1.DEVO-F12E(white) Control Panel
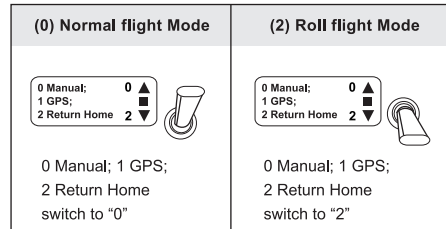
Mode 2 (Throttle stick on the left)	Left stick	THRO/RUDD stick
	Right stick	ELEV/AILE stick
	Left trim	THRO trim
	Right trim	ELEV trim
Mode 1 (Throttle stick on the right)	Left stick	ELEV/RUDD stick
	Right stick	THRO/AILE stick
	Left trim	ELEV trim
	Right trim	THRO trim

(0) Normal flight Mode	(2) Roll flight Mode
0 Manual; 0 ▲ 1 GPS; ■ 2 Return Home 2 ▼	0 Manual; 0 ▲ 1 GPS; ■ 2 Return Home 2 ▼
0 Manual; 1 GPS; 2 Return Home switch to "0"	0 Manual; 1 GPS; 2 Return Home switch to "2"

1. 2.4G TX antenna

2.One Key to Start-buzzer control switch

3. Retractable Skid Landing - Landing Gear Retract Switch and Deploy landing gear

4. IOC - IOC control switch Inteligent Orientation Control

5. Gimbal Roll - Gimbal ROLL control

6. Left trim

7. Left stick

8. RUDD trim

9. UP key

10. DN key

11. EXT key

12. 5.8G RX antenna

13. ORBIT - Round flight mode

14. 0 Manual;
    1 GPS;
    2 Return Home
    (Flight Mode Switch)

15. Start/Stop Video Rec (Camera Start/Stop)

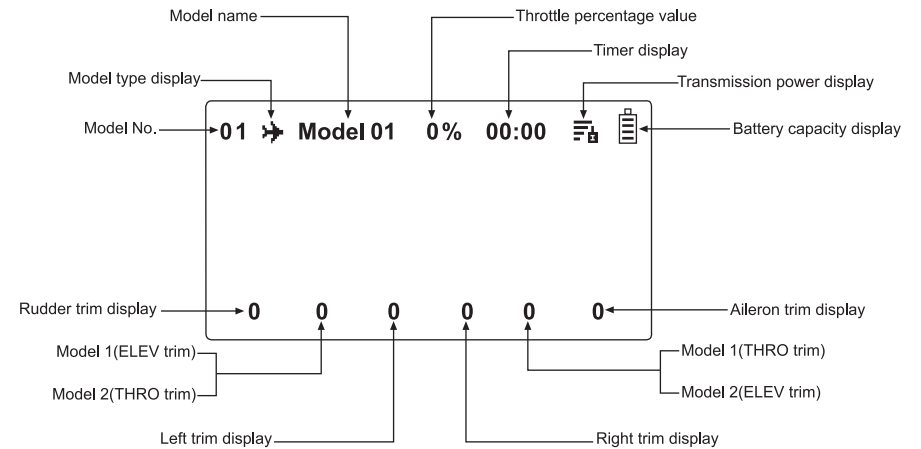16. Gimbal Tilt - Gimbal TILT control

17. Right stick

18. Right trim

19. AILE trim

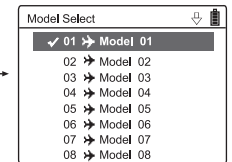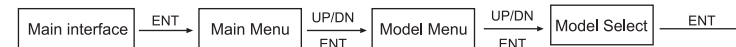20. R key

21. L key

22. ENT key

23. Power switch
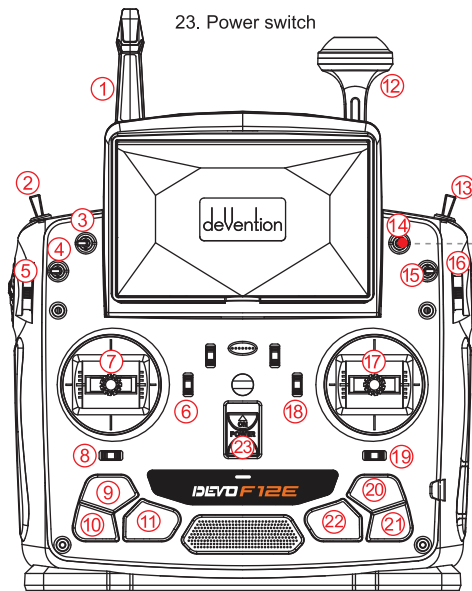
Note: RUNNER 250 match with DEVO-F12E(white) radio,need only use two functions switch ② and ⑭ on the panel.

