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DEVO F7DS

devo F7DS

7-channel micro computer system

DEVO F7DS transmitter Users Manual

Note:Please read the manual throughly before use and keep it in a safe place for the future reference.

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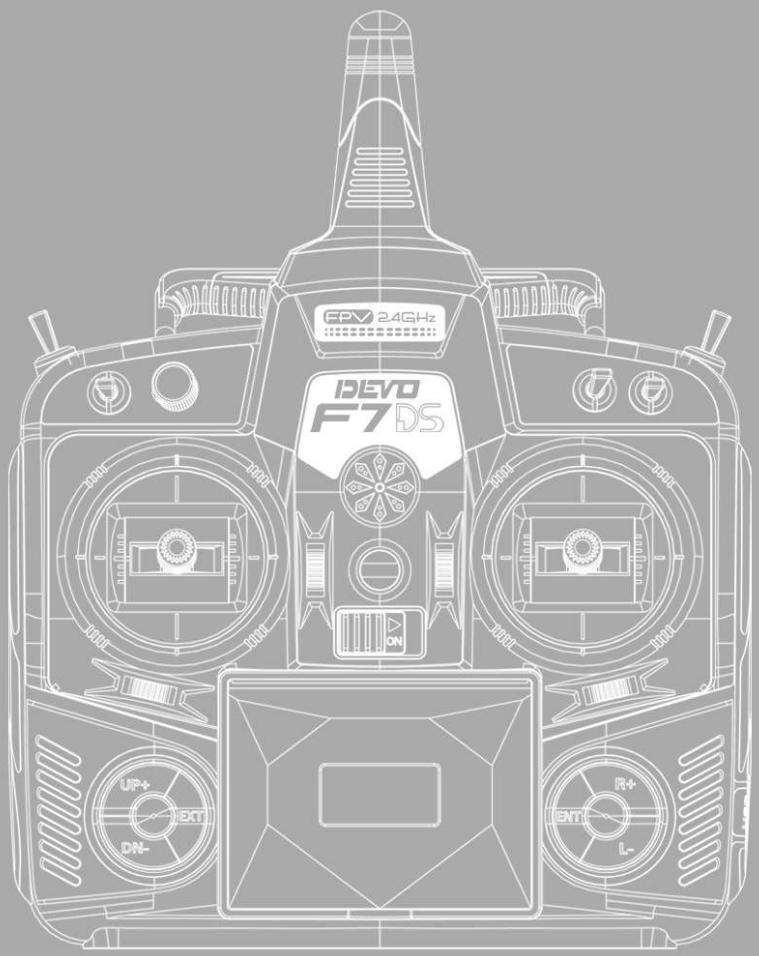
DEVO F7DS

Part one General information

DEVO F7DS takes 2.4 GHz Direct Sequence Spread Spectrum (DSSS) technology and 2.4G FPV and features automatic ID binding, automatic ID assignment, and also features fixed ID set by yourself. The usage of wireless copy function keeps you away from the trouble in wire link-up. Two mode types of helicopter and airplane are available to meet your requirements for different models. 3.5"LCD display and 2.4G real time Image monitor, which offers you convenient operation,FPV makes the flight more easier. Online update via USB ensures a transmitter in hand not to be out of date and makes it full of vigour.



1.0 General information

1.1 Important statements

(1) The transmitter is suitable for experienced pilots beyond 14 years old.
(2) Flying the aircraft in approved ground is a must.
(3) We are not responsible for any safety caused by operation, usage or control once the transmitter is sold out.
(4) We consign our distributors to offer technical support and service after sale. Please contact the local distributors for problem solutions caused by usage, operation, maintenance, etc.

1.2 Safety needing attention

(1) Far away from obstacle and people

RC aircraft in flights is uncertain of flight speed and status, which potential risk exists in when flying. Please keep your radio controlled aircraft far away from people, high buildings, high-tension line, etc, and avoid operating in rain, storms, thunder and lightening.

(2) Away from humidity environment

Radio controlled aircraft should be kept away from humidity and vapor because it is composed of complicated precise electronic elements and mechanical parts.

(3) Proper operation

Use original spare parts to upgrade, modify or maintain your equipment in order to assure its safety. Please operate your equipment within the range of functions permitted. It is forbidden to use out of the safety laws or regulations.

(4) Safety operation

Operate your equipment according to your body status and flight skills. Fatigue, listlessness and mis-operation will increase the possibilities of accidental hazard.

(5) Away from heat sources

The inside of the transmitter is composed of precise electronic components and mechanical parts. Keep it far away from heat sources and sunshine to avoid distortion, or even damage caused by high temperature.

1.3 Attention before flight

(1) Ensure the battery packs of both transmitter and receiver are fully saturated.

(2) Ensure both the throttle stick and the throttle trim of your DEVO F7DS stay at the lowest positions before operation.

(3) Strictly obey the order of TURN-ON and TURN-OFF before operation. When starting your flight, turn on your transmitter first, and connect the battery to the aircraft last. When turning off the aircraft, disconnect the battery first, and turn off your transmitter last. An upset in the order may cause your aircraft out of control. Cultivate a correct habit of turn-on and turn-off.

(4) Ensure whether the directions and actions of all the servos in your RC aircraft are correct when executing commands of the transmitter. Using broken servos will result in unforeseen dangers.

2.0 Features

2.1 Transmitter DEVO F7DS

(1) The DEVO F7DS adopts 2.4 GHz Direct Sequence Spread Spectrum (DSSS) technology and features automatic ID binding and ID assignment. It can also be customizedly set as fixed ID code.

(2) 2.4G real time image transmission.

(3) USB online update makes you always enjoy the latest firmware.

(4) Adjustability of hi-frequency output power enjoys more personality and friendly environment.

(5) Wireless data transmission between two DEVO F7DS helps experience the training function.

(6) Up to 15-model data can be saved.

(7) DEVO F7DS adjusting the gyro sensitivity makes hovering flight and fancy flight in an easy way.

(8) Super large LCD display features direct and convenient setting.

(9) Shape design accords with human engineering and provides comfortable holding.

(10) Both the length and tension of the sticks can be adjustable.

(11) DEVO F7DS can be freely switched among Modes 1, 2, 3, and 4.

(12) DEVO F7DS support Helicopter and Airplane. The Helicopter mode provides three flight modes, each of which can be freely set and its parameters can be personalizedly adjusted to meet the requirement for F3C or 3D aerobatic flight.

2.2 Features of DEVO-RX701

(1) Adopts 2.4GHz Direct Sequence Spread Spectrum (DSSS) that features fast reaction and strong anti-jamming protection.

(2) Double receiving circuits and signal switch automatically effectively assure the stability of receiving signal.

(3) The single chip Microco as CPU provides super-strong analyzing ability.

(4) The Receiver maintains the frequency and the ID memories when its changing a new battery pack with the transmitter powered on .

(5) It can be customizedly set as fixed ID and automatic ID assignment.

3.0 Specification

3.1 DEVO F7DS transmitter Specification

- Encoder ····· 7-channel micro computer system
- Frequency ····· 2.4GHz DSSS
- Output power ····· ⩽100 mW
- Current drain ····· ⩽550 mA (100 mW)
- Power supply ····· 7.4V 800mAh
- Output pulse ····· 900 – 2100us (1500Ms Neutral)
- Image Receive ····· 2.4G
- Image Transmission Frequency ····· 2.4G(2406MHz-2478MHz)

3.2 Receiver specification

- Type ····· 2.4GHz 7 channels
- Sensitivity ····· - 105 dbm
- Frequency interval ····· ≥ 4 M
- Weight ····· 11.6 g
- Dimension ····· 43X28X16mm
- Receiver Battery ····· 4.8-6V 1,300mAh

4.0 Definition of DEVO F7DS

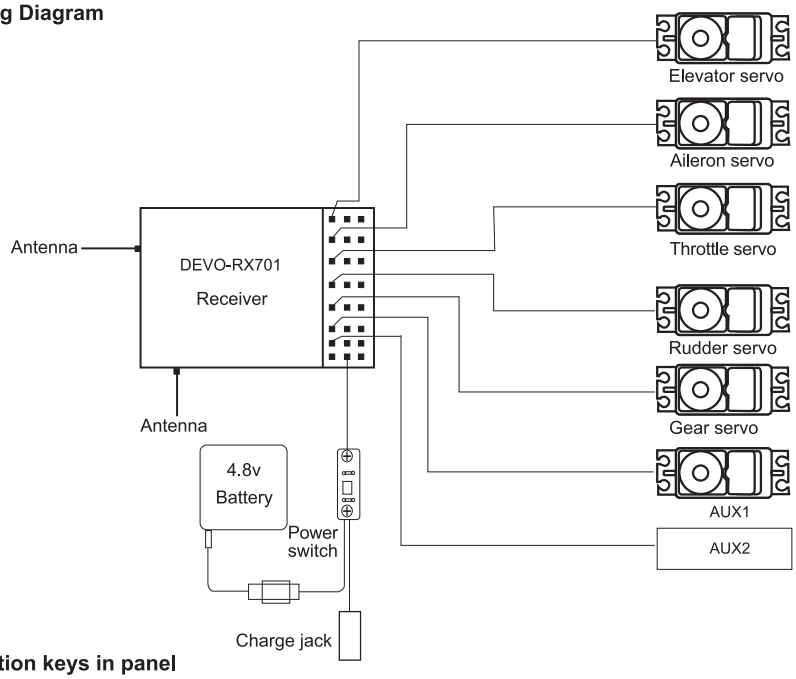
4.1 Panel definition

4.2 Rear definition

(1) Power Connector: input DC at 8-12V, 1000mA; Polarity: ⊕→⊖

(2) Digital Signal Converter socket (DSC): used for simulator flight practice via computer (You need software and its dongle which are available in hobby shops), and for training.

4.3 Wiring Diagram



4.4 Function keys in panel

There are 6 functional keys in the panel of DEVO F7DS. Below are the details:

(1) EXT: Reset key. Press EXT to exit the main menu.

(2) ENT: Confirmation key. Press ENT to access the system or the function mode.

(3) UP+: Moves cursor up to the forward function item.

(4) DN-: Moves cursor down to the next function item.

(5) R+: Moves cursor up to increase the setting value.

(6) L-: Moves cursor down to decrease the setting value.

5.0 Control Stick Adjustment

Stick adjustment control has two parts:the stick length and degree of tightness.

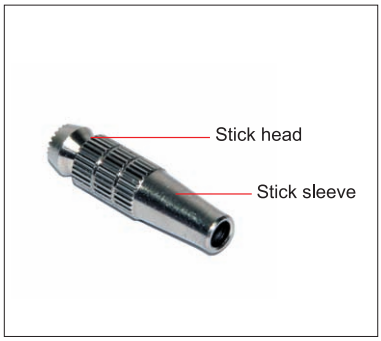
5.1 The stick length adjustment

(1) Prolong the stick length: Counter clockwise rotate the stick head until the length you hope, and then counter clockwise tighten the stick sleeve.

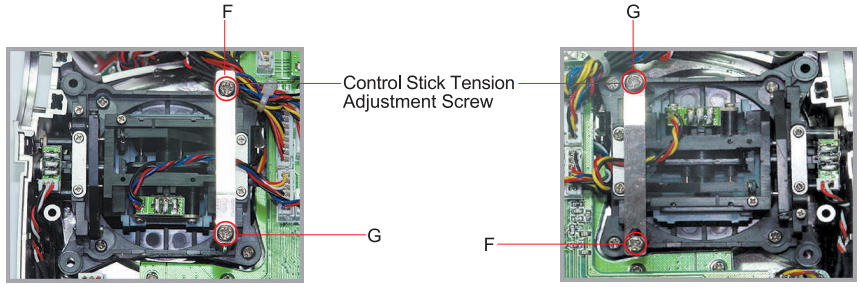
(2) Shorten the stick length: Clockwise rotate the stick sleeve until the length you hope, and then clockwise tighten the stick head.

5.2 Stick Tension Adjustment

Use a cross screwdriver to adjust the rear cover screw show as below. Clockwise will increase stick tension and counter-clockwise reduce it.

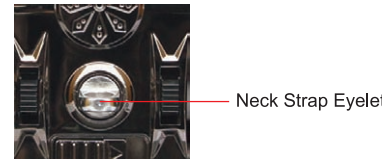


Find the tension adjuster spring for left and right hand throttle stick as shown below. Using a cross head screwdriver adjust the screw ringed in red below; clockwise will increase stick tension and counter-clockwise reduce it. Replace the transmitter rear cover after completion.



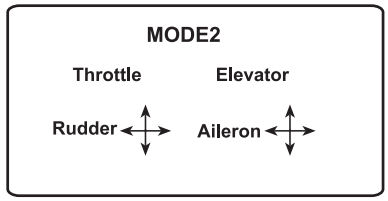
6.0 Neck Strap Usage

There is a concealed hook in the face panel of DEVO F7DS. It will pop up as you press the hook. The neck strap can be connected to the hook. The Hook located at the center helps to get optimal balance of the transmitter.

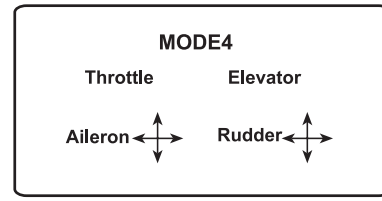


7.0 Stick Mode Switch

There are total four stick modes from MODE 1 through MODE 4. The left-hand throttle includes MODE 2 and MODE 4, and the right-hand throttle includes MODE 1 and MODE 3. Below is the sketch map:

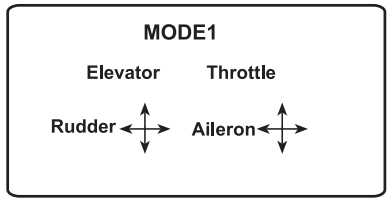


MODE 2

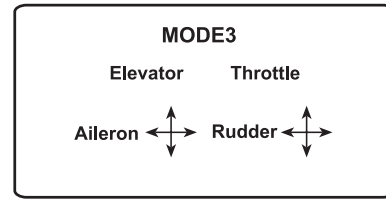


MODE 4

MODE 2 and MODE 4 are listed in left-hand throttle.



MODE 1



MODE 3

MODE 1 and MODE3 are listed in right-hand throttle.

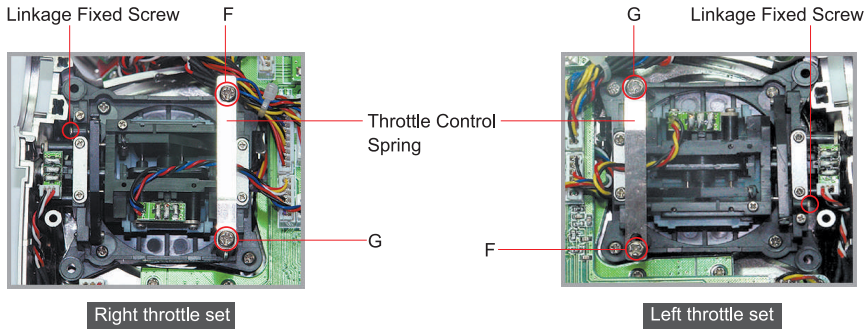
8.0 Switches between left-hand and right-hand throttles

Switching between left and right-handed throttle modes requires both a MECHANICAL and ELCTRONIC switch. It will work correctly only after both parts are completed. Please follow the steps below:

8.1 Right-hand throttle switched to left-hand throttle

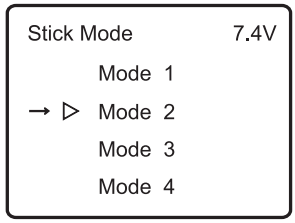
(1) Mechanical step

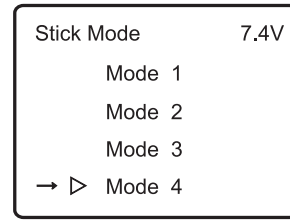
Remove the left lateral and right lateral non-slipping blocks, respectively, remove the 6 screws, and then rear cover to expose the base plate. The photo below shows the internal views of right and left hand throttle setups. Using a cross-head screwdriver loosen and remove, in order, the Linkage Fixed Screw, Screw F, Screw G and the Throttle Control Spring from the right throttle set, remount the parts removed into the left throttle set in the corresponding (rotated) positions shown below. Adjust the tension using Screw F to match your preferred setting. Replace the rear cover.



(2) The ELECTRONIC step

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to System Menu, press ENT to System Menu; Press UP or DN to move the cursor→to point to Stick Mode, press ENT to Stick Mode Selection Menu; Press UP or DN to move the cursor→to point to Mode 2 or Mode 4, press ENT to confirm, press EXT to exit. All saved model date will automatically be switched to be compatible with Mode 2 or Mode 4.





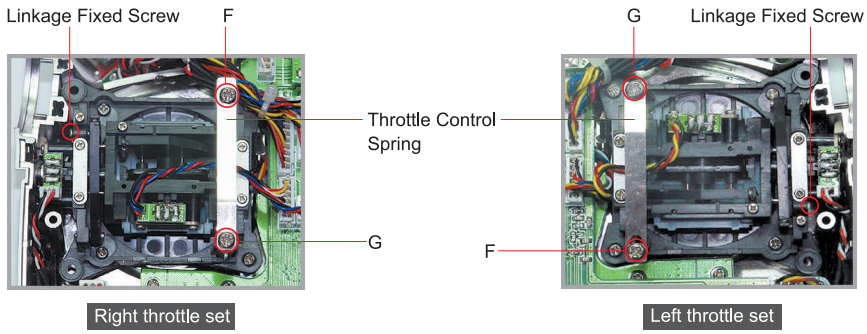
Once both the MECHANICAL and ELECTRONIC steps are successfully completed the transmitter is now ready for normal operation.

8.2 Left-hand throttle switched to right-hand throttle

(1) Mechanical step

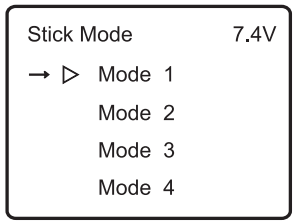
Refer to the above “Mechanical switch” to open the transmitter cover.

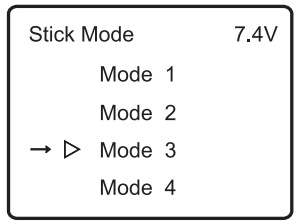
The photo below shows the internal views of right and left hand throttle setups. Using a cross-head screwdriver loosen and remove, in order, the Linkage Fixed Screw, Screw F, Screw G and the Throttle Control Spring from the left throttle set, remount the parts removed into the right throttle set in the corresponding (rotated) positions shown below. Adjust the tension using Screw F to match your preferred settings. Replace the rear cover.



(2) The data step

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to System Menu, press ENT to System Menu; Press UP or DN to move the cursor→to point to Stick Mode, press ENT to Stick Mode Selection Menu; Press UP or DN to move the cursor→to point to Mode 1 or Mode 3, press ENT to confirm, press EXT to exit.





All saved model date will automatically be switched to be compatible with Mode 1 or Mode 3.

Once both the MECHANICAL and ELECTRONIC steps are successfully completed the transmitter is now ready for normal operation.

Note: Pay careful attention to the force used when removing, replacing and adjusting the screws. Excessive force may damage them or the base plate.

9.0 Training function

Two DEVO F7DS transmitters can be made to work together in order to offer a teacher-trainer function, meeting the requirements for a beginner. The setup of training mode is described as below:

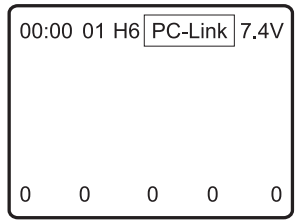
(1) Model data transmission

First step is to use the DEVO F7DS's wireless data transmission feature to transfer the teacher's main model data to the trainee's DEVO F7DS transmitter. This step guarantees that the model data in each transmitter is identical. Refer to item “2.4 model wireless copy” in the Helicopter section later in this manual. Two DEVO F7DS transmitters are needed for wireless data transmission.

(2) Training connection

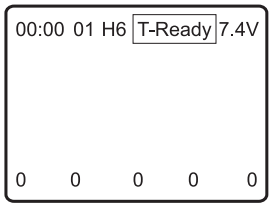
Insert the signal wire from the trainer’s transmitter into the DSC socket of the trainee’s transmitter. Turn on the transmitter and a linkage icon,PC-Link will be shown on the boot screen.

Insert one end of the signal wire (included) into the DSC socket of the trainee's transmitter and turn it on. PC-Link will be shown in the trainee's DEVO F7DS display (see image right).



linkage icon

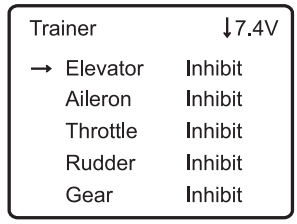
Turn on the power of the trainer's DEVO F7DS. Select the same model as the trainee (as transferred in the previous section) and briefly fly the aircraft to confirm the settings are good. Turn off the aircraft and turn off the trainer's DEVO F7DS power. Insert the other end of the signal wire into the trainer's DEVO F7DS DSC port and turn on the power once more, T-Ready will be shown in the trainee's DEVO F7DS display (see image left).



(3) Traniner Function Channel Setup

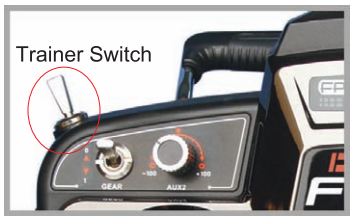
The trainee can aquire the control part or whole channel operation by setting the trainer’s function channel.Here is the setup:

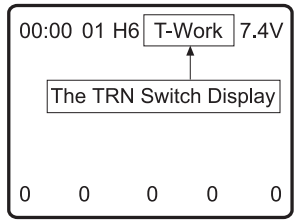
Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Trainer, press ENT to Trainer Function setting; Press UP or DN to move the cursor→to point to the desired setting channel, there are Elevator, Aileron,Throttle,Rudder,Gear, Pitch, Gyro channels available. Press R+ or L- to set Active or Inhibit for the choosed Channel.



(4) Training mode usage

The default setting is that the training mode switch is on the top left corner of the transmitter, named HOLD/TRN.





When flying, if the trainer operates the TRN switch, control is transferred control to the trainee; also, T-Work will be shown on the trainer's DEVO F7DS. The trainee's output data is displayed on the trainer's DEVO F7DS screen. If the trainer operates the switch once more, the trainer regains control over all functions and channels.

Please check and familiarize yourself with the operation of the training mode before attempting flight or a training session in order to avoid miss-operation and damage/injury.

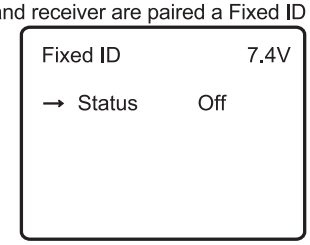
10.0 Customized fixed ID

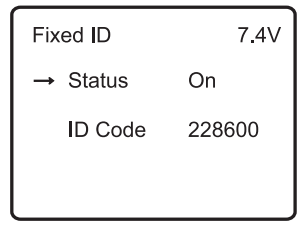
Using the Fixed ID function allows users to create a unique relationship between transmitter model data and the corresponding model's receiver. It significantly speeds up the binding process and also prevents mistakenly flying an aircraft with the incorrect transmitter model selected.

(1) Fixed ID setup

To start the Fixed ID setup it is important that the transmitter and receiver have successfully completed automatic ID binding process. Once the transmitter and receiver are paired a Fixed ID can be set as described below:

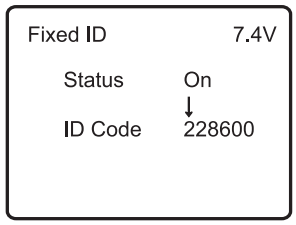
Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Fixed ID, press ENT to the Fixed ID setting interface.

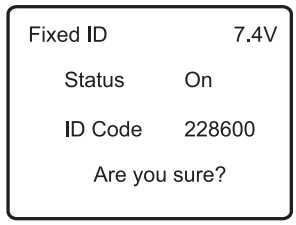


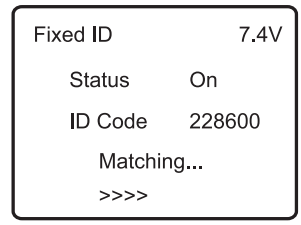


Press R+ or L- to set Status ON, and there is a Random Fixed ID display on the screen. Press DN to move the cursor → to point to ID Code, press ENT to move the cursor → to point to the first code of the Fixed ID.

Press R+ or L- to change the Code; Press DN to move to next Code. Press ENT after finished setting, there is an inqury “Are you sure? ”. Press ENT to confirm and execute the binding process. After finished binding the display will return to the Model Menu automatically.

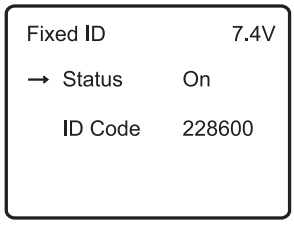


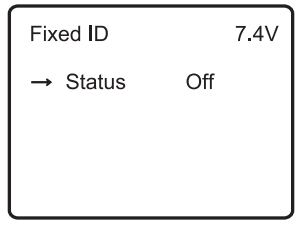




(2) Cancelling/Resetting the Fixed ID

If you wish to change the receiver Fixed ID model back to random ID, insert the included BIND PLUG into the output terminal BATT before the receiver is powered on. Connect 5V DC power to the Throttle channel. The red LED of the receiver will flash slowly. Remove the BIND PLUG. The Fixed ID code has been cancelled.After the receiver's Fixed ID is reset it should also be reset in the Transmitter.





Refer to the instructions of Fixed ID setting above to the following interface. Press UP to move the cursor → to point to Status ON.

When Fixed ID Status ON, press R+ or L- to change ON to OFF. Press EXT to exit.

11.0 Receiver installation requirement

Below is some advice on how to install your equipment.

(1) Using 10mm thick foam, wrap the receiver and attach it securely to the aircraft using a cable tie or strong rubber band. The foam will help protect the receiver

(2) It is suggested to use rubber grommets and copper washers to isolate the receiver from vibrations. Do not over tighten the screws in order that the grommets are not damaged otherwise vibration absorption will be reduced.

(3) When mounting the servos, make sure the servos' bellcranks can move freely over their whole travel range and ensure the control linkages don't touch or impede the movement of the servos.

(4) If installing additional switches, please install them far away from the engine exhaust pipe and other high vibration sources. Ensure all the switches move freely over their entire range.

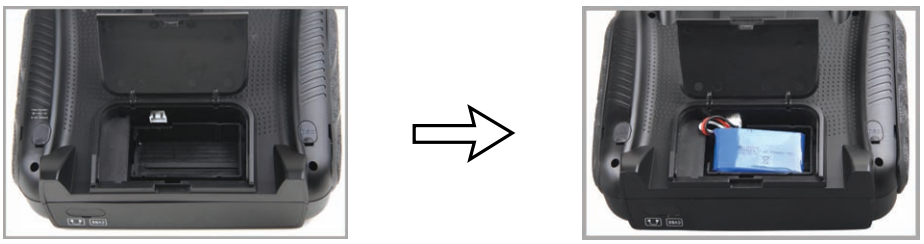
(5) Don't wrap the receiver antennas together or make them parallel; horizontal at 90° will give the best performance.

12.0 Installation requirement for battery pack

Open the battery cover of DEVO F7DS transmitter, insert the battery to the fool-proofing plug correspondingly. The standard battery is 7.4V,800mAh lipo battery. To make sure the safety, please use the professional charger.

Warning: 1.Do not put the polarities of batteries in the opposite directions.

2.Please use the orignal battery pack and charger(The charger need to bug seperately).



