① FCS-H500 "Main Controller" visual guide to the flight controller

TALI H500
GPS SYSTEM

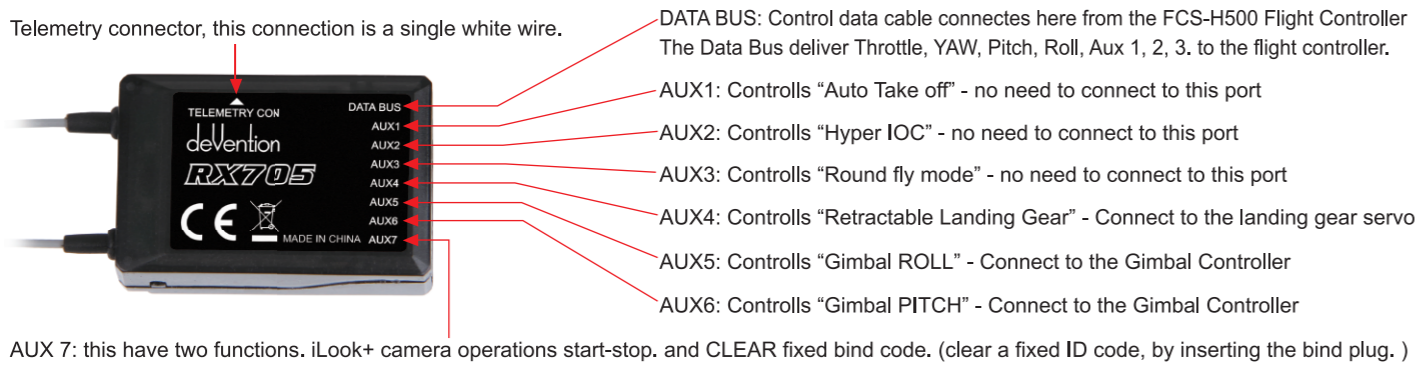# Setup guide for the advanced DEVO F12E control system
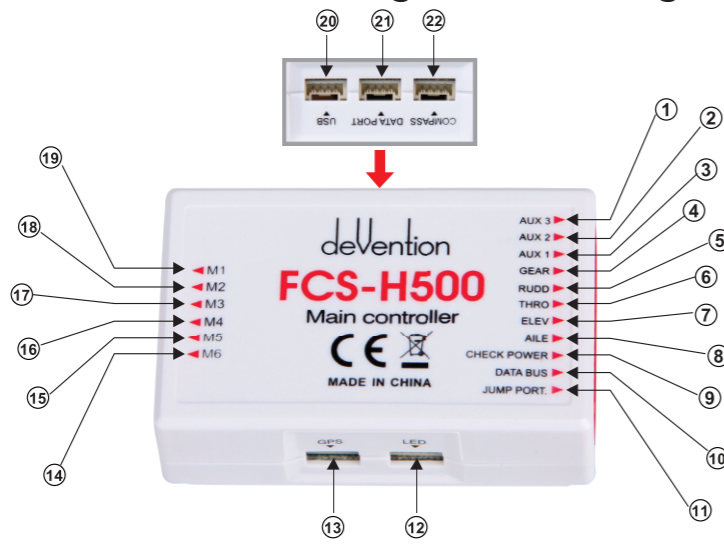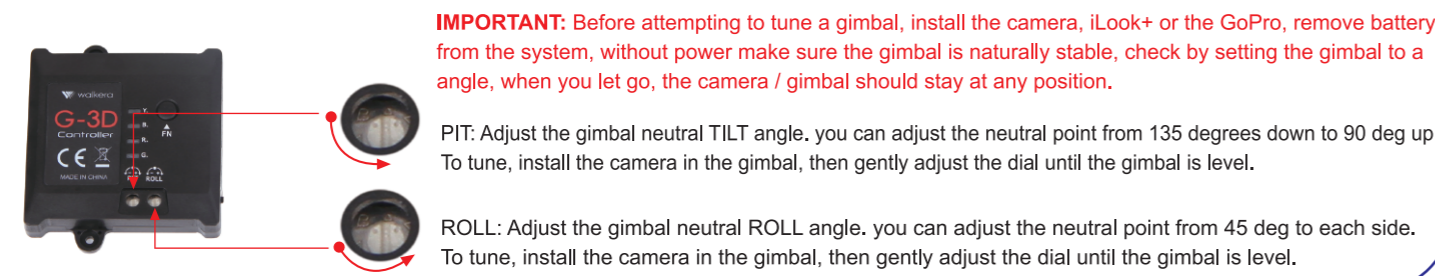
①	AUX 3 - Round fly Mode	⑨	Voltage sensor - connect to the power distribution board	⑯	Connect to ESC #4 (eletronic speed controller for motor)
②	AUX 2 - Hyper IOC mode	⑩	Data transmission - connect to the DEVO RX705 recieve	⑰	Connect to ESC #3 (eletronic speed controller for motor)
③	AUX 1 - Auto Take Off	⑪	Jumper port, when using regular recievers. insert bind plug her	⑱	Connect to ESC #2 (eletronic speed controller for motor)
④	Control Mode Switch	⑫	LED lights - the Flight Control status indecator LED's	⑲	Connect to ESC #1 (eletronic speed controller for motor)
⑤	YAW control	⑬	GPS connection (the red/white/blue/black 4 color cable)	⑳	UPGRADE port for the FC (MINI USB)
⑥	Throttle input	⑭	Connect to ESC #6 (eletronic speed controller for motor)	㉑	DATA communication port
⑦	PITCH control (forward & backward)	⑮	Connect to ESC #5 (eletronic speed controller for motor)	㉒	Connect to the Compass (the red and black cable)
⑧	ROLL control (leftward & rightward)				

