11.0 Installation requirement for receiver

(1) It is important to correctly mount your radio system in your model. Below are some advices on how to install your equipments.

(2) Wrap the receiver with 10mm thickness polyfoam and fix it with a rubber band or magic string on your helicopter or airplane. It helps protect the receiver.

(3) It is necessary for you to use rubber grommets and copper sleeves to isolate the vibration from the main body. The mounting screws cannot be over-tightened. Otherwise, the rubber grommets will be distorted and decrease the vibration absorption effect.

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

(5) If installing various switches,please keep them far away from the engine tuned pipe and high vibration sources. Ensure all the switches move freely over their whole range.

(6) Don't make the receiver antennas wrapped or parallel.

11.1 Receiver Frame rate setting

There are 11Millisecond and 22 Millisecond Frame Rate. When using 11 Millisecond frame rate, it can't be compatible with Analog servos. Please select the 22 Millisecond one if use Anolog servos.

(1) LED Indicator

■ Red LED indicates 22ms frame rate;

■ Blue LED indicates 11ms frame rate;

■ Red&Blue LED indicate the frame rate is under setting;

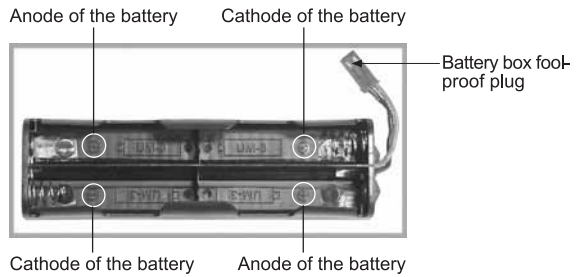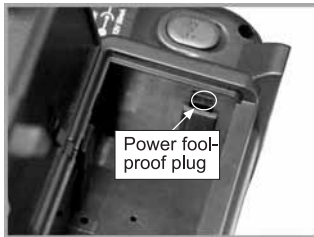■ Red& Blue LED flash means both frame rate can be set;

(2) Setting method

After TX and RX binding, press the switch with the tool pen or screwdriver, both indicators will turn on. About 5 seconds, both indicator will flash, then release the switch and press it once again, the frame rate can be changed and the indicators will turn red or blue only. Red means 22ms frame rate and Blue means 11ms.

12.0 Installation requirement for DEVO-10 battery pack

Open the battery cover of DEVO-10 transmitter and take out the battery box. Then put 8 cells AA battery or the same size full charged NIMH battery into the battery box. Please check again to make sure the polarities are correct.

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

When insert the battery box connector to the transmitter connector, please make the fool proof is right, showing as below picture.Then put the battery box back to battery case.

Anode of the battery   Cathode of the battery

Battery box fool-proof plug

Power fool-proof plug

Cathode of the battery   Anode of the battery

Note:If you don't use the transmitter,please take out the battery.

12.1 DEVO-10 Battery Charging

Warning: the CHG socket is only used for the rechargeable NIMH batteries. If using the batteries which is unchargeable. The CHG socket is not allowed to use.
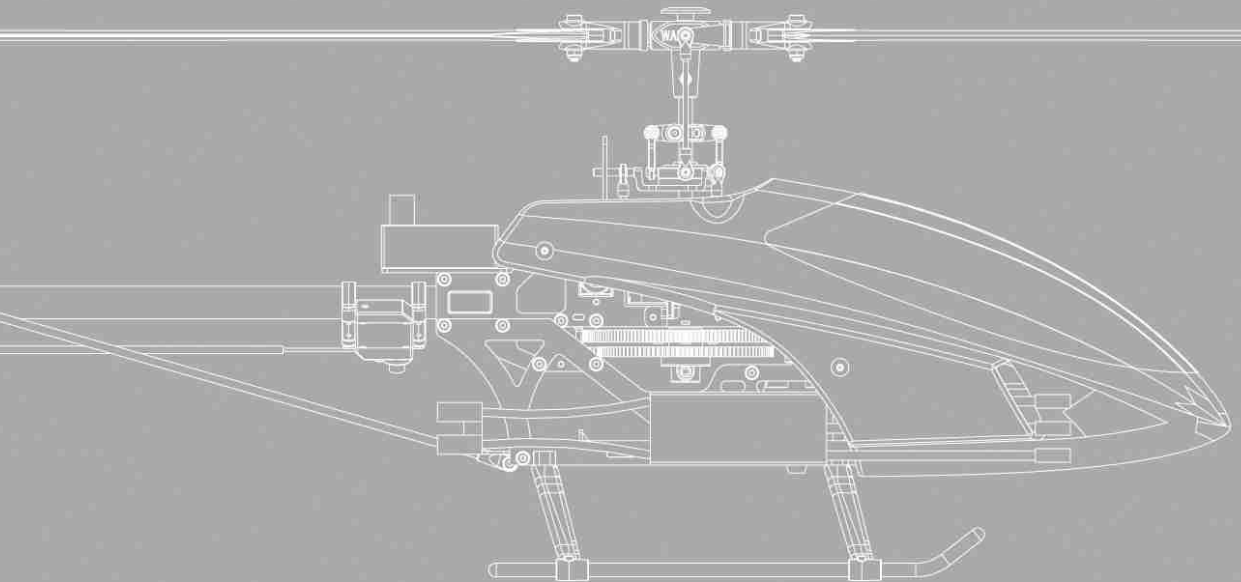
CHG Charging Socket

