Thank you for purchasing the E-eyes(GPS) from walkera, please strictly follow the guideline to finish code binding and calibrations thoroughly before using. Please keep it in a safe place for future reference.

1.0 Main Specification

Wingspan: 1280mm	Length: 910mm	Weight: 750g(Battery included)
CG Position: 70mm	Wing Area: 21.4dm^2	Wing Load: 35g/dm^2
Motor: Out runner Brushless Motor	ESC: WK-WST-30A-4	Battery: 11.1V 1600mAh Li-Po
Optional transmitter: DEVO-7/10	Receiver: DEVO-RX702	Servo: 9gx4

2.0 Safety matters needing attention

2.1 Important Statement

(1) This product is not a toy. It is a piece of complicated equipment which harmoniously integrates engineering materials, mechanics, electronics, aerodynamic and high frequency radio. Correct installation and adjustment are necessary to avoid accidents taking place. The owner must always operate in a safe manner. Improper operation may result in serious property damage, bodily injury or even death.

(2) We accept no liability for damage and consequent damage arising from the use of these products, as we have no control over the way they are maintained, used and operated.

(3) This product is suitable for experienced RC aircraft pilots aged 14 years or more.All minors must be accompanied by a responsible adult when flying.

(4) The flight field should be legally approved by the local government. We accept no liability for any safety duties or fines arising from operation, usage or mis-control after the sale of the products .

(5) We consign our distributors to offer technical support and service after sale. Please contact the local distributors for problem resolution caused by usage, operation, maintenance, etc.

2.2 Safety matters needing attention

RC aircraft flight is a high risk hobby, whose flight should be kept far away from other people. Mis-assembled or broken main frame, defective electronic equipment, and/or problematic radio system will lead to unforeseen accidents such as bodily injury or property damage. The pilot must pay attention to the flight safety and UNDERSTAND his responsibility for accidents caused by his carelessness.

(1) Far away from obstacles and people

A RC aircraft in flight has risk of uncertain flight speed and direction which is potentially dangerous. When flying, please keep your RC aircraft far away from people, high buildings, high-tension lines, etc, and avoid operating in rain, storms, thunder and lightening.

(2) Keep away from humidity

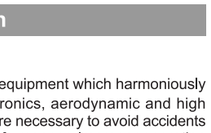
RC aircraft should be kept away from humidity and vapor because its complex, precise electronic components and mechanical parts may be damaged.

(3) Proper operation and maintenance

Please use Walkera original spare parts to upgrade, modify or maintain your aircraft in order to ensure its safety. Please operate your aircraft within the range of functions permitted. It is forbidden to use it outside of the safety laws or regulations.

(4) Avoid flying alone

At the beginning of learning about radio-controlled flight there are some difficulties to overcome. Please avoid flying alone. Invite experienced pilots to guide you (two of the most effective methods to practice are via a PC flight simulator and/or under the supervision of a skilled pilot).



(5) Safe operation

Please fly your aircraft according to your physical status and flight skills. Fatigue, listlessness and mis-operation will increase the possibilities of accidental hazard.

(6) Away from highly spinning parts

Please keep pilot, people and object away from the spinning blades of both main rotor and tail rotor.

(7) Protect from heat

A RC aircraft is made from metal, fiber, plastic and electronic components, etc. Please keep away from heat and sunshine in order to avoid distortion, even damage, caused by high temperatures.

2.3 Attention before flight

(1) Make sure that the battery power is saturated.

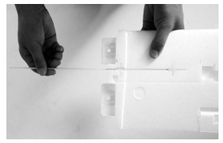
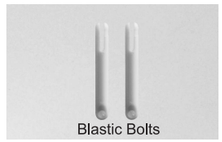
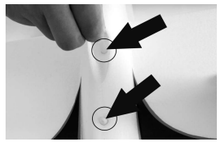
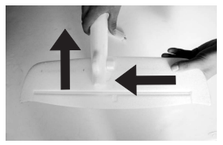
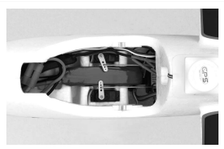
(2) Ensure the directions and actions which servos execute transmitter commands are correct and smooth, respectively. Using a broken servo will result in unforeseen dangers.