② DEVO RX705(FCC) / DEVO RX708C(CE) receiver guide

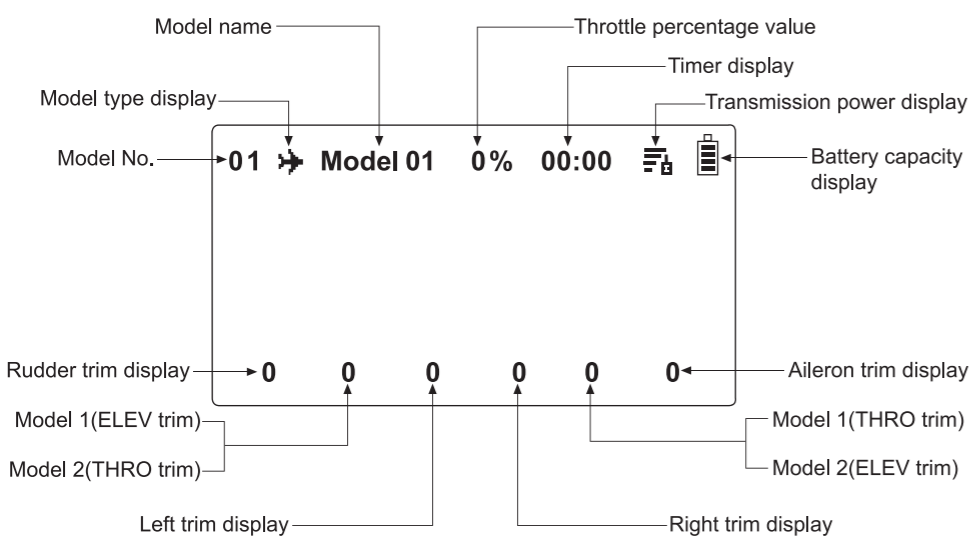**Attention:** DEVO RX705(FCC) / DEVO RX708(CE) have the same ports.

Telemetry connector, this connection is a single white wire.

DATA BUS: Control data cable connectes here from the FCS-H500 Flight Controller The Data Bus deliver Throttle, YAW, Pitch, Roll, Aux 1, 2, 3. to the flight controller.

AUX1: Controlls "Auto Take off" - no need to connect to this port

AUX2: Controlls "Hyper IOC" - no need to connect to this port

AUX3: Controlls "Round fly mode" - no need to connect to this port

AUX4: Controlls "Retractable Landing Gear" - Connect to the landing gear servo

AUX5: Controlls "Gimbal ROLL" - Connect to the Gimbal Controller

AUX6: Controlls "Gimbal PITCH" - Connect to the Gimbal Controller

AUX 7: this have two functions. iLook+ camera operations start-stop. and CLEAR fixed bind code. (clear a fixed ID code, by inserting the bind plug.)

③ Instructions for the G-3D gimbal tuning dials

IMPORTANT: Before attempting to tune a gimbal, install the camera, iLook+ or the GoPro, remove battery from the system, without power make sure the gimbal is naturally stable, check by setting the gimbal to a angle, when you let go, the camera / gimbal should stay at any position.

PIT: Adjust the gimbal neutral TILT angle. you can adjust the neutral point from 135 degrees down to 90 deg up To tune, install the camera in the gimbal, then gently adjust the dial until the gimbal is level.