2.0 DEVO F12E Radio Setting(White version)

2.1 Boot Screen(Main interface)

Model name — Throttle percentage value
Model type display — Timer display
Model No. — Transmission power display
— Battery capacity display
01 ✈ Model 01 0% 00:00
Rudder trim display — Aileron trim display
0 0 0 0 0 0
Model 1(ELEV trim) — Model 1(THRO trim)
Model 2(THRO trim) — Model 2(ELEV trim)
Left trim display — Right trim display

2.2 Model Select

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

Model Select
✓ 01 ✈ Model 01
02 ✈ Model 02
03 ✈ Model 03
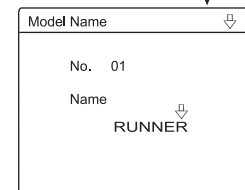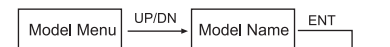04 ✈ Model 04
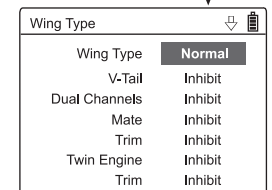05 ✈ Model 05
06 ✈ Model 06
07 ✈ Model 07
08 ✈ Model 08

Press the UP or DN button to select the stored model number. For example "Model 01", press EXT to return back to the "Model Menu" after finished.

2.3 Model Name

Model Menu →UP/DN→ Model Name →ENT→
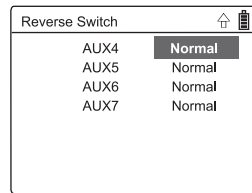
Model Name
No. 01
Name
RUNNER

Press UP or DN button to select the characters which need to be changed, press R or L to change the characters. Name model "RUNNER". Press EXT to return to the "Model Menu".

2.4 Wing Type

Model Menu →UP/DN→ Wing Type →ENT→
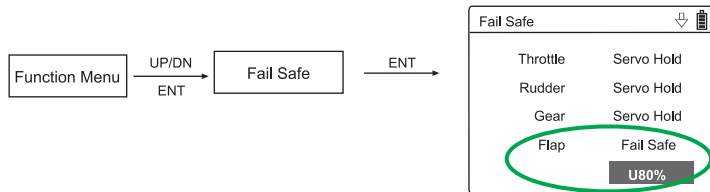
Wing Type
Wing Type   Normal
V-Tail   Inhibit
Dual Channels Inhibit
Mate   Inhibit
Trim   Inhibit
Twin Engine Inhibit
Trim   Inhibit

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

2.5 Reverse Switch

Main Menu → (UP/DN, ENT) → Function Menu → (UP/DN, ENT) → Reverse Switch → (ENT) → Factory default Settings interface.

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
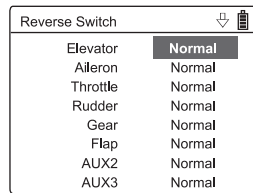
Press EXT to return back to the "Function Menu" after finished.

2.6 Flail Safe: Start using aircraft Buzzer

Function Menu → (UP/DN, ENT) → Fail Safe → (ENT) →

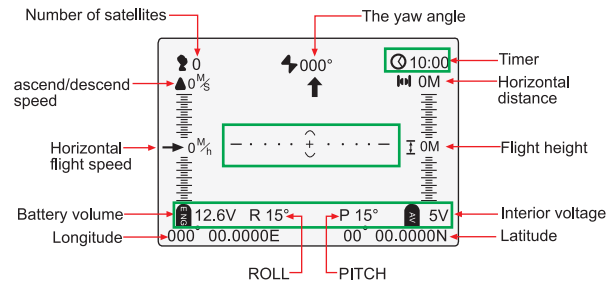| Fail Safe	⬇ 🔋
Throttle	Servo Hold
Rudder	Servo Hold
Gear	Servo Hold
Flap	Fail Safe
	U80%

Press "UP" or "DN" choose "Flap",press "R" or "L"
choose "Fail Safe", press "UP" or "DN" point to "Failed-Safe Value",press "R" or "L" setting as "U80%".
After setting,press "ENT" to confirm and press "EXT" back to "Main Menu".

