

**Specifications:**

Main Rotor Diameter: 340 mm

All-up Weight: 188g (Battery included)

Receiver: RX-2401

Tail Rotor Diameter: 340 mm

Drive System: 2 × 130PH

Transmitter: WK-2401

Overall Length: 365 mm

Battery: 3.7V 1000mAh Li-Po

Gyro: Built-in

Servo: weight 8.5g / speed 0.11sec/60° (4.8V)/ torque 0.90kg/cm(4.8V) / dimension 22.5X11.5X24mm

Features:

- 1). HM5G4, an optimal mode for the beginners, is of coaxial structure with emulational effect. The usage of CW and CCW spinning of the upper and lower main rotor blades and the auto control of built-in gyro assure your helicopter flying stably and easily.
- 2). 2 × 130PH brushed motors as drive are powerful and suitable for various courses.
- 3). 3-in-1 receiving circuit, capable of servo extent adjustment and built-in gyro sensitivity adjustment, offers you with customized and fine parameters.
- 4). The flight time at the 3.7V 1000mAh Li-Po battery will be up to 7-10 minutes.
- 5). 2.4G RF makes WK-2401 with high precision strong in anti-interference and prompt in reaction.

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Introduction

Thank you for your purchase of our product. In order to enjoy all the benefits of your helicopter, we recommend you carefully read the entire manual before you begin working with this model. After you have read the manual please store it in a safe place for future reference.

Warning

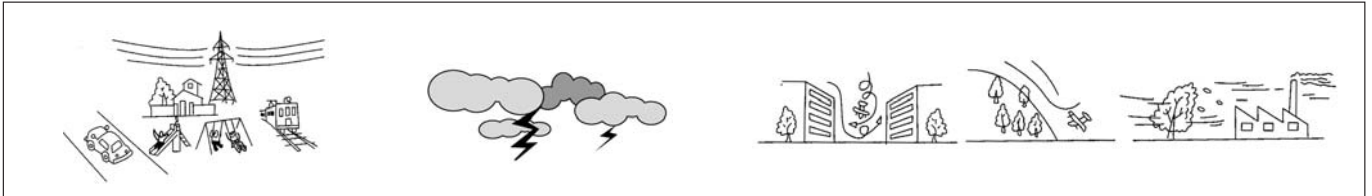
1. Walkera helicopters are not toys. They are a complex combination of electronics and mechanics which produce an aerodynamic rotorcraft. All models require proper setup and exacting adjustments to avoid accidents. We accept no liability for damage and/or consequent damage arising from the use or misuse of the products due to improper construction methods, use or operation, It is your responsibility to operate this highly advanced model in a safe manner.
2. When charging the battery, do not overcharge. Overcharging may result in fire or explosion. When the battery is hot during charging, please stop charging at once. Use specified charger only. Never short circuit! Proper disposal of the battery is your responsibility.
3. Children under 14 years old are strictly forbidden from flying the helicopter. Please do not allow children or adults in the designated flying area.
4. Any situations that occur during flight, that cause the rotor blades to stop spinning or that result in a serious ground strike and cause damage to the helicopter could initiate a fire or explosion. If this type of situation occurs, IMMEDIATELY move the throttle stick to it's lowest position.
5. Before flying your helicopter, please undraw the upper and lower blades and make sure the left and right blades are in line.

Notice: please let the motors cool 10 minutes after your helicopter flies every one of fully charged battery packs, and then continue your next flight; otherwise, the motors of your helicopter will take a high risk of burning or damage!

Cautions

1. Because the helicopter is operated by radio control, it is important to make sure you are always using fresh and/or fully charged batteries. Never allow the batteries to run low or you could lose control of the helicopter.
2. Do not allow any of the electrical components to get wet. Otherwise electrical damage may occur.
3. You should complete a successful range check of your radio equipment prior to each new day of flying, or prior to the first flight of a new or repaired model.
4. If the helicopter gets dirty, don't use any solvents to clean it. Solvents will damage the plastic and composite parts.
5. Always turn on the transmitter before plugging in the flight battery and always unplug the flight battery before turning off the transmitter.
6. Never cut the receiver antenna shorter or you could lose control of the helicopter during flight.
7. When flying the helicopter, please make sure that the transmitter antenna is completely extended and is pointed up toward the sky, not down toward the ground.

