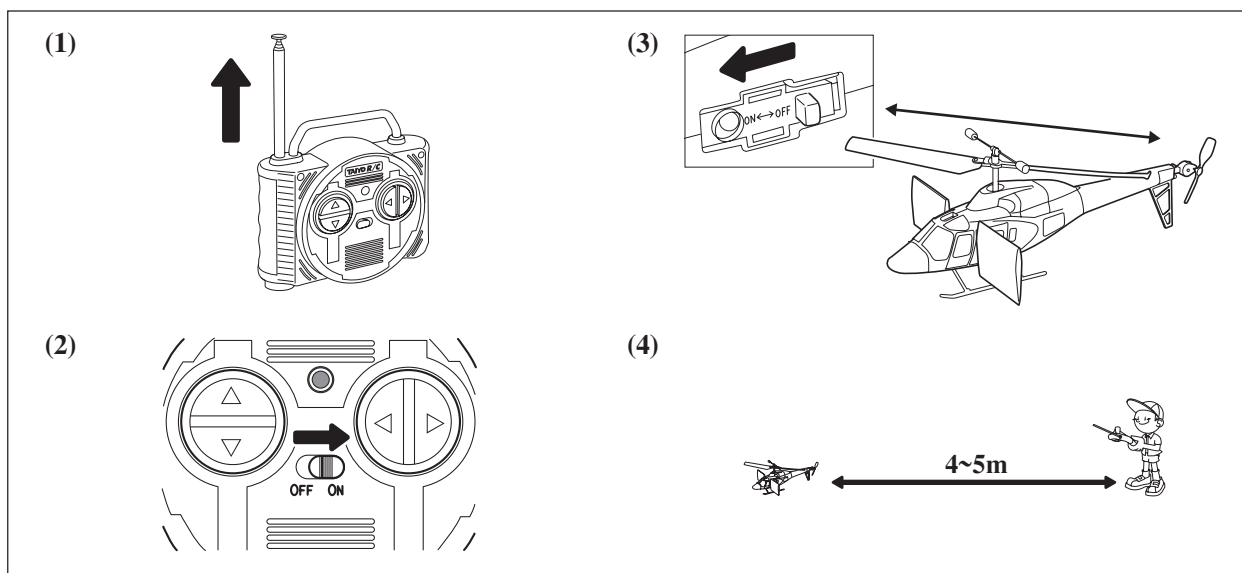
Is everything ready?
If the preparation is perfect,
let's fly the helicopter.



HOW TO FLY THE HELICOPTER Before Flying~Let's Fly

1. Before Flying

- (1) Extend the antenna of the transmitter as much as possible.
- (2) Set the power switch of the transmitter in the ON position. The red LED comes on.
- (3) Set the power switch of the helicopter in the ON position and put the helicopter on the ground. Adjust the main rotor so that it is positioned in a straight line.
- (4) Be sure to keep stay 5 m or more away from the helicopter before ascent with the helicopter.
- (5) Recheck the area around you. If there are no obstacles around you, you can fly the helicopter.



2. Transmitter Functions (Ascend / Descend)

UP button

Do not press the button.	Power: 0% (Stop)
Press the button once.	Power: 0% ▶ 25%
Press the button once more.	Power: 25% ▶ 75%
Only while the button is pressed.	Power: 75% ▶ 100%

DOWN button

* Assuming that the helicopter is flying at 75% power

Press the button once.	Power: 75% ▶ 25%
Press the button once more.	Power: 25% ▶ 0% (Stop)

Relationship between Power and Operation

Assume that 75% power is for hovering, 25% power is for descent, and 100% power is for ascent.

Ascent flight
100% power

↑

Hovering
75% power

↓

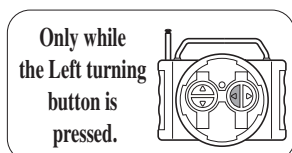
Descent flight
25% power

* The condition will differ according to the amount of battery power.

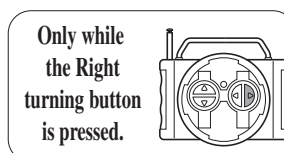


English

3. Transmitter Functions (Right / Left Turning)



The helicopter turns in the left direction.



The helicopter turns in the right direction.

Important:

- * If anyone is playing with an R/C plane or an R/C car near you, check with them about which frequencies are being used. When you turn on the helicopter switch, if the propellers start rotating, there may be someone nearby using the same frequency.
- * Do not cut or bend the transmitter antenna even if it is too long.
- * If wind blows weakly on the ground, it may blow stronger in the sky. In such case, the helicopter may be carried away by wind. Fly the helicopter in an area where there are no rivers or marshes downwind. Fly it where it is safe even if driven out by wind.

