❶ Propellers Installation

1.1 Prepare forward propeller(Clockwise arrow mark), counter propeller (counterclockwise arrow mark)

1.2 Follow the principle of propellers' arrows consistant with body arrow marks to assemble clockwise and counterclockwise propellers.

1.3 Propellers Installation finished.

❷ Skid landing reset/Binding

The default setting of skid landing is in retracting status. You can change it into extending status by power-on reset. Please do not pull it out with external force.

2.1 Put battery into aircraft.

2.2 Reverse the aircraft.

2.3 Turn all the Switch of transmitter to "0" Position, push the throttle stick to the lowest position, Turn on the transmitter power.

— Power indicator
— Power button
— Power switch

2.4 Turn the power switch to "ON" position, and press on the power button about 3-5 second till the green LED light solid. The undercarriage(skid landing) will unfold automatically.

2.5 Put aircraft to the horizontal position, the Red LED and Green LED flash till light out which means code binding successful.

2.6 After the success of code binding, place the aircraft well.

❸ Compass Calibration (indoor, outdoor)

IMPORTANT: Make sure all the trims position default at Middle(the number is "0") and the motors are locked before calibration (Aircraft red, green LED indicator is NOT flashing). Factory default setting, is for the motors to be locked after the completed ID binding process. (For details on motor lock and unlock process see point 6 and 7).

3.1 Enter into Compass Calibration, Aircraft red, green LED light flash quickly.
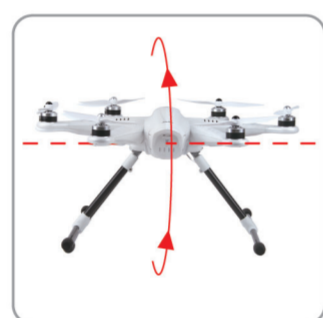
3.2 Forward& backward 360° rotation (Rotate the aircraft, from 0° to 90°, 180°, 270°, 360°, all need to pause for 1 second.)
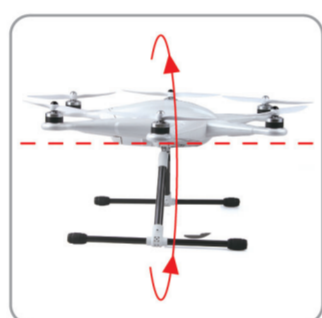
3.3 Leftward & rightward 360° rotation (Rotate the aircraft, from 0° to 90°,180°, 270°, 360°, all need to pause for 1 second.)

3.4 Horizon level 360° rotation (Rotate the aircraft, from 0° to 90°, 180°, 270°, 360°, all need to pause for 1 second.)

Ground Head vertical down
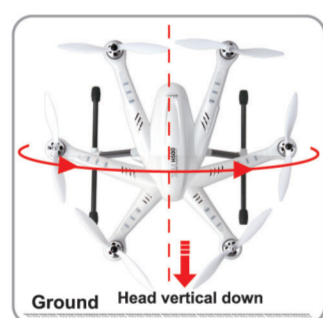
3.5 Vertical direction (Head down) rotation 360°(Rotate the aircraft, from 0° to 90°, 180°, 270°, 360°, all need to pause for 1 second.)

3.6 Put aircraft to the horizontal position, the Red LED and Green LED light out which means calibration finished. Please reconnect the aircraft power after calibration.

● Attention:

(1) After calibration, first time taking off, the aircraft may drift in the sky, please just ignore that, and meantime the system will do compass calibration automatically. After 3-5 minutes flight, please land the aircraft on the ground and hold the motor in order to save calibration parameter.

(2) please do the calibration in open space and far away from the Strong electromagnetic interference.

❹ G-3D Gimbal installation

Notice: belows installations need to be handled with copter power turn-off.

4.1 Prepare the G-3D gimbal, Gimbal fixed block, gasket, screw, spring.
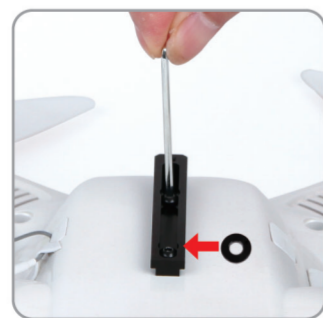
4.2 Put the gasket on the threaded hole on bottom of the aircraft, Use M3x8 and M3x10 screw to fix the gimbal fixed block to the bottom of aircraft.

