

### **Specifications:**

Main Rotor Diameter: 340 mm All-up Weight: 188g (Battery included)

Tail Rotor Diameter: 340 mm Drive System: 2 × 130PH

Overall Length: 425 mm Battery: 3.7V 1000mAh Li-Po battery

Servo: weight 8.5g / speed  $0.11sec/60^{\circ}$  (4.8V)/ torque 0.90kg/cm(4.8V) / dimension 22.5X11.5X24mm

### **Unique Features:**

- 1) One cell Lipo at 3.7V 1,000mAh offers 7- to 10-minute flight after fully charged.
- 2) High quality servo is prompt and precise in reaction.
- 3) Coaxial structure makes flying much stable and easy.

4) 4-channel transmitter with visible power indicator can avoid helicopter losing control due to the shortage of battery power, and support you to fly without any worry.

Receiver: RX-410

Gyro: Built-in

Transmitter: WK-0408

5) An optimal model for the beginner.



# Contents

Introduction	2
Warning	2
Cautions	3
Transmitter Features	2
Receiver Identification	6
Flybar Set Assembly	6
Battery Mounting and Adjustment	7
Swashplate Adjustment	8
Main Rotor Blade Adjustment	8
Flight Mode	ć



### 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 damge 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.

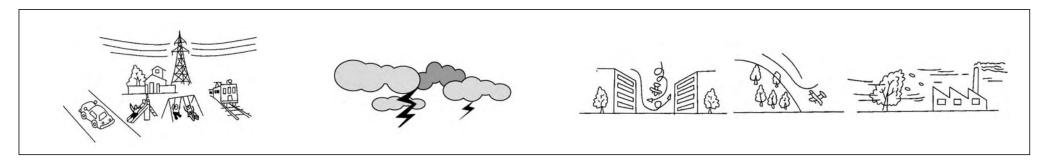
**Notice:** please let the motors cool 10 minutes after your helicopter flies every one of fully charged battery packs, and then continue your next flight; otherwise, the motors of your helicopter will take a high risk of burning or damage!



### **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**

#### 4-CH Transmitter features:

- 1. The panel is easy to operate with multistage electricity indication.
- 2. The shape design accords with the ergonomics.
- 3. 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.
- 4. 4-channel micro-computer as the encoder, PPM modulation, output power: ≤ 200MW, current drain: 150mA; power source: 1.2V X 8 Ni-Cd battery ( 9.6V 600mAh) or 1.5VX8AA dry cell battery.

#### **Control Identification and Function:**

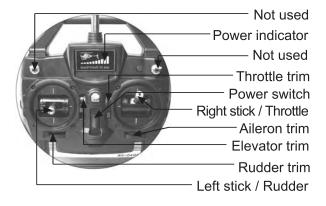
#### **MODE I - EUROPE & AUSTRALIA**

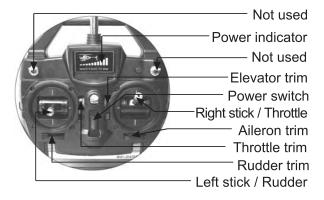
- 1. Left stick / Rudder. It controls your helicopter forward, backward, left, and right. Push up to fly your helicopter forward, pull down to fly backward, push leftward to fly left, and push rightward to fly right.
- **2. Right stick / Throttle.** It controls your helicopter ascending, descending,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

#### (MODE I - EUROPE & AUSTRALIA)





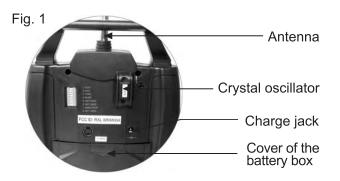
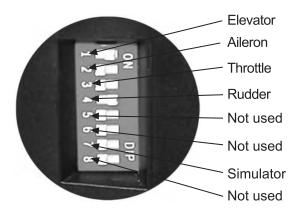




Fig. 2 DIP Switch



#### The Factory Default Settings

CHANNEL	ON/OFF
1	ON
2	OFF
3	OFF
4	ON
5	OFF
6	OFF
7	OFF
8	NOT USED

- **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 battery back.
- 11. Battery box. Please note the polarities while inserting the batteries.