ROLL: Adjust the gimbal neutral ROLL angle. you can adjust the neutral point from 45 deg to each side. To tune, install the camera in the gimbal, then gently adjust the dial until the gimbal is level.
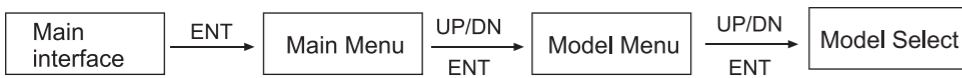

④ DEVO F12E - TALI H500 Settings

4.1 Boot Screen(Main interface)

- Model name
- Throttle percentage value
- Timer display
- Transmission power display
- Model type display
- Model No.
- Battery capacity display
- Rudder trim display
- Aileron trim display
- Model 1(ELEV trim)
- Model 1(THRO trim)
- Model 2(THRO trim)
- Model 2(ELEV trim)
- Left trim display
- Right trim display

4.2 Model Select

Main interface → ENT → Main Menu → UP/DN ENT → Model Menu → UP/DN ENT → Model Select

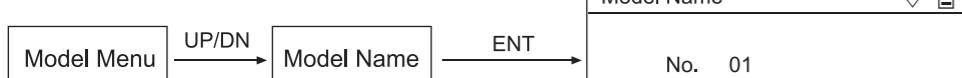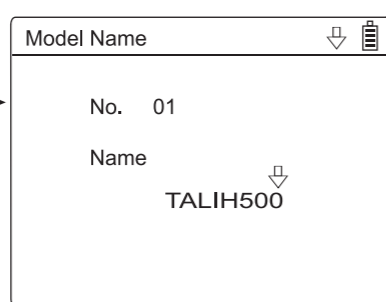| Model Select	⇩ 🗎
✓ 01 ✈ Model 01	
02 ⤳ Model 02	
03 ⤳ Model 03	
04 ⤳ Model 04	
05 ⤳ Model 05	
06 ⤳ Model 06	
07 ⤳ Model 07	
08 ⤳ Model 08	

Press UP or DN button to select the stored model No. For example "Model 01", press EXT to return back "Model Menu" after finished.

4.3 Model Name

Model Menu → UP/DN → Model Name → ENT

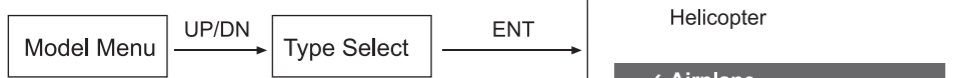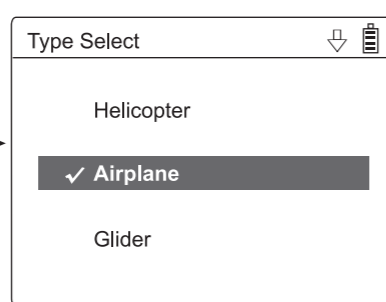| Model Name	⇩ 🗎
No. 01	
Name	
TALIH500	

Press the UP or DN button to move the cursor position
Press the R / L button to change the character
Name the model "TALIH500"
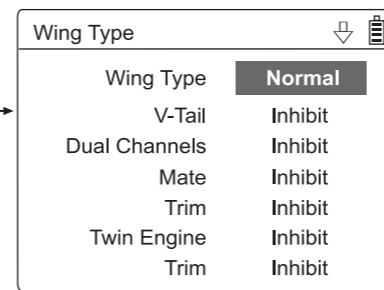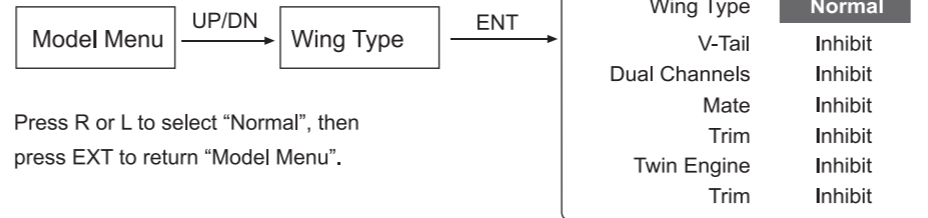When done, press EXT to return to the "Model Menu"

4.4 Type Select

Model Menu → UP/DN → Type Select → ENT

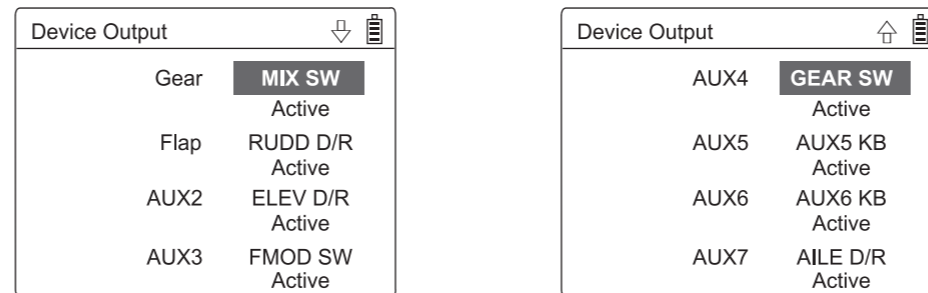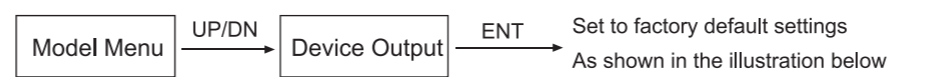| Type Select	⇩ 🗎
Helicopter	
✓ Airplane	
Glider	