4.3 Put the Gimbal sliding chute aim to gimbal fixed block, and enclose to the bottom of gimbal fixed block.

4.4 Put the spring into M3x12 screw, aim to the threaded hole, tighten up the screw to Gimbal.

4.5 Insert 9 pin of the Gimbal date wire into the Gimbal connection port at the bottom of the aircraft.

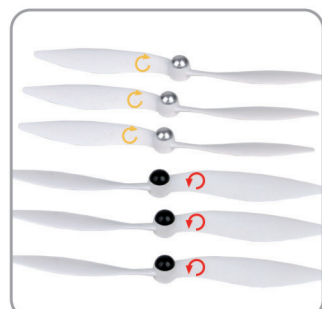4.6 G-3D Gimbal Installation finished.

TALI H500
GPS SYSTEM

deVention

- One key to take off
- Roundly cruise flight mode
- Hyper IOC Mode
- GPS Telemetry function
- Altitude hold mode
- One key go home mode
- Retractable undercarriage
- 5.8G real time image transmission

Match with DEVO F12E
Quick Start Guide and Systems Flowchart

● **Specifications:**

Main Rotor Dia. : 233mm

Overall (L x W x H): 471 x 536 x 270mm

Weight: 2020g(Battery included)

Takeoff Weight: <2500g

Transmitter: DEVO F12E

Receiver: DEVO-RX705

Brushless Motor: WK-WS-34-001

Brushless ESC: WST-15AH (R/G)

Main Controller: FCS-H500

Battery: 22.2V 5400mAh Li-Po

M3   M4
M2   M5
M1   M6

● M1/M3/M5 rotate in counterclockwise, motors are the dextrogyrate thread.

● M2/M4/M6 rotate in clockwise, motors are the levogyrate thread.

❺ iLook+ Camera Installation

5.1 Screw the camera mushroom antenna into Camera.

5.2 Unscrew 2 M2x4 screw, Loosen the camera fixed frame.

5.3 Install the camera into gimbal, Fix it with camera fixed frame (ensure the gap close to the lens), then screw the M2x4 screw to the camera fixed frame again.

5.4 Insert the camera power cable into power output port of G-3D.

5.5 iLook+ Camera Installation finished.

⑥ Motor Unlock

After Binding, move the throttle stick to the lowest position and keep the throttle trim at the neutral position, at the same time move the rudder stick to the far left side. The red, green LED indicator light will turn solid, this indicate that the motors are unlocked.

TEST: gently push the throttle up a little, the motors will spin.

NOTICE: The MIX switch much be in Manual to unlock the motors.
It is not possible to unlock the motors in GPS flight mode.

Note:
For safety, the motors will automatically lock after 10 seonds. This means, if you do not start flying in 10 seconds, you have to unlock the motors again.

Mode 1(throttle stick on the right)   Mode 2(throttle stick on the left)

⑦ Motor Lock

To Lock the motors.
Move the throttle stick to the lowest position,and move the rudder stick to the far right.
The red, green LED indicator light will go out whenthe motors are locked.
TEST: if you gently push up on the throttle, the motors will not start.

NOTICE:
By default. After successful binding, the motors is locked.

Mode 1(throttle stick on the right)   Mode 2(throttle stick on the left)

⑧ DEVO F12E panel illustration

	Left stick	THRO/RUDD stick
Mode 2 (Throttle stick on the left)	Right stick	ELEV/AILE stick
	Left trim	THRO trim
	Right trim	ELEV trim
Mode 1 (Throttle stick on the right)	Left stick	ELEV/RUDD stick
	Right stick	THRO/AILE stick
	Left trim	ELEV trim
	Right trim	THRO trim

(1) Manual Mode — MIX Switch to "0"
(2) Altitude Hold Mode — MIX Switch to "1"
(3) One Key Go Home — MIX Switch to "2"

2.4G TX antenna
5.8G RX antenna
GEAR(Control skid landing, Extend and Retract)
MIX(Control Mode Switch)
RUDD D/R(One Key to take off switch)
FMOD(Roundly cruise flight mode switch)
ELEV D/R(Intelligent Orientation Control (IOC) Flight switch)
AILE D/R(Control video switch)
AUX5(Control Gimbal, Roll)
AUX6(Control Gimbal, Tilt)
Left trim
5" LCD Screen
Left stick
Right stick
RUDD trim
Right trim
AILE trim
Power switch