### **DIP Switch Identification (Fig. 2):**

- **1. Elevator.** Reverse the swing direction of elevator servo.
- **2. Aileron.** Reverse the swing direction of aileron servo.
- **3. Throttle.** Reverse the throttle stick direction. **Note**: ascertain the throttle stick to be worked in a correct way before flight.
- 4. Rudder. Reverse the rudder stick direction.
- **7. Simulator.** Simulation signal switch.

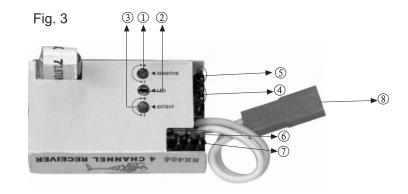


### **Receiver Identification**

- 1. Gyro sensitivity adjustment (SENSITIVE). Adjust the sensitivity according to the flight performance. Clockwise adjustment increases the sensitivity and counterclockwise adjustment decreases the sensitivity.
- **2. 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 failed to be received.
- **3. 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.
- 4. Tail motor. Connect to the tail motor.
- **5. Main motor**. Connect to the main motor.
- **6. Aileron servo**. Connect to the aileron servo.
- 7. Elevator servo. Connect to the elevator servo.
- **8. power cable**. Connect to the battery.

# **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. 4-1);
- 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. 4-2);



1 SENSITIVE

**⑤ MAIN MOTOR** 

② LED

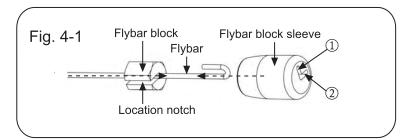
**6** AILERON SERVO

③ EXTENT

**(7) ELEVATOR SERVO** 

**4** TAIL MOTOR

**® POWER CABLE** 

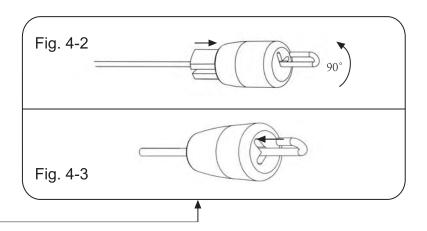




3. Counterclockwise rotate 90° the flybar block sleeve (Fig. 4-2), let the hole 1 of flybar block sleeve aim at the hook of flybar, and then push the flybar block set outside and make the hook completely insert into the hole 2 (Fig. 4-3).

**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.

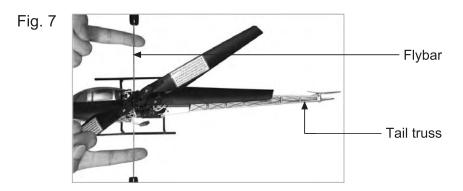




# **Battery Mounting and Adjustment**

- **1. Battery pack mounting.** Place the battery pack in the correct position of your helicopter (Fig. 6).
- 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. 7). 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. 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 turn on the transmitter and then connect the helicopter power cable. Check whether or not the swashplate is in a horizontal level.
- **2. Swashplate adjustment**. If the swashplate is not horizontal, you can adjust through the following three steps: ① servo and servo bellcrank adjustment. Re-connect the power cable of your helicopter again, and adjust the angle between ball linkage 1 and servo bellcrank to 90° degrees. ② ball linkage 1 adjustment. Adjust the length of ball linkage 1 and make the swashplate horizontal (Fig. 8).

## **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 ball linkage 1 (Fig. 9).

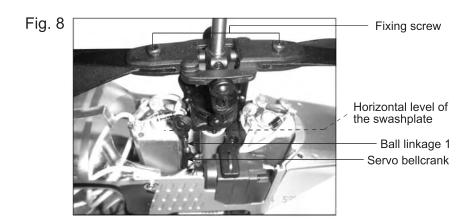
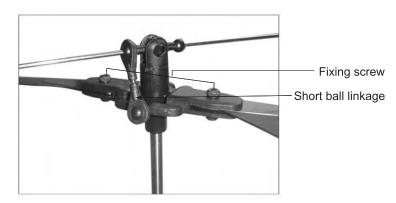


Fig. 9





# Flight Mode

### **Normal Mode**

ascending	29 000	throttle pushing up	head forward	-	elevator stick pushing up
descending	29 - 000	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



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