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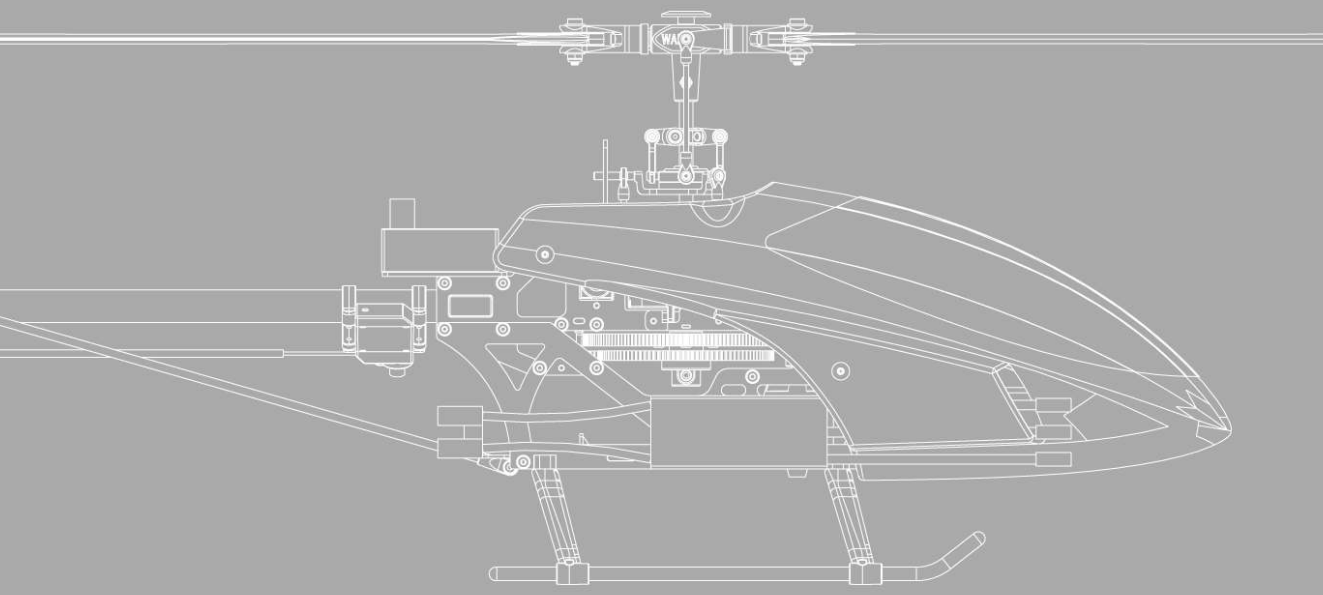
DEVO F7DS

Part two Helicopter

All the functional settings, which are relative to the operation system of DEVO F7DS itself, are fully integrated in System Menu. They include Display, Buzzer, vibrator, Video Select, Stick Mode, Stick Direction, Stick calibration, and About.

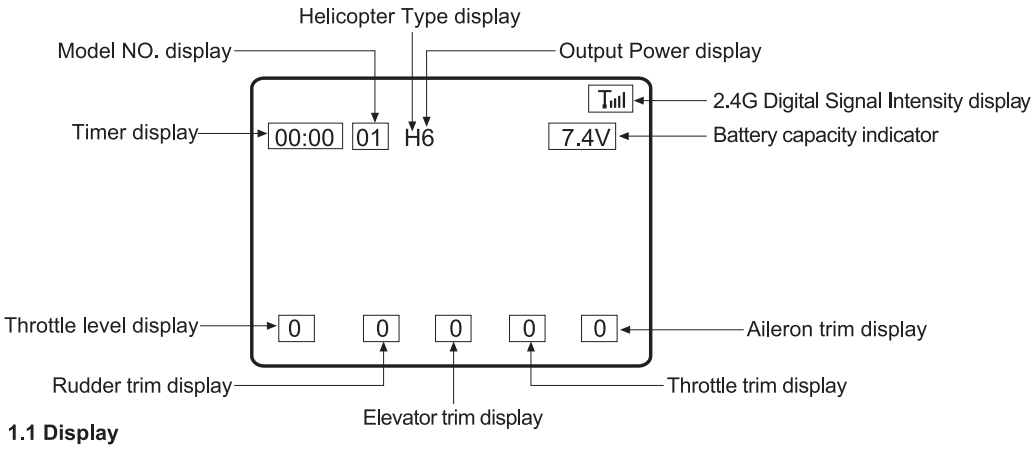
Setup your DEVO F7DS transmitter for the best Helicopter performance with the following sections. Included are specific functions for rotor-craft features; Throttle curves, Pitch curves and Cyclic response are covered below.



1.0 System Menu

This section describes the settings which are specific to the operation of the DEVO F7DS itself. Settings for Display, Buzzer, Vibrator, Video Select, Stick Mode, Stick Direction, Stick Calibration and About can be accessed via the System Menu.

Below is the boot screen of helicopter:



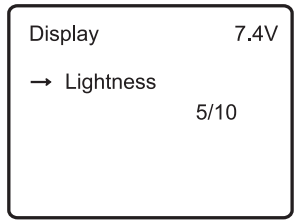
1.1 Display

Backlight intensity: the backlight intensity is adjustable using the UP or DN button. Power consumption will be increased when intensity is high and battery life will be reduced.

Setting:

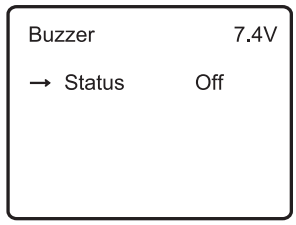
Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to System Menu, press ENT to System Menu; Press UP or DN to move the cursor→to point to Display, press ENT to the Lightness setting interface and use R or L to change the setting as desired.

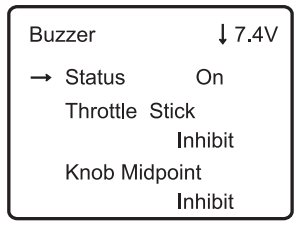
Press EXT to exit.



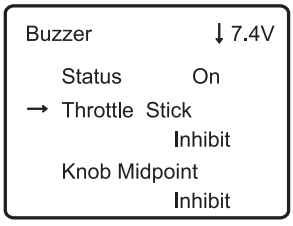
1.2 Buzzer Setting

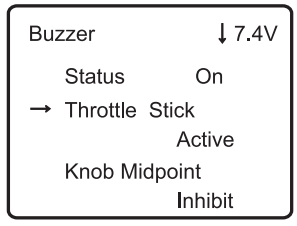
(1) Status: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to System Menu, press ENT to System Menu; Press UP or DN to move the cursor→to point to Buzzer, press ENT to the Buzzer setting interface. And then press UP or DN to move the cursor→to point to the Status, press R or L to toggle between ON and OFF settings. ON means start the Buzzer while OFF means the Inhibit.





(2) Throttle stick: With the “Status” item on, the option THSTK can be set to ON or OFF. If the Throttle Stick setting is ON/Active, a musical scale will be heared when moving the throttle stick. The position of the throttle stick can be judged by listening to the change in musical tone. Setting OFF, turns off the sounds.



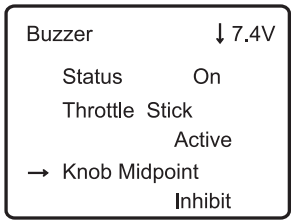


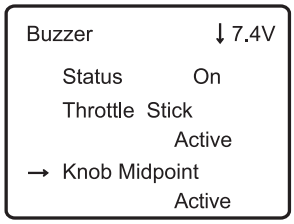
Setting:

With the “Status” item on, press DN to move the cursor→to point to the “Throttle Stick”. Use R or L to change the display between Inhibit and Active. Active means tones will be played, Inhibit means there will be no tones played.

(3) Knob Midpoint: With the “Status” item on, if the “Knob midpoint” setting keeps Active, there will be a buzzer at the midpoint position when turn the knobs. Please choose Inhibit if the buzzer isn't needed.

Setting: With the “Status” item on , press DN to move the cursor→to point to Knob Midpoint. Use R or L to change the status between Inhibit and Active. Active means to turn on Knob Midpoint buzzer while Inhibit means to turn of Knob Midpoint buzzer.





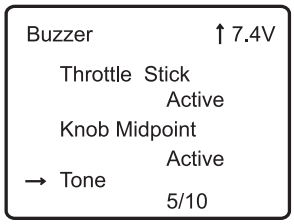
(4) Tone:

The buzzer tone can be selected from 10 notes. You can set the tone according to your preference and test the performance.

Setting:

With the "Status" item on, press DN to move the cursor→to point to Tone item. Use R or L key to change the flashing value from 1 to 10.

Press EXT to exit after finished.

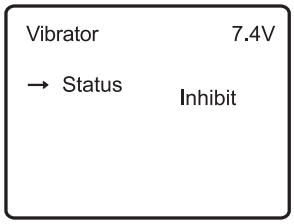


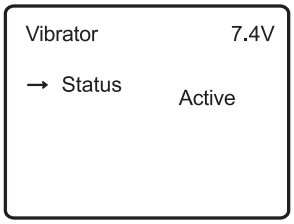
1.3 Vibrator

The vibrator is used as an alarm function to remind the users.

Setting:

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to System Menu, press ENT to System Menu; Press UP or DN to move the cursor→to point to Vibrator, press ENT to Vibrator setting interface.





There are two status as Inhibit and Active. Press R or L to select Active or Inhibit. Active means to start vibration,Inhibit means to turn off vibration.

Press EXT to exit after finished.

1.4 Video Select

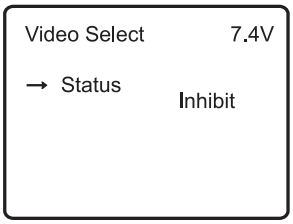
This function provides the settings of Inhibit or Active when choose the Video option.

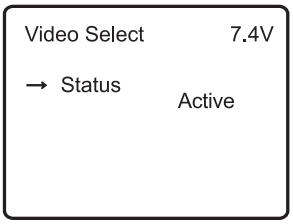
Setting:

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to System Menu, press ENT to System Menu; Press UP or DN to move the cursor→to point to Video Select, press ENT to Video Select setting interface.

Press R or L to select Active or Inhibit. Active means to start vibration, Inhibit means to turn off vibration.

Press EXT to exit after finished.

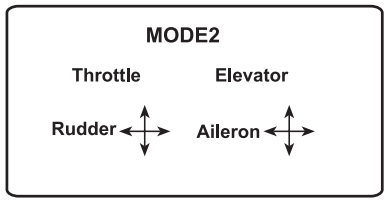


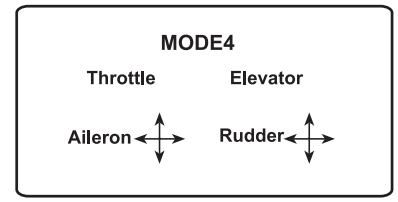


1.5 Stick Mode

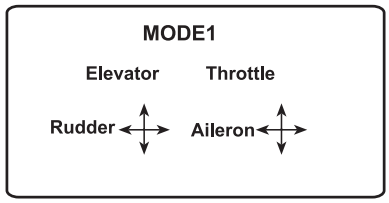
There are 4 stick modes including Mode1, Mode2, Mode3 and Mode4. Right-hand throttle includes Mode1 and Mode3; while left-hand throttle includes Mode2 and Mode4. See Below:

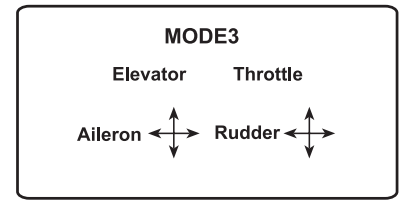
Mode 2 and Mode 4 are listed in left-hand throttle.





Mode 1 and Mode 3 are listed in right-hand throttle.

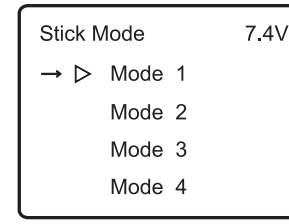




Setting: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to System Menu, press ENT to System Menu; Press UP or DN to move the cursor→to point to Stick Mode, press ENT to Stick Mode setting interface.

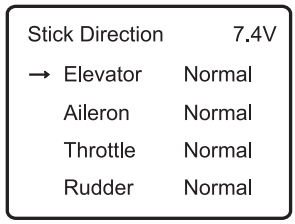
There are Mode 1, Mode 2, Mode 3 and Mode 4 for options.Press UP or DN to move the cursor→to point to desired item and then press ENT to confirm.

Press EXT to exit after finished.



1.6 Stick Direction

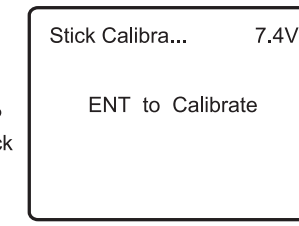
Setting: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to System Menu, press ENT to System Menu; Press UP or DN to move the cursor→to point to Stick Direction, press ENT to Stick Direction setting interface.



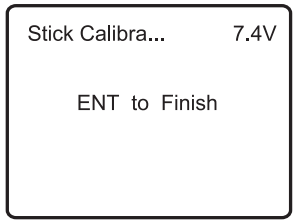
Stick Direction: There are Elevator, Aileron, Throttle,Rudder for options. Press UP or DN to move the cursor→to point to the desired item. Press R or L to change the settings of corresponding sticks. There are Normal and Reverse. The default setting is Normal.

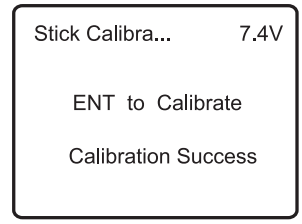
1.7 Stick Calibration

Setting: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to System Menu, press ENT to System Menu; Press UP or DN to move the cursor→to point to Stick Calibration, press ENT to Stick Calibration setting interface.



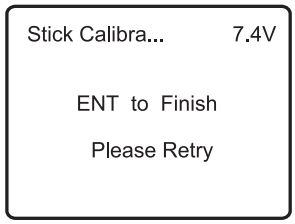
Stick Calibration: Mechanically move the right stick and left stick from their minimum levels to their maximum levels several times, and then return the sticks to the neutral positions, respectively.





Press ENT again to stop the calibration process and the display should show the following interface(Calibration Success).

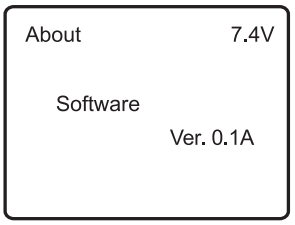
The calibration has failed if press ENT and show the following interface. Please go back to the STMOD sub-menu using EXT and re-start the calibration process. Press EXT to exit after finished.



1.8 About

Setting: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to System Menu, press ENT to System Menu; Press UP or DN to move the cursor→to point to About, press ENT to About setting interface. You can check the current versions of hardware and software.

Press EXT to exit after finished.

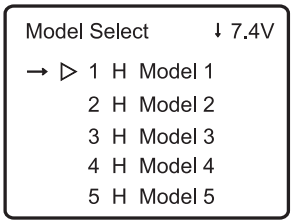


2.0 Model Menu

Model Menu manages all the model data saved in DEVO F7DS. It includes Model Select, Model Name, Model Copy, Model Transmit, Model Receive, Model Reset, Type Select, Trim System, Stick Position Switch, Device Select, Device Output, Swash Type, Power Amplifier, Fixed ID and Sensor setting.

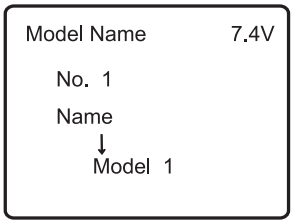
2.1 Model Select

Setting: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Model Select, press ENT to Model Select setting interface.There are 15 different model settings be saved. Press UP or DN to move the cursor→to point to select the model No you want and press ENT to confirm. Press EXT to exit.



2.2 Model Name

In the menu of model name, you can make a desired name for your model for long-term storage. Its data can be directly withdrawn in next flights.Repeat the step “2.1 Model Select” to choose the model you want to name or save, press EXT to back to the interface.

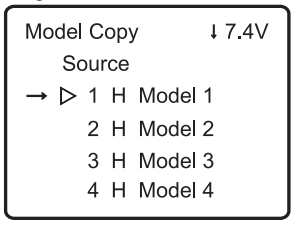


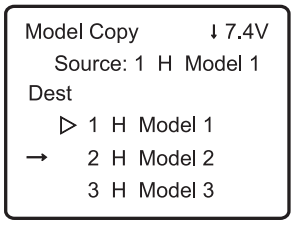
Setting: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Model Name, press ENT to Model Name setting interface.

Press UP or DN to move the cursor→to point to select the character and figure which are needed to be changed, press R or L button to change the character and figure, and press UP or DN to set next one. Press EXT to exit after finished.

2.3 Model Copy

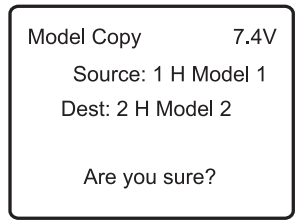
Setting: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Model Copy, press ENT to Model Copy setting interface.





Press UP or DN to choose the model you want to be copied as source model and press ENT to confirm, The serial No. and model name of Source Model will be shown as Illustration.

Press UP or DN to move the cursor→to point to select the model you want to be copied as source model and press ENT to confirm, The serial No. and model name of Source Model will be shown as Illustration.
Then press UP or DN to locate the source model, press ENT to confirm. Then an enquire “Are you sure?” is popped up as Illustration. Press ENT to copy, or press EXT to exit.

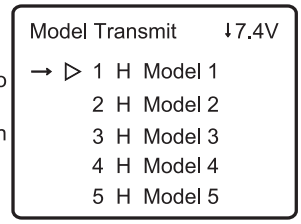


2.4 Model wireless copy

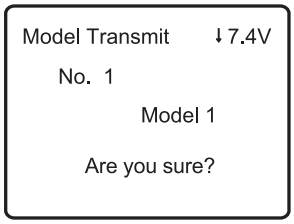
The model data between two DEVO F7DS equipments can be wirelessly copied via Model Transmit and Model Receive in Model Menu.

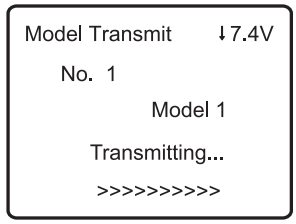
(1) Model Transmit

Setting: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Model Transmission, press ENT to Model Transmission setting interface.



Press UP or DN to choose the source model which will be transmitted, and press ENT to confirm, an enquiry information “Are you sure?” will be shown as below Illustration. Press ENT to confirm and EXT to exit.

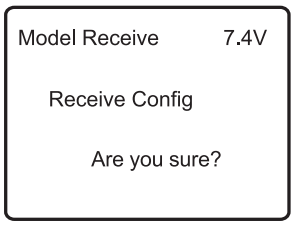


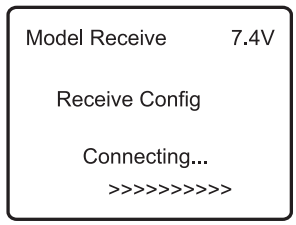


Press ENT to transmit, “Transmitting ……” appears in the interface. Or press ENT to confirm.Press EXT to exit after another DEVO F7DS received the data.

(2) Model Receive

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Model Receive, press ENT to Model Receive setting interface. An enquiry information “Are you sure?” will be shown as below Illustration.

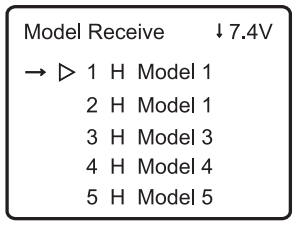


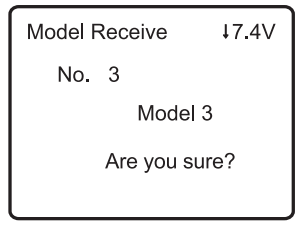


Press ENT to receive, “Connecting ……” and “Receiving ……” will be shown in series in the interface.

After Model received the data will enter to the Model save interface. Press UP or DN to move to the cursor→to point to Model data save position. Press ENT will pop up “Are you sure”. Press ENT to save, press EXT to cancel .

Press ENT to confirm and EXT to exit.

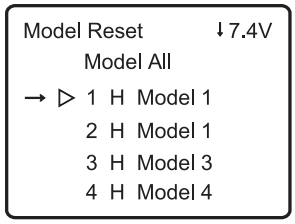


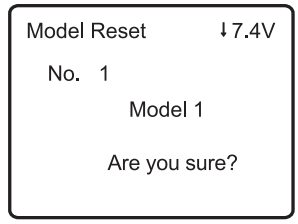


2.5 Model Reset

Using the Model Reset function, the settings for one or all models can be reset to the factory defaults.

Setting: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Model Reset, press ENT again to display to model selection. Use R and L to select “ALL” for all models or the individual model name for a single model reset.



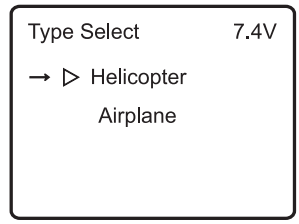


Press UP or DN to move the cursor→ to point to the desired model No and press ENT, an inquiry "Are you sure" will be shown as Illustration.
Press ENT to reset and EXT to cancel.
Press EXT after finished.

2.6 Type Select

This transmitter offers a choice of two model types. The options are helicopter and airplane.

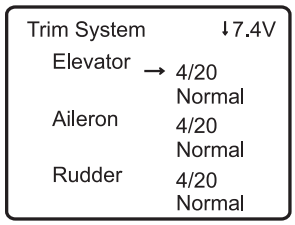
Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Type Select, press ENT to Type Select setting interface.



Press UP or DN to move the cursor→to point to helicopter or Airplane option. Press ENT, there is an inquiry shows. Press ENT to select the desired model. If the default model are the desired one. Press ENT and press EXT to exit.

2.7 Trim System

Trim System is able to finely tune the following terms, respectively: Elevator, Aileron, Rudder, Throttle. The trim range is divided into 20 grades. (factory default is set at 4). It is convenient to subtly modify the pitch by adjusting the trim range.

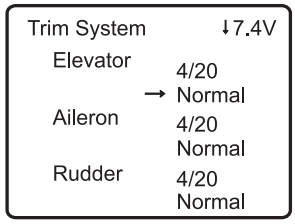


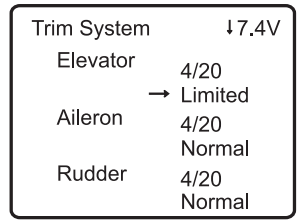
Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Trim System, press ENT to Trim System setting interface.

Press UP or DN to move the cursor→to point to the item that need to adjust. Press R+ or L- can change the setup, the Maxium is 20.

For elevator, aileron and rudder, there are two more options : Normal and Limited. "Normal" means the trim is always working although the corresponding stick stays anywhere. "Limited" means the trim is out of working when the corresponding stick is at maximum position.

Press EXT to exit after finished.



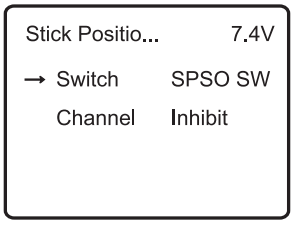


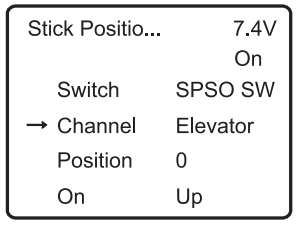
2.8 Stick Position Switch

According to the following setting, the stick can be used as a switch. The turn-on or turn-off position at which stick stays can also be settable.

Method for setting:

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Stick Position Switch, press ENT to Stick Position Switch setting interface.

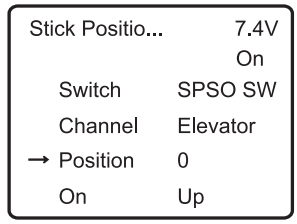


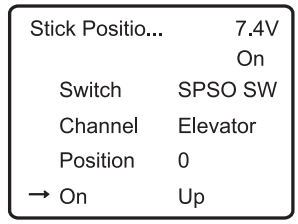


There are four options under the Stick position switch: SPS0, SPS1, SPS2, SPS3. Press UP or DN to move the cursor→to point to switch option. Press R or L to choose the switch you want to define.
Press UP or DN to move the cursor→to point to the channel option. There are Inhibit and channel options.(Default setting Inhibit)

The channel includes four items: Elevator, Aileron, Throttle and Rudder. The factory default is inhibit. Take Elevator for example.

Press R or L to choose the Elevator as stick, and then press DN to move the cursor→to point to value of position. It's possible to adjust the stick position via pressing R or L. Press UP or DN to move the cursor→to point to On option. And then press R+ or L- to change the ON status of stick postion
Press EXT after finished.

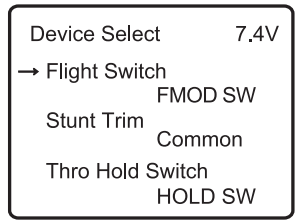




2.9 Device Select

This setting can help you configure various functional switches. It includes Fight Switch, Stunt Trim Select and Throttle Hold Switch.

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Device Select, press ENT to Device Select setting interface.



(1) Flight Switch

Press UP or DN to move the cursor→to point to Flight Switch option and press R or L to select the desired switch. The factory default setting is FMOD switch.

(2) Stunt Trim Select

There are two modes: Common and Flight Mode. In Common Mode all the trim values, which various sticks are corresponding to, put equal effect on all the flight modes.In Flight Mode, the trim value, each of which stick is corresponding to, puts independent effect on the corresponding stick. The factory default setting is Common.

Press UP or DN to choose the Stunt trim select , press R or L to select “Common” or “Flight Mode”, the factory default setting is “Common”.

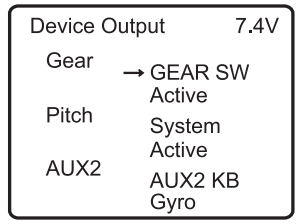
(3) Throttle Hold Switch:Refer to “(1) Flight switch” After finishing the setting, press EXT to exit.

2.10 Device Output

Device output can set up the output switches respectively. It can also activate, inhibit or use other functions. The switchs include:FMOD SW,MIX SW,D/R SW,HOLD SW,GEAR SW, TRN SW,SPS0,SPS1,SPS2,SPS3 and AUX2 KB.

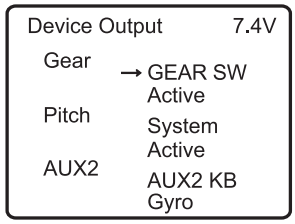
Setting:

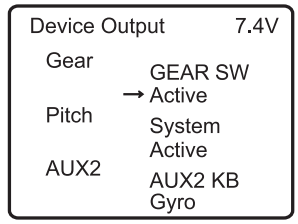
Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Device Output, press ENT to Device Output setting interface. There are 3 settings: Gear, Pitch, AUX2.



(1) Gear

Press UP or DN in Device output interface can change the GEAR Switch. It includes FMOD SW, MIX SW, D/R SW, HOLD SW, GEAR SW, TRN SW, SPS0 SW, SPS1 SW, SPS2 SW, SPS3 SW and AUX2 KB. Press R or L to select the setting switch, The default setting is GEAR SW.





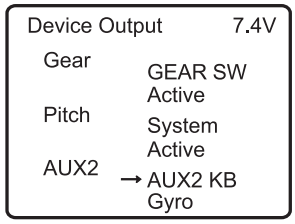
Press UP or DN to move the cursor→to point to Function Setting after you select the switch, press R or L to choose the switch, it inculdes Inhibit, Active, Gyro, Governor The default setting is Activate. You can continue to set other items after finishing.

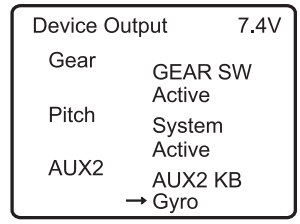
(2) Pitch

Pitch can't be setted by the system.

(3) AUX2

Press UP or DN to move the cursor→to point to the AUX2 option. Press R or L can change the AUX2 switch. It includes FMOD SW, MIX SW, D/R SW, HOLD SW, GEAR SW, TRN SW, SPS0 SW, SPS1 SW, SPS2 SW, SPS3 SW and AUX2 KB. The default setting is AUX2 KB.





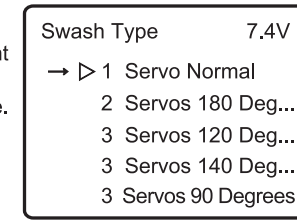
Press UP or DN to move the cursor→to point to Function Setting, press R or L to choose the switch, it inculdes Inhibit, Active, Gyro, Governor. The default setting is Gyro. Press EXT to exit after the setting finished.