Using the R and L button, to select the model type. type should be "Airplane" when done press ENT This will autmatically return to "Model Menu".
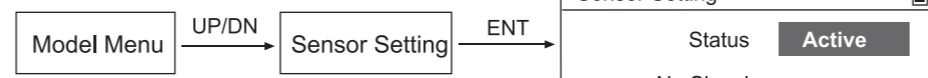
4.5 Wing Type

Model Menu → UP/DN → Wing Type → ENT

Wing Type	⇩ 🗎
Wing Type	Normal
V-Tail	Inhibit
Dual Channels	Inhibit
Mate	Inhibit
Trim	Inhibit
Twin Engine	Inhibit
Trim	Inhibit

Press R or L to select "Normal", then press EXT to return "Model Menu".

4.6 Device Output

Model Menu → UP/DN → Device Output → ENT → Set to factory default settings As shown in the illustration below

Device Output	⇩ 🗎
Gear	MIX SW
	Active
Flap	RUDD D/R
	Active
AUX2	ELEV D/R
	Active
AUX3	FMOD SW
	Active

Device Output	⇧ 🗎
AUX4	GEAR SW
	Active
AUX5	AUX5 KB
	Active
AUX6	AUX6 KB
	Active
AUX7	AILE D/R
	Active

Press the EXT button to return back to the "Model Menua" when finished.

4.7 Sensor Setting

Model Menu → UP/DN → Sensor Setting → ENT

| Sensor Setting	🗎
Status	Active
No Signal	Inhibit
Sensor Submenu	
	Voltage
	Temperature
	GPS Setting

Press R or L to select "Active".

NOTE: To display the sensor settings while flying you have to enter model menu / sensor view / press L for next page this page will show the sensor readings live while you fly.
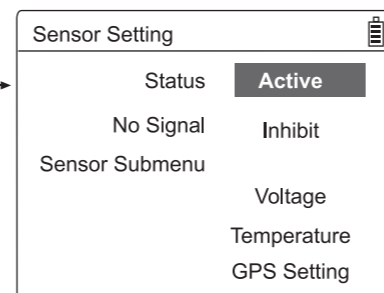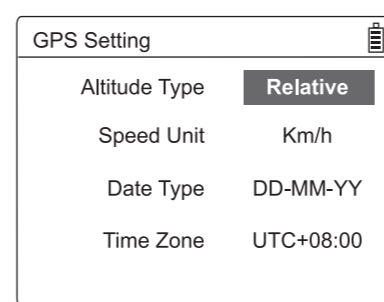
(1) Voltage Setting

Press UP or DN to select Voltage in the Sensor Setting. Press ENT to enter Voltage interface.

Voltage	
Internal: V0	Inhibit
External: V1	Active
	21.4V
External: V2	Inhibit
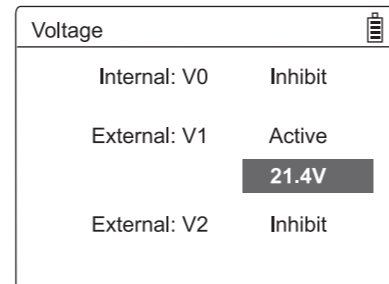
Internal shows the Radio battery voltage. External shows the aircraft battery voltage.

The TALI default voltage settings is 21.4 volts. When the radio give you the low-voltage warning. it is **URGENT to land as quickly as possible.**
* Optional you can adjust the voltage to 21.6 this will give you a earlier warning.

(2) GPS Receive Setting

Press UP or DN to select GPS setting on the Sensor Setting interface, then press ENT to enter GPS Setting interface.

GPS Setting	🗎
Altitude Type	Relative
Speed Unit	Km/h
Date Type	DD-MM-YY
Time Zone	UTC+08:00

(2.1) Altitude Type setting:

Press R or L to select Absolute altitude over oceanlevel or Relative altitude which is indicating the altitude from your starting point.