⑩ Operation Instruction

Model (is the nose direction)	Mode 1	Mode 2
Up/down		
Forward/backward		
Left-leaning/ right-leaning		
Head direction is horizontal level		
One key to take off	Toggle the throttle stick to the lowest position → MIX switch to "1" position → RUDD D/R switch to "1" position	
Altitude hold mode	MIX switch to "1" position → Throttle stick return neutral	
Roundly cruise flight mode	FMOD switch to "2" position: roundly cruise flight mode Active	FMOD switch to "0" position: roundly cruise flight mode close
One key to go home mode	MIX switch to "2" position → Throttle stick return neutral	

⑨ GPS indicator lights

GPS Satellites	<6	6	7	8	9	10	11	12	13
The blue LED status	No blinking	Blinking once	Blinking 2 times	Blinking 3 times	Blinking 4 times	Blinking 5 times	Blinking 6 times	Blinking 7 times	Blinking 8 times

IMPORTANT: For GPS flight mode, the LED blue indicator light should blink over 2 times.

⑪ Radio function version form

Function	Switch	Transmitter setting	Instructions
One key to take off	RUDD D/R	Model Menu → Device Output → Flap → RUDD D/R → Active	Keep aircraft static in horizontal ground → Motor unlock → Toggle the throttle stick to the lowest position → MIX switch to "1" position → RUDD D/R switch to "1" position Notes: (1) You can use this function only when you can receive GPS signal and the GPS signal should be in good condition. (2) If you want to control manually the throttle, you should toggle the throttle stick to the middle position or above, then you can unlock one key to take off mode.
Altitude hold mode	MIX SW	Model Menu → Device Output → Gear → MIX SW → Active	"0" position: Manual mode "1" position: Altitude hold mode "2" position: One key go home mode MIX switch to "1" position → Throttle stick return neutral Notes: (1) You can use this function only when you can receive GPS signal and the GPS signal should be in good condition. (2) Under Altitude hold mode, the drone will hover only when the throttle stick is in the middle position. (3) If there is no GPS signal or the signal isn't in good condition, it will enter automatically altitude hold mode, instead of holding at one position.
Roundly cruise flight mode	FMOD	Model Menu → Device Output → AUX3 → FMOD SW → Active	"0" position: close "1" position: leave unused "2" position: start roundly cruise flight mode Notes: (1) You can use this function only when you can receive GPS signal and the GPS signal should be in good condition. (2) The default setting of Roundly cruise flying radius is 5m. If you want to change the Roundly cruise flying radius, you should set the EPA in the transmitter. After having changed the setting, you should turn FMOD switch to "0" position to save the data, then return to "2" position to read the new Roundly cruise flying radius.
One key to go home mode	MIX SW	Model Menu → Device Output → Gear → MIX SW → Active	"0" position: Manual mode "1" position: Altitude hold mode "2" position: One key go home mode MIX switch to "2" position → Throttle stick return neutral Notes: (1) You can use this function only when you can receive GPS signal and the GPS signal should be in good condition. (2) When under one key go home mode, do not touch other switches and keys of transmitter.
Hyper IOC Mode	ELEV D/R	Model Menu → Device Output → AUX2 → ELEV D/R → Active	IOC means the aircraft flight direction only related to the position of the first GPS signals, unrelated to head direction of the aircraft. "0" position: close "1" position: start hyper IOC mode Notes: (1) You can use this function only when you can receive GPS signal and the GPS signal should be in good condition. (2) During the flight, the drone will enter hyper IOC mode when the distance between the flight position of drone and the initial position where the GPS signal has been received is more than 10m. (3) When under hyper IOC mode, you can make the drone return to the initial position only by holding the stick backwards.
Extend/Retract of skid landing	GEAR	Model Menu → Device Output → AUX4 → GEAR SW → Active	"0" position: extend skid landing "1" position: retract skid landing Notes: When under one key go home mode, the skid landing will lay down automatically, and it has nothing to do with the position of GEAR switch until the drone has returned.