Don't fly your helicopter at the places with these signs



Transmitter Features

WK-2401 Instruction:

1. 2.4G RF makes WK-2401 with high precision strong in anti-interference and prompt in reaction.
2. The means of automatically scanning and code pairing:
 - A. Push the throttle stick to the lowest position and turn on the transmitter, and then the power indicator will flash (Note: never move any control sticks when it is flashing).
 - B. The receiver LED will flash swiftly as soon as the battery is connected to the receiver, and will get a solid light 1-3 seconds later (Note: Do not move the right control stick when it is having a solid light). When the power indicator of the transmitter has stopped flashing to recover to the state of power indication, the codes have been matched successfully, and you can fly the helicopter.

Note: It will take about 10 second for the codes to match. If the codes fail to match, please re-turn on the transmitter to match again. Please do not have the codes matched simultaneously when a few of people are flying their helicopters in the same field.

4-CH Transmitter Features:

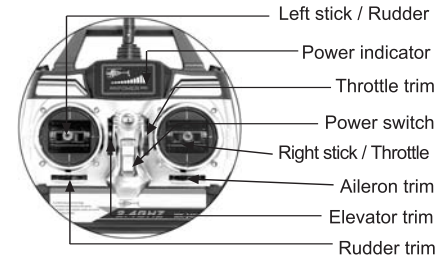
1. The DIP switches are available for various servos. It can perform the flight actions such as ascending, descending, forward, backward, leftward, rightward and so on.
2. 4-channel micro-computer as the encoder; output power: $\leq 10\text{mW}$; current drain: 50mA; power source: 1.2V X 8 Ni-Cd battery (9.6V 600mAh) or 1.5V X 8 AA dry cell battery.
3. Free to switch between left-hand and right-hand throttles.

Control Identification and Function:

MODE I - EUROPE & AUSTRALIA

1. **Left stick / Rudder.** It controls your helicopter forward, backward, left, and right. Push up to fly your helicopter forward, pull down to fly backward, push leftward to fly left, and push rightward to fly right.

(MODE I - EUROPE & AUSTRALIA)



(MODE II - NORTH & AMERICA)

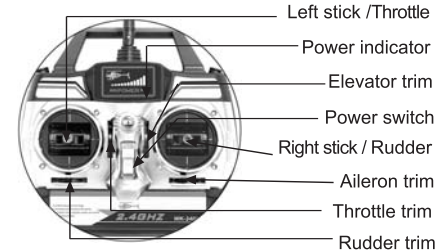


Fig. 1-1

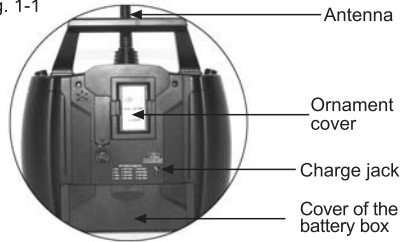
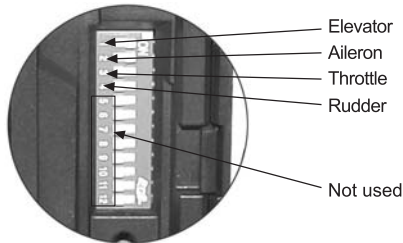


Fig. 2

DIP Switch



2. Right stick / Throttle. It controls your helicopter ascending, descending, left moving and right moving. Push up to ascend your helicopter; pull down to descend, push leftward to move your helicopter left, and push rightward to move right.

MODE II - NORTH AMERICA

1. Left stick / Throttle. It controls your helicopter ascending, descending, left, and right. Push up to ascend your helicopter, pull down to descend, push leftward to fly left, and push rightward to fly right.

2. Right stick / Rudder. It controls your helicopter forward, backward, left moving and right moving. Push up to fly your helicopter forward, pull down to fly backward, push leftward to move your helicopter left, and push rightward to move right.

3. Power indicator. The indicator is consisted of three colors: red, yellow, and green. Green LED on means the electricity is enough to fly; Green LED off and yellow LED on indicate the power is not enough and stop flying; Yellow LED off and red LED on show the power is in extreme shortage, and please stop flying at once.

4. Elevator trim. It controls and modifies your helicopter forward and backward. Push up to fly forward, and pull down to fly backward.

5. Rudder trim. The trim controls and modifies your helicopter leftward and rightward. Move the trim left to fly leftward, and move right to fly rightward.

6. Throttle trim. The throttle trim controls your helicopter to ascend and descend. Push up the trim to ascend, and pull down to descend.

7. Aileron trim. The aileron trim controls your helicopter leftward and rightward. Push the trim left to fly left, and push the trim rightward to fly right.

8. Power switch. Turn on or off the power of the transmitter. Push up the switch to turn on the power, and push down to turn off.

9. Antenna. Transmit the signals.

10. Charge jack. Charge the rechargeable battery pack at current 50mA, voltage $\leq 12V$. (Notice: the charge jack is forbidden to use for non-rechargeable battery pack).