(2.2) Speed Unit setting:

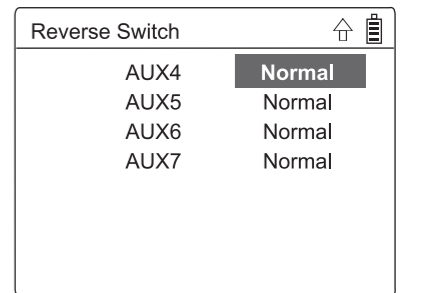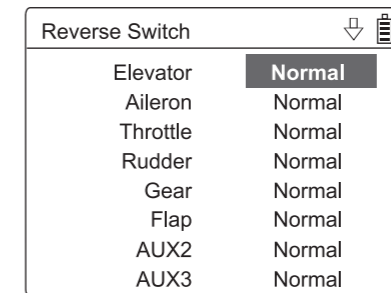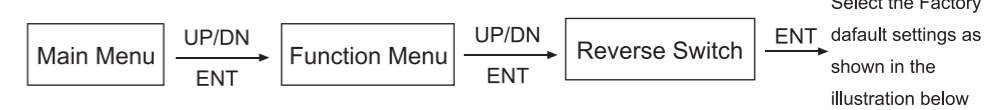Press R or L to select Km/h or Knots.

(2.3) Date Type setting:

Press R or L to select the date format DD-MM-YY / MM-DD-YY / YY-MM-DD.

(2.4) Time Zone:

Press R or L to select Time Zone, then press EXT to return "Main Menu".

4.8 Reverse Switch

Main Menu → UP/DN ENT → Function Menu → UP/DN ENT → Reverse Switch → ENT → Select the Factory dafault settings as shown in the illustration below

Reverse Switch	⇩ 🗎
Elevator	Normal
Aileron	Normal
Throttle	Normal
Rudder	Normal
Gear	Normal
Flap	Normal
AUX2	Normal
AUX3	Normal

Reverse Switch	⇧ 🗎
AUX4	Normal
AUX5	Normal
AUX6	Normal
AUX7	Normal

When finished press the EXT button to return back to the "Function Menu"

4.9 Servo Travel Adjust

Function Menu → UP/DN → Travel Adjust → ENT

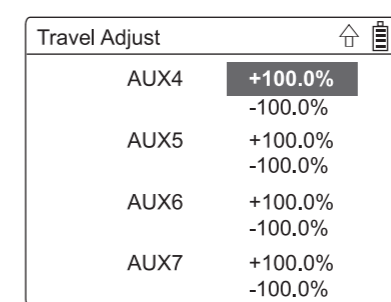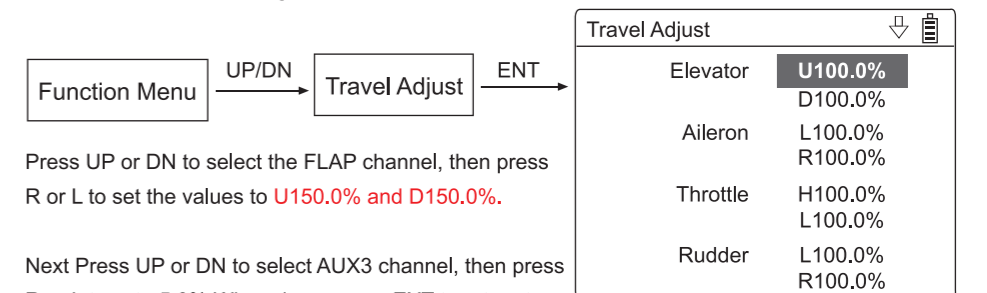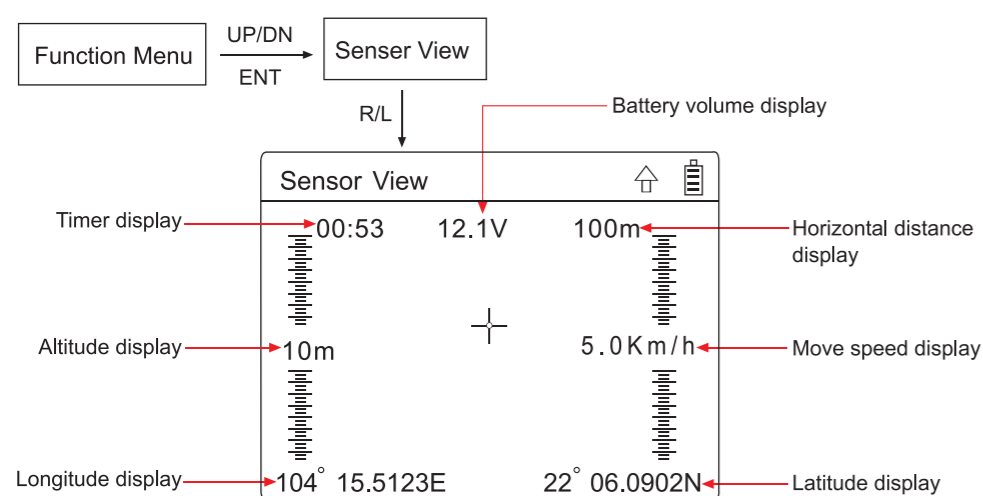| Travel Adjust	⇩ 🗎
Elevator	U100.0%
	D100.0%
Aileron	L100.0%
	R100.0%
Throttle	H100.0%
	L100.0%
Rudder	L100.0%
	R100.0%

Press UP or DN to select the FLAP channel, then press R or L to set the values to U150.0% and D150.0%.