(3) Check and makesure no missing or loose screws and nuts, no unassembled or damaged parts. Carefully check the and wings have no defects, especially the position close to the main blade connector. Broken or unassembled parts will have an effect on the flight performance, and will cause unforeseen potential dangers.

(4) Check all the connections between ball linkage and ball. Loose linkages and balls should be changed. Loose connection between linkage and ball will have an effect on the flight performance, even lose control.

(5) Assure there are solid connections between the power cables of battery pack and motors. Continuous vibrations in flight may loosen the battery tie-ins.

3.0 Assembly

1. Install the glass fiber rod.	2. Install the main wing.
	
3. Press the two plastic bolts to secure the main wing.	
 Blastic Bolts	
4. Apply glue on the combined side of the elevator.	5. Install the elevator all the way as the arrow has showed.
	
6. Install the propeller.	7. Install the nut.
	
8. Battery position.	9. Install the canopy.
	

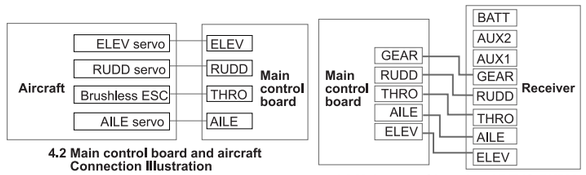
4.0 Main control board guideline

4.1 Main control board port Instruction

S/N	Full name	Function
①	**ELEV**	Connect to the Elevator servo.
②	**RUDD**	Connect to the Rudder servo.
③	**THRO**	Connect to the brushless ESC.
④	**AILE**	Connect to the Aileron servo.
⑤	**LED**	To link LED.
⑥	**GPS**	To link GPS module.
⑦	**ELEV**	To control Elevator.
⑧	**AILE**	To control Aileron (leftward & rightward).
⑨	**THRO**	To control Throttle.
⑩	**RUDD**	To control Rudder.
⑪	**GEAR**	To control Mode Switch (Manual Mode/ One key Go Home).
⑫	**Upgrade channel**	Upgrade channel.

4.2 Main control board and aircraft Connection Illustration

4.3 Main control board and DEVO-RX702 Receiver Illustration



4.2 Main control board and aircraft Connection Illustration

4.3 Main control board and DEVO-RX702 Receiver Illustration

4.4 Main Control Board Installation Requirements

(1) Label side towards the top of the aircraft.

(2) Side with ESC connector towards forward of the aircraft.

(3) Keep horizontal with the body of the aircraft.

(4) Please install the main control board at the CG positon and keep all ports are free to connect.

5.0 Basic Flight Instruction

5.1 Main Control System Control Mode

5.1.1 Control Mode Classification

There are two control modes according to the 2-position switch:Manual Mode \One Key Go Home.

5.1.2 Control Mode Switch Setting(The factory setting is RTF, the default setting use "D/R" switch.).

(1) Manual Mode	(2) One Key Go Home
	
2-position Switch to"0"Position	2-position Switch to"1"Position

Please choose a 2-position switch as control mode switch before flight.

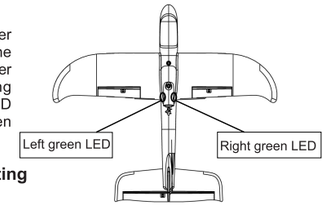
5.1.3 Notes

(1) Control mode switch position related to channel reverse setting of the transmitter (default setting is normal).

(2) Please choose manual mode to take off and then turn to one key return home mode after adjusting the Aircraft attitude by stick or trim and Aircraft at the reasonable height.

5.2 Code binding

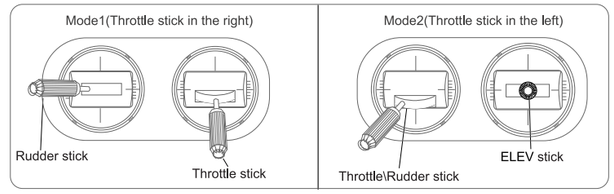
Please follow the rule "Turn on transmitter first and aircraft battery later" Turn on the radio first, please connect the aircraft power in 10 second later. The Code binding successfully when the left green LED indicator flash quickly to slowly and then light out last.