Charge socket (CHG): input DC at 12V, 50mA; Polarity: ⊕—•—⊖
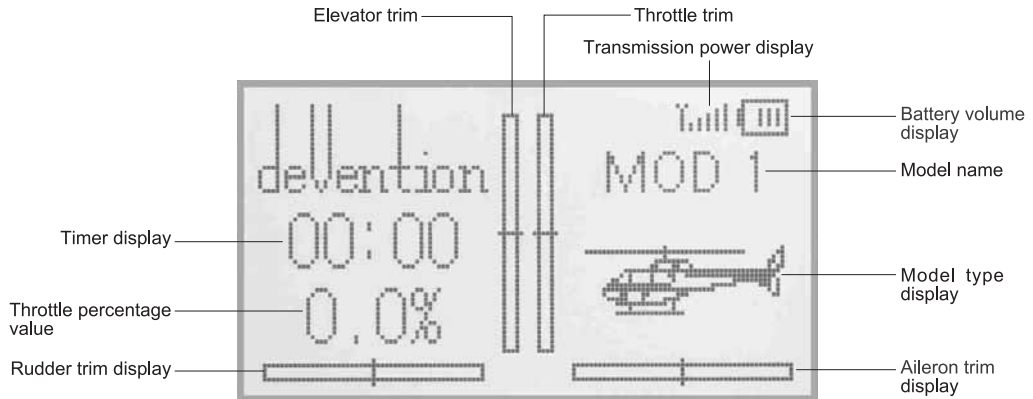
deVention
DEVO-10

Part two
Helicopter

All the functional settings, which are relative to the operation system of DEVO-10 itself, are fully integrated in System Menu. They include Language, Display, Buzzer, vibrator, Stick Mode, Stick Direction,Stick calibration, and About.

1.0 System Menu

All the functional settings, which are relative to the operation system of DEVO-10 itself, are fully integrated in System Menu. They include Language, Display, Buzzer, vibrator, Stick Mode, Stick Direction,Stick calibration, and About.

Below is the boot screen of helicopter:

Elevator trim — Throttle trim

Transmission power display

Battery volume display

Model name

Timer display

Model type display

Throttle percentage value

Rudder trim display
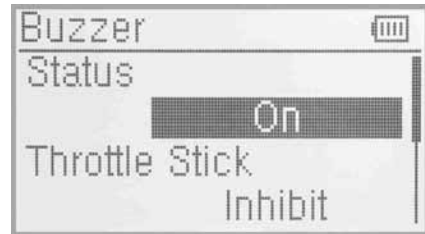
Aileron trim display

1.1 Language setting

Press ENT to enter System Menu and then press UP or DN to move the navigational mark to select System menu. Then push ENT to enter System menu.Press UP or DNto select Language and press ENT to enter the language interface.Press UP or DN to select the language that you want. A "√" will be shown on the screen after selected.Push EXT to exit.

1.1 Language setting   **1.2 Display**

1.2 Display

Press ENT to enter the main menu and push UP or DN to move the navigational mark to select system menu.Press ENT to enter System Menu and then press UP or DN to select Display to enter "Display"interface.

Three items are available to be set. Below are the setting methods for them:

(1) Backlight contrast: the backlight contrast is adjustable by pushing UP or DN to move the navigational mark to the digits after Contrast. Press R key to increase the backlight contrast, while press L to decrease it.