Next Press UP or DN to select AUX3 channel, then press R or L to set +5.0% When done, press EXT to return to the "Function Menu" AUX 3 the setting for the Round Fly mode. changing the percentage change the radius on the round fly circle
*You can adjust any round-fly radius you want, simply change the positive value. 25% = 25 meter / 75feet.

Travel Adjust	🗎
AUX4	+100.0%
	-100.0%
AUX5	+100.0%
	-100.0%
AUX6	+100.0%
	-100.0%
AUX7	+100.0%
	-100.0%

Travel Adjust	⇧ ⇩ 🗎
Gear	+100.0%
	-100.0%
Flap	U150.0%
	D150.0%
AUX2	+100.0%
	-100.0%
AUX3	+5.0%
	-100.0%

4.10 Senser View

Function Menu → (UP/DN, ENT) → Senser View → (R/L)

Sensor View   ⬆ 🔋
- Timer display → 00:53   12.1V   100m → Horizontal distance display
- Altitude display → 10m   5.0Km/h → Move speed display
- Longitude display → 104° 15.5123E   22° 06.0902N → Latitude display
- Battery volume display
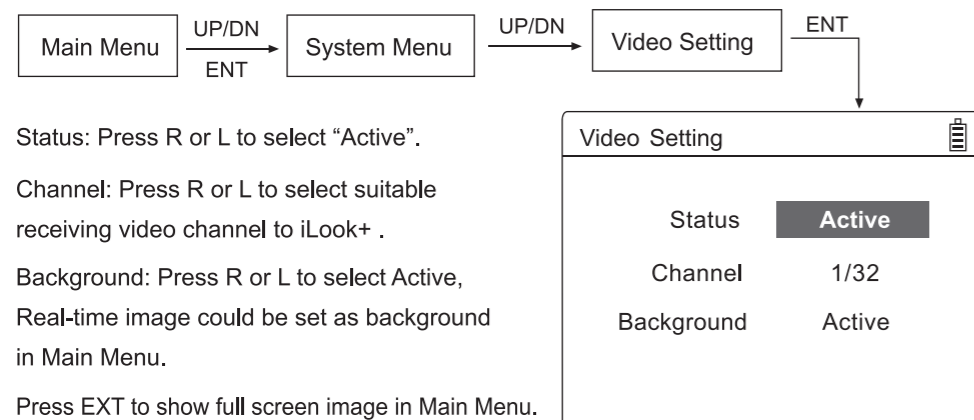
Press R or L to select viewport display. When set the image as background, Information will be displayed on the image.

4.11 Video Setting

Main Menu → (UP/DN, ENT) → System Menu → (UP/DN) → Video Setting → (ENT)
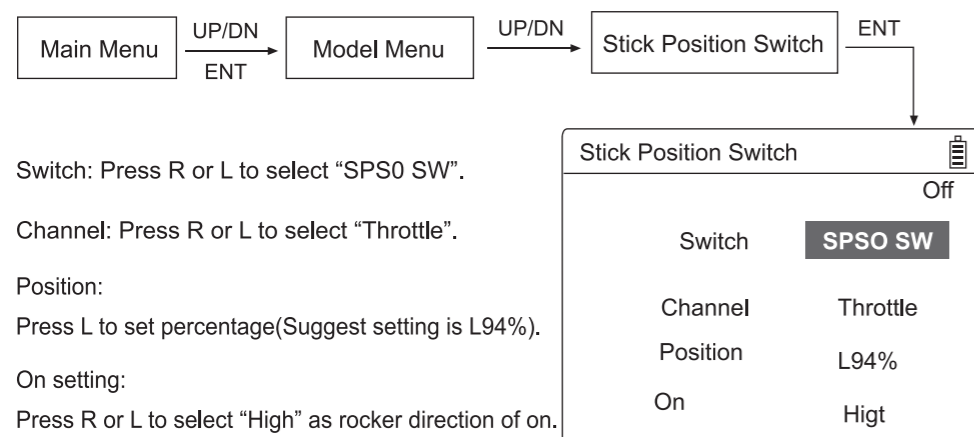
Status: Press R or L to select "Active".

Channel: Press R or L to select suitable receiving video channel to iLook+ .

Background: Press R or L to select Active, Real-time image could be set as background in Main Menu.

Press EXT to show full screen image in Main Menu.