5.3 Motor unlock/lock/ Stop rotating

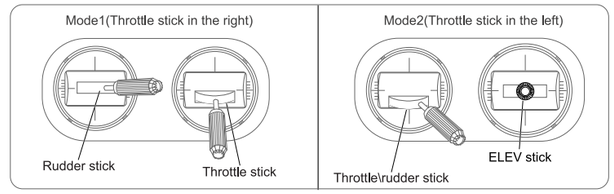
5.3.1 Motor unlock

Once binding, down the throttle stick to the lowest position ,move the rudder stick to far LEFT and the left green LED indicator turn solid Green, then motors are unlocking. If you push the throttle up, the motors will rotate（Note:The motor can unlock only when in Manual Mode）.



5.3.2 Motor lock

Down the throttle stick to the lowest position, move the rudder stick to far RIGHT, the motors are locked when the left green LED indicator light out. If you push the throttle up, the motors won't rotate(Notes: The aircraft is in Motor lock status after Code binding successfully).



5.3.3 Motors stop rotating

If you push the throttle to the lowest positon,the motors stop rotation.

5.4 Compass Calibration

Please calitrate the Compass first in the following condition:

(1) the first time for flight.

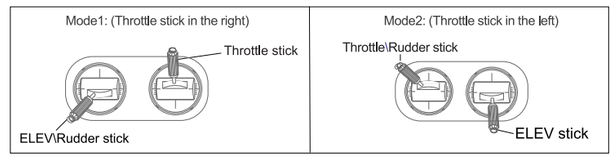
(2) when you are in a new environment.

(3) when you change the original place to a new place.

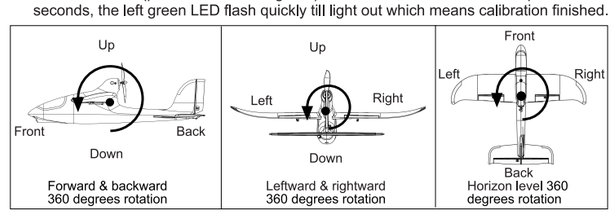
5.4.1 Compass Calibration

(1) Put aircraft to the horizontal position to lock the motors (lock method refer to 5.3.2).

(2) MODE 1: Push the Throttle stick to the highest point, move the Elevator / Rudder joystick to the bottom left corner, enter into the Calibration Mode.
MODE 2: Push the Throttle/Rudder stick to the highest point and left side, move the Elevator stick to the bottom, enter into the Calibration Mode.



(3) Rotate the aircraft 360 degree according to forward/backward, left/right and horizontal level orientation(please follow the figures) and leave it on the horizontal place for 30 seconds, the left green LED flash quickly till light out which means calibration finished.



(4) **Please reconnect the aircraft power after calibration.**

5.4.2 Notes:

(1) Please make calibration keep away from magnetic materials area.

(2) Please don not carry the magnetic materials when you make calibration.

(3) Compass does not work properly in the Antarctic Circle and the Arctic Circle.

(4) Calibrate compass is very important, otherwise, the system cannot work well.

(5) **Please reconnect the power of the aircraft and recalibrate the Compass if crash.**

6.0 Advanced function specification

6.1 The flowchart of GPS Satellites Signal(Need to connect with GPS module)

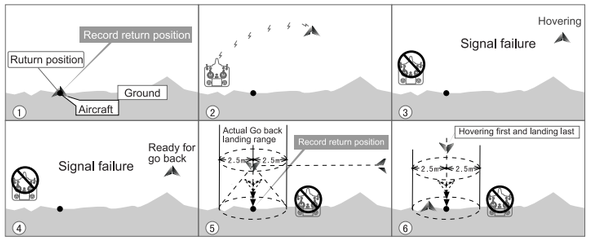
Notes:The starting position means a point before the departure of the flight control system initialization and automatically check the complete aircraft location.