(2) Backlight lightness: the backlight lightness is adjustable by pressing UP or DN to move the navigational mark the digits after Lightness.The power consumption will be increased if the backlight lightness is too bright and the battery cruise duration will be shortened.Press R or L to increase or decrease the lightness. When the value is one means turn off the backlight.

(3) Backlight time out: it is possible to set the duration which LCD stays at highlight in the form of "Always on" or any period from 5 to 60 seconds with an interval of 5 seconds.Press UP or DN to move the navigational mark to select the digits after Timeout. Press L to short the time of backlight duration or keep it in the form of "Always on" while push R or prolong the time. The maxium is 60s.

Press EXT to exit.

1.3 Buzzer warning

Pressing ENT to enter the main menu and pressing UP or DN to move the navigational mark to select system menu then pusing ENT to enter System menu. Pressing UP or DN to select Buzzer and pressing ENT to enter the buzzer interface.

(1) Status:There are On and off two status on the Buzzer interface. Pressing UP or DN to move the navigational mark to the status option. Pressing R or L to change the ON or OFF status. It includes Thro stick,knobs and Tones items under the status is ON.

(2) Throttle stick buzzer: Pressing UP or DN to move the navigational mark to Thro Stick item then pressing R or L to change the status from inhibit to Active.When Buzzer is at the status of On, if Throttle Stick is set as "Active", a relative musical scale will make response when moving the throttle stick. You can judge the position of the throttle stick according to the different musical scales. Also, it can be set as Inhibit. Press UP or DN to move the navigational mark to Thro Stick item and push R or L to change the status from Inhibit to Active.

(3) Knobs midpoint Buzzer: When Buzzer is at the status of On, if Knobs is set as "Active",there is buzzer sound when you turn the AUX4 and AUX5 to the midpoint. If you don't need the buzzer sound, please change the status to Inhibit.

(4) Buzzer tone: the tone is composed of 10 grades. You can choose the favorite one according to your interests.Press UP or DN to move the navigational mark to Tone item and press R or L to make a listening test.
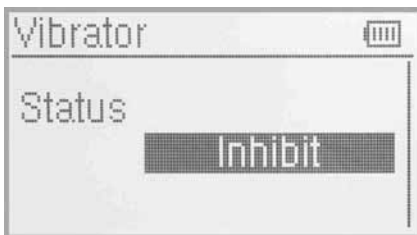
Press EXT to exit.

1.4 Vibrator

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

Press ENT to get the Main Menu, press UP or DN to select System Menu. And then press ENT to get System Menu, press UP or DN to select Vibrator. Press ENT to get Vibrator setting interface. There are two status as Inhibit and Active. Press R or L to select Active if need.

Press EXT to exit after finished.

1.5 Stick Mode

Press ENT to get Main Menu, press UP or DN to select System Menu, and then press ENT to the System Menu, press UP or DN to select Stick Mode, and press ENT to get stick Mode setting interface.
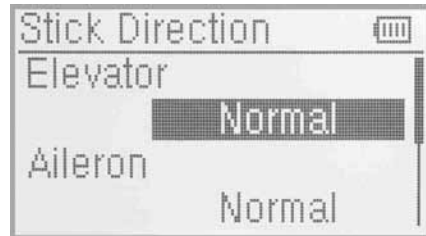
Select the stick mode according to the throttle mode showing on the screen. Devo-10 offers 4 stick modes, please refer to "8.0 Switches exchange between left-hand and right-hand throttles.

Press EXT to exit after finished.

1.6 Stick Direction

Press ENT to get Main Menu, press UP or DN to select System Menu, and then press ENT to the System Menu, press UP or DN to select Stick Direction, and press ENT to get stick direction setting interface.

Stick Direction:There are four items available as Elevator, Aileron, Throttle and Rudder. Press UP or DN to select the stick which will change direction, and press R or L to change the direction. The factory setting is Normal.
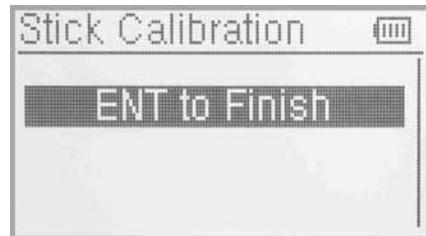