Video Setting   🔋
- Status   Active
- Channel   1/32
- Background   Active

4.12 Timer Setting

Main Menu → (UP/DN, ENT) → Model Menu → (UP/DN) → Stick Position Switch → (ENT)
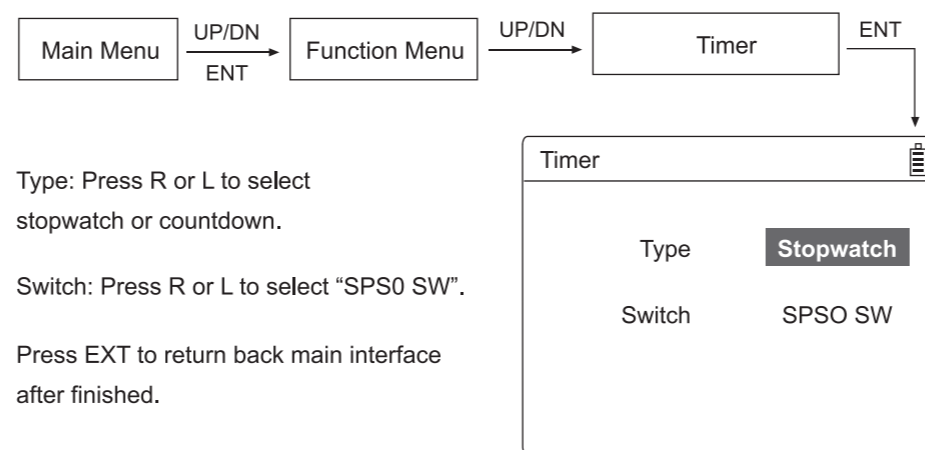
Switch: Press R or L to select "SPS0 SW".

Channel: Press R or L to select "Throttle".

Position:
Press L to set percentage(Suggest setting is L94%).

On setting:
Press R or L to select "High" as rocker direction of on.

Stick Position Switch   🔋
- Off
- Switch   SPS0 SW
- Channel   Throttle
- Position   L94%
- On   Higt

Move up and down of the throttle to check if the direction of the switch is set correctly. Then press EXT to return "Main Menu".

Main Menu → (UP/DN, ENT) → Function Menu → (UP/DN) → Timer → (ENT)
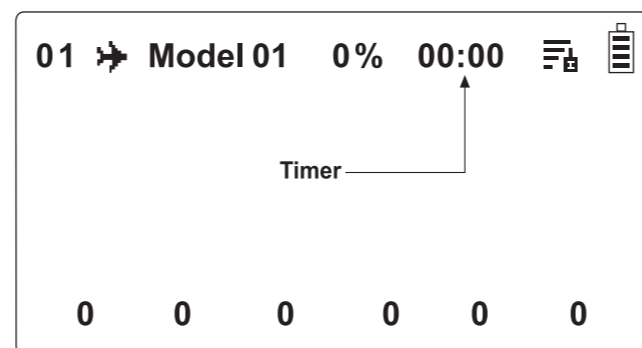
Type: Press R or L to select stopwatch or countdown.

Switch: Press R or L to select "SPS0 SW".

Press EXT to return back main interface after finished.

Timer   🔋
- Type   Stopwatch
- Switch   SPSO SW

Usage: Toggle the throttle up to L94% to start the time, toggle the throttle down to L94% to stop the time, press DN to reset.

01 ✈ Model 01   0%   00:00   🔋

Timer

0   0   0   0   0   0

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❺ iLook+ Camera Setting

5.1 Pictures illustration

- Shutter Button
- Video/Photo Switch
- Antenna
- Power port(DC 7V-15V)
- Indicator(Red light)
- Micro SD card slot

5.2 Specifications

(1) Video

a. Video Resolution: 1920 x1080 Full HD   b. FPS: 30   c. Micro High Speed SD card: Max 64G

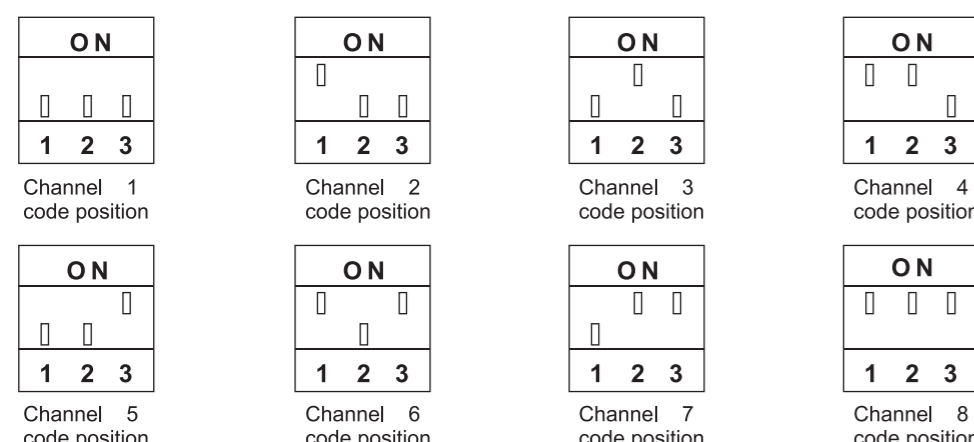d. Imaging Sensor: 3,000,000 Pixels   e. Video Format: MOV   f. Photo: 4032x3024 Pixels