GPS Satellites	<5	5	6	7	8	9	10	11	12
The right Green LED status	No blinking	Blinking once	Blinking twice	Blinking 3 times	Blinking 4 times	Blinking 5 times	Blinking 6 times	Blinking 7 times	Blinking 8 times

6.2 Failsafe to Return & Landing

Here pre-conditions for Failsafe to Return and Landing:
(1) The Aircraft is in normal flight status and battery voltage is normal.
(2) GPS function and signal is in good condition (⩾5 satellites, the right Green LED blinking).

6.2 .1 The flowchart of Failsafe to Return & Landing

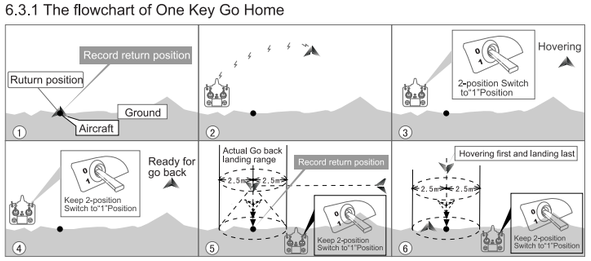


6.2.2 Notes:
(1) It is a suggest to active the fixed ID to make sure finding the signal more easier and faster when it was lost.
(2) To make sure the safe useage,please make sure to record the starting position before departure and know exactly where the starting position is.
(3) When the aircraft go home, the head is directed at start position, straight flight along the line on the horizon which between the start position and the failsafe point.
(4) If there are big obstacles around, the aircraft will be likely to block in the return trip.
(5) When GPS signal is bad or GPS is unable to work, the failsafe will not work and the aircraft will not return.

6.3 One Key Go Home

Here pre-conditions for One Key Go Home:
(1) The Aircraft is in normal flight status and battery voltage is normal.
(2) GPS function and signal is in good condition (⩾5 satellites, the right Green LED blinking).

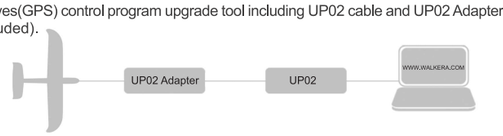
6.3.1 The flowchart of One Key Go Home



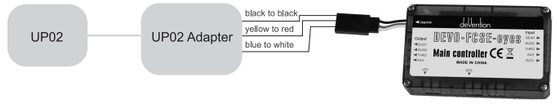
6.3.2 Notes:
(1) When switch to One Key Go Home mode, please don't move any sticks or switchs of the Radio. If move , the aircraft will enter into manual mode automatically if moved and will not execute the function of One Key Go Home.
(2) Please use manual mode to start to fly, switch to one key go home mode the aircraft begin to return home, after landing to the ground please push the throttle stick to the lowest position,and later need to re-switch to manual mode the motor can unlock.
(3) To make sure the safe useage,please make sure to record the starting position before departure and know exactly where the starting position is.
(4) When the aircraft go home, the head is directed at start position, straight flight along the line on the horizon which between the start position and the failsafe point.
(5) If there are big obstacles around, the aircraft will be likely to block in the return trip.
(6) When GPS signal is bad or GPS is unable to work, the failsafe will not work and the aircraft will not return.

7.0 Main Control Board Upgrade

(1) E-eyes(GPS) control program upgrade can be downloaded online at Walkera Offical Website:www.walkera.com.
(2) E-eyes(GPS) control program upgrade tool including UP02 cable and UP02 Adapter(Not included).

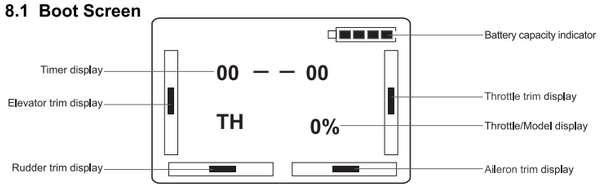


(3) Connect the blue single wire to signal wire of update access of flyer (blue to white), and connect yellow single wire to power wire of update access of flyer (yellow to red). Connect black single wire to ground of update access of flyer



8.0 DEVO-7 radio setting

8.1 Boot Screen



8.2 Model Type(TYPE)

Press the ENT button to enter the Main Menu, press UP or DN until MODEL starts to flash, then press ENT button to enter the Model Menu. Press the UP or DN button until TYPE starts to flash. Press the ENT button to choose between Helicopter and Aeroplane types. Press the R or L button to select **AERO**, press ENT to confirm and EXT to go back to the previous menu.