2.7 Video Setting/OSD information(OSD module should be purchased)

Main Menu → (UP/DN, ENT) → System Menu → (UP/DN) → Video Setting → (ENT) →

Video Setting	🔋
Status	**Active**
Channel	1/32
Background	Active
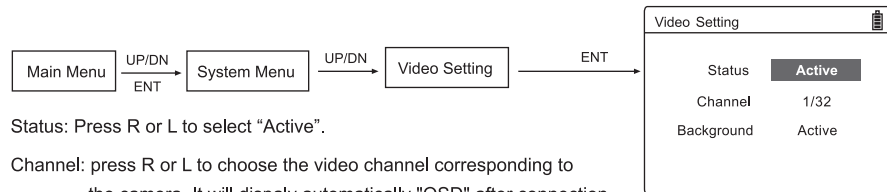
Status: Press R or L to select "Active".

Channel: press R or L to choose the video channel corresponding to the camera. It will dispaly automatically "OSD" after connection.

Number of satellites — The yaw angle

ascend/descend speed

Horizontal flight speed

Battery volume

Longitude

ROLL — PITCH

- Timer
- Horizontal distance
- Flight height
- Interior voltage
- Latitude

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

Press EXT to switch full screen or half screen to display image and OSD information when in the main interface

⚠ **Note: The OSD Of Runner 250 just show the data within the green chart.**

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3.0 Operation Instruction

Aircraft posture (⬅ is the nose direction)	Remote Controller control instruction
The aircraft roll forward The tail toward operator	0 Manual; 1 GPS; 2 Return Home 0 Manual; 1 GPS; 2 Return Home MODE 1 / MODE 2 0 Manual; 1 GPS; 2 Return Home switch to "0" position: Normal flight Mode 0 Manual; 1 GPS; 2 Return Home switch to "2" position: Roll flight Mode
The aircraft roll backward The tail toward operator	**Attention:** (1) Please select a larger space,soft ground for flying. (2) The rolling mode is more suitable for experienced pilots. (3) Need match the throttle for practice during the rolling,when the aircraft drop please up throttle a bit, when the aircraft rise please down the throttle a little. (4) When the voltage is low, the aircraft switched automatically from roll mode to normal mode
The aircraft roll left	0 Manual; 1 GPS; 2 Return Home 0 Manual; 1 GPS; 2 Return Home MODE 1 / MODE 2 0 Manual; 1 GPS; 2 Return Home switch to "0" position: Normal flight Mode 0 Manual; 1 GPS; 2 Return Home switch to "2" position: Roll flight Mode
The aircraft roll right	**Attention:** (1) Please select a larger space,soft ground for flying. (2) The rolling mode is more suitable for experienced pilots. (3) Need match the throttle for practice during the rolling,when the aircraft drop please up throttle a bit, when the aircraft rise please down the throttle a little. (4) When the voltage is low, the aircraft switched automatically from roll mode to normal mode

Buzzer(optional) Instruction

Buzzer: give an alarm when signal lost.

Once the drone lost control signal from the remote controller, the alarm funtion will be triggered automatically and keep buzzing to help to find the drone.

When the aircraft fall into the jungle or weeds accidentally and couldn't be found, then you can toggle the remote controller "**One Key to Start**" switch to "1" position, activate the BUZZ funtion and track the aircraft by the BUZZ sound.

Buzzer connection diagram:

White wire connect to "AUX1" channel

Red wire connect to "5V" channel
Black wire connect to "GND" channel

⚠ **Note: Please check Runner 250 operation guidence for other details.**

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