

# R/C HELICOPTER 59#D(2.4G)

## User Handbook



### Specifications:

Main Rotor Dia. : 630 mm

Main Motor Type: 380 PF

Transmitter: WK-2601

Tail Rotor Dia. : 136 mm

Tail Motor Type: 1627FE33

Gyro: Built-in

Overall Length: 650 mm

Battery: 11.1V 1200mAh Li-Po

Receiver: RX-2601

All-up Weight: 510g (Battery included)

Servo: weight 8.5g / speed 0.11sec/60° (4.8V) / torque 0.9kg/cm (4.8V) / dimension 22.5X11.5X24mm

### Features:

- 1) CCPM mixing control system and collective pitch control system make perfect 3D maneuvers such as rolls, inverted, and swoop flights.
- 2) The compact structure characterized by metal main frame and metal tail boom makes the helicopter more stable. Easy-to-be mounted parts like servo are used.
- 3) 380PF brushed motors as drive are powerful and make you fly with much more enjoyment.
- 4) The flight time on the saturated Li-Po battery will be up to 6-8 minutes, depending on your flight.
- 5) The usage of 2.4G technology is prompter in reaction, more sensitive in operation, and stronger in anti-interference.

100% READY-TO-FLY R/C HELICOPTER

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## Introduction

Thank you for your purchase of our product. In order to fly your helicopter more easily and conveniently, we kindly recommend you to read carefully the whole user handbook and keep it in a safe way as a reference book for maintenance and adjustment in the future.

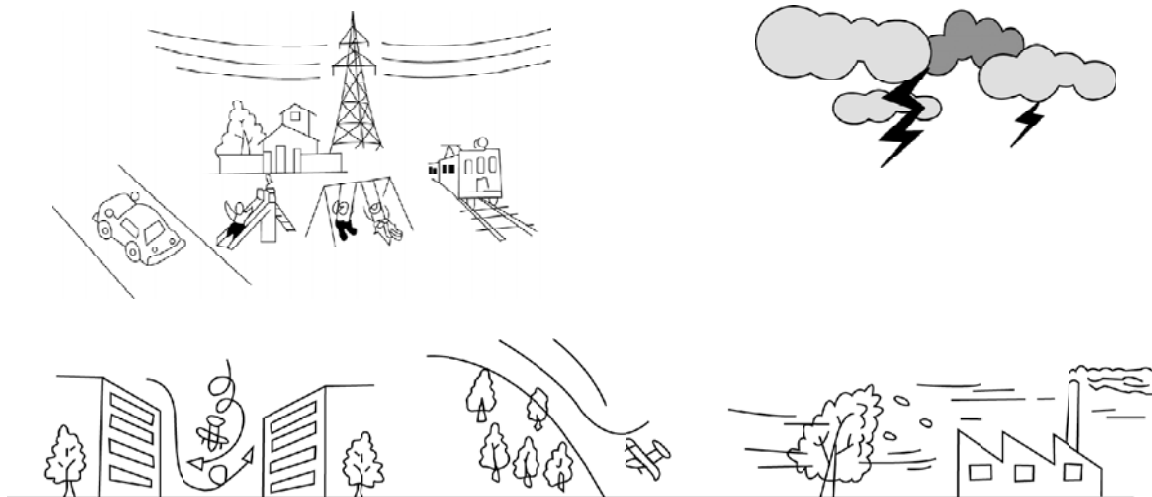
## Warning

1. The HM 59#D is not a toy. It is a complex combination of electronics, mechanics, and aerodynamics. It requires proper setup and fine adjustment to avoid accident. We accept no liability for damage and consequent damage arising from the use of the products, because we have no control over the way they are installed, used, and operated.
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! The battery must be properly disposed of.
3. Children under 14 years old are strictly forbidden from flying the helicopter.
4. When your helicopter is running, any causes which stop the rotor blades spinning or make collision will result in serious damage or burning. Please immediately turn down the throttle stick at the lowest position!

## 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 helicopter at the places with these signs



## Transmitter Features

### The code pairing instruction for wk-2601:

1. The usage of 2.4G technology is prompter in reaction, more sensitive in operation, and stronger in anti-interference.
2. The methods for automatic scanning, code pairing and ID allocation are shown as below :
  - 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 seconds for the code pairing. If code pairing is failed, please re-turn on the transmitter to match the code again. Please don't have the codes paired simultaneously when a few of people are flying their helicopters in the same field.

## 6-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:  $\leq 10mW$ ; 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.
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 and fly left, and push the trim rightward and fly right.

8. **Power switch.** Turn on or off the power of the transmitter. Push up the witch 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.

12. **Battery box cover.** protect the transmitter battery. please open the box according to the arrow direction when replace the battery.

13. **Gear switch.** Convert the gear switch to fold or release the skid landing system. Switching the switch up is ON, and switching the switch down is OFF.

14. **Flight mode switch:** There are normal flight mode and 3D inversed mode. Put it on "N" position is normal mode, and put it on "1" position is 3D inversed mode.

15. **PIT limit / Exponential / Rudder mixing adjustment knob (V2).** Under the help of DIP switches, all the functions can be switchable.