11. Battery box. Please note the polarities while inserting the batteries.

DIP Switches Identification (Fig. 2):

1. **Elevator.** Reverse the direction of elevator servo.
2. **Aileron.** Reverse the direction of aileron servo.
3. **Throttle.** Reverse the throttle stick direction. **Note:** ascertain the throttle stick to work in a correct way before flight.
4. **Rudder.** Reverse the rudder stick direction.

Receiver Identification

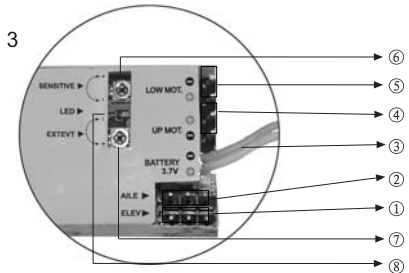
Receiver Identification (Fig. 3):

1. **Elevator servo.** Connect to the elevator servo.
2. **Aileron servo.** Connect to the aileron servo.
3. **Power cable.** Connect to the battery.
4. **Front motor.** Connect to the front motor.
5. **Back motor.** Connect to the back motor.
6. **Gyro sensitivity adjustment (SENSITIVE).** Adjust the sensitivity according to the flight performance. Clockwise adjustment increases the sensitivity and counterclockwise adjustment decreases the sensitivity.
7. **Servo extent adjustment (EXTENT).** EXTENT knob is used to set up the servo travel. Clockwise adjustment increases the servo travel, and counterclockwise adjustment decreases the servo travel.
8. **LED.** LED indicates the receiving status. Quick flash means the signal is being received; LED on means the signal has been received; slow flash means the signal fails to be received.

The Factory Default Settings

CHANNEL	ON/OFF
1	OFF
2	OFF
3	OFF
4	OFF
5-12	NOT USED

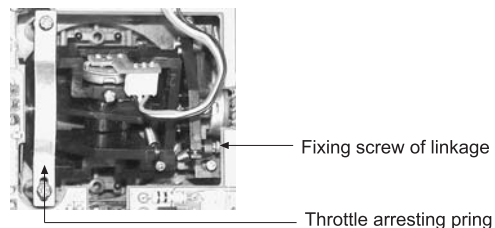
Fig. 3



Switch Between Model I and Model II Throttles

Remove the battery pack and the 4 fixing screws in the back cover of your WK-2401, and take off the back cover (Note: don't break cables inside). Unscrew the fixing screw of linkage using cross screwdriver and fix the linkage of another side using the screw. And then remove the throttle arresting spring to fix in your expecting side. In this way, physical refit has been finished (Fig. 4).

Fig. 4



Flybar Set Assembly

1. Let the location notch of flybar block aim at the flybar, and press the flybar block till the flybar reaches the end of notch; Insert one end of the flybar through hole 1 (Fig. 6-1);
2. Let the location notch of flybar block aim at the inner location mast of flybar block sleeve, and press the flybar block along the inner location mast into the sleeve (Fig. 6-2);
3. Counterclockwise rotate 90° the flybar block sleeve (Fig. 6-2), let the hole 1 of flybar block sleeve aim at the hook of flybar, and then push the flybar block set outside and make the hook completely insert into the hole 2 (Fig. 6-3).

Note: the flybar set will be thrown off at high speed in flying when it is mounted improperly. A serious damage to people or property may be taken place.

Fig. 5

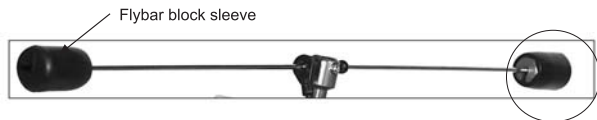
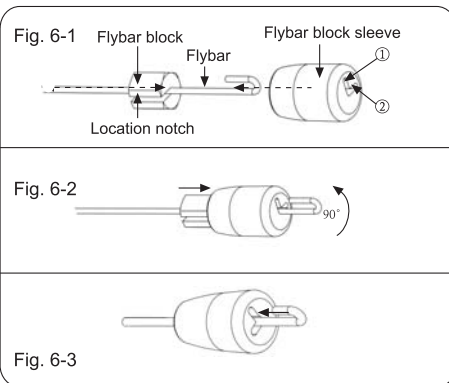


Fig. 4-1



Throttle DIP Switch (switching to left end fits Model I throttle control; switching to right end fits Model II throttle control).



Battery Mounting and Adjustment

- 1. Battery pack mounting.** Place the battery pack in the correct position of your helicopter (Fig. 7).
- 2. CG balance.** Put your helicopter on a horizontal ground and make the flybar perpendicular to the tail truss of your helicopter. Lift your helicopter using your index fingers to support the two sides of flybar, and check the balance. The tail boom should be level with the ground. If it is not, move the battery pack backwards or forwards to balance. Always check the Center of Gravity (CG) with the battery pack and canopy installed (Fig. 8). **Note:** If you can not obtain a level condition, a very small amount of weight may be added the tail.

Swashplate Adjustment

- 1. Swashplate inspection.** Turn on the transmitter. Pull down the throttle stick and throttle trim to the lowest position, and put the elevator trim and aileron trim in the neutral position (MODE I). Then re-connect the power cable of the helicopter to check whether or not the swashplate is in a horizontal level after the reposition of the elevator and aileron servos.
- 2. Swashplate adjustment.** If the swashplate is not horizontal, you can adjust through the following two steps: ① servo and servo bellcrank adjustment. Loosen the servo bellcrank screws and the servo bellcrank and then reconnect the power of the helicopter. Adjust the servo bellcrank to horizontal level after the reposition of the elevator and aileron servos, and then tighten the screws. ② ball linkage 1 adjustment. Adjust the length of the ball linkage 1 to make the swashplate horizontal (Fig.9)

Fig. 7

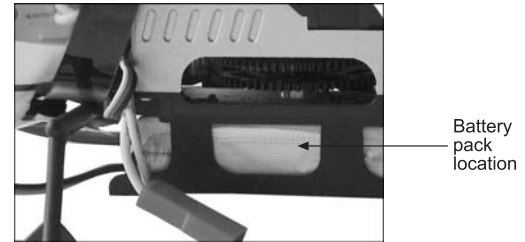


Fig. 8

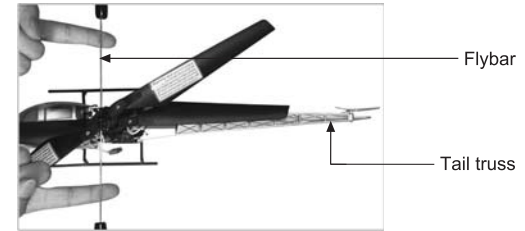
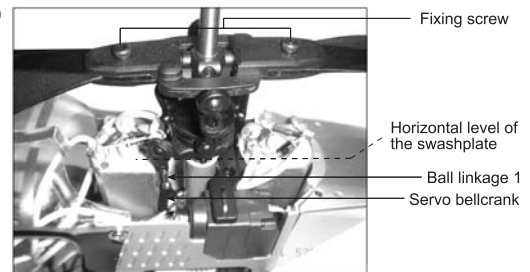


Fig. 9



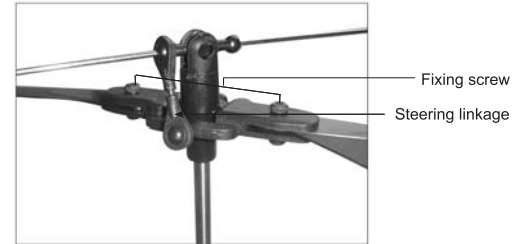
Main Rotor Blade Adjustment

1. **Main rotor blade inspection.** ① check whether the fixing screws of main rotor blade are too loose or tight. ② check the tracking problem.
2. **Main rotor blade adjustment.** ① If the fixing screws are too loose, tighten to some extent; otherwise, unscrew to some extent. ② If there exists tracking problem, adjust long or short the steering linkage (Fig. 10).

Note: when inspecting the main rotor blades, please enter the Adjustment Mode. Below are the detailed adjustment steps:

1. Put the Throttle Stick at the top position.
2. Turn on the transmitter power, plug in your helicopter power, and begin to automatically match the pair code.
3. Enter the Adjustment Mode as well as the pairing code is finished. Put the Throttle Stick at the bottom position, and then the adjustment of the blade tracking is finished. In the Adjustment Mode, please turn off the power of your transmitter and helicopter, and then re-pair code (it is unnecessary to put the Throttle Stick at the top position at this step). Your helicopter is ready to fly now.

Fig. 10



Flight Mode

Normal Mode		(MODE I - EUROPE & AUSTRALIA)	MODE II - NORTH AMERICA		Normal Mode	(MODE I - EUROPE & AUSTRALIA)	MODE II - NORTH AMERICA	
ascending				throttle pushing up	head forward			elevator stick pushing up
descending				throttle pulling down	head backward			elevator stick pulling down
head turning left				rudder stick moving left	helicopter moving left			aileron stick moving left
head turning right				rudder stick moving right	helicopter moving right			aileron stick moving right

Modifications not authorized by the manufacturer may void users authority to operate this device. 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.



The specifications of the R/C Product may be altered without notice.