8.3 Model Select(SELEC)

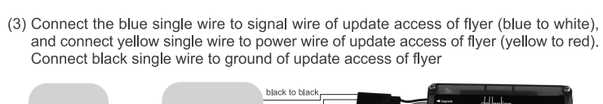
Press UP or DN key under the MODEL menu until SELEC starts to flash. Press ENT, the model options will be shown. Press UP or DN to choose MOD 1, press ENT to confirm and EXT back to previous menu.

8.4 Model Name(NAME)

In the MODEL menu, press UP or DN until the NAME starts to flash. Press ENT to access the model serial No. and default name options. Press UP or DN to select the characters or numbers that you wish to change, use the R or L key to change the characters or numbers to "EEYES". Press ENT to confirm and EXT to go back to the previous menu.

8.5 Wing Type(WING)

Press the ENT button to enter the MODEL Menu and press UP or DN until WING starts to flash and then press ENT key. The Wing type will be shown. Press UP or DN to choose "NORM" and after setting, press ENT to confirm and EXT to go back to the previous menu.



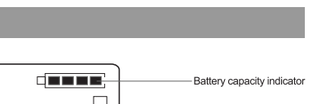
8.2 Model Type(TYPE) 8.3 Model Select(SELEC) 8.4 Model Name(NAME) 8.5 Wing Type(WING)

8.6 Device Output(OUTPU)

Press UP or DN under the MODEL menu, it comes out the flashing “OUTPU” menu. Press “ENT” to the submenu of “Output”.

(1) GEAR Setting

Press R or L to choose "GEAR D/R"; Press DN and R or L to choose "GEAR ACT".

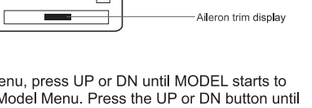


(2) FLAP Setting

Press DN and R or L to choose "FLAP ACT"; Press UP and R or L to choose "FLAP FMD".

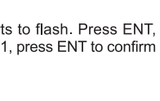
(3) AUX2 Setting

Press DN and R or L to choose "AUX2 GEAR"; Press UP and R or L to choose "AUX2 ACT", and press ENT to confirm. Press EXT to exit to the main interface.



8.7 Reverse Switch(REVSW)

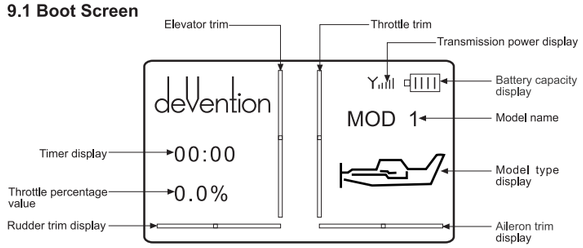
Press ENT to enter the Main Menu, press UP or DN until FUNCTION starts to flash, then press ENT to access the function menu. Press UP or DN until REVSW starts to flash. Press ENT to display the channel name and the reverse status. Press R or L to change between NOR and REV settings. Press DN to display each channel AILE, THRO, RUDD, GEAR, FLAP, AUX2 and their corresponding reverse setting. Set each channel as shown in the table below. Once complete, press ENT to confirm and EXT to go back to the previous menu.



ELEV	AILE	THRO	RUDD	GEAR	FLAP	AUX2
NORM	NORM	NORM	NORM	NORM	NORM	NORM

9.0 DEVO-10 radio setting

9.1 Boot Screen



9.2 Type Select

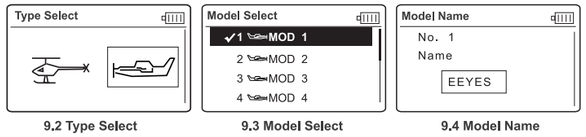
Press ENT to enter Main Menu and press UP or DN to select Model Menu. Press ENT to enter and press UP or DN to select Type Select and press ENT to enter setting interface. Press R or L to get the icon of **"Airplane"** and press ENT to confirm, then press EXT to exit.