2.11 Swash Type

The swash type is grouped into five options: 1 Servo Normal, 2 Servos 180° , 3 Servos 120° , 3 Servos 140° and 3 Servos 90° .

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Swash Type, press ENT to Swash Type setting interface.

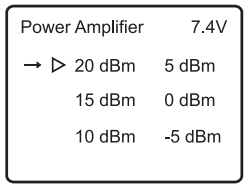
Press UP or DN to choose the required swashplate type. Press ENT to confirm. Press EXT to exit after finishing.

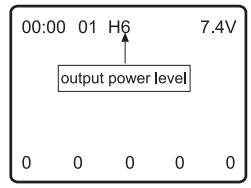


2.12 Power Amplifier

The transmission output power of DEVO F7DS is adjustable. It is divided into six grades from low to high. The lower the transmission output power transmits, the shorter the radio range is, and the longer the stand-by time will be, the higher the transmission output power, the farer the radio range, and the shorter the stand-by time. Choose the appropriate transmission output power according to the actual situation.

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Power Amplifier, press ENT to Power Amplifier setting interface.





Grade 6	Grade 5	Grade 4	Grade 3	Grade 2	Grade 1
20dBm	15dBm	10dBm	5dBm	0dBm	-5dBm

Press UP or DN to move the cursor→to point to the desired output power value and press ENT to confirm. The output power level will also show on the main menu interface see the left Illustration:

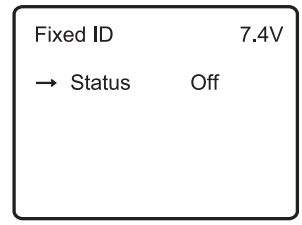
2.13 Fixed ID

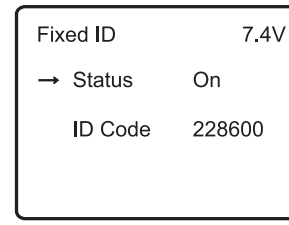
Using the Fixed ID function allows users to create a unique relationship between transmitter model data and the corresponding model's receiver. It significantly speeds up the binding process and also prevents mistakenly flying an aircraft with the incorrect transmitter model selected.

(1) Fixed ID setup

To start the Fixed ID setup it is important that the transmitter and receiver have successfully completed automatic ID binding process. Once the transmitter and receiver are paired a Fixed ID can be set as described below:

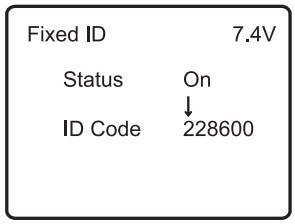
Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Fixed ID, press ENT to the Fixed ID setting interface.

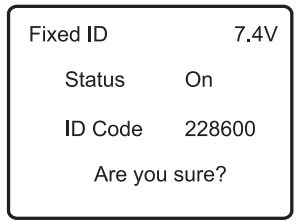


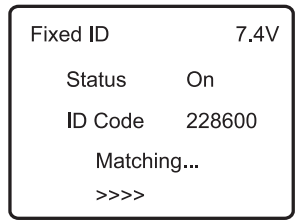


Press R+ or L- to set Status ON, and there is a Random Fixed ID display on the screen. Press DN to move the cursor → to point to ID Code, press ENT to move the cursor → to point to the first code of the Fixed ID.

Press R+ or L- to change the Code; Press DN to move to next Code. Press ENT after finished setting, there is an inqury “Are you sure? ”. Press ENT to confirm and execute the binding process. After finished binding the display will return to the Model Menu automatically.

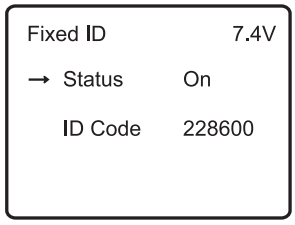


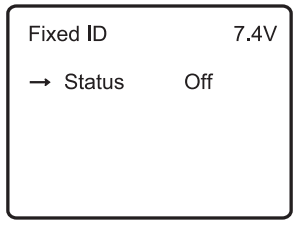




(2) Cancelling/Resetting the Fixed ID

If you wish to change the receiver Fixed ID model back to random ID, insert the included BIND PLUG into the output terminal BATT before the receiver is powered on. Connect 5V DC power to the Throttle channel. The red LED of the receiver will flash slowly. Remove the BIND PLUG. The Fixed ID code has been cancelled. After the receiver's Fixed ID is reset it should also be reset in the Transmitter.





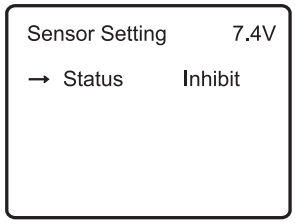
Refer to the instructions of Fixed ID setting above to the following interface. Press UP to move the cursor → to point to Status ON.

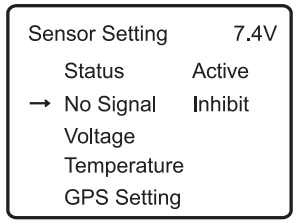
When Fixed ID Status ON, press R+ or L- to change ON to OFF. Press EXT to exit.

2.14 Sensor Setting

Setting method: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Sensor Setting, press ENT to Sensor setting interface.

Press R or L to select Activate or Inhibit (the default setting is Inhibit), such as press Activate will includes No Signal Warning, Voltage sensor,Temperature sensor, GPS receiver setting etc.





(1) No Signal

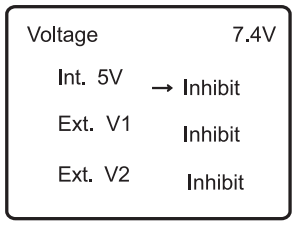
Press UP or DN to move the cursor→to point to No Signal option. Press R or L to choose Inhibit or Active (default setting is inhibit). If you choose Active, the Radio will alarm when telemetry signal lost. see the left Illustration:

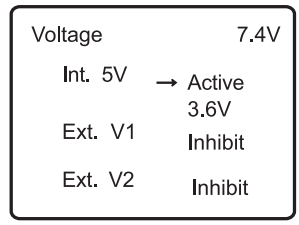
(2) Voltage

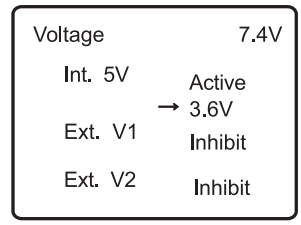
There are 3 different types of voltage can be measured. It includes Internal 5V, External V1 and V2 which can be monitored two different external voltage(i.e. battery) respectively. Once the measured voltage is lower than the setting value, the Radio will alarm.

(2.1) Receiver 5V(Internal) PFV(Power Feeding Voltage) Alarmed value can be setted as 3.6-6V

Voltage setting: press DN to move the cursor→to point to Voltage otpion on the Sensor setting interface. Then press ENT to enter the voltage setting interface. Press UP or DN to move the cursor→to point to Int.5V option. Press R or L to activate the 5V, the alarm interface will appear in the interface, please refer to the illustration.





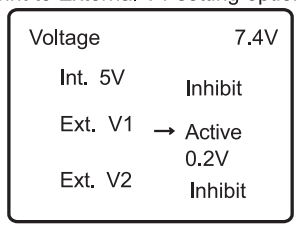


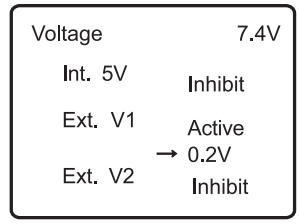
Press UP or DN to select the Alarm Voltage setting option,press R or L to set the value. The range is 3.6-6V. You can continue to set other items after you finished.

(2.2) V1 External V1

Press UP or DN to move the cursor→to point to External V1 setting option. Press R or L to activate the V1, the details refers to the illustration.

Press UP or DN to move the cursor→to point to the Alarm Voltage setting. Press R or L to set the value. The setting range is 0.2~99.9V. You can continue to set other items after you finished.



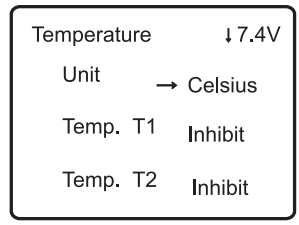


(2.3) External: V2 setting can refer to External V1 setting. Press EXT to back to sensor setting interface to set other options.

(3) Temperature sensor

The temperature sensor can measure up to 4 different temperature(i.e.motors). You can choose Celsius or Fahrenheit. The alarmed value can be setted to 4 different temperature. Once the measured value is higher than the setting value, the radio will alarm. The Alarm Temperature value can be setted as -20~220℃ or -4.0~428.0° F.

Temperature Setting:In the Sensor Setting interface, press UP or DN to move the cursor→to point to Temperature Sensor setting option,and press ENT to Temperature setting interface. See the right Illustration.

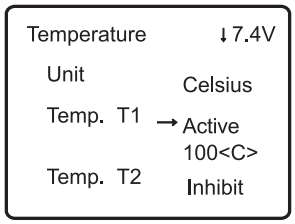


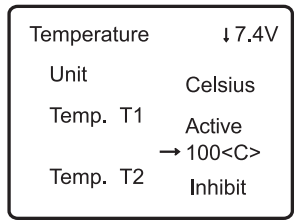
(3.1) Unit

Press UP or DN to move the cursor→to point to Unit setting option,and press R or L to choose Unit, two kinds of Unit:Celsius and Fahrenheit.

(3.2) Alarm Temperature settings

Press UP or DN to move the cursor→to point to T1 option, Press R or L to activate the setting. Inhibit will change to Active and Alarm temperature will be shown. If you choose Inhibit, the Alarm temperature value won t be shown.





Press UP or DN to move the cursor→to point to Alarm setting, press R or L to set the alarm temperature value. Press UP or DN to set other items after finishing the setting.

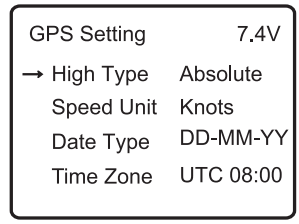
(3.3) T2,T3,T4 setting

Refer to the step of “T1”.

(4) GPS Setting

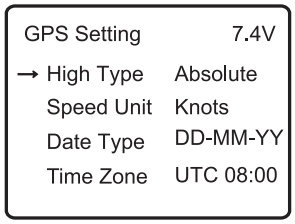
There are 4 items including Altitude Type, Speed Unit, Date Type and Time Zone in the GPS receiver setting interface.

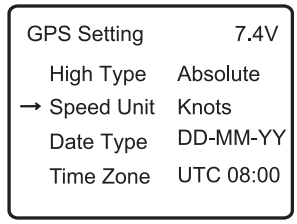
Setting: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Sensor Setting, press ENT to Sensor setting interface; Press UP or DN to move the cursor→to point to GPS Setting, press ENT to GPS setting interface.



(4.1) High Type

Press UP or DN to select the High type on the GPS setting interface and there are Absolute and Relative two types.

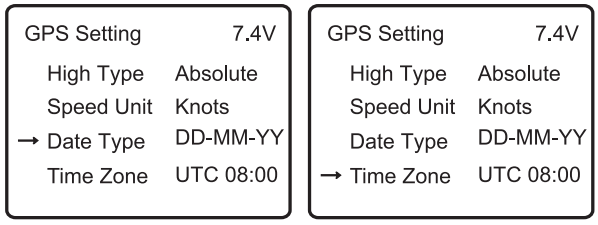




(4.2) Speed Unit

Press UP or DN to select the Speed Unit on the GPS setting interface and it includes knots and km/h and relative. Select the desired item.

(4.3) Date Type
Press UP or DN to select the Date Type on the GPS setting interface and it includes DD-MM-YY,MM-DD-YY and YY-MM-DD. Select the desired item.



(4.4) Time Zone
Press UP or DN to select the Time Zone, press R or L to set the desired Time Zone.

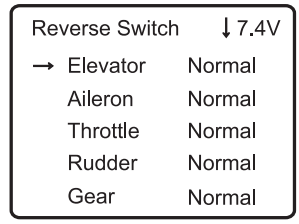
3.0 Function Menu

The Function Menu allows you to customize the settings for your saved models. This menu includes the following: Channel Reverse Switch, Travel Adjust, Sub Trim, Dual Rate and Exponential, Throttle Hold, Throttle Curve, Mix to Throttle, Gyro Sensor, Governor, Swash Mix, Pitch Curve, Program Mix, Monitor, Fail Safe, Sensor View,Trainer and Timer. Total 17 settings.

3.1 Reverse Switch

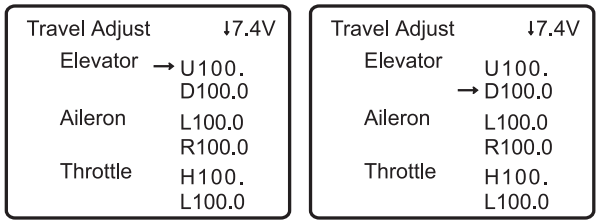
Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Reverse Switch, press ENT to Reverse Switch setting interface.

Press UP or DN to move the cursor→to point to ELEV(take Elevator for example), Press R or L to shift the status between nomal and reverse. These are two status for option. And the default setting is Normal. All Channels Reverse Switch like: Aileron, Throttle, Rudder, Gear, Pitch, and Aux2 can be referred to the way of ELEV Reverse Switch. And press EXT to exit after setting finished.



3.2 Travel Adjust

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Travel Adjust, press ENT to Travel Adjust setting interface. The interface display a channel's servo travel value status.



Press UP or DN to move the cursor→to point to “Elevator's U” setting (ELEV is used in the example), press R+ or L- key, can set the travel value while the Elevator towards up. The adjustment range:0.0-150.0%. Factory default setting :100.0%.

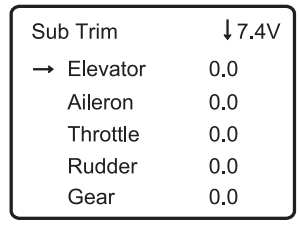
Press UP or DN to move the cursor→to point to “Elevator's D” setting, press R+ or L- key, can set the travel value while the Elevator towards down. The adjustment range :0.0-150.0%. Factory default setting :100.0%.

The settings for all channels, AILE, THRO, RUDD, GEAR, PITCH and AUX 2 can all be set using this process. Press EXT to exit.

3.3 Sub Trim

NOTE: Sub Trim is used to fine tune the servo neutral position during setup. In order to avoid pushing the servo beyond it's limits and possibly causing damage it is advised to first mechanically adjust the servo arm/bell crank to be as close to the neutral point as possible. Only when this is complete may sub trim be used to make a final adjustment.

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Sub Trim, press ENT to Sub Trim setting interface.



The interface display a adjustable channel's name and adjustable data project. Press R+ or L- can adjust the fine tune the servo neutral position. Press UP or DN can select the channel you wish to set. Every Channel default setting value is 0.0%. The adjustment ranges are as below:

Channel name	Adjustment range	Channel name	Adjustment range
Elevator	D62.5%～U62.5%	Gear	-62.5%～+62.5%
Aileron	R62.5%～L62.5%	Pitch	L62.5%～H62.5%
Throttle	L62.5%～H62.5%	AUX2	-62.5%～+62.5%
Rudder	R62.5%～L62.5%		

Press EXT to exit.

3.4 Dual Rate and Exponential

After finishing this setting , you can use D/R switch to control ELEV, AILE and RUDD ,the setting range is: 0-125%. Use exponential curve triming at the same time you can adjust the desired settings. The automatic setting is available too. The D/R and exponential switches can be switch after pull "flight mode" stick up and down

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Dual Rate and Exponential, press ENT to Dual Rate and Exponential setting interface.

Dual Rate and...	↓7.4V
	Pos 0
→ Channel	Elevator
Position	Pos 0
Dual Rate	100

(1) Channel

Press UP or DN to move the cursor→to point to Channel setting, press R+ or L- key, can set the Channel as follows : ELEV, AILE and RUDD ect.

Dual Rate and...	↓7.4V
	Pos 0
Channel	Elevator
→ Position	Pos 0
Dual Rate	100

(2) Position

Press UP or DN to move the cursor→to point to Position setting, Use the corresponding D/R switch to set D/R and exponential function. The available positions are POS0 and POS1. ELEV is shown in the following example. Use ELEV D/R switch to select the position you wish to change.

(3) Dual Rate

Press UP or DN to move the cursor→to point to Dual Rate setting, press R+ or L- key, can set the “Position” dual rate value. The default setting is 100%.

Dual Rate and...	↓7.4V
	Pos 0
Channel	Elevator
Position	Pos 0
→ Dual Rate	100

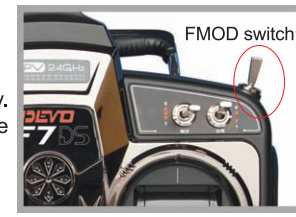
Dual Rate and...	↑↓7.4V
	Pos 0
Position	Pos 0
Dual Rate	100
→ Exponential	Line

(4) Exponential

Press UP or DN to move the cursor→to point to Exponential setting, press R+ or L- key, can set the “Position” Exponential value . there are ±100% and LINE three settings available.

(5) Automatic setting

Under Flight Mode, it is possible to switch the dual rate and exponential, which are set in above “(3) Dual Rate adjustment” and “(4) Exponential adjustment”, respectively. There are Normanl , Stunt 1 , Stunt 2 and Throttle Hold settings available. The Throttle Hold setting need to “Active” (refer to 3.5 Throttle Hold settings).



Dual Rate and...	↑↓7.4V
	Pos 0
Exponential	Line
→ Normal Mode	Switch
Stunt 1	Switch

(5.1) Normal Mode

Press UP or DN to move the cursor→to point to Normal Mode setting, press R+ or L- key, can set the position or switches. Selected “Switch” for corresponding D/R switches settings and selected “Postion” can swtich “(3) Dual rate and exponential settings” and “(4) exponential setting” according to different flight mode. There are Switch Pos 0, Pos 1, Pos 2 and Pos 3 settings available.

(5.2) Stunt 1 , stunt 2 and Throttle Hold settings please refer to above Normal Flight settings.

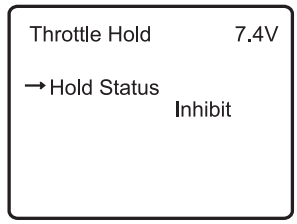
Press EXT to exit.

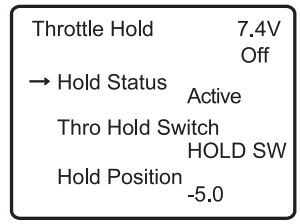
3.5 Throttle Hold

If the throttle hold function is activated in the function settings menu, it can be operated by the Throttle Hold switch. The permitted setting range is from -20.0% to 50.0%. The default setting is INH (inhibited).

Setting method:

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Throttle Hold, press ENT to Throttle Hold setting interface.



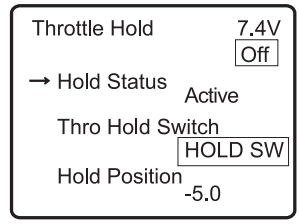


Press R+ or L- key active Throttle Hold function. There are Throttle Hold Status , Throttle Hold Switch and Throttle Hold Position three settings available.

(1) There two status of Throttle Hold : “Inhibit” and “Active” . The factory default setting is “Inhibit”.

(2) Throttle Hold Switch setting

This function can't be set, the factory default setting is “HOLD SW”. The status alwasys be “HOLD SW”.see the right Illustration:



(3) Throttle Hold Position setting

Press UP or DN to move the cursor→to point to Hold Position setting option, Press R+ or L- adjust the data, the MIN Value:-20.0%; MAX Value:+50.0%.

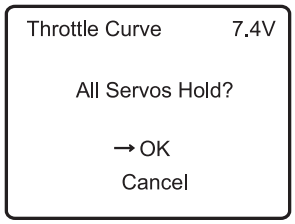
When Throttle Hold switch “Active”, the throttle holded in the “Throttle Hold position” setted position. When Throttle Hold Switch “Inhibit”, the throttle hold status released.

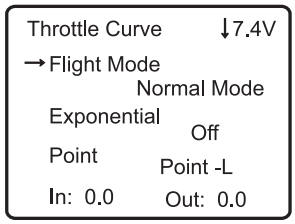
Press EXT to exit.

3.6 Throttle Curve

The Throttle Curve adopted 7 points adjustment , every flight mode’s throttle Curve can be set separately. Flight mode have Normal flight , Stunt flight 1, Stunt flight 2.

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Throttle Curve, press ENT to Throttle Curve setting interface. see below Illustration:





The interface of Throttle Curve will pop up “All servos Hold?” inquire, if you choose “OK” every servo will hold at current position, if you choose “Cancel” every servo won’t be hold.

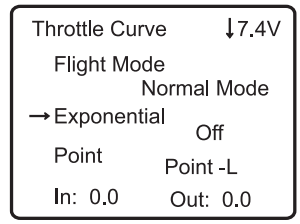
(1) Flight Mode

There are 3 flight mode, Normal mode , Stunt 1, Stunt 2 , each of the settings can be set separately.

Press UP or DN to move the cursor→to point to Flight Mode setting. Pull flight mode switch, the settings with be changed according to corresponding current flight mode. After finished that you can set the current flight mode's Curve parameter settings.

(2) Exponential curve setting

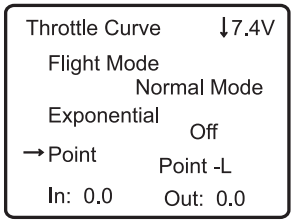
Press UP or DN to move the cursor→to point to “Exponential” setting. Press R or L can set ON and OFF. The throttle curve will being changed smoothly if select ON. Select OFF if not need then the throttle curve will be shown as a line. see the right Illustration:



(3) Curve setting: Including “Point” and “Output”

(3.1) Point setting

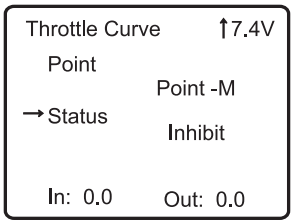
Press UP or DN in Throttle Curve interface to select Points setting. Press R+ to expand a list including seven points: “Point-L”, “Point-1”, “Point-2”, “Point-M”, “Point-3”, “Point-4” and “Point-H”.

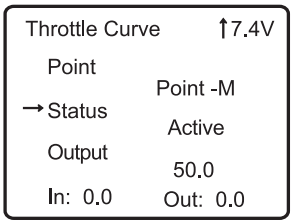


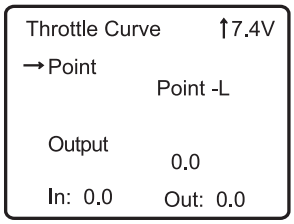
(3.2) Status setting

After above setup, press DN to select Status setting, press R+ or L- to set Inhibit or Active. Select Inhibit if keeping the current value (the default setting is Inhibit). Select Active for changing the above points’ value.

Note: After select Point L or Point H , the status setting won't be display.



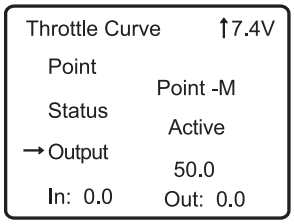




(3.3) Output setting

There is a expand item “Output” after select Status Active, press DN to select Output setting, press R+ or L- to increase or decrease, respectively, the output value. The adjustable range is from 0.0% to 100.0%. “IN” and “Out” means throttle stick input and output level.

Press EXT to exit.

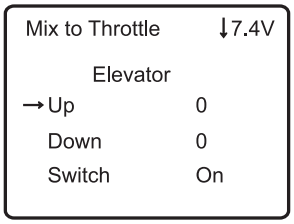


3.7 Mix to Throttle

This Function can keep the main rotor blades running at the certain revolution caused by the changed load when operate the aileron servo, elevator servo and rudder servo. Generally, it's not advised to use the function.

Setting method:

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Mix to Throttle, press ENT to Mix to Throttle setting interface. see below Illustration:



There are three settings: elevator, aileron and rudder. If the item of Channel is shown as Elevator, there are UP, DOWN and Switch in the interface. If the item of Channel is Aileron or Rudder, the contents in the said interface will be changed into Left, Right and Switch. Take the example of Channel set as Elevator to illustrate the setting method.

(1) Up setting

In the Mix to throttle interface, press UP or DN to select UP item. Press R+ or L- to increase or decrease the mix amount when moving the throttle stick upwards.The bigger the amount is, the bigger the mix to throttle will be. Change the amount from “+” to “-” for the throttle mix direction Reversing. The adjustable range is ±125%.

(2) Down setting

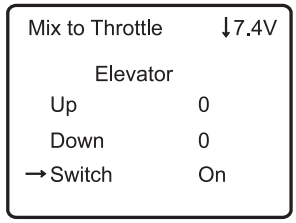
In the interface of Mix to Throttle, press UP or DN to select Down item. Press R or L to increase or decrease, respectively, the mix amount when moving the throttle stick downwards. The bigger the amount is, the bigger the mix to throttle will become. Change the amount from “+” to “-” for the throttle mix direction Reversing. The adjustable range is ±125%.

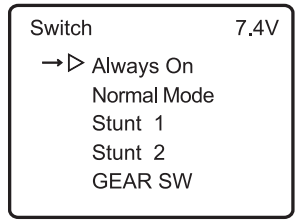
(3) Switch Selection

In the interface of Mix to Throttle, press UP or DN to select Switch item. Press ENT expand the Switch setting interface. see below Illustration.

Press UP or DN to select Switch item, press ENT to confrim. There are Always on, Normal Mode, Stunt1, Stunt2 and Gear SW etc settings. After setting finished, press EXT to back to MIX to Throttle interface. Aileron or Rudder can be set via pressing DN.

(4) The setting of Aileron or Rudder, and Mix to Throttle can be referred to Elevator setting.





Press EXT to exit.

Note:

(1) Before the flight, please confirm: All above amount of mix to throttle is proper enough to offer a good flight. And make sure all the actions in different flight mode are normal.

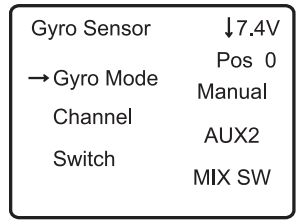
(2) The function is in spare when governor is working.

3.8 Gyro Sensor

This function supply the GYRO sensitivity adjustment, both through switch 'MIX' to Manual and "Flight Mode" Automatic switch different sensitivity

Setting method:

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Gyro Sensor, press ENT to Gyro Senso setting interface. see the right Illustration:



(1) Manual Setting

(1.1) Manual Setting

In the Gyro Sensor interface, press UP/DN to choose "Gyro Mode" project set, press R+/L- to selectable set ("Manual set" and "Automatic set").Then choose "Manual" option.

(1.2) Channel

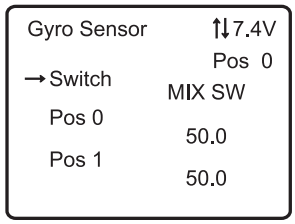
The original channel is "AUX2", if you want to change to other channels control, you can choose from "Device Output" set. (refer to "2.10 Device Output").

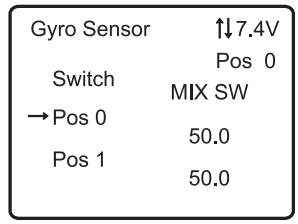
(1.3) Switch

In the Gyro Sensor interface, press UP/DN to choose "Switch" project set, press R+/L- to selectable sets "FMOD SW", MIX SW, D/R SW, HOLD SW, GEAR SW, totally 5 selectable sets. Choose the Manual control switch.

(1.4) Sensitivity Setting

If choose 3 switches, there are "position 0", "position 1" and "position 2", then set the sensitivity individually; If choose 2 switches, there are "position 0" and "position 1" , then set the sensitivity individually.





(1.4.1) position 0

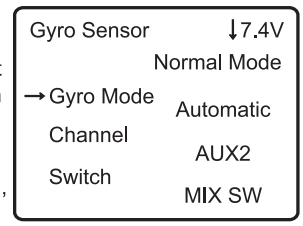
Press UP/DN to choose "position 0", press R/L to increase/decrease value individually. If the GYRO have "NOR" mode and "AVCS" mode, when the value lower than 50%, it is "NOR" mode. the lower of the value is, the bigger of the GYRO sensitivity becomes. The factory default setting is 50%.