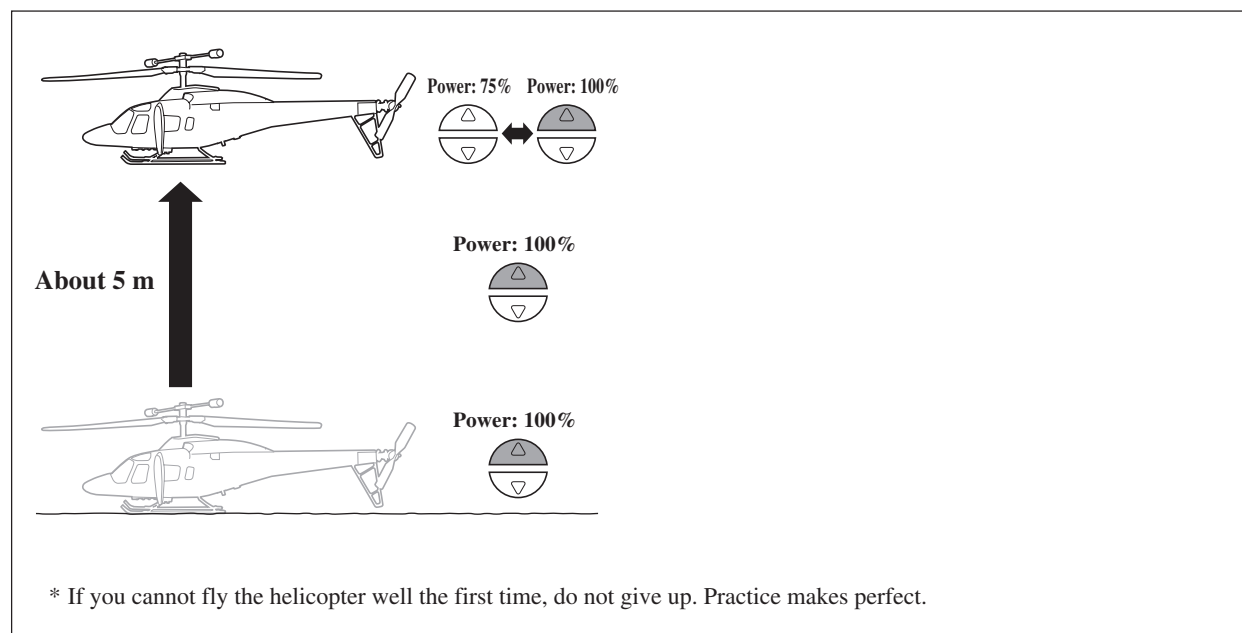
4. After Playing with the Helicopter

After the helicopter lands, set the switch on the helicopter and that of the transmitter in the OFF position in this order.
Also, if you stop flying the helicopter, be sure to retract the transmitter antenna.

5. Let's Fly

How to make a successful ascent or descent

- (1) Press the "UP button" on the transmitter 3 times and set the power to 100 % while the button is pressed. The helicopter ascends. When the helicopter ascends about 5 m, take your finger off the "UP button" and set the power to 75%. When the helicopter starts descending, press the UP button again and set the power to 100%. Repeat the procedure above to make the helicopter hover.
- (2) To descend slowly, keep the power at 75%. Or, you can press the "DOWN button" once to set the power to 25% and land the helicopter. After that, press the "DOWN button" once again and set the power to 0% to stop the helicopter.