9.3 Model Select

Press UP or DN to select Model select in Model Menu, press ENT to enter the Model Select setting interface; press UP or DN to select MOD 1, then press ENT to confirm and then press EXT to exit.

9.4 Model Name

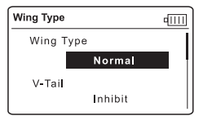
Press UP or DN to select Model Name in Model Menu, press ENT to enter the Model Name setting interface. Press UP or DN to select the character and figure which need to be changed, press R or L to change character and named "EEYES". Press EXT to exit after finished.



9.2 Type Select 9.3 Model Select 9.4 Model Name

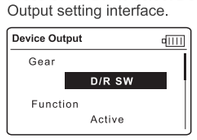
9.5 Wing Type

Press UP or DN to select Wing Type in Model Menu, press ENT to enter the Wing Type setting interface; Press UP or DN to select "Wing Type" setting, press R or L to select "Normal", then press ENT to confirm and then press EXT to exit.



9.6 Device Output

Press UP or DN to select Device Output in Model Menu, press ENT to enter the Device Output setting interface.

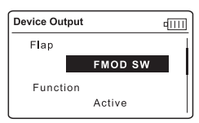


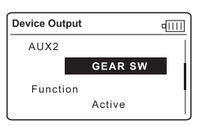
(1) Gear setting

Press UP or DN to select "Gear" setting, press R or L to select "D/R SW"; Press UP or DN to select "Function" setting, press R or L to select "Active".

(2) Flap setting

Press UP or DN to select "Function" setting below Flap, press R or L to select "Active"; Press UP or DN to select "Flap" setting, press R or L to select "FMOD SW".



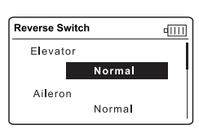


(3) AUX2 setting

Press UP or DN to select "AUX2" setting, press R or L to select "GEAR SW"; Press UP or DN to select "Function" setting, press R or L to select "Active", then press ENT to confirm and then press EXT to exit.

9.7 Reverse Switch

Press UP or DN to select Function Menu in Main Menu, press UP or DN to select Reverse Switch and press ENT to enter the Reverse Switch setting interface; Press UP or DN to select channel, press R or L to shift the status between normal and reverse, and press ENT to confirm and then press EXT to exit.

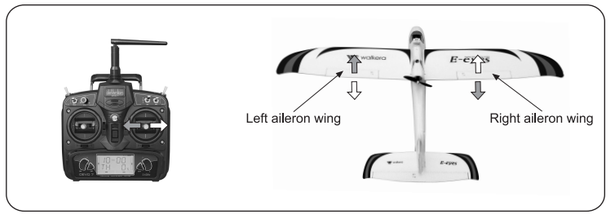


Channel	Elevator	Aileron	Throttle	Rudder	Gear	Flap	AUX2	AUX3	AUX4	AUX5
Status	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal

10.0 Flight control

Take Mode 1 (throttle stick on the right hand) as example

(1) Throttle control: Push the throttle stick up, the screw propellers will rotates clockwise and fly forward in fast; When you pull down the stick , the aircraft will decrease to low speed flight.



(2) Aileron(left and right) control: When moving the aileron stick left , the left aileron wing will move up, and the right aileron wing will move down, the aircraft will fly to the leftward; When moving the aileron stick right, the left aileron wing will move down, the right aileron wing will move up, the aircraft will fly to the rightward.

(3) Elevator(forward and backward)control: When moving the elevator stick up, the elevator wing will move down, the aircraft will fly downward; When moving the elevator stick down, the elevator wing will move up, the aircraft will fly higher and higher.

(4) Rotate control: When moving the rudder stick left, the rudder wing will move left, the aircraft will rotate left(CCW); When moving the rudder stick right, the rudder wing will move right, the aircraft will rotate right(CW).