(1.4.2) "Position 1", "Position 2" setting method please refer to above "position 0".

(2) Automatic setting

(2.1) Automatic setting

In the Gyro Sensor interface, press UP/DN to choose "Gyro Mode" project set, press R+/L- to selectable sets ("Manual set" and "Automatic set"). Then choose "Automatic" option.



(2.2) Channel

The original channel is "AUX2", if you want to change to other channels control, you can choose from "Device Output" set.(refer to "2.10 Device output")

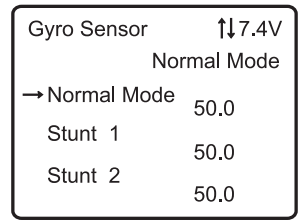
(2.3) Switch: Can't be used in this Automatic Setting.

(2.4) Status

Turn the Switch “Flight Mode” or “Throttle Hold”, the status set display present flight mode position. There are “Normal Mode”, “Stunt 1”, “Stunt 2”, “Throttle hold” sets. “Throttle hold” need to Active.(refer to “3.5 Throttle Hold”)

(2.4.1) Normal Mode

Press UP/DN to choose “Normal Mode”, press R+/L- can increase or decrease the value individually. If the GYRO have “NOR” mode and “AVCS” mode, when the value is lower than 50%, it is “NOR” mode. the lower of the value is, the bigger of the GYRO sensitivity becomes. The factory default setting is 50%.



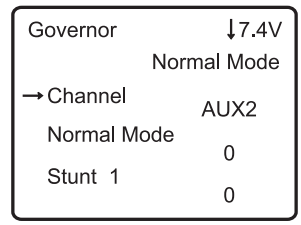
(2.4.2) “Stunt 1”, ”Stunt 2”, ”throttle hold” settings refer to “Normal Mode”.

Press EXT to finish.

3.9 Governor

Before setup this function, “Governor” should be set and activated in “Device Output” interface(Refer to 2.10 Device Output). It is possible to set Governor control rate in various flight modes seperately. Please setup the Governor for the desired retation speed. The transmitter display data is only for percentage reference. The real rotation speed refer to Governor.

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Governor, press ENT to Governor setting interface. see Illustration:

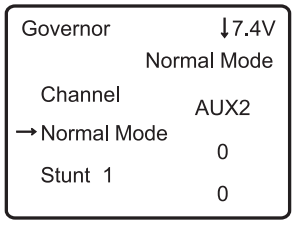


The status and Channel will display in the interface. Press UP/DN can see the “Normal Mode”, “ST1”, “ST2”, “Throttle Hold”(need to be Active. Please refer to 3.5 Throttle Hold).

(1) Status

Pull the Flight Mode or Thottle Hold switch, the status display present flight mode position. There are “Normal Mode”, “ST1”,“ST2”, “Throttle Hold” and so on. “Throttle hold” need to Active that can effect(refer to “3.5 Throttle Hold”).

(2) Channel: displaying in “2.10 Device Output” have set the Channel.(refer to 2.10 Device Output)



(3) Normal Mode

Press “UP/DN” to choose the “Normal Mode” set, press R+/L- to increase/decrease the value. The factory default value is 0%.

(4) The method to set “ST1”, “ST2”, “Throttle Hold” refer to “Normal Mode”.

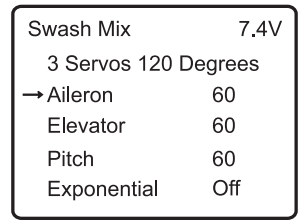
Press EXT to exit.

3.10 Swash Mix

This function, which can be executed through flight mode, is used for amending the variation caused by swashplate movement, when the aileron or elevator is working.

Setting method:

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Swash Mix, press ENT to Swash Mix setting interface. The “Swash Mix” item is only effected after choose the two or more servos in “2.11 Swash Type”. Take the third servo 120° as an example. see the right Illustration:



(1) Swash Type

The item will show the current swash type if choose the two or more servos in “2.11 Swash Type”. the choosed Swash Type is the 3 servos 120 Degrees.

(2) Aileron

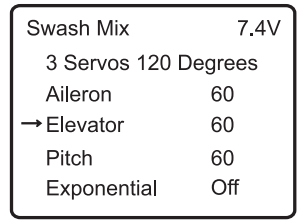
In the interface of Swash Mix, press UP or DN to choose Aileron Setting item. Press R+ button to increase the rate and L- to reduce. If reversed direction, it is available to chang through the “+” or “-” mark. The adjustable rate is ±125%. After finish the settings, press DN to set others.

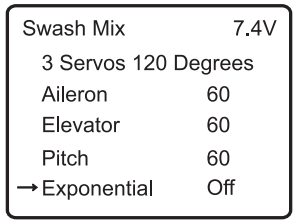
(3) Elervator

The function is based on the three or more servos which is choosed(refer to the 2.11 Swash Type).The setting method is same as above.

(4) Pitch

The function is based on the two or more servos which is choosed(refer to the 2.11 Swash Type). The setting method is same as above.





(5) Exponential

This function can execute the exponential changes, which are set at Dual Rate and Exponential in Function Menu when it is started. If Off is selected, the exponential curve will be changed into straight line.

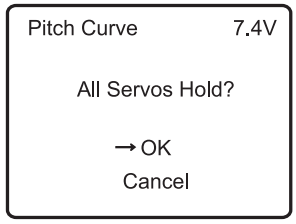
Setting method:

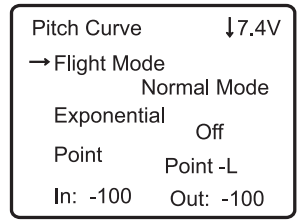
Press UP or DN until cursor point to Exponential to expand two options: Off and On. the default setting is Off. On is recommended. Press EXT to finish.

3.11 Pitch Curve

Pitch curves are adjusted through 7 points, which of all the flight modes can be respectively set. There are “Normal Mode”, “Stunt 1”, “Stunt 2” and “Throttle hold” 4 flight modes. “Throttle hold” need to Active that can effect.(refer to “3.5 Throttle Hold”)

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Pitch Curve, press ENT to Pitch Curve setting interface. see Illustration:





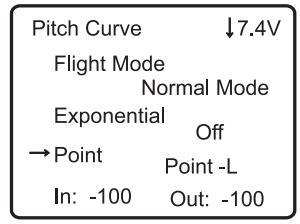
The interface of Pitch Curve will pop up “All servos Hold?” inquire, if you choose “OK” every servo will hold at current position, if you choose “Cancel” every servo won't be hold.

(1) Flight Mode

Press UP or DN to enter the Flight Mode at the interface of Pitch Curve, and then move the switch of Flight Mode, the state of flight mode will be shown. The Pitch Curve can be set at the current state. There are “Normal Mode”, “Stunt 1”, “Stunt 2” and “throttle hold” 4 flight modes. “Throttle hold” need to Active that can effect.(refer to “3.5 Throttle Hold”) The “Normal Mode” is made as an example for your referrence.

(2) Exponential

Press UP or DN to choose the setting item of Exponetial .There are ON or OFF option when you press the R+ or L- buttoms. The Exponetial will become round if the ON buttom is choosen. If you don't adjust the Exponetial Funtion, then choose OFF buttom.

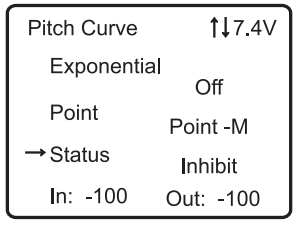


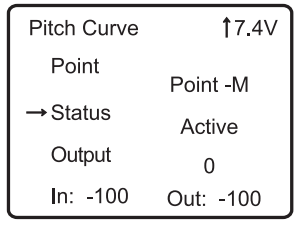
(3) Curve setting: Press UP or DN to choose the Point setting item.

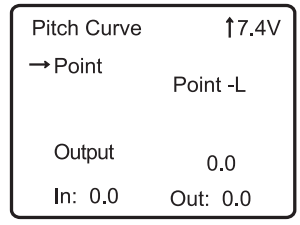
Press UP or DN to move the cursor→to point to “Point” in the Pitch curve interface, press R+ can select seven points for selection. There are Point L, Point 1, Point 2, Point M, Point 3, Point 4, Point H.

(3.1) Status setting: (Point L or Point H won't be display “Status”.)

After finished above settings, Press DN to move the cursor→to point to “Status”, press R+ or L- can set curve as “Inhibit” or “Active”. The factory default setting is Inhibit, if you want to change the data, please select Active.







(3.2) Output

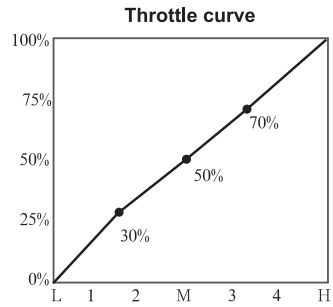
After finishing above setting , there is a “Output ”selection, press DN to move the cursor→to point to “Output” setting, press R+ or L- amend output data, Min value 0.0%, Max value 100.0%. “In” and “Out” display the throttle stick Input and Output level.

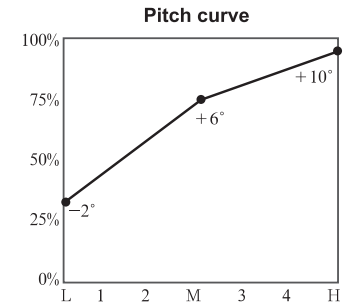
(4) Stunt 1, Stunt 2, Throttle Hold can be set separately in Pitch curve settings, Please refer to above settings.

Press EXT to exit.

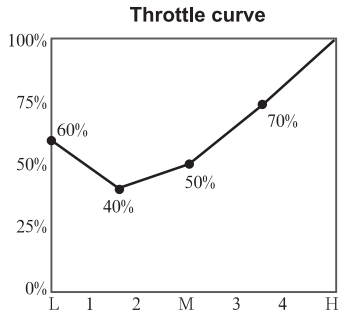
The basic examples are only for your reference. Adjustment to the real flights is a must.

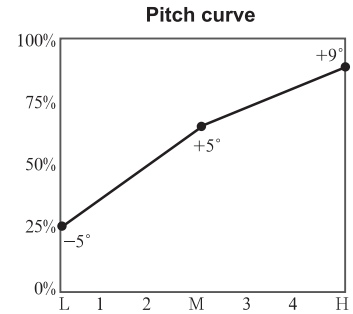
Normal flight



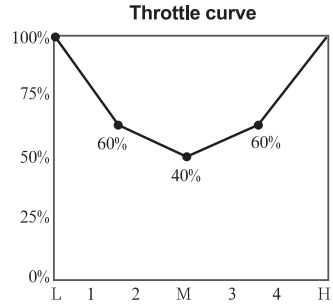


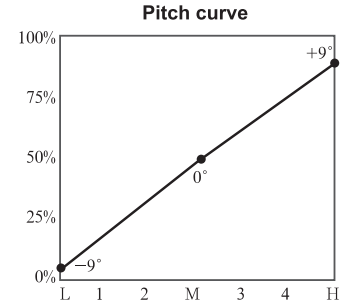
Flight mode1



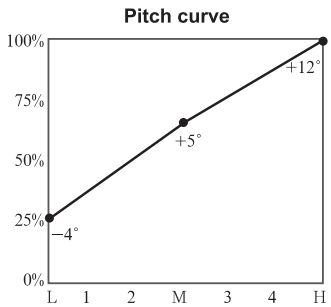


Flight mode 2





Autorotation landing

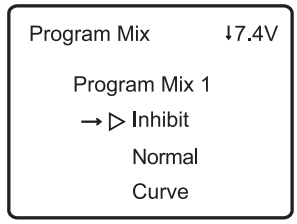


3.12 Program Mix

There are 8 series of program mix, mix channels and values are adjustable.

Setting Method:

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Program, press ENT to Program setting interface. see the right Illustration:

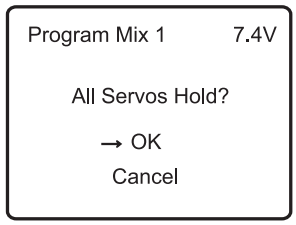


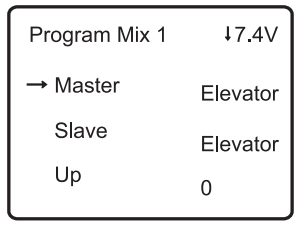
And press ENT to program mix setting and current status (default setting is “inhibit”) interface. Press R+ or L- to choose Inhibit, normal or curve.

Take “program mix 1” for example, there are “normal” and “curve” setting.

(1) The “normal” setting of “program mix”

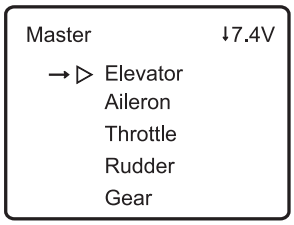
Press UP or DN to move the cursor→to point to the “Normal”setting, Press ENT button then pop up “All Servos Hold?” Press R or L to choose OK or Cancel. If “OK” selected, all the servos will be locked in the current status, if “Cancel” selected, all servos are unlocked. Press ENT enter to Program Mix 1 setting interface.

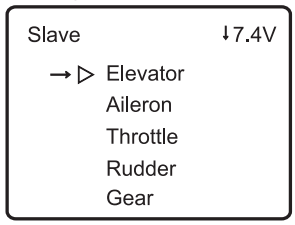




(1.1) Master channel setting

Press UP or DN to move the cursor→to point to Master Channel setting, press ENT to the Master Channel setting interface. Press UP or DN to move the cursor→to point to the desired Master Channel, press ENT to confirm and press EXT to be back to Program Mix 1 interface.





(1.2) Slave channel setting:

Press UP or DN to move the cursor→to point to Slave Channel setting, press ENT to the Slave Channel setting interface. Press UP or DN to move the cursor→to point to the desired Slave Channel, press ENT to confirm and press EXT to return to Program Mix 1 interface.

(1.3) Gain setting: Take Elevator at Master as an example.

(1.3.1) UP

Mix amount setting when elevator stick moved upward.Press UP or DN to move the cursor→to point to Up setting. Press R or L to increase or decrease the mix amount separately. It is possible to reverse mix direction through changing the “+” or “-” sign before amount. The adjustable range is ±125%.

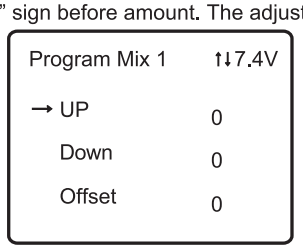
(1.3.2) Down

Mix amount setting when elevator stick moved downward.Press UP or DN to move the cursor→to point to Down setting. Press R or L to increase or decrease the mix amount separately. It is possible to reverse mix direction through changing the “+” or “-” sign before amount. The adjustable range is ±125%.

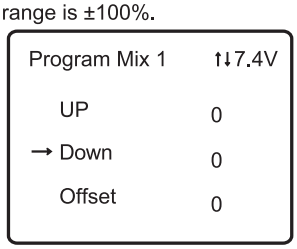
(1.3.3) Offset Setting

This function can make Slave begin to mix through the corresponding Lever switch from a certain point as the starting point.

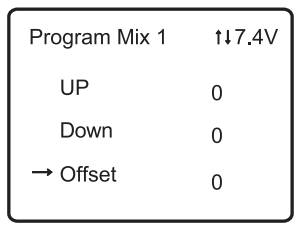
Press UP or DN to move the cursor→to point to Offset setting, Press R+ to increase the mix amount and press L- to decrease. It is possible to reverse Offset direction by pressing R or L button to change the “+” or “-” sign before amount. The adjustable range is ±100%.



(1.3.1) UP



(1.3.2) Down

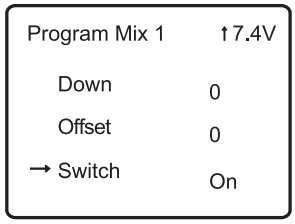


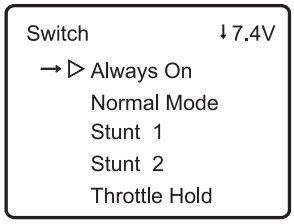
(1.3.3) Offset Setting

(1.4) Switch

Press UP or DN to move the cursor→to point to the Switch setting item and press ENT to enter the select interface of Switch. Press UP or DN to choose the switch you wish to set. Press ENT to confirm.

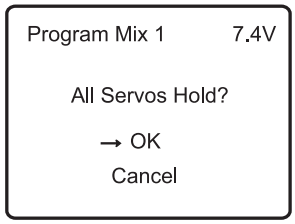
Press EXT to be back to Program Mix 1 interface.

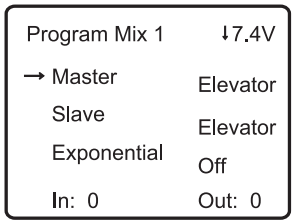




(2) Curve setting of Program Mix

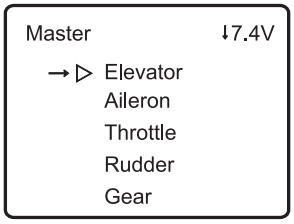
Press UP or DN to move the cursor→to point to the "Curve" setting, Press ENT button then pop up "All Servos Hold?" Press R or L to choose OK or Cancel. If "OK" selected, all the servos will be locked in the current status, if "Cancel" selected, all servos are unlocked. Press ENT enter to Program Mix 1 setting interface.

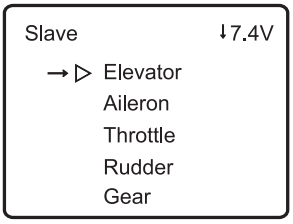




(2.1) Master channel setting

Press UP or DN to move the cursor→to point to Master Channel setting, press ENT to the Master Channel setting interface. Press UP or DN to move the cursor→to point to the desired Master Channel, press ENT to confirm and press EXT to be back to Program Mix 1 interface.





(2.2) Slave channel setting:

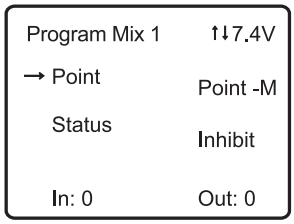
Press UP or DN to move the cursor→to point to Slave Channel setting, press ENT to the Slave Channel setting interface. Press UP or DN to move the cursor→to point to the desired Slave Channel, press ENT to confirm and press EXT to return to Program Mix 1 interface.

(2.3) Exponential Curve

Press UP or DN to move the cursor→to point to Exponential setting. There are ON or OFF option when you press the R+ or L- buttoms. The Curve Pitch will become smoothly if the ON buttom is choosen. If you don't adjust the Pitch Curve Funtion, then choose OFF buttom.

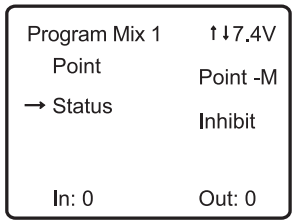
(2.4) Point

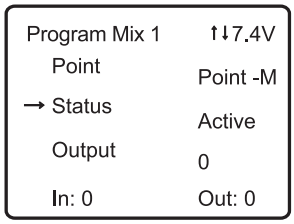
Press UP or DN to move the cursor→to point to the setting interface of Point. Press R or L keys of setting point, there are "point-L", "point -1", "point -2", "point -M", "point -3", "point -4", "point -H". Choose the points need adjusting.

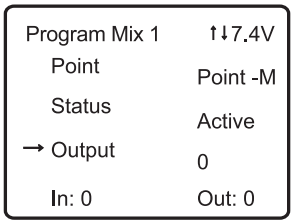


(2.5) Status Setting

(There is no Status options when the point is Point-L or Point-H) After selecting the point that you want to set, press UP or DN to move the cursor→to point to Status item, press R+ or L-, there are two options of Inhibit and Active. Select Inhibit for unchanging the current amount (the default setting is Inhibit).





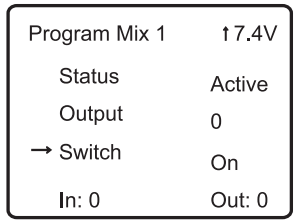


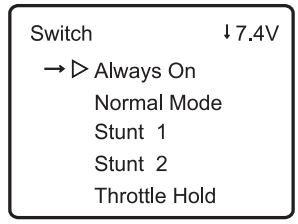
(2.6) Output

When the Status option is Active, the Output option will be listed. Press DN to move the cursor→to point to Output setting, press R+ or L- to increase or decrease, respectively, the output value. The adjustable range is from 0.0% to 100.0%. "IN" and "Out" means throttle stick input and output level.

(2.7) Switch

Press UP or DN to move the cursor→to point to the Switch setting item and press ENT to enter the select interface of Switch. Press UP or DN to choose the switch you wish to set . Press ENT to confirm.





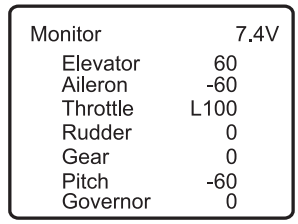
Press EXT key to return to the previous interface for other settings or press EXT key to exit after finished.

3.13 Monitor

This function can display the current status and positions of all the channels' outputs, and check the current working status of each channel.

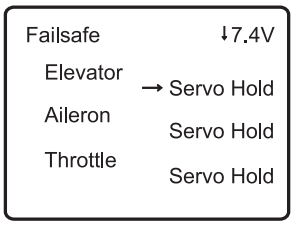
Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Monitor, press ENT to Monitor setting interface. See below to check the current working status of each channel.

Press EXT to exit.



3.14 Failsafe

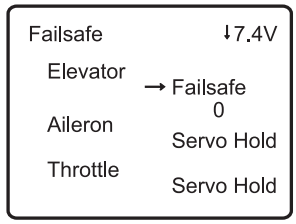
There are two possibilities for using if the transmission signal is under abnormal condition. The first one is to lock the last action data received; the second one is to execute the pre-set data which is pre-set. The default setting is Servo Hold.

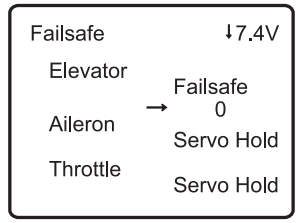


Setting method:

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Failsafe, press ENT to Fail Safe setting interface. Take the item Elevator as an example.

Press UP or DN to select Elevator on the Failsafe interface, then press R or L to change the status of Servo Hold into Failsafe(If you want to keep Servo hold status, there is no need to re-set).There is a expanded sub-item blow. Press UP or DN to select 0%,then press R+ or L- to increase or decrease, respectively, the position amount which centers on the neutral point of servo. The available value is 125%, respectively. 0% is the neutral point of servo.





The setting methods for other channels are same as above. Press EXT to exit after finished.

Note: Checking whether all the actions when failsafe happened are correct, is a must after the setting is finished. It is dangerous to use full throttle, especially after failsafe taken place.

3.15 Sensor View

Setting method: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Sensor View, press ENT to Sensor View setting interface.

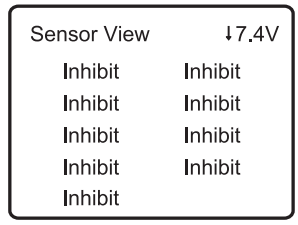
If all the sensors disconnect, telemetry signal lost, there will be inhibits shown on the view. If all work normally, all the measured data will be shown.

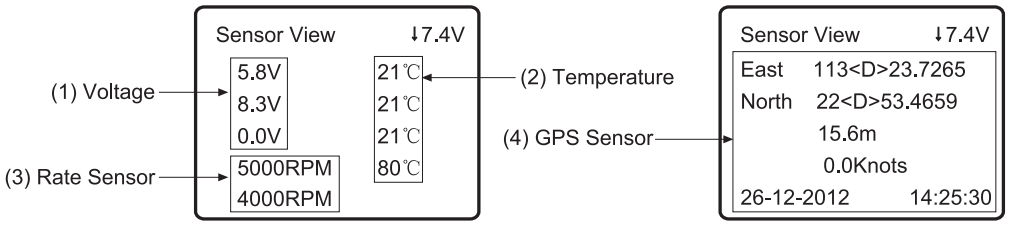
(1) Voltage: Show 3 diffferent measured voltage value;

(2) Temperature: Show 4 different measured temperature value;

(3) Rate Sensor: Show 2 different measured RPM value;

(4) GPS Sensor: Press UP or DN to turn to GPS function, show located date, time, longitude, latitude, altitude and speed.





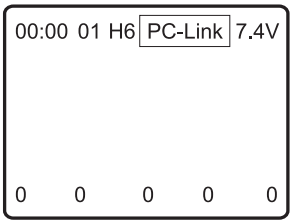
3.16 Trainer

Two DEVO F7DS transmitters can be made to work together in order to offer a teacher-trainer function, meeting the requirements for a beginner. The setup of training mode is described below:

(1) Model data transmission

First step is to use the DEVO F7DS's wireless data transmission feature to transfer the teacher's main model data to the trainee's DEVO F7DS transmitter. This step guarantees that the model data in each transmitter is identical. Refer to item “2.4 model wireless copy” in the Helicopter section later in this manual. Two DEVO F7DS transmitters are needed for wireless data transmission.

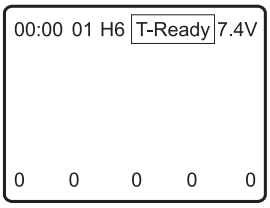
(2) Training connection



Insert the signal wire from the trainer's transmitter into the DSC socket of the trainee’s transmitter. Turn on the transmitter and a linkage icon, PC-Link will be shown on the boot screen. Insert one end of the signal wire (included) into the DSC socket of the trainee's transmitter and turn it on. PC-Link will be shown in the trainee's DEVO F7DS display (see image right).

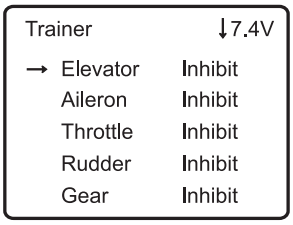
linkage icon

Turn on the power of the trainer's DEVO F7DS. Select the same model as the trainee (as transferred in the previous section) and briefly fly the aircraft to confirm the settings are good. Turn off the aircraft and turn off the trainer's DEVO F7DS power. Insert the other end of the signal wire into the trainer's DEVO F7DS DSC port and turn on the power once more, T-Ready will be shown in the trainee's DEVO F7DS display (see image left).



(3) Traniner Function Channel Setup

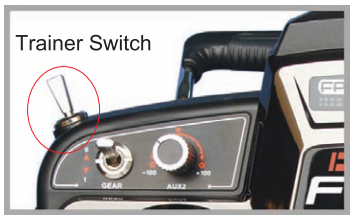
The trainee can acquire the control part or whole channel operation by setting the trainer's function channel. Here is the setup:

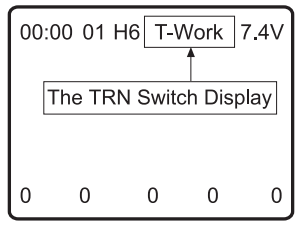


Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Trainer, press ENT to Trainer Function setting; Press UP or DN to move the cursor→to point to the desired setting channel, there are Elevator, Aileron, Throttle, Rudder, Gear, Pitch, Gyro channels available. Press R+ or L- to set Active or Inhibit for the choosed Channel.

(4) Training mode usage

The default setting is that the training mode switch is on the top left corner of the transmitter, named HOLD/TRN.

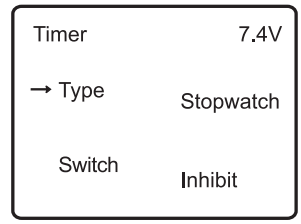




When flying, if the trainer operates the TRN switch, control is transferred control to the trainee; also, T-Work will be shown on the trainer's DEVO F7DS. The trainee's output data is displayed on the trainer's DEVO F7DS screen. If the trainer operates the switch once more, the trainer regains control over all functions and channels.

Please check and familiarize yourself with the operation of the training mode before attempting flight or a training session in order to avoid miss-operation and damage/injury.

3.17 Timer



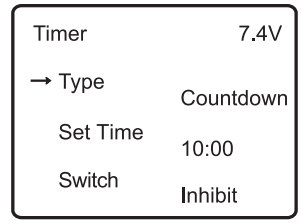
There are two timers which can be set as Stopwatch and Countdown, respectively. Each timer can be operated by switch or by shortcut.