(2) 5.8G wireless

a. 5.8G wireless image transmission   d. FCC Output Power≤200mW   c. CE Output Power≤25mW

d. CE Bind B section: 8 channels   e. FCC Bind B section: 4 channels

5.3 iLook+(FCC/CE) camera transmitting channel selection

There are 8 different channels can be selected. You can choose the best frequency channel according to the image quality as bellow:

Channel	1	2	3	4	5	6	7	8
Frequency	5866MHz	5847MHz	5828MHz	5809MHz	5790MHz	5771MHz	5752MHz	5733MHz

Channel 1 code position   Channel 2 code position   Channel 3 code position   Channel 4 code position

Channel 5 code position   Channel 6 code position   Channel 7 code position   Channel 8 code position

Channel code switch

Note: Only transmitting channel 2, 4, 6, 8 are available for the iLook+(FCC).

5.4 Video and Photo user guide

Warm tips:

(1) Micro SD card must be inserted to the iLook+ camera before connecting the power, and took off after disconnecting the power.(Recommend to use high speed SD card)

(2) Insert MICRO SD card, the camera is powered on, the red indicator light indicates the camera is initialized, the red light goes out indicates the camera enters standby mode initialization is complete.

(3) Insert MICRO SD card, the camera is powered on, if the red indicator light blinks rapidly means formatting it is necessary. pls stir video/ photo switch to 🎬 position press shutter last for 5 sec. format after the completion of the proposed re-energized camera.

(1) Video instruction

(1.1) Radio Operation

| Switch	Transmitter setting	Instructions
AILE D/R	Model Menu ↓ Device output ↓ AUX7 ↓ AILE D/R ↓ Active	(1) It's a must to turn the switch of iLook+ to " 🎬 " position. (2) Start video: turn the AILE D/R switch from "0" position to "1" position, wait for 1-2 seconds, then return to "0" position, the camera will start to video (the red indicator keeps flash with an interval of 0.5 second). The red indication of video status can be seen on the transmitter. Stop video: turn the AILE D/R switch from "0" position to "1" position, wait for 1-2 seconds, then return to "0" position, the camera will stop video (the red indicator lights out). And the red indication of video status can not be seen on the transmitter. (3) Make sure that the video recorded will not be saved in the SD card if you haven't finished the "stop video" operation.

(1.2) Manual Operation

Turn the Video/Photo Swich to 🎬 first please, press the shutter button once, iLook+ camera starts to Video(the Red indicator flash for 0.5sec interval); Press the shutter button again, iLook+ camera stops video(The Red indicator light out).

(2) Photo instruction

Please Turn the video/photo switch to 📷 , Press the shutter button once, iLook camera Will take a photo (The Red indicator blinks once then light out), press the shutter button again, it will take another photo.

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❻ Connect charger instruction

Slide the power switch to "ON" position when charging, press the power button for 3-5 seconds till the power indicator keeps on.

- Power switch
- Power button
- Power indicator
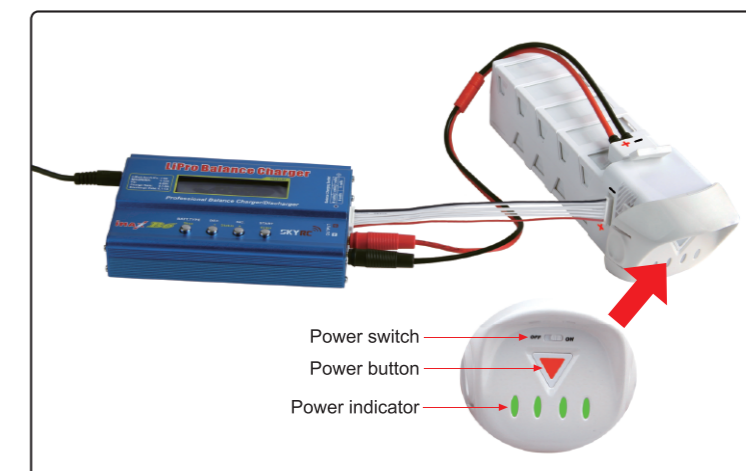
For details, please refer to iMAX B6 user manual.

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

(3) 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 .

(4) 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.