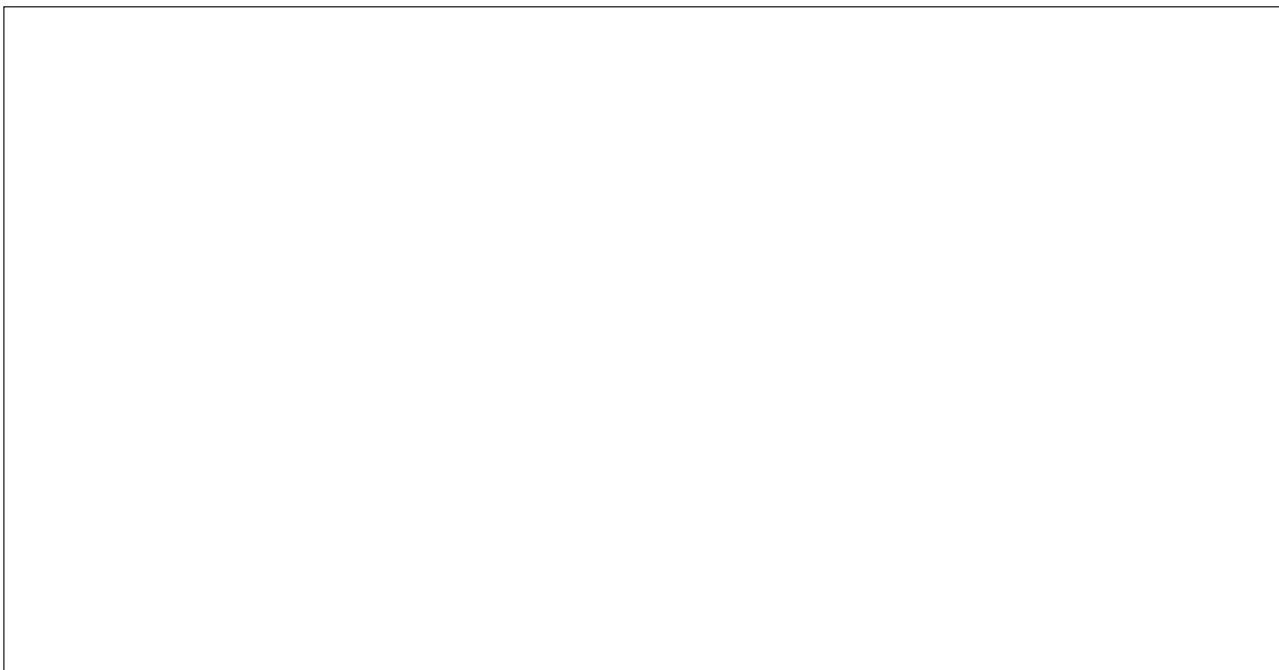
Note: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.



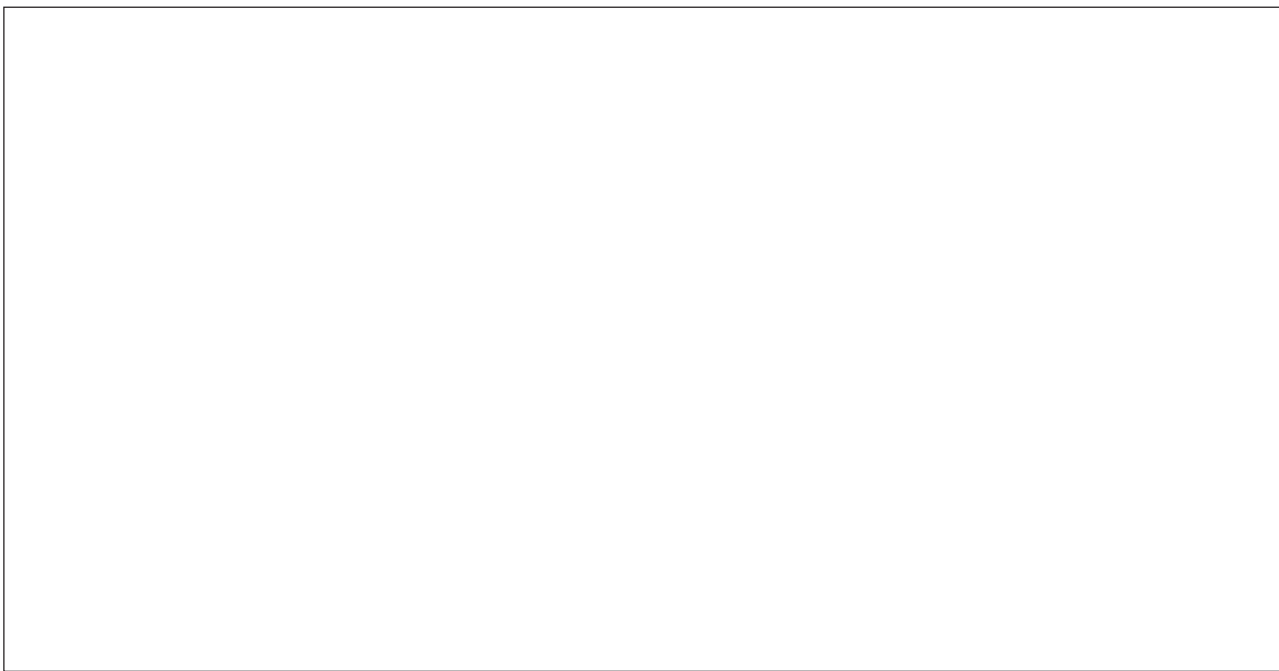


English

HELICOPTER MAINTENANCE



AFTER-SALES SERVICE



A403-English



TAIYO R/C
<http://www.taiyo-toy.co.jp>

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