Setting method: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Timer, press ENT to Timer setting interface. See the right Illustration:

(1) Type

Press UP or DN to move the cursor→to point to Type. Press R+ or L- to choose Stopwatch or Countdown. The default setting is Stopwatch. The time range of Stopwatch is from 0 to 59:59 (59 minutes 59 seconds).

(2) Countdown setting



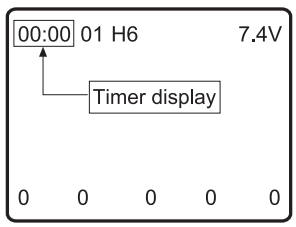
If you need Countdown time manner, press R+ or L- to select the Countdown. There is an expand sub-menu set time item. Press UP or DN to select the option of Set time item. Press R+ or L- to set the Countdown time. The settable Countdown time range is from 00:05 to 59:55.

(3) Switch selection

Press UP or DN to move the cursor→to point to Switch setting. There are Inhibit and available switch options, available switch can be selected by press L- or R+. It includes FMOD SW12, FMOD SW 2, MIX SW12, MIX SW 2, D/R SW, HOLD SW, GEAR SW, SPS0 SW, SPS1 SW, SPS2 SW, SPS3 SW. We can select the desired item except these items of SPS0 SW, SPS1 SW, SPS2 SW, and SPS3 which should be previously set at Stick Position Switch at Model Menu(refer to “2.8 Stick Position Switch”). Press EXT to exit.

(4) Usage of timer

Press UP or DN by pressing UP key for one time, and to pause it by pressing it the second time. Press DN to clear timer. It's ok to control time by Switch when time setting is finished on switch. Timer will be shown in main intereface, as below illustration:



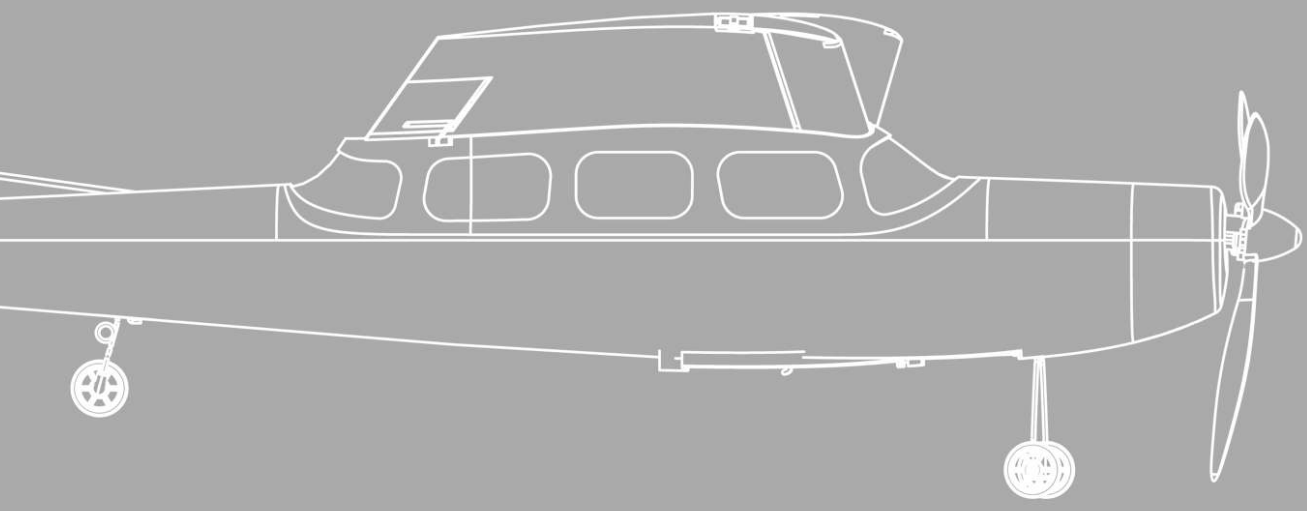
deVention

DEVO F7DS

Part three Airplane

All the functional settings, which are relative to the operation system of DEVO F7DS itself, are fully integrated in System Menu. They include Display, Buzzer, vibrator, Video Select, Stick Mode, Stick Direction, Stick calibration, and About.

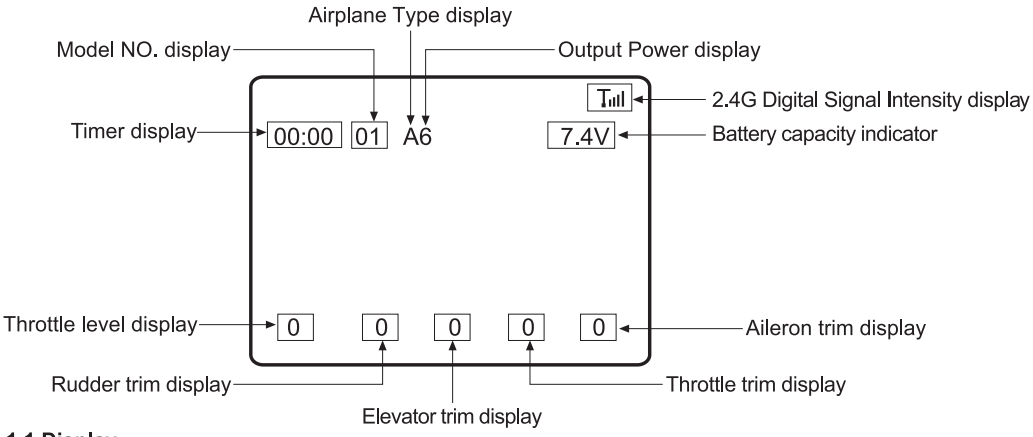
Setup your DEVO F7DS transmitter for the best Helicopter performance with the following sections. Included are specific functions for rotor-craft features; Throttle curves, Pitch curves and Cyclic response are covered below.



1.0 System Menu

This section describes the settings which are specific to the operation of the DEVO F7DS itself. Settings for Display, Buzzer, Vibrator, Video Select, Stick Mode, Stick Direction, Stick Calibration and About can be accessed via the System Menu.

Below is the boot screen of Airplane:



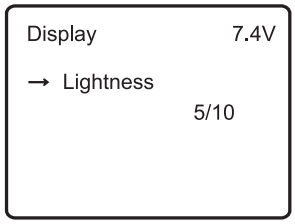
1.1 Display

Backlight intensity: the backlight intensity is adjustable using the UP or DN button. Power consumption will be increased when intensity is high and battery life will be reduced.

Setting:

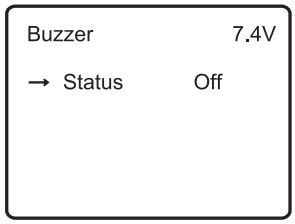
Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to System Menu, press ENT to System Menu; Press UP or DN to move the cursor→to point to Display, press ENT to the Lightness setting interface and use R or L to change the setting as desired.

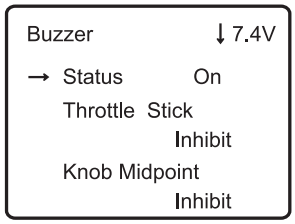
Press EXT to exit.



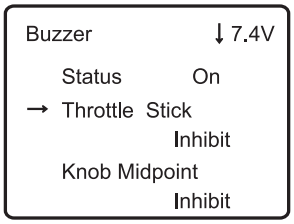
1.2 Buzzer Setting

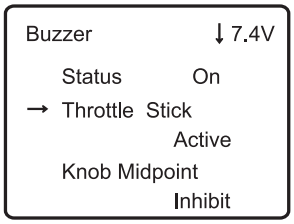
(1) Status: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to System Menu, press ENT to System Menu; Press UP or DN to move the cursor→to point to Buzzer, press ENT to the Buzzer setting interface. And then press UP or DN to move the cursor→to point to the Status, press R or L to toggle between ON and OFF settings. ON means start the Buzzer while OFF means the Inhibit.





(2) Throttle stick: With the “Status” item on, the option THSTK can be set to ON or OFF. If the Throttle Stick setting is ON/Active, a musical scale will be heared when moving the throttle stick. The position of the throttle stick can be judged by listening to the change in musical tone. Setting OFF, turns off the sounds.



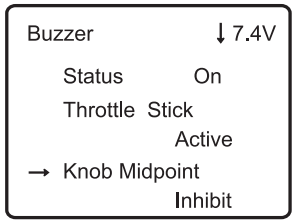


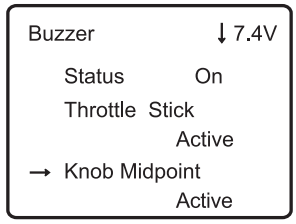
Setting:

With the “Status” item on, press DN to move the cursor→to point to the “Throttle Stick”. Use R or L to change the display between Inhibit and Active. Active means tones will be played, Inhibit means there will be no tones played.

(3) Knob Midpoint: With the “Status” item on, if the “Knob midpoint” setting keeps Active, there will be a buzzer at the midpoint position when turn the knobs. Please choose Inhibit if the buzzer isn't needed.

Setting: With the “Status” item on, press DN to move the cursor→to point to Knob Midpoint. Use R or L to change the status between Inhibit and Active. Active means to turn on Knob Midpoint buzzer while Inhibit means to turn of Knob Midpoint buzzer.





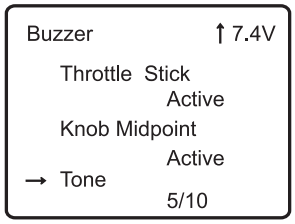
(4) Tone:

The buzzer tone can be selected from 10 notes. You can set the tone according to your preference and test the performance.

Setting:

With the “Status” item on, press DN to move the cursor→to point to Tone item. Use R or L key to change the flashing value from 1 to 10.

Press EXT to exit after finished.

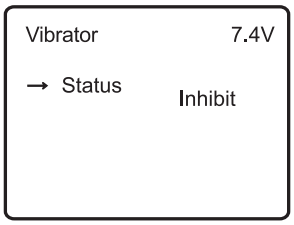


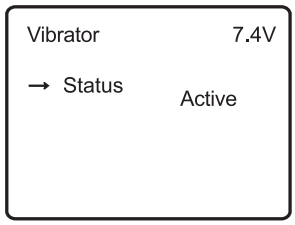
1.3 Vibrator

The vibrator is used as an alarm function to remind the users.

Setting:

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to System Menu, press ENT to System Menu; Press UP or DN to move the cursor→to point to Vibrator, press ENT to Vibrator setting interface.





There are two status as Inhibit and Active. Press R or L to select Active or Inhibit. Active means to start vibration, Inhibit means to turn off vibration.

Press EXT to exit after finished.

1.4 Video Select

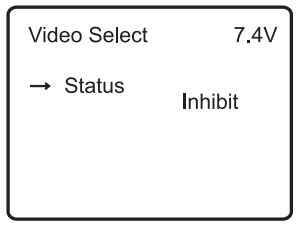
This function provides the settings of Inhibit or Active when choose the Video option.

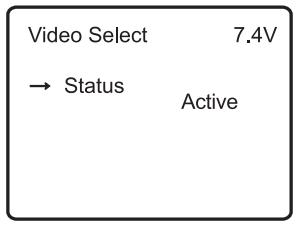
Setting:

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to System Menu, press ENT to System Menu; Press UP or DN to move the cursor→to point to Video Select, press ENT to Video Select setting interface.

Press R or L to select Active or Inhibit. Active means to start vibration, Inhibit means to turn off vibration.

Press EXT to exit after finished.

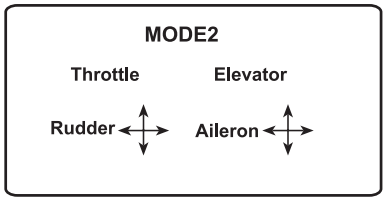


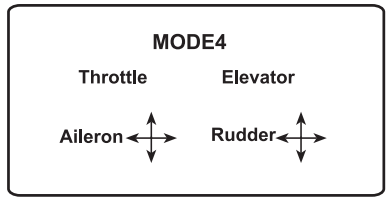


1.5 Stick Mode

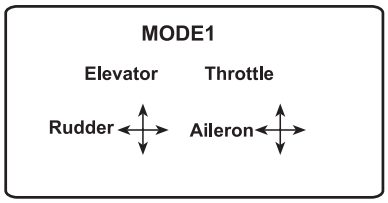
There are 4 stick modes including Mode1, Mode2, Mode3 and Mode4. Right-hand throttle includes Mode1 and Mode3; while left-hand throttle includes Mode2 and Mode4. See Below:

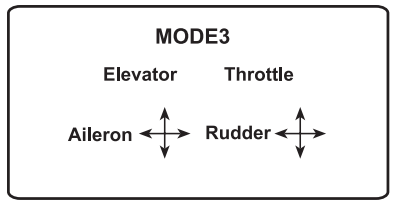
Mode 2 and Mode 4 are listed in left-hand throttle.





Mode 1 and Mode 3 are listed in right-hand throttle.

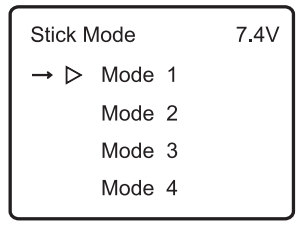




Setting: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to System Menu, press ENT to System Menu; Press UP or DN to move the cursor→to point to Stick Mode, press ENT to Stick Mode setting interface.

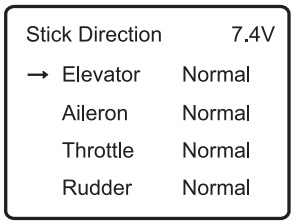
There are mode 1, mode 2, mode 3 and mode 4 for options. Press UP or DN to move the cursor→to point to desired item and then press ENT to confirm.

Press EXT to exit after finished.



1.6 Stick Direction

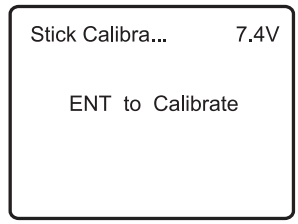
Setting: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to System Menu, press ENT to System Menu; Press UP or DN to move the cursor→to point to Stick Direction, press ENT to Stick Direction setting interface.



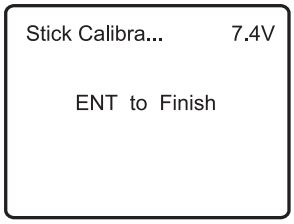
Stick Direction: There are Elevator, Aileron, Throttle, Rudder for options. Press UP or DN to move the cursor→to point to the desired item. Press R or L to change the settings of corresponding sticks. There are Normal and Reverse. The default setting is Normal.

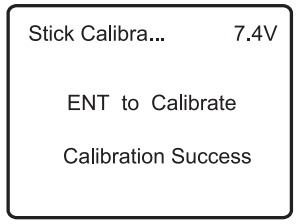
1.7 Stick Calibration

Setting: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to System Menu, press ENT to System Menu; Press UP or DN to move the cursor→to point to Stick Calibration, press ENT to Stick Calibration setting interface.



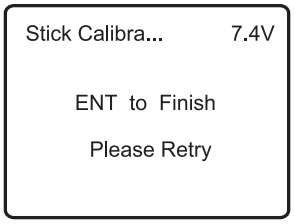
Stick Calibration: Mechanically move the right stick and left stick from their minimum levels to their maximum levels several times, and then return the sticks to the neutral positions, respectively.





Press ENT again to stop the calibration process and the display should show the following interface(Calibration Success).

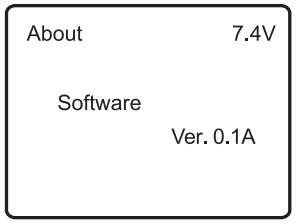
The calibration has failed if press ENT and show the following interface. Please go back to the STMOD sub-menu using EXT and re-start the calibration process. Press EXT to exit after finished.



1.8 About

Setting: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to System Menu, press ENT to System Menu; Press UP or DN to move the cursor→to point to About, press ENT to About setting interface. You can check the current versions of hardware and software.

Press EXT to exit after finished.

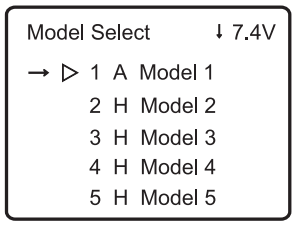


2.0 Model Menu

Model Menu manages all the model data saved in DEVO F7DS. It includes Model Select, Model Name, Model Copy, Model Transmit, Model Receive, Model Reset, Type Select, Trim System, Stick Position Switch, Device Select, Device Output, Wing Type, Power Amplifier, Fixed ID and Sensor setting.

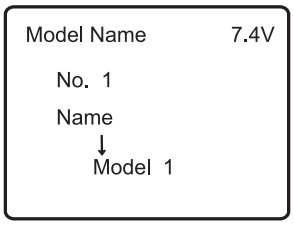
2.1 Model Select

Setting: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Model Select, press ENT to Model Select setting interface. There are 15 different model settings be saved. Press UP or DN to move the cursor→to point to select the model No you want and press ENT to confirm. Press EXT to exit.



2.2 Model Name

In the menu of model name, you can make a desired name for your model for long-term storage. Its data can be directly withdrawn in next flights. Repeat the step “2.1 Model Select” to choose the model you want to name or save, press EXT to back to the interface.

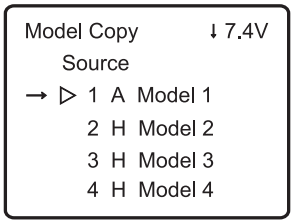


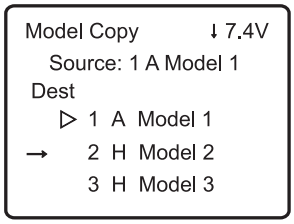
Setting: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Model Name, press ENT to Model Name setting interface.

Press UP or DN to move the cursor→to point to select the character and figure which are needed to be changed, press R or L button to change the character and figure, and press UP or DN to set next one. Press EXT to exit after finished.

2.3 Model Copy

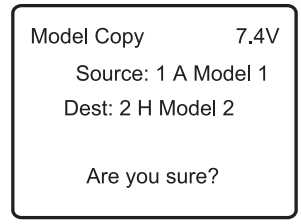
Setting: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Model Copy, press ENT to Model Copy setting interface.





Press UP or DN to choose the model you want to be copied as source model and press ENT to confirm, The serial No. and model name of Source Model will be shown as the left Illustration.

Press UP or DN to move the cursor→to point to select the model you want to be copied as source model and press ENT to confirm, The serial No. and model name of Source Model will be shown as the right Illustration. Then press UP or DN to locate the source model, press ENT to confirm. Then an enquire “Are you sure?” is popped up as Illustration. Press ENT to copy, or press EXT to exit.

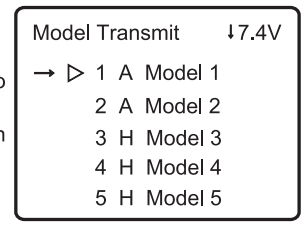


2.4 Model wireless copy

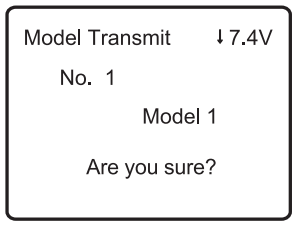
The model data between two DEVO F7DS equipments can be wirelessly copied via Model Transmit and Model Receive in Model Menu.

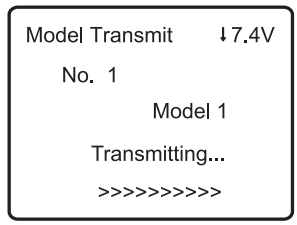
(1) Model Transmit

Setting: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Model Transmission, press ENT to Model Transmission setting interface.



Press UP or DN to choose the source model which will be transmitted, and press ENT to confirm, an enquiry information “Are you sure?” will be shown as below Illustration. Press ENT to confirm and EXT to exit.

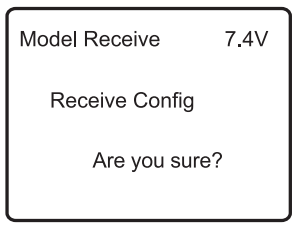


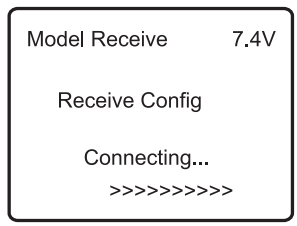


Press ENT to transmit, “Transmitting ……” appears in the interface. Or press ENT to confirm. Press EXT to exit after another DEVO F7DS received the data.

(2) Model Receive

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Model Receive, press ENT to Model Receive setting interface. An enquiry information “Are you sure?” will be shown as below Illustration.

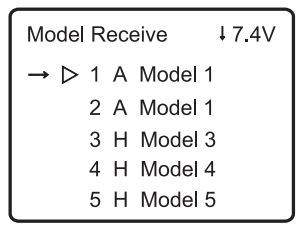


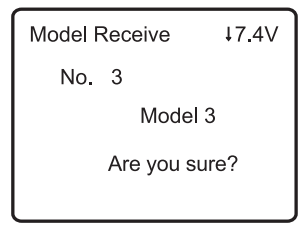


Press ENT to receive, “Connecting ……” and “Receiving ……” will be shown in series in the interface.

After Model received the data will enter to the Model save interface. Press UP or DN to move to the cursor→to point to Model data save position. Press ENT will pop up “Are you sure”. Press ENT to save, press EXT to cancel .

Press ENT to confirm and EXT to exit.

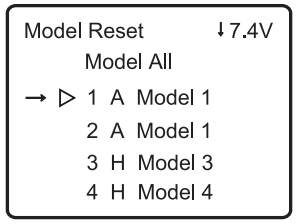


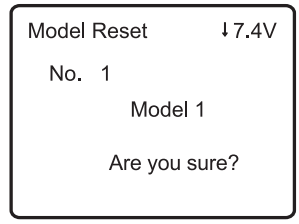


2.5 Model Reset

Using the Model Reset function, the settings for one or all models can be reset to the factory defaults.

Setting: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Model Reset, press ENT again to display to model selection. Use R and L to select “ALL” for all models or the individual model name for a single model reset.





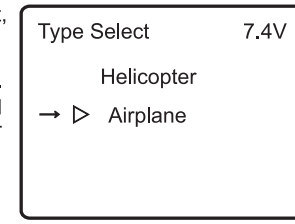
Press UP or DN to move the cursor→ to point to the desired model No and press ENT, an inquiry "Are you sure" will be shown as Illustration.
Press ENT to reset and EXT to cancel.
Press EXT after finished.

2.6 Type Select

This transmitter offers a choice of two model types. The options are helicopter and airplane.

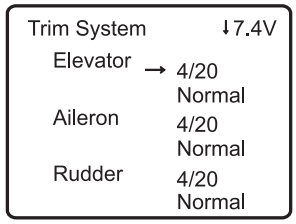
Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Type Select, press ENT to Type Select setting interface.

Press UP or DN to move the cursor→to point to helicopter or Airplane option. Press ENT, there is an inquiry shows. Press ENT to select the desired model. If the default model are the desired one. Press ENT and press EXT to exit.



2.7 Trim System

Trim System is able to finely tune the following terms, respectively: Elevator, Aileron, Rudder, Throttle. The trim range is divided into 20 grades. (factory default is set at 4). It is convenient to subtly modify the pitch by adjusting the trim range.

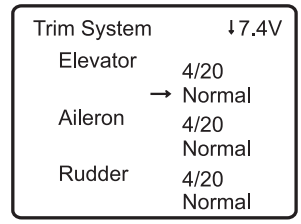


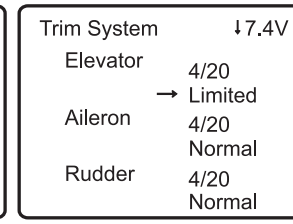
Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Trim System, press ENT to Trim System setting interface.

Press UP or DN to move the cursor→to point to the item that need to adjust. Press R+ or L- can change the setup, the Maxium is 20.

For elevator, aileron and rudder, there are two more options: Normal and Limited. "Normal" means the trim is always working although the corresponding stick stays anywhere. "Limited" means the trim is out of working when the corresponding stick is at maximum position.

Press EXT to exit after finished.



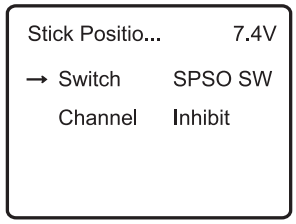


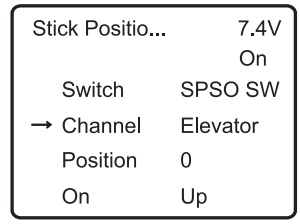
2.8 Stick Position Switch

According to the following setting, the stick can be used as a switch. The turn-on or turn-off position at which stick stays can also be settable.

Method for setting:

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Stick Position Switch, press ENT to Stick Position Switch setting interface.

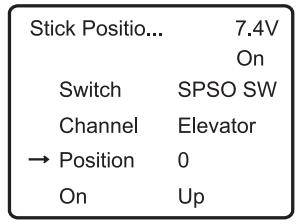


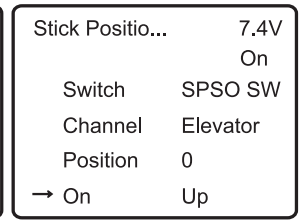


There are four options under the Stick position switch: SPS0, SPS1, SPS2, SPS3. Press UP or DN to move the cursor→to point to switch option. Press R or L to choose the switch you want to define.
Press UP or DN to move the cursor→to point to the channel option. There are Inhibit and channel options.(Default setting Inhibit)

The channel includes four items: Elevator, Aileron, Throttle and Rudder. The factory default is inhibit. Take Elevator for example.

Press R or L to choose the Elevator as stick, and then press DN to move the cursor→to point to value of position. It's possible to adjust the stick position via pressing R or L.
Press UP or DN to move the cursor→to point to On option. And then press R+ or L- to change the ON status of stick postion
Press EXT after finished.

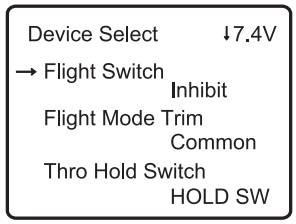




2.9 Device Select

This setting can help you configure various functional switches. It includes Flight Mode switch, Flight Mode trim, Throttle Hold Switch and Flap Switch select.

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Device Select, press ENT to Device Select setting interface.



(1) Flight Mode Switch

Press UP or DN to move the cursor→to point to Flight Switch items and press R or L to select the desired switch. There are FMOD SW, MIX SW. The factory default setting is Inhibit.

(2) Flight Mode Trim

There are two modes: Common and Flight Model. In common mode all the trim values, to which various sticks are relative, put equally effects on all the flight modes. In Flight Mode, the Trim values to which each stick is relative put, respectively, effect on the corresponding stick. The factory default is Common.

Press UP or DN to move the cursor→to point to Flight Mode Trim, press R or L to select Common or Flight Mode. The factory default is Common.

(3) Throttle Hold Switch

Refer to (1) Flight Mode Switch.

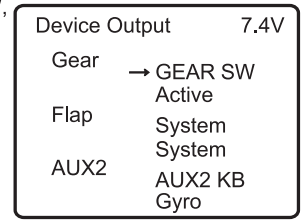
(4 Flap Switch Select

Refer to (1) Flight Mode Switch. After finished the setting, press EXT to exit.

2.10 Device Output

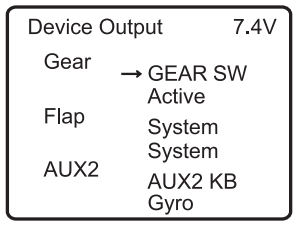
Device output can set up the output switches respectively. It can also activate, inhibit or use other functions. The switchs include: FMOD SW, MIX SW, D/R SW, HOLD SW, GEAR SW, TRN SW, SPS0, SPS1, SPS2, SPS3 and AUX2 KB.

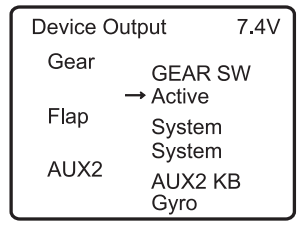
Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Device Output, press ENT to Device Output setting interface. There are 3 settings: Gear, Flap, AUX2.