16. **Throttle curve / PIT curve / Gyro sensitivity adjustment (V1).** Under the help of DIP switches, the knob can experience throttle curve adjustment, PIT curve adjustment and gyro sensitivity adjustment .

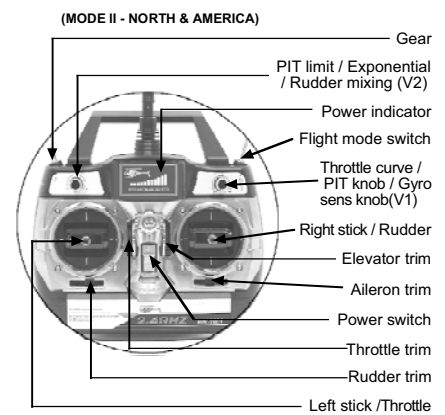
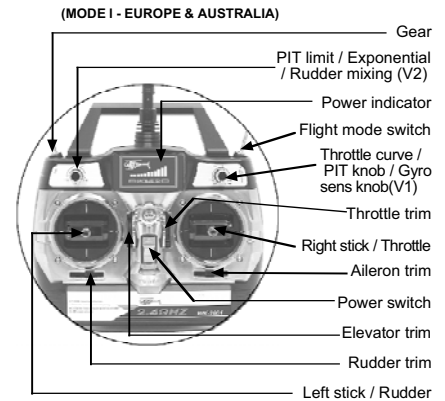


Fig. 1-1

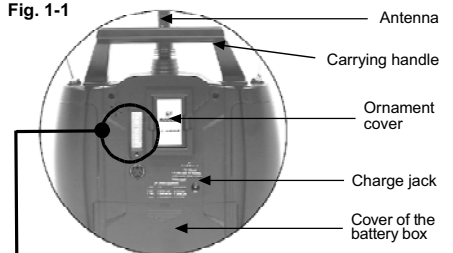
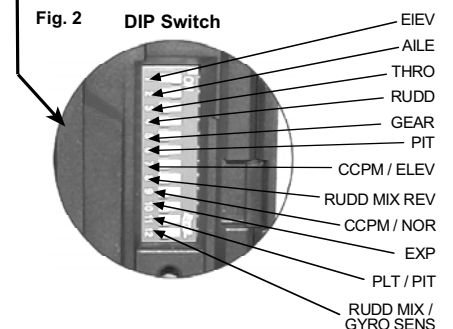


Fig. 2 DIP Switch



### The Factory Default Settings:

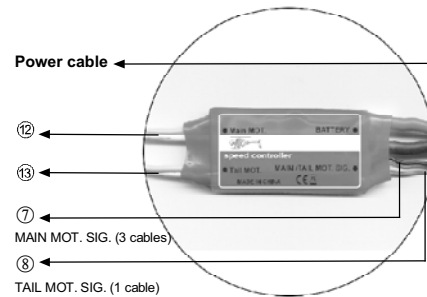
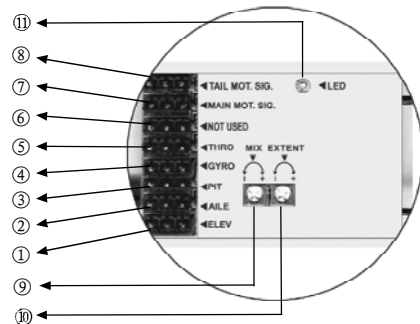
CHANNEL	ON/OFF	CHANNEL	ON/OFF
1	OFF	7	OFF
2	OFF	8	ON
3	OFF	9	ON
4	ON	10	OFF
5	OFF	11	OFF
6	ON	12	OFF

## Receiver Identification

**Receiver Identification (Fig. 3):**

1. **ELEV.** : Connect to the elevator servo.
2. **AILE.** : Connect to the aileron servo.
3. **PIT.** : Connect to the PIT servo.
4. **RUDD.** : Connect to the tail servo.
5. **THRO.** : Connect to the speed controller .
6. **Not used.**
7. **Main motor signal cable** : Connect to the main motor signal cable.
8. **Tail motor signal cable** : Connect to the tail motor signal cable.
9. **MIX** : Please regulate according to the flight effects, clockwise adjustment increases the mixing ratio control, counterclockwise decreases the mixing ratio control.
10. **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.
11. **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.
12. **Main motor cable** : Connect to the main motor.
13. **Tail motor cable** : Connect to the tail motor.
14. **Power cable** : Connect to the battery.

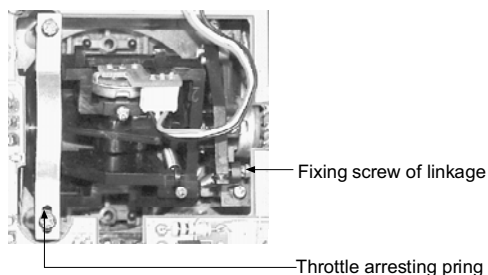
**Fig. 3**



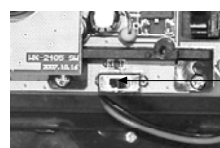
## Switch Between Model I and Model II

Remove the battery pack and the 4 fixing screws in the back cover of your WK-2601, and take off the back cover (Note: don't break the 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**



**Fig. 4-1**



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

## **FCC WARNING**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

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