(1) Gear

Press UP or DN in Device output interface can change the GEAR Switch. It includes FMOD SW, MIX SW, D/R SW, HOLD SW, GEAR SW, TRN SW, SPS0 SW, SPS1 SW, SPS2 SW, SPS3 SW and AUX2 KB. Press R or L to select the setting switch, The default setting is GEAR SW.

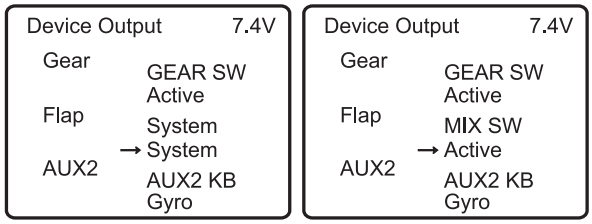




Press UP or DN to move the cursor→to point to Function Setting after you select the switch, press R or L to choose the switch, it inculdes Inhibit, Active, Gyro, Governor The default setting is Activate. You can continue to set other items after finishing.

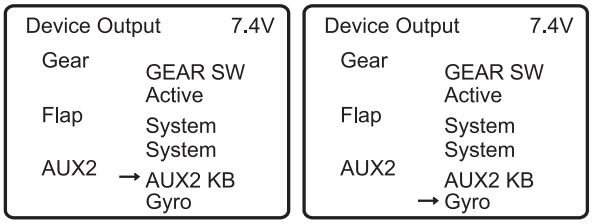
(2) Flap

Press UP or DN to move the cursor→to point to Flap, press R or L to select between Active, System and Inhibit. The factory default setting is System. When choose Active, it can be selected as Switch Control. It's possible to change via pressing L to show Flap Output setting.



(3) AUX2

Press UP or DN to move the cursor→to point to the AUX2 option. Press R or L can change the AUX2 switch. It includes FMOD SW, MIX SW, D/R SW, HOLD SW, GEAR SW, TRN SW, SPS0 SW, SPS1 SW, SPS2 SW, SPS3 SW and AUX2 KB. The default setting is AUX2 KB.



Press UP or DN to move the cursor→to point to Function Setting, press R or L to choose the switch, it inculdes Inhibit, Active, Gyro, Governor. The default setting is Gyro. Press EXT to exit after the setting finished.

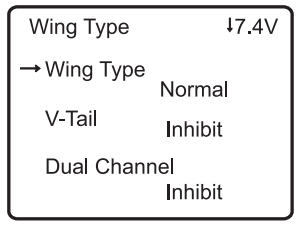
2.11 Wing Type

Wing Type is grouped into Nomal, Flaperon, Delta and V -Tail.

Wing Type selection:

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Wing Type, press ENT to Wing Type setting interface.

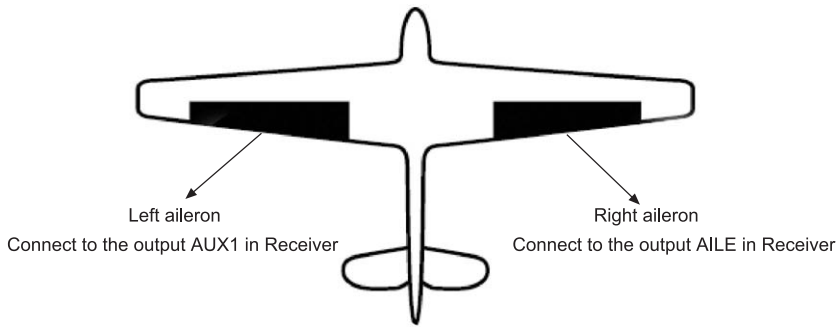
Press UP or DN to move the cursor→to point to Wing Type. Press R or L to choose Wing Type. The Wing Type are Normal, Flaperon and Delta.



(1) Flaperon

Press R or L to choose Flaperon under Wing Type.

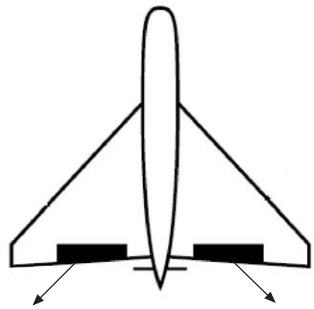
Below is the graphics for the servos location of the Flap and Aileron Type.



(2) Delta

Press R or L to choose Delta in Wing Type.

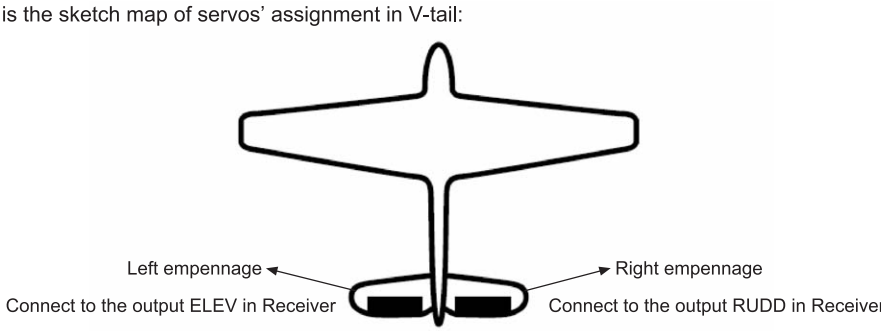
Below is the graphics of the servos location of the Delta Type.



(3) V-tail

Press UP or DN to move the cursor→to point to V-Tail under V-Tail interface. There are Inhibit and Active, please choose Active. V-tail is unadjustable when the Wing type is Delta.

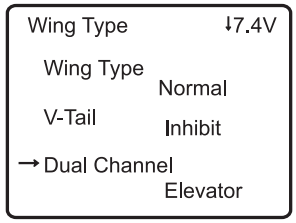
Below is the sketch map of servos' assignment in V-tail:

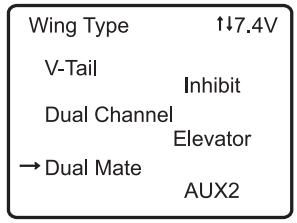


(4) Dual channels setting

Dual Channels can be set as Elevator, Aileron, Rudder, or Flaperon. It is of dual channel output function. The channel, which will be set as dual channel at AUX in Device Output (Refer to "2.10 Device Output"), should be previously set as Inhibit when the AUX channel is being set.

Dual Channel setting: Press UP or DN to move the cursor→to point to item Dual Channels in the interface of Wing Type, press R or L, there are items of Elevator, Aileron, Rudder, and Flap. We take Elevator as an example.





(4.2) Dual Mate Setting

Press UP or DN to move the cursor→to point to Dual Mate. Press R or L to select the desired channel in the menu with Inhibitt and the inhibited channels previously set in "Device Output".

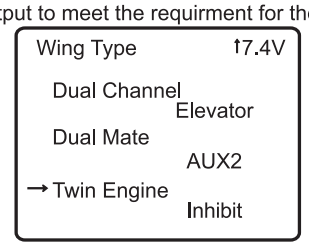
The settings of Aileron, Rudder and Flap in the item Channel are same as above.

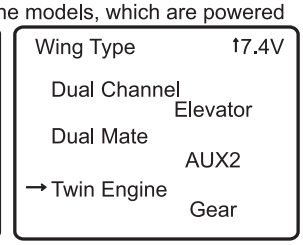
(4.2) Twin Engine

This function can be set as twin engine output to meet the requirment for the models, which are powered by twin engines.

Twin Engine setting: Press UP or DN to move the cursor→to point to Twin Engine. Press R or L to the desired channel in the menu with Inhibit and the inhibited channels previously set in "Device Output"

Press EXT after setting finished.

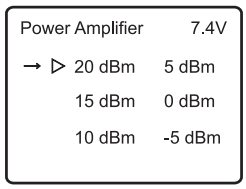


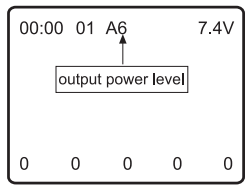


2.12 Power Amplifier

The transmission output power of DEVO F7DS is adjustable. It is divided into six grades from low to high. The lower the transmission output power transmits, the shorter the radio range is, and the longer the stand-by time will be, the higher the transmission output power, the farer the radio range, and the shorter the stand-by time. Choose the appropriate transmission output power according to the actual situation.

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Power Amplifier, press ENT to Power Amplifier setting interface.





Grade 6	Grade 5	Grade 4	Grade 3	Grade 2	Grade 1
20dBm	15dBm	10dBm	5dBm	0dBm	-5dBm

Press UP or DN to move the cursor→to point to the desired output power value and press ENT to confirm. The output power level will also show on the main menu interface see the left Illustration:

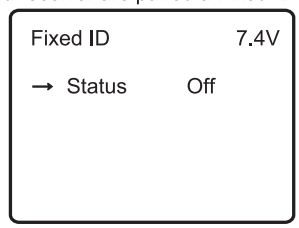
2.13 Fixed ID

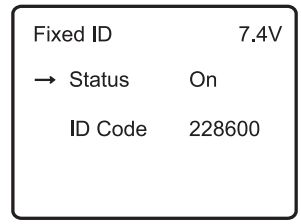
Using the Fixed ID function allows users to create a unique relationship between transmitter model data and the corresponding model's receiver. It significantly speeds up the binding process and also prevents mistakenly flying an aircraft with the incorrect transmitter model selected.

(1) Fixed ID setup

To start the Fixed ID setup it is important that the transmitter and receiver have successfully completed automatic ID binding process. Once the transmitter and receiver are paired a Fixed ID can be set as described below:

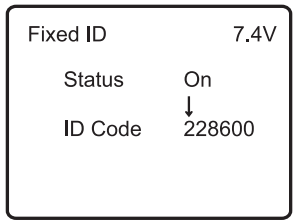
Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Fixed ID, press ENT to the Fixed ID setting interface.

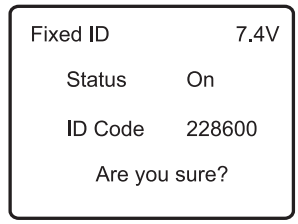


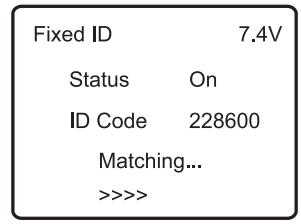


Press R+ or L- to set Status ON, and there is a Random Fixed ID display on the screen. Press DN to move the cursor → to point to ID Code, press ENT to move the cursor → to point to the first code of the Fixed ID.

Press R+ or L- to change the Code; Press DN to move to next Code. Press ENT after finished setting, there is an inqury “Are you sure? ”. Press ENT to confirm and execute the binding process. After finished binding the display will return to the Model Menu automatically.

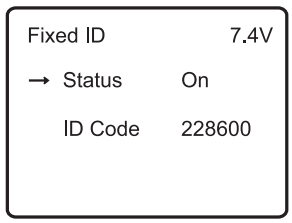


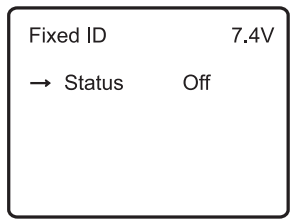




(2) Cancelling/Resetting the Fixed ID

If you wish to change the receiver Fixed ID model back to random ID, insert the included BIND PLUG into the output terminal BATT before the receiver is powered on. Connect 5V DC power to the Throttle channel. The red LED of the receiver will flash slowly. Remove the BIND PLUG. The Fixed ID code has been cancelled. After the receiver's Fixed ID is reset it should also be reset in the Transmitter.





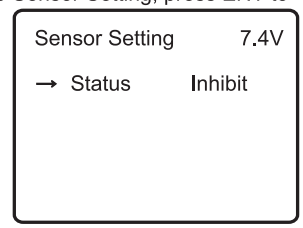
Refer to the instructions of Fixed ID setting above to the following interface. Press UP to move the cursor → to point to Status ON.

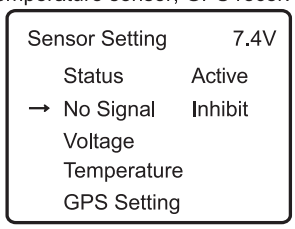
When Fixed ID Status ON, press R+ or L- to change ON to OFF. Press EXT to exit.

2.14 Sensor Setting

Setting method: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Sensor Setting, press ENT to Sensor setting interface.

Press R or L to select Activate or Inhibit (the default setting is Inhibit), such as press Activate will includes No Signal Warning, Voltage sensor, Temperature sensor, GPS receiver setting etc.





(1) No Signal

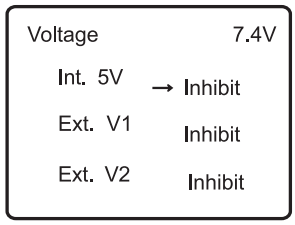
Press UP or DN to move the cursor→to point to No Signal option. Press R or L to choose Inhibit or Active (default setting is inhibit). If you choose Active, the Radio will alarm when telemetry signal lost. See the left Illustration:

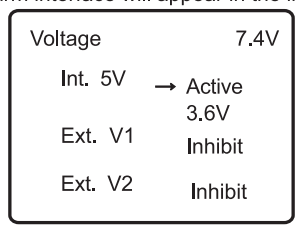
(2) Voltage

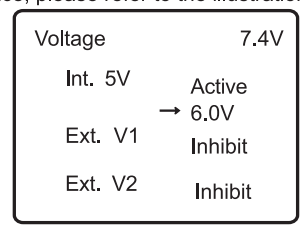
There are 3 different types of voltage can be measured. It includes Internal 5V, External V1 and V2 which can be monitored two different external voltage(i.e. battery) respectively. Once the measured voltage is lower than the setting value, the Radio will alarm.

(2.1) Receiver 5V(Internal) PFV(Power Feeding Voltage) Alarmed value can be setted as 3.6-6V

Voltage setting: press DN to move the cursor→to point to Voltage otpion on the Sensor setting interface. Then press ENT to enter the voltage setting interface. Press UP or DN to move the cursor→to point to Int.5V option. Press R or L to activate the 5V, the alarm interface will appear in the interface, please refer to the illustration.





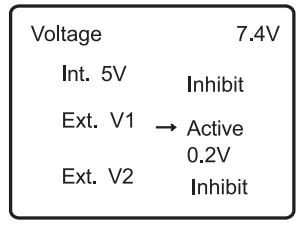


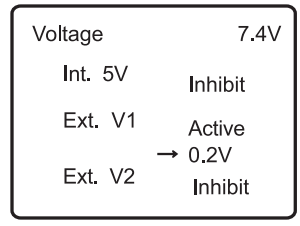
Press UP or DN to select the Alarm Voltage setting option, press R or L to set the value. The range is 3.6-6V. You can continue to set other items after you finished.

(2.2) V1 External V1

Press UP or DN to move the cursor→to point to External V1 setting option. Press R or L to activate the V1, the details refers to the illustration.

Press UP or DN to move the cursor→to point to the Alarm Voltage setting. Press R or L to set the value. The setting range is 0.2~99.9V. You can continue to set other items after you finished.



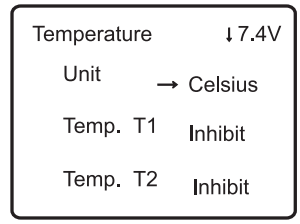


(2.3) External: V2 setting can refer to External V1 setting. Press EXT to back to sensor setting interface to set other options.

(3) Temperature sensor

The temperature sensor can measure up to 4 different temperature(i.e.motors). You can choose Celsius or Fahrenheit. The alarmed value can be setted to 4 different temperature. Once the measured value is higher than the setting value, the radio will alarm. The Alarm Temperature value can be setted as -20~220℃ or -4.0~428.0° F.

Temperature Setting: In the Sensor Setting interface, press UP or DN to move the cursor→to point to Temperature Sensor setting option, and press ENT to Temperature setting interface. See the illustration.



(3.1) Unit

Press UP or DN to move the cursor→to point to Unit setting option, and press R or L to choose Unit, two kinds of Unit: Celsius and Fahrenheit.

(3.2) Alarm Temperature settings

Press UP or DN to move the cursor→to point to T1 option, Press R or L to activate the setting. Inhibit will change to Active and Alarm temperature will be shown. If you choose Inhibit, the Alarm temperature value won t be shown.

Temperature	↓7.4V
Unit	Celsius
Temp. T1	→ Active
	100<C>
Temp. T2	Inhibit

Temperature	↓7.4V
Unit	Celsius
Temp. T1	Active
	→ 100<C>
Temp. T2	Inhibit

Press UP or DN to move the cursor→to point to Alarm setting, press R or L to set the alarm temperature value. Press UP or DN to set other items after finishing the setting.

(3.3) T2,T3,T4 setting

Refer to the step of "T1".

(4) GPS Setting

There are 4 items including Altitude Type, Speed Unit, Date Type and Time Zone in the GPS receiver setting interface.

Setting: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Model Menu, press ENT to Model Menu; Press UP or DN to move the cursor→to point to Sensor Setting, press ENT to Sensor setting interface; Press UP or DN to move the cursor→to point to GPS Setting, press ENT to GPS setting interface.

GPS Setting	7.4V
→ High Type	Absolute
Speed Unit	Knots
Date Type	DD-MM-YY
Time Zone	UTC 08:00

(4.1) High Type

Press UP or DN to select the High type on the GPS setting interface and there are Absolute and Relative two types.

GPS Setting	7.4V
→ High Type	Absolute
Speed Unit	Knots
Date Type	DD-MM-YY
Time Zone	UTC 08:00

GPS Setting	7.4V
High Type	Absolute
→ Speed Unit	Knots
Date Type	DD-MM-YY
Time Zone	UTC 08:00

(4.2) Speed Unit

Press UP or DN to select the Speed Unit on the GPS setting interface and it includes knots and km/h and relative. Select the desired item.

(4.3) Date Type

Press UP or DN to select the Date Type on the GPS setting interface and it includes DD-MM-YY, MM-DD-YY and YY-MM-DD. Select the desired item.

GPS Setting	7.4V
High Type	Absolute
Speed Unit	Knots
→ Date Type	DD-MM-YY
Time Zone	UTC 08:00

GPS Setting	7.4V
High Type	Absolute
Speed Unit	Knots
Date Type	DD-MM-YY
→ Time Zone	UTC 08:00

(4.4) Time Zone

Press UP or DN to select the Time Zone, press R or L to set the desired Time Zone.

3.0 Function Menu

The Function Menu allows you to customize the settings for your saved models. This menu includes the following: Channel Reverse Switch, Travel Adjust, Sub Trim, Dual Rate and Exponential, Throttle Hold, Throttle Curve, Differential, Balance, Gyro Sensor, Governor, Aileron to Rudder Mix, Elevator to Flap Mix, Rudd to Aile/Elevator, Flap System, Airon to Flap Mix, Program Mix, Monitor, Fail Safe, Sensor View,Trainer and Timer.

3.1 Reverse Switch

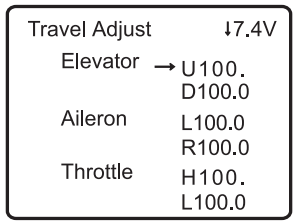
Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Reverse Switch, press ENT to Reverse Switch setting interface.

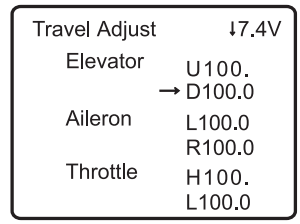
Reverse Switch	↓7.4V
→ Elevator	Normal
Aileron	Normal
Throttle	Normal
Rudder	Normal
Gear	Normal

Press UP or DN to move the cursor→to point to ELEV(take Elevator for example), Press R or L to shift the status between nomal and reverse. These are two status for option. And the default setting is Normal. All Channels Reverse Switch like: Aileron, Throttle, Rudder, Gear, Flap, and Aux2 can be referred to the way of ELEV Reverse Switch. And press EXT to exit after setting finished.

3.2 Travel Adjust

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Travel Adjust, press ENT to Travel Adjust setting interface. The interface display a channel's servo travel value status.





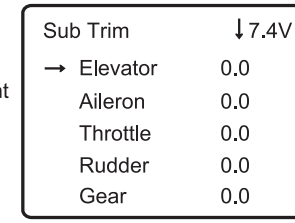
Press UP or DN to move the cursor→to point to "Elevator's U" setting (ELEV is used in the example), press R+ or L- key, can set the travel value while the Elevator towards up. The adjustment range :0.0-150.0%. Factory default setting: 100.0%.

Press UP or DN to move the cursor→to point to "Elevator's D" setting, press R+ or L- key, can set the travel value while the Elevator towards down. The adjustment range :0.0-150.0%. Factory default setting: 100.0%. The settings for all channels, Aileron, Throttle, Rudder, Gear, Flap and Aux2 can all be set using this process. Press EXT to exit.

3.3 Sub Trim

NOTE: Sub Trim is used to fine tune the servo neutral position during setup. In order to avoid pushing the servo beyond it's limits and possibly causing damage it is advised to first mechanically adjust the servo arm/bell crank to be as close to the neutral point as possible. Only when this is complete may sub trim be used to make a final adjustment.

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Sub Trim, press ENT to Sub Trim setting interface.



The interface display a adjustable channel's name and adjustable data project. Press R+ or L- can adjust the fine tune the servo neutral position. Press UP or DN can select the channel you wish to set. Every Channel default setting value is 0.0%. The adjustment ranges are as below:

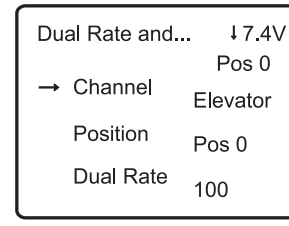
Channel name	Adjustment range	Channel name	Adjustment range
Elevator	D62.5%～U62.5%	Gear	-62.5%～+62.5%
Aileron	R62.5%～L62.5%	Flap	D62.5%～U62.5%
Throttle	L62.5%～H62.5%	Gyro	-62.5%～+62.5%
Rudder	R62.5%～L62.5%		

Press EXT to exit.

3.4 Dual Rate and Exponential

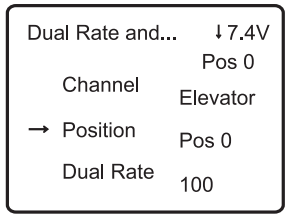
After this function is set up, it is possible for D/Rswitch to control the dual rates of elevator, aileron and rudder, respectively. The setting range is covered from 0-125%. Under the help with exponential curve adjustment, it is possible to make both customized setting and automatic setting.

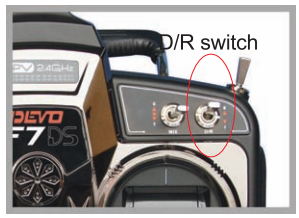
Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Dual Rate and Exponential, press ENT to Dual Rate and Exponential setting interface.



(1) Channel

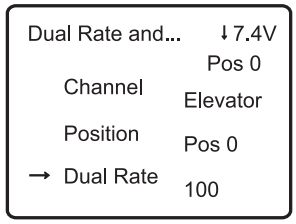
Press UP or DN to move the cursor→to point to Channel setting, press R+ or L- key, can set the Channel as follows : ELEV, AILE and RUDD ect.

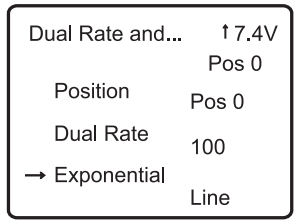




(2) Position
Press UP or DN to move the cursor→to point to Position setting, Use the corresponding D/R switch to set D/R and exponential function.The available positions are POS0 and POS1. ELEV is shown in the following example. Use ELEV D/R switch to select the position you wish to change.

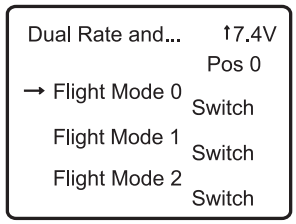
(3) Dual Rate
Press UP or DN to move the cursor→to point to Dual Rate setting, press R+ or L- key, can set the “Position” dual rate value. The default setting is 100%.





(4) Exponential
Press UP or DN to move the cursor→to point to Exponential setting, press R+ or L- key, can set the “Position” Exponential value. there are ±100% and LINE three settings available.

(5) Automatic setting
Under Flight Mode, it is possible to switch the dual rate and exponential, which are set in above“(3) Dual Rate adjustment” and “(4) Exponential adjustment”, respectively. There are Flight Mode 0, Flight Mode 1, Flight Mode 2 settings available.



(5.1) Flight Mode 0
Press UP or DN to move the cursor→to point to Flight Mode 0 setting, press R+ or L- key, can set the position or switches. Selected “Switch” for corresponding D/R switches settings and selected “Postion” can swtich “(3) Dual rate and exponential settings” and “(4) exponential setting” according to different flight mode. There are Switch, Pos 0, Pos 1,Pos 2 settings available.

(5.2) Flight Mode 1 , Flight Mode 2 settings please refer to above Flight Mode 0 settings.

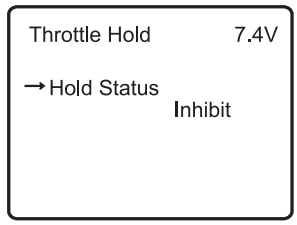
Press EXT to exit.

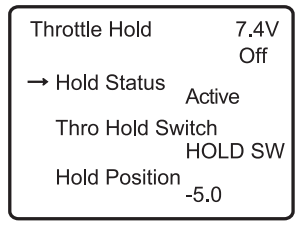
3.5 Throttle Hold

If the throttle hold function is activated in the function settings menu, it can be operated by the Throttle Hold switch. The permitted setting range is from -20.0% to 50.0%. The default setting is INH (inhibited).

Setting method:

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor →to point to Throttle Hold, press ENT to Throttle Hold setting interface.

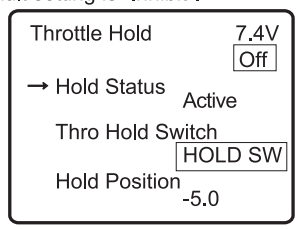




Press R+ or L- key active Throttle Hold function. There are Throttle Hold Status , Throttle Hold Switch and Throttle Hold Position three settings available.

(1) There two status of Throttle Hold: “Inhibit” and “Active”. The factory default setting is “Inhibit”.

(2) Throttle Hold Switch setting
This function can't be set, the factory default setting is “HOLD SW”. The status alwasys be “HOLD SW”. See the right Illustration:



(3) Throttle Hold Position setting
Press UP or DN to move the cursor→to point to Hold Position setting option, Press R+ or L- adjust the data, the MIN Value: -20.0%; MAX Value: +50.0%.

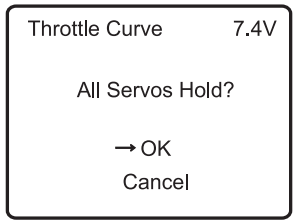
When Throttle Hold switch “Active”, the throttle holded in the “Throttle Hold position” setted position. When Throttle Hold Switch “Inhibit”, the throttle hold status released.

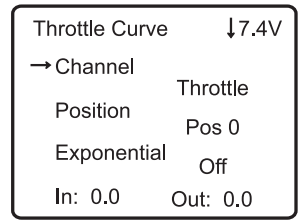
Press EXT to exit.

3.6 Throttle Curve

Throttle Curve are adjusted through 7 points.

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Throttle Curve, press ENT to Throttle Curve setting interface. see below Illustration:





The interface of Throttle Curve will pop up “All servos Hold?” inquire, if you choose “OK”every servo will hold at current position, if you choose “Cancel” every servo won’t be hold.

(1) Channel setting

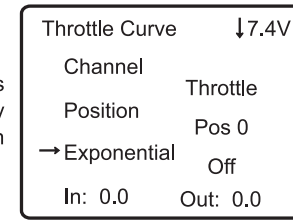
The default setting is Throttle Channel, and can not reset.

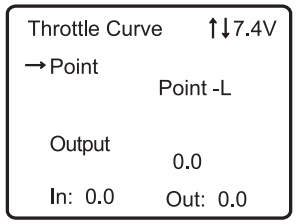
(2) Position selection

Press UP or DN in the “Throttle Curve” setting interface to select “Position”, press R+ or L- to select the item you want to set in the list with Pos 0 and Pos 1.

(3) Exponential curve setting

Press UP or DN to move the cursor→to point to “Exponential” setting. Press R or L can set ON and OFF. The throttle curve will being changed smoothly if select ON. Select OFF if not need then the throttle curve will be shown as a line. See the right Illustration:





(4) Curve setting: Including “Point” and “Output”

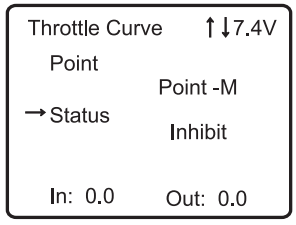
(4.1) Point setting

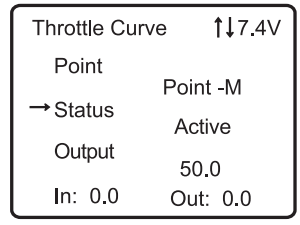
Press UP or DN in Throttle Curve interface to select Points setting. Press R+ to expand a list including seven points: “Point-L”, “Point-1”, “Point-2”, “Point-M”, “Point-3”, “Point-4” and “Point-H”.

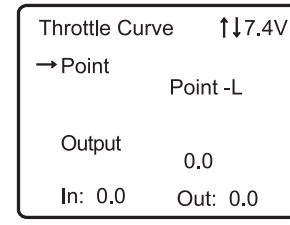
(4.2) Status setting

After above setup, press DN to select Status setting, press R+ or L- to set Inhibit or Active. Select Inhibit if keeping the current value (the default setting is Inhibit). Select Active for changing the above points’ value.

Note: After select Point L or Point H, the status setting won't be display.

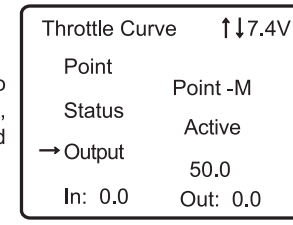






(4.3) Output setting

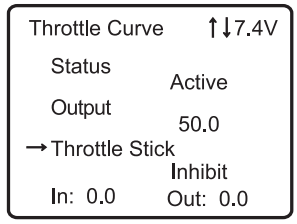
There is a expand item “Output” after select Status Active, press DN to select Output setting, press R+ or L- to increase or decrease, respectively, the output value. The adjustable range is from 0.0% to 100.0%. “IN” and “Out” means throttle stick input and output level.



(5) Throttle Stick setting

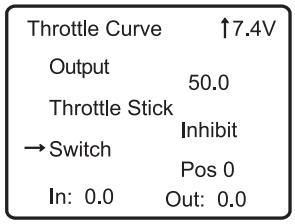
The switch between Pos 0 and Pos 1 can be freely realized through throttle stick after the below amount has been set up. The below set amount is the position of throttle stick as well as the switch point.

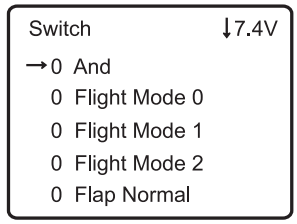
Throttle setting: Press UP or DN to move the cursor→to point to Throttle Stick seting, Press L to decrease the amount with a lower limit of 0.0% or Inhibit, Press R+ to increase the amount with an upper limit of 100.0%.



(6) Switch Selection

When the item Throttle Stick is set in Inhibit, it is possible to switch between Pos 0 and Pos 1 by Switch. Press UP or DN to move the cursor→to point to "Switch". Press ENT to enter into Switch selection interface, press UP or DN to move the cursor→to point to the desired item. Press ENT, the desired item whose left side will be changed into "1" from "0". If two or more items are selected, the item should be chosen, whose left side should be changed into "1" from "0". Press EXT after finished it.



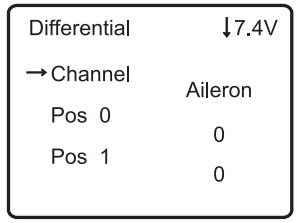


3.7 Differential

If want to use this function, Flaperon or Delta should be previously selected in Wing Type of Model Menu. Refer to "2.11 Wing Type".

(1) Aileron differential setting

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Differential, press ENT to Differential setting interface. See the right Illustration:

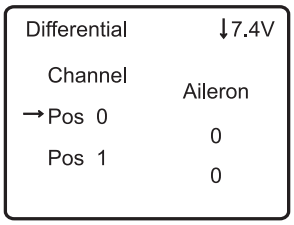


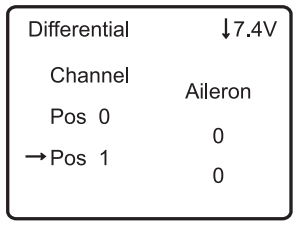
Mounting servos in left and right ailerons are a must if using this function. The following interface will be shown after Flaperon or Delta selected in Wing Type. Refer to "2.11 Wing Type".

(1.1) Channel: Current setting channel is Aileron. System default can not be set.

(1.2) Setting for Pos 0

Press UP or DN to move the cursor→to point to Pos 0, press R or L to increase or decrease differential value, respectively. The adjustable range is ± 100%.





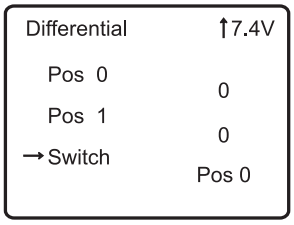
(1.3) Setting for Pos 1

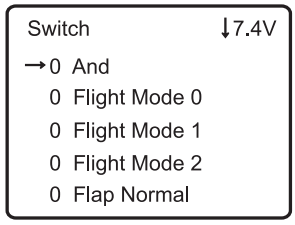
Press UP or DN to move the cursor→to point to Pos1, press R or L to increase or decrease differential value, respectively. The adjustable range is ± 100%.

(1.4) Switch selection

It is possible to switch by Setting Switch when differential is in use.

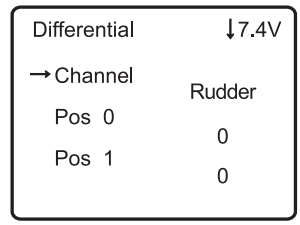
Press UP or DN to move the cursor→to point to Switch, press ENT to enter interface of Switch selection, Press UP or DN to move the cursor→to point to desired item. Press ENT, the desired item whose left side will be changed into "1" from "0". If two or more items are selected, the item "And" should be chosen, whose left side should be changed into "1" from "0". Press EXT after finished it.





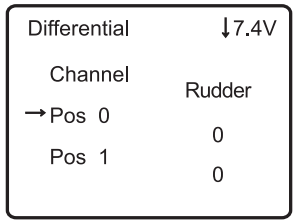
(2) Rudder differential setting

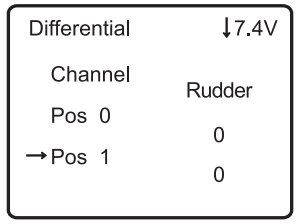
V-Tail should be previously set in Wing Type of Model Menu if the rudder differential function is activated. Refer to “2.11 Wing Type”. On the interface of Differential, press UP or DN to move the cursor→to point to Channel, And press R+ to choose Channel to Rudder, see Illustration:



(2.1) Setting for Pos 0

Press UP or DN to move the cursor→to point to Pos 0, press R or L to increase or decrease differential value, respectively. The adjustable range is ± 100%.





(2.2) Setting for Pos 1

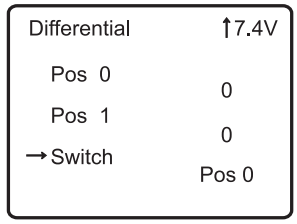
Press UP or DN to move the cursor→to point to Pos1, press R or L to increase or decrease differential value, respectively. The adjustable range is ± 100%.

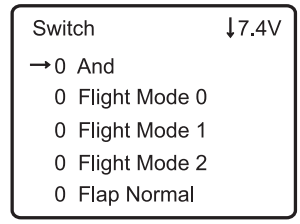
(2.3) Switch selection

It is possible to switch by Setting Switch when differential is in use.

Press UP or DN to move the cursor→to point to Switch, press ENT to enter interface of Switch selection,

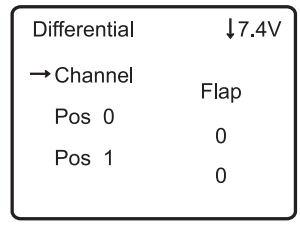
Press UP or DN to move the cursor→to point to desired item. Press ENT, the desired item whose left side will be changed into “1” from “0”. If two or more items are selected, the item "And" should be chosen, whose left side should be changed into “1” from “0”. Press EXT after finished it.





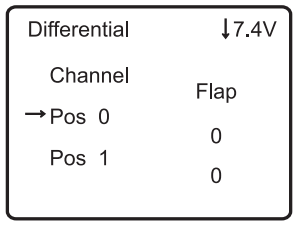
(3) Flap differential setting

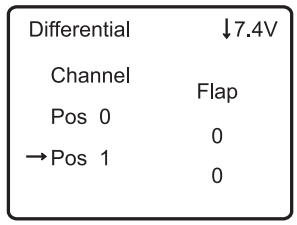
It should be previously set the flap dual channel function in Wing Type of Model Menu (refer to “2.11 Wing Type”) in order to activate the menu of Flap Differential. On the interface of Differential, press UP or DN to move the cursor→to point to Channel, and press R+ to choose Channel to Flap as the right Illustration:



(3.1) Setting for Pos 0

Press UP or DN to move the cursor→to point to Pos 0, press R or L to increase or decrease differential value, respectively. The adjustable range is ± 100%.





(3.2) Setting for Pos 1

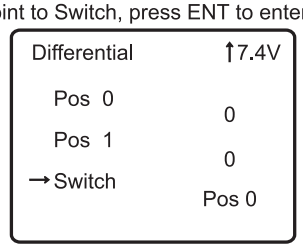
Press UP or DN to move the cursor→to point to Pos1, press R or L to increase or decrease differential value, respectively. The adjustable range is ± 100%.

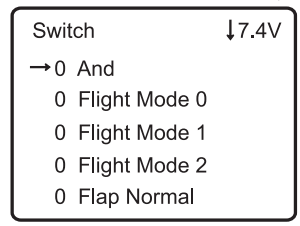
(3.3) Switch selection

It is possible to switch by Setting Switch when differential is in use.

Press UP or DN to move the cursor→to point to Switch, press ENT to enter interface of Switch selection,

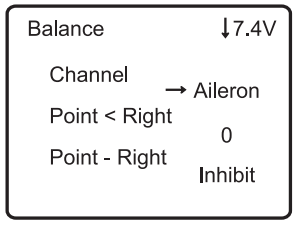
Press UP or DN to move the cursor→to point to desired item. Press ENT, the desired item whose left side will be changed into “1” from “0”. If two or more items are selected, the item "And" should be chosen, whose left side should be changed into “1” from “0”. Press EXT after finished it.





3.8 Balance

This function can adjust the parameters of the two servos which are used in the dual channels. It should be previously activated one of these wing types of Flaperon, Delta, and V Tail in Wing Type at Model Menu. Refer to “2.11 Wing Type”.

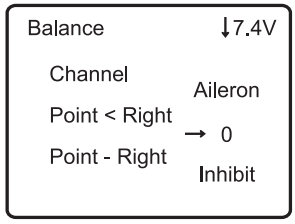


Setting method:

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Balance, press ENT to Balance setting interface. See Illustration:

(1) Channel

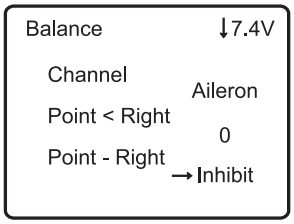
Current setting channel is Aileron, or other double channels. Press UP or DN to move the cursor→to point to Channel, and press R+ or L- to choose the seeting you want.

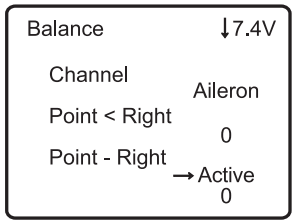


(2) Point parameter adjustment

Point< Right Setting: Press UP or DN to move the cursor→to point to “Point< Right”. If need to adjust the value, press L (0% means no adjusting). A minus value means the amending direction is downward; press R to adjust value(0% means no adjusting). A plus value means the amending direction is upward. The adjustable range is ±100%.

Point-Right Setting: Press UP or DN to move the cursor→to point to “Point-Right”. Press R or L to inhibit or active. If need to adjust please active it. There will be expanded value adjustment item. Press UP or DN to move the cursor→to point to “0%”, if need to adjust the value, press L (0% means no adjusting). A minus value means the amending direction is downward; press R to adjust value (0% means no adjusting). A plus value means the amending direction is upward. The adjustable range is ±100%.

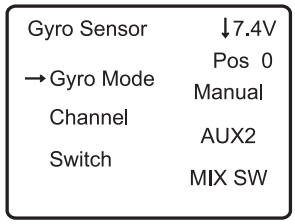




Press UP or DN, there will be setting for Point-1, Point-2, Point-3, Point-Left, Point>Left, refer to the setting method as above. Press EXT after finished it.

3.9 Gyro Sensor

This function offers the gain adjustment for gyro sensor, which can be manually set through MIX switches or Flight mode switch, and also is possible to be automatically switched among various gains through flight mode switch. (The flight mode should be activated. Refer to “2.9 Device Select”).



Setting method:

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Gyro Sensor, press ENT to Gyro Senso setting interface. see Illustration:

(1) Manual Setting

(1.1) Manual Setting

In the Gyro Sensor interface, press UP/DN to choose “Gyro Mode” project set, press R+/L- to selectable set (“Manual set” and “Automatic set”).Then choose “Manual” option.

(1.2) Channel

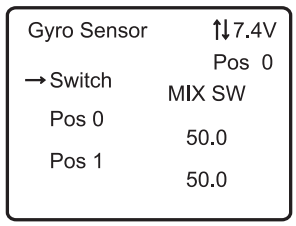
The original channel is “AUX2”, if you want to change to other channels control, you can choose from “Device Output”set. (refer to “2.10 Device Output”).

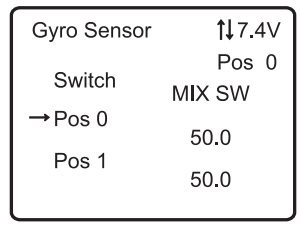
(1.3) Switch

In the Gyro Sensor interface, press UP/DN to choose “Switch” project set, press R+/L- to selectable sets FMOD SW, MIX SW, D/R SW, HOLD SW, GEAR SW, totally 5 selectable sets. Choose the Manual control switch.

(1.4) Sensitivity Setting

If choose 3 switches, there are “position 0”, “position 1” and “position 2”, then set the sensitivity individually;
If choose 2 switches, there are “position 0” and “position 1”, then set the sensitivity individually.





(1.4.1) position 0

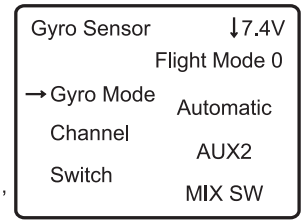
Press UP/DN to choose “position 0”, press R/L to increase/decrease value individually. If the GYRO have “NOR” mode and “AVCS” mode, when the value lower than 50%, it is “NOR” mode. the lower of the value is, the bigger of the GYRO sensitivity becomes. The factory default setting is 50%.

(1.4.2) “Position 1”, “Position 2” setting method please refer to above “position 0”.

(2) Automatic setting

(2.1) Automatic setting

In the Gyro Sensor interface, press UP/DN to choose “Gyro Mode” project set, press R+/L- to selectable sets (“Manual set” and “Automatic set”). Then choose “Automatic” option.



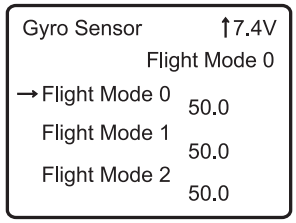
(2.2) Channel

The original channel is “AUX2”, if you want to change to other channels control, you can choose from “Device Output” set.(refer to “2.10 Device output”)

(2.3) Switch: Can’t be used in this Automatic Setting.

(2.4) Status

Turn the Flight Mode switch, the status display present flight mode position. There are “Flight Mode 0”, “Flight Mode 1” and Flight Mode 2. etc.



(2.4.1) Flight Mode 0:

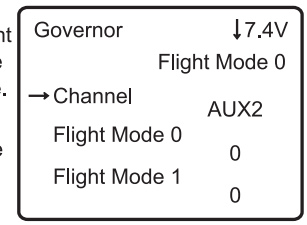
Press UP or DN to move the cursor→to point to Flight Mode 0, press R/L can increase or decrease the value individually. If the gyro used has two modes of NOR and AVCS, NOR will be activated when the value is less than 50.0%. In NOR mode, the smaller the value is, the bigger the gyro sensor gain will be. The factory setting is 50.0%.

(2.4.2) Flight Mode 1, Fligjt Mode 2 setting refer to “Flight Mode 0”. After finishing the set, press EXT to exit.

3.10 Governor

Before setup this function, “Governor” should be set and activated in “Device Output” interface(Refer to 2.10 Device Output). It is possible to set Governor control rate in various flight modes seperately. Please setup the Governor for the desired retation speed. The transmitter display data is only for percentage reference. The real rotation speed refer to Governor.

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Governor, press ENT to Governor setting interface. See Illustration:



The status and Channel will display in the interface. Press UP/DN can see the “Flight Mode 0”, "Flight Mode 1", “Flight Mode 2” and so on.

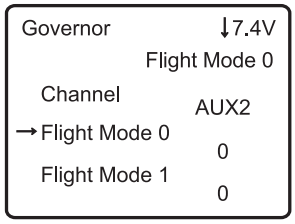
(1) Status

Turn the Flight Mode switch, the status set display present flight mode position.There are “Flight Mode 0”, “Flight Mode 1”, “Flight Mode 2” and so on.

(2) Channel: The setted channels will display in “2.10 Device output” (refer to 2.10 Device Output)

(3) Flight Mode 0

Press UP or DN to move the cursor→to point to the “Flight Mode 0” set, press R/L to increase/decrease the value.The factory default value is 0%.



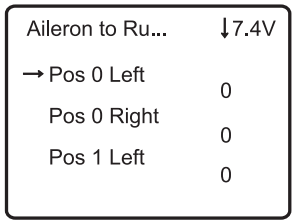
(4) Flight Mode 1, Flight Mode 2 setting refer to “Flight Mode 0”. After finished the setting, press EXT to exit.

3.11 Aileron to Rudder Mix

This function is possible to execute the mix of aileron to rudder, which is controlled by switch.

Setting method:

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Aileron to Rudder Mix, press ENT to Aileron to Rudder Mix setting interface. See Illustration:



(1) Pos 0 Setting leftward setting

Press UP or DN to move the cursor→to point to leftward mix value, press R or L, leftward mix value of aileron to rudder will be changed. The mix direction will be revised by changing the sign of plus or minus before the value. The adjustable range is ±125%.

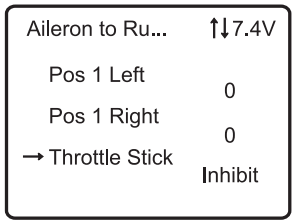
(2) Pos 0 Setting rightward setting

Press UP or DN to move the cursor→to point to rightward mix value, press R or L rightward mix value of aileron to rudder will be changed. The mix direction will be revised by changing the sign of plus or minus before the value. The adjustable range is ±125%.

(3) Pos 1 setting, reference Pos 0 setting.

(4) Throttle stick setting

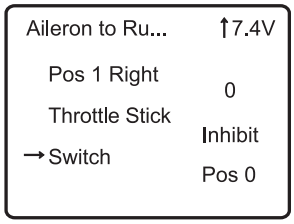
The switch between Pos 0 and Pos 1 can be realized by setting the position of throttle stick. Press UP or DN to move the cursor→to point to "Throttle Stick” setting, press R or L to change the value or inhabit. The Throttle Stick postion can be set when changing the value.The default setting is “Inhabit”. The adjustable range is from 0.0% to 100.0%

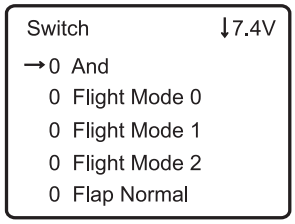


(5) Switch setting

The switch will display the current switch position.

Press UP or DN to move the cursor→to point to Switch, press ENT to enter interface of Switch selection, Press UP or DN to move the cursor→to point to desired item. Press ENT, the desired item whose left side will be changed into “1” from “0”. If two or more items are selected, the item “And” should be chosen, whose left side should be changed into “1” from “0”. Press EXT after finished it.

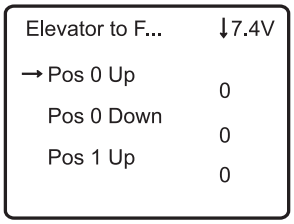




3.12 Elevator to Flap Mix

This function is used to execute the mix of elevator to flap. which is controlled by switch.

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Elevator to Flap Mix, press ENT to Elevator to Flap Mix setting interface. See Illustration:



(1) Pos 0 UP setting

Press UP or DN to move the cursor→to point to Pos 0 UP, press R or L upward mix value of Elevator to flap mix will be changed. The mix direction will be revised by changing the sign of plus or minus before the value. The adjustable range is ±125%.

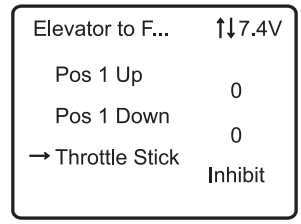
(2) Pos 0 Down setting

Press UP or DN to move the cursor→to point to Pos 0 Down, press R or L downward mix value of Elevator to flap mix will be changed. The mix direction will be revised by changing the sign of plus or minus before the value. The adjustable range is ±125%.

(3) Pos 1 setting, the setting is same as Pos 0.

(4) Throttle stick setting

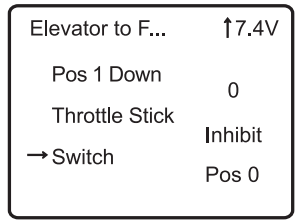
The switch between Pos 0 and Pos 1 can be realized by setting the position of throttle stick. Press UP or DN to move the cursor→to point to "Throttle Stick" setting, press R or L to change the value or inhibit. The Throttle Stick postion can be set when changing the value.The default setting is "Inhabit". The adjustable range is from 0.0% to 100.0%

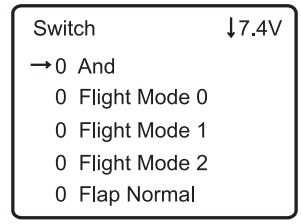


(5) Switch setting

The switch will display the current switch position.

Press UP or DN to move the cursor→to point to Switch, press ENT to enter interface of Switch selection, Press UP or DN to move the cursor→to point to desired item. Press ENT, the desired item whose left side will be changed into "1" from "0". If two or more items are selected, the item "And" should be chosen, whose left side should be changed into "1" from "0". Press EXT after finished it.



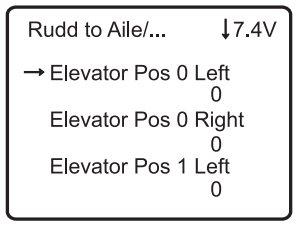


3.13 Rudder to Aileron/Elevator Mix

This function is used to execute the mix of rudder to aileron/elevator. It will help eliminate waver or shake caused by rudder stick operation.

Setting method:

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Rudd to Aile/Elev Mix, press ENT to Rudd to Aile/Elev Mix setting interface. See Illustration:



(1) Elevator setting

(1.1) Elevator Pos 0 Leftward setting

Press UP or DN to move the cursor→to point to "Elevator Pos 0 Leftward setting" item, and press R or L to change the value and the Elevator mix amount when operating Rudder leftward. The mix direction will be revised by changing the sign of plus or minus before the value.The adjustable range is ±125%.

(1.2) Elevator Pos 0 Rightward setting

Press UP or DN to move the cursor→to point to "Elevator Pos 0 Rightward setting" item, and press R or L to change the value and the Elevator mix amount when operating Rudder rightward. The mix direction will be revised by changing the sign of plus or minus before the value. The adjustable range is ±125%.

(1.3) Elevator Pos 1 setting: refer to "Elevator Pos 0" setting.

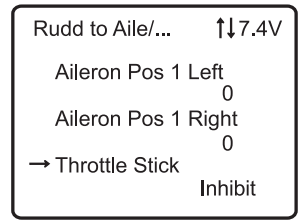
(2) Aileron setting

(2.1) Pos 0 setting: refer to "Elevator Pos 0" setting.

(2.2) Pos 1 setting: refer to "Elevator Pos 0" setting.

(4) Throttle stick setting

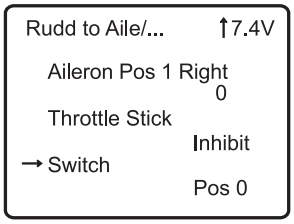
The switch between Pos 0 and Pos 1 can be realized by setting the position of throttle stick. Press UP or DN to move the cursor→to point to "Throttle Stick" setting, press R or L to change the value or inhabit. The Throttle Stick postion can be set when changing the value.The default setting is "Inhabit". The adjustable range is from 0.0% to 100.0%

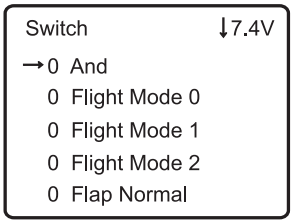


(5) Switch setting

The switch will display the current switch position.

Press UP or DN to move the cursor→to point to Switch, press ENT to enter interface of Switch selection, Press UP or DN to move the cursor→to point to desired item. Press ENT, the desired item whose left side will be changed into "1" from "0". If two or more items are selected, the item "And" should be chosen, whose left side should be changed into "1" from "0". Press EXT after finished it.

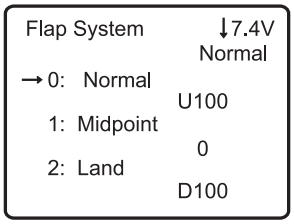




3.14 Flap System

This function can modify some effects on elevator. It is possible to set 3 status of elevator through 3-way flap control switch.

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Flap System, press ENT to Flap System setting interface. There are 0:Normal, 1:Midpoint, 2:Land for Switch Status options. See Illustration:

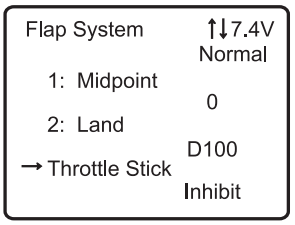


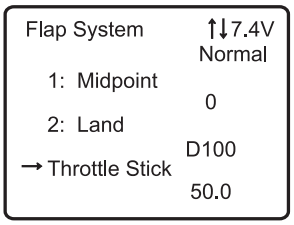
(1) 0:Normal Setting:
Press UP or DN to move the cursor→to point to "Elevator 0:Normal", and press R or L to change the elevator mix amount. It is possible to change the direction by altering U or D before the amount. The default setting is 0%, and the adjustable range is U125% - D125%.

(2) 1:Midpoint position: Please refer to "1.1 Elevator 0:Normal" setting

(3) 2:Land position: Please refer to "1.1 Elevator 0:Normal" setting

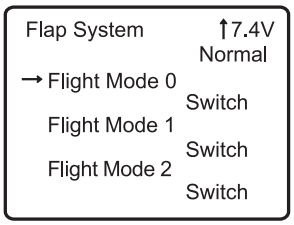
(4) Throttle Stick setting
Press UP or DN to move the cursor→to point to "Throttle stick" item, and press R or L to change value or Inhibit. It is possible to set the position when changing the value. The default setting is "Inhibit", and adjustable range is from 0.0 to 100.0%.





(5) Flight mode 0 setting

It is possible to set a certain flight mode switch automaticly after automatic land. When do this, you must come to "Wing type" setting interface under the Model Menu and make corresponding Wing type setting. Please refer to 2.11 Wing type.



Press UP or DN to move the cursor→to point to "Flight Mode 0" item and press R or L to 4 positions: Switch, Normal, Midpoint, Land. It is manual control when choose "Switch", If the Automatic control is needed, please choose Flight mode switch position.

(6) Flight mode 1 setting :Please refer to "(5)Flight mode 0 setting"

(7) Flight mode 2 setting :Please refer to "(5)Flight mode 0 setting"

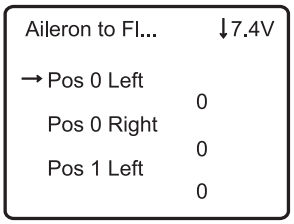
Press EXT to exit after finished.

3.15 Aileron to Flap Mix

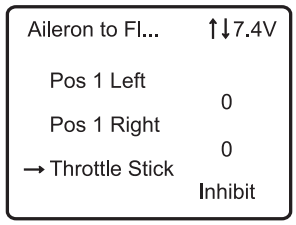
The function aims at mixing flap when operating aileron stick, and can set switch. The flap dual channels should also be previously activated at Wing Type in Mode Menu(refer to "2.11 Wing Type")

Setting method:

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Aileron to Flap Mix, press ENT to Aileron to Flap Mix setting interface. See Illustration:

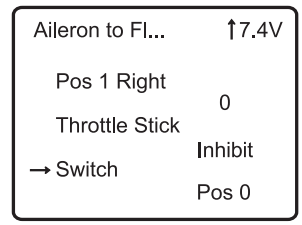


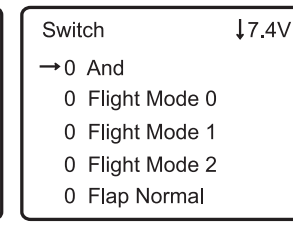
(1) Pos 0 to leftward setting
Press UP or DN to move the cursor→to point to “Pos 0 to leftward setting”, press R or L to change the leftward mix value of aileron to flap, the mix direction will be revised by changing the sign of plus or minus before the value, the adjustable range is ±125%.
(2) Pos 0 to rightward setting
Press UP or DN to move the cursor→to point to “Pos 0 to rightward setting”, press R or L to change the rightward mix value of aileron to flap, the mix direction will be revised by changing the sign of plus or minus before the value, the adjustable range is ±125%.
(3) Pos 1 to leftward setting: refer to above “(1) pos 0 to leftward setting”.
(4) Pos 1 to rightward setting: refer to above “(2) pos 0 to rightward setting”.



(5) Throttle stick setting
The switch between Pos 0 and Pos 1 can be realized by setting the position of throttle stick. Press UP or DN to move the cursor→to point to “Throttle Stick” setting, press R or L to change the value or inhabit. The Throttle Stick postion can be set when changing the value. The default setting is “Inhabit”. The adjustable range is from 0.0% to 100.0%

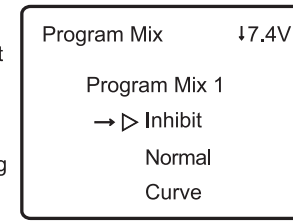
(5) Switch setting
The switch will display the current switch position.
Press UP or DN to move the cursor→to point to Switch, press ENT to enter interface of Switch selection, Press UP or DN to move the cursor→to point to desired item. Press ENT, the desired item whose left side will be changed into “1” from “0”. If two or more items are selected, the item “And” should be chosen, whose left side should be changed into “1” from “0”. Press EXT after finished it.



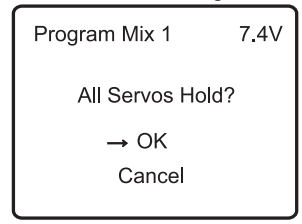


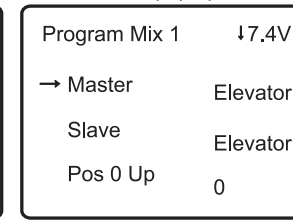
3.16 Program Mix

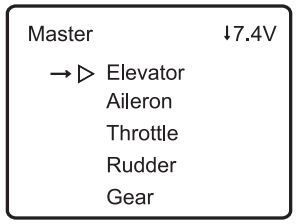
There are 8 series of program mix, mix channels and values are adjustable.
Setting Method:
Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Program, press ENT to Program setting interface. See Illustration:
And press ENT to program mix setting and current status (default setting is “inhibit”) interface. Press R+ or L- to choose inhibited, normal or curve.
Take “program mix 1” for example, there are “normal” and “curve” setting.



(1) The “normal” setting of “program mix”
Press UP or DN to move the cursor→to point to the “Normal” setting, Press ENT button then pop up “All Servos Hold?” Press R or L to choose OK or Cancel. If “OK” selected, all the servos will be locked in the current status, if “Cancel” selected, all servos are unlocked. Press ENT enter to Program Mix 1 setting interface.



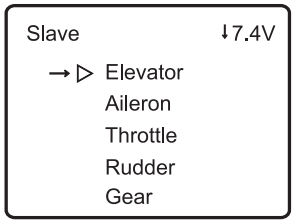




(1.1) Master channel setting
Press UP or DN to move the cursor→to point to Master Channel setting, press ENT to the Master Channel setting interface. Press UP or DN to move the cursor→to point to the desired Master Channel, press ENT to confirm and press EXT to be back to Program Mix 1 interface.

(1.2) Slave channel setting:

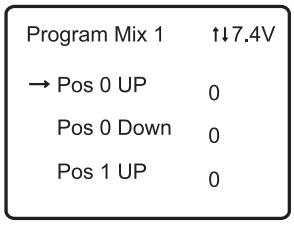
Press UP or DN to move the cursor→to point to Slave Channel setting, press ENT to the Slave Channel setting interface. Press UP or DN to move the cursor→to point to the desired Slave Channel, press ENT to confirm and press EXT to return to Program Mix 1 interface.

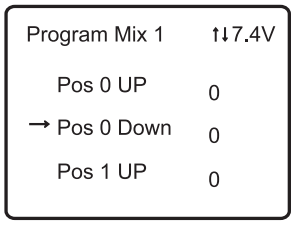


(1.3) Gain setting: Take Elevator at Master as an example.

(1.3.1) Pos 0 UP

Mix amount setting when elevator stick moved upward. Press UP or DN to move the cursor→to point to Pos 0 UP setting. Press R or L to increase or decrease the mix amount separately. It is possible to reverse mix direction through changing the "+" or "-" sign before amount. The adjustable range is ±125%.





(1.3.2) Pos 0 Down

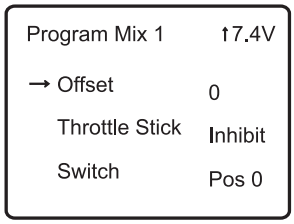
Mix amount setting when elevator stick moved downward. Press UP or DN to move the cursor→to point to Pos 0 Down setting. Press R or L to increase or decrease the mix amount separately. It is possible to reverse mix direction through changing the "+" or "-" sign before amount. The adjustable range is ±125%.

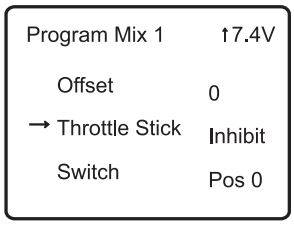
(1.3.3) Pos 1 setting: Please refer to "Pos o setting".

(1.3.4) Offset Setting

This function can make Slave begin to mix through the corresponding Lever switch from a certain point as the starting point.

Press UP or DN to move the cursor→to point to Offset setting, Press R+ to increase the mix amount and press L- to decrease. It is possible to reverse Offset direction by pressing R or L button to change the "+" or "–" sign before amount. The adjustable range is ±100%.



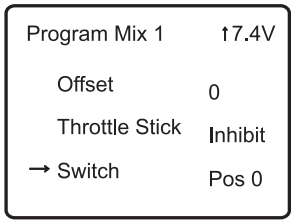


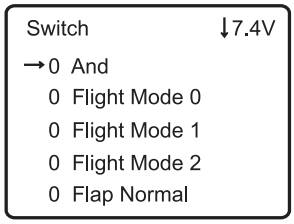
(1.4) Throttle stick setting

Press UP or DN to move the cursor→to point to "Throttle Stick" setting, press R or L to change the value or inhabit. The Throttle Stick postion can be set when changing the value.The default setting is "Inhabit". The adjustable range is from 0.0% to 100.0%

(1.5) Switch setting

The switch will display the current switch position. Press UP or DN to move the cursor→to point to Switch, press ENT to enter interface of Switch selection; Press UP or DN to move the cursor→to point to desired item, press ENT, the desired item whose left side will be changed into "1" from "0". If two or more items are selected, the item "And" should be chosen, whose left side should be changed into "1" from "0".

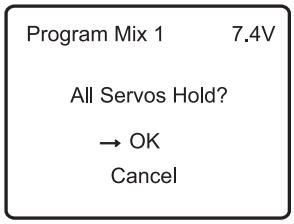


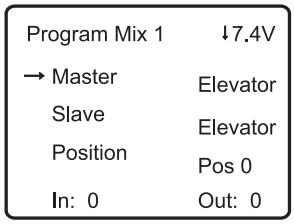


After finished, press EXT to return to Program Mix interface and set other items or Press EXT again to exit.

(2) Curve setting of Program Mix

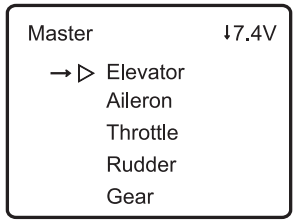
Press UP or DN to move the cursor→to point to the "Curve" setting, Press ENT button then pop up "All Servos Hold?" Press R or L to choose OK or Cancel. If "OK" selected, all the servos will be locked in the current status, if "Cancel" selected, all servos are unlocked. Press ENT enter to Program Mix 1 setting interface.

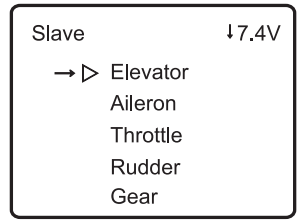




(2.1) Master channel setting

Press UP or DN to move the cursor→to point to Master Channel setting, press ENT to the Master Channel setting interface. Press UP or DN to move the cursor→to point to the desired Master Channel, press ENT to confirm and press EXT to be back to Program Mix 1 interface.





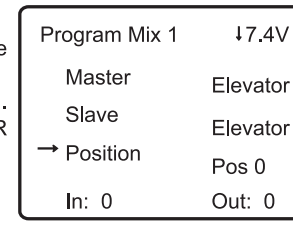
(2.2) Slave channel setting:

Press UP or DN to move the cursor→to point to Slave Channel setting, press ENT to the Slave Channel setting interface. Press UP or DN to move the cursor→to point to the desired Slave Channel, press ENT to confirm and press EXT to return to Program Mix 1 interface.

(2.3) Position

Press UP or DN to enter to the Position setting interface after finished the Slave Channel setting(See illustration).

Position: There are two different postions for options, Pos 0 and Pos 1. Press UP or DN to move the cursor→to point to Position setting. Press R or L to change the postion statues.

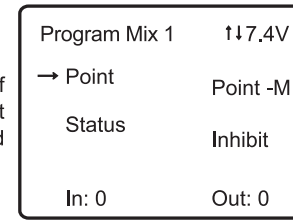


(2.4) Exponential Curve

Press UP or DN to move the cursor→to point to Exponential setting. There are ON or OFF option when you press the R+ or L- buttoms. The Curve Pitch will become smoothly if the ON buttom is choosen. If you don't adjust the Pitch Curve Funtion, then choose OFF buttom.

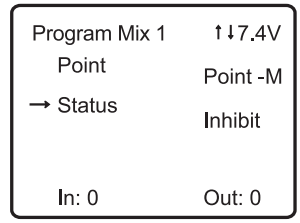
(2.5) Point

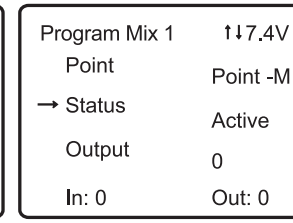
Press UP or DN to move the cursor→to point to the setting interface of Point. Press R or L keys of setting point, there are “point-L”, “point -1”, “point -2”, “point -M”, “point -3”, “point -4”, “point -H”. Choose the points need adjusting.

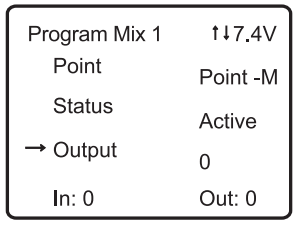


(2.6) Status Setting

(There is no Status options when the point is Point-L or Point-H) After selecting the point that you want to set, press UP or DN to move the cursor→to point to Status item, press R+ or L-, there are two options of Inhibit and Active. Select Inhibit for unchanging the current amount (the default setting is Inhibit).





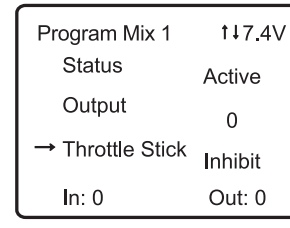


(2.7) Output

When the Status option is Active, the Output option will be listed. Press DN to move the cursor→to point to Output setting, press R+ or L- to increase or decrease, respectively, the output value. The adjustable range is from 0.0% to 100.0%. “IN” and “Out” means throttle stick input and output level.

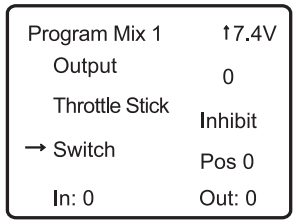
(2.8) Throttle stick setting

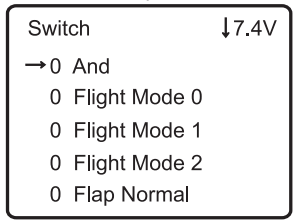
Press UP or DN to move the cursor→to point to “Throttle Stick” setting, press R or L to change the value or inhabit. The Throttle Stick postion can be set when changing the value. The default setting is “Inhabit”. The adjustable range is from 0.0% to 100.0%



(2.9) Switch setting

The switch will display the current switch position. Press UP or DN to move the cursor→to point to Switch, press ENT to enter interface of Switch selection; Press UP or DN to move the cursor→to point to desired item, press ENT, the desired item whose left side will be changed into "1" from "0". If two or more items are selected, the item "And" should be chosen, whose left side should be changed into "1" from "0".





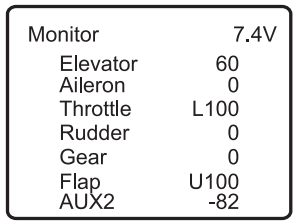
After finished, press EXT to return to Program Mix interface and set other items or Press EXT again to exit.

3.17 Monitor

This function can display the current status and positions of all the channels' outputs, and check the current working status of each channel.

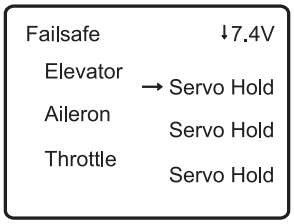
Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Monitor, press ENT to Monitor setting interface. See below to check the current working status of each channel.

Press EXT to exit.



3.18 FailSafe

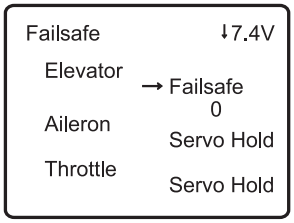
There are two possibilities for use if the transmission signal is under abnormal condition. The first one is to lock the last action data received; the second one is to execute the pre-set data which is pre-set. The default setting is Servo Hold.

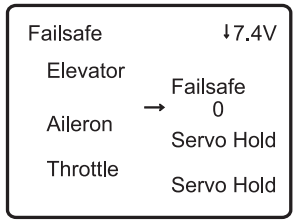


Setting method:

Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Failsafe, press ENT to Failsafe setting interface. Take the item Elevator as an example.

Press UP or DN to select Elevator on the Failsafe interface,then press R or L to change the status of Servo Hold into Failsafe(If you want to keep Servo hold status, there is no need to re-set). There is a expanded sub-item blow. Press UP or DN to select 0%, then press R+ or L- to increase or decrease, respectively, the position amount which centers on the neutral point of servo. The available value is 125%, respectively. 0% is the neutral point of servo.





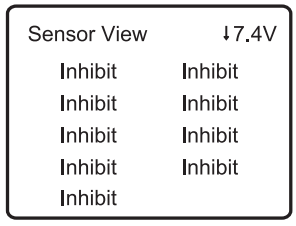
The setting methods for other channels are same as above. Press EXT to exit after finished.

Note: Checking whether all the actions when failsafe happened are correct, is a must after the setting is finished. It is dangerous to use full throttle, especially after failsafe taken place.

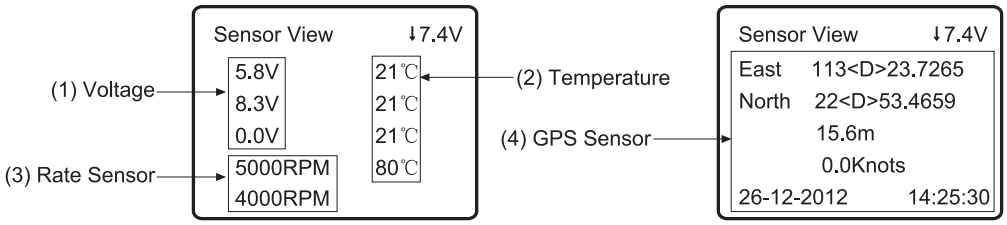
3.19 Sensor View

Setting method: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Sensor View, press ENT to Sensor View setting interface.

If all the sensors disconnect, telemetry signal lost, there will be inhibits shown on the view. If all work normal, all the measured data will be shown.



(1) Voltage: Show 3 diffferent measured voltage value;
(2) Temperature: Show 4 different measured temperature value;
(3) Rate Sensor: Show 2 different measured RPM value;
(4) GPS Sensor: Press UP or DN to turn to GPS function, show located date, time, longitude, latitude, altitude and speed.



3.20 Trainer

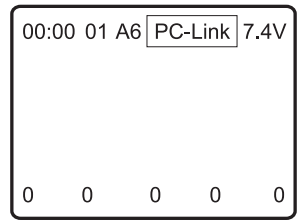
Two DEVO F7DS transmitters can be made to work together in order to offer a teacher-trainer function, meeting the requirements for a beginner. The setup of training mode is described below:

(1) Model data transmission

First step is to use the DEVO F7DS's wireless data transmission feature to transfer the teacher's main model data to the trainee's DEVO F7DS transmitter. This step guarantees that the model data in each transmitter is identical. Refer to item “2.4 model wireless copy” in the Helicopter section later in this manual. Two DEVO F7DS transmitters are needed for wireless data transmission.

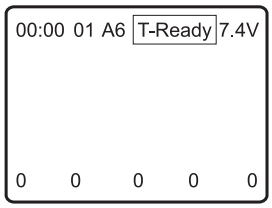
(2) Training connection

Insert the signal wire from the trainer's transmitter into the DSC socket of the trainee's transmitter. Turn on the transmitter and a linkage icon, PC-Link will be shown on the boot screen. Insert one end of the signal wire (included) into the DSC socket of the trainee's transmitter and turn it on. PC-Link will be shown in the trainee's DEVO F7DS display (See image right).



linkage icon

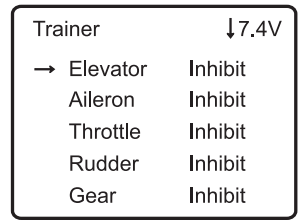
Turn on the power of the trainer's DEVO F7DS. Select the same model as the trainee (as transferred in the previous section) and briefly fly the aircraft to confirm the settings are good. Turn off the aircraft and turn off the trainer's DEVO F7DS power. Insert the other end of the signal wire into the trainer's DEVO F7DS DSC port and turn on the power once more, T-Ready will be shown in the trainee's DEVO F7DS display (see image left).



(3) Traniner Function Channel Setup

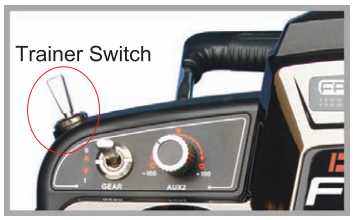
The trainee can acquire the control part or whole channel operation by setting the trainer's function channel. Here is the setup:

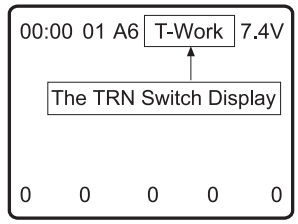
Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Trainer, press ENT to Trainer Function setting; Press UP or DN to move the cursor→to point to the desired setting channel, there are Elevator, Aileron, Throttle, Rudder, Gear, Flap, Aux2 channels available. Press R+ or L- to set Active or Inhibit for the choosed Channel.



(4) Training mode usage

The default setting is that the training mode switch is on the top left corner of the transmitter, named HOLD/TRN.





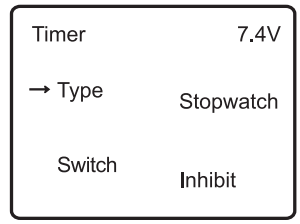
When flying, if the trainer operates the TRN switch, control is transferred control to the trainee; also, T-Work will be shown on the trainer's DEVO F7DS. The trainee's output data is displayed on the trainer's DEVO F7DS screen. If the trainer operates the switch once more, the trainer regains control over all functions and channels.

Please check and familiarize yourself with the operation of the training mode before attempting flight or a training session in order to avoid miss-operation and damage/injury.

3.21 Timer

There are two timers which can be set as Stopwatch and Countdown, respectively. Each timer can be operated by switch or by shortcut.

Setting method: Press ENT to the Main Menu. Press UP or DN to move the cursor→to point to Function Menu, press ENT to Function Menu; Press UP or DN to move the cursor→to point to Timer, press ENT to Timer setting interface. See the right Illustration:

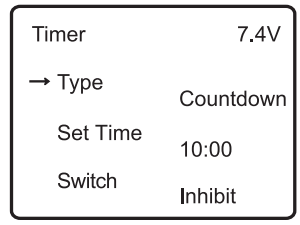


(1) Type

Press UP or DN to move the cursor→to point to Type. Press R+ or L- to choose Stopwatch or Countdown. The default setting is Stopwatch. The time range of Stopwatch is from 0 to 59:59 (59 minutes 59 seconds).

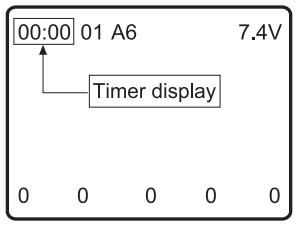
(2) Countdown setting

If you need Countdown time manner, press R+ or L- to select the Countdown. There is an expand sub-menu set time item. Press UP or DN to select the option of Set time item. Press R+ or L- to set the Countdown time. The settable Countdown time range is from 00:05 to 59:55.



(3) Switch selection

Press UP or DN to move the cursor→to point to Switch setting. There are Inhibit and available switch options, available switch can be selected by press L- or R+. It includes FMOD SW12, FMOD SW 2, MIX SW12, MIX SW 2, D/R SW, HOLD SW, GEAR SW, SPS0 SW, SPS1 SW, SPS2 SW, SPS3 SW. We can select the desired item except these items of SPS0 SW, SPS1 SW, SPS2 SW, and SPS3 which should be previously set at Stick Position Switch at Model Menu(refer to “2.8 Stick Position Switch”). Press EXT to exit.



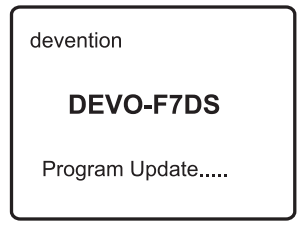
(4) Usage of timer

Press UP or DN by pressing UP key for one time, and to pause it by pressing it the second time. Press DN to clear timer. It's ok to control time by Switch when time setting is finished on switch. Timer will be shown in main intereface, See the right Illustration:

4.0 Upgrading

Software can be upgraded in PC via downloading or uploading the configuration files.

Enter upgrading interface: Press EXT and power on the radio when the radio is in powered off state, the illustration will be shown in the right.



The operation guide for connecting to PC upgrading should be mentioned with upgrading software.

5.0 DV04 Camera instruction

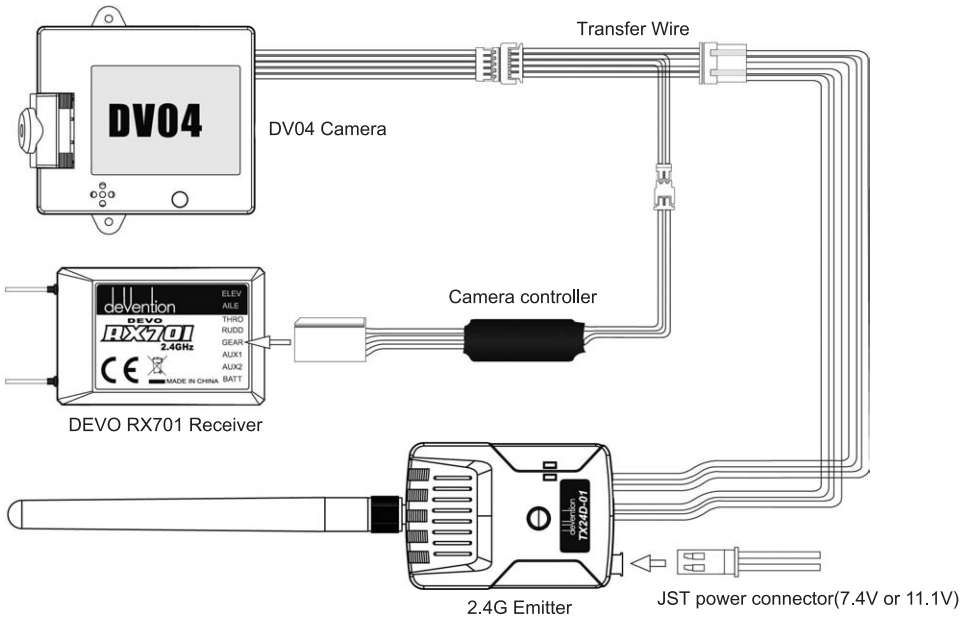
DV04 Camera has the following two ways to control the video:

(1) Press the red button once on the rear of the DV04 Camera, it means the DV04 Camera starts to video. Press the red button again to stop the video.

(2) Pull the Gear Switch to postion "1" and keep about 1-2 seconds, then pull back to postion "0". After finish the press, the DV04 Camera starts to video. Push Gear Switch again to stop video.

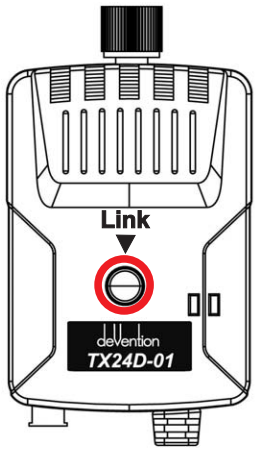
Notice: The Memory card must be inserted before the DV04 connects the battery, and remove the Memory card after power off.

6.0 FPV connect Illustration

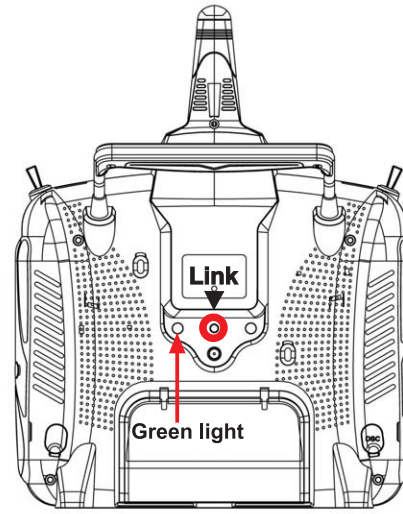


7.0 2.4G image transmitter matching methods

Press both the 2.4G image transmitting Link buttons of the 2.4G Emitter Module and the Transmitter for 3-5 seconds, the signal is receiving when the green Link LED of the trasnmitter keeps flashing. The signal has been successfully received when the green Link LED turns solid.Then the Transmitter will display the live video.



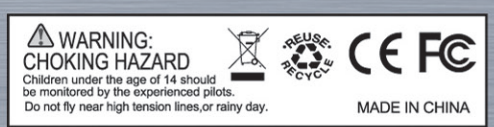
2.4G Emitter



DEVO F7DS transmitter

NOTE: The DEVO F7DS only need to match the 2.4G Emitter once and no need to match again for later use. It's a must to match again when the DEVO F7DS or 2.4G Emitter be changed.

This symbol indicating separate collection for electrical and electronic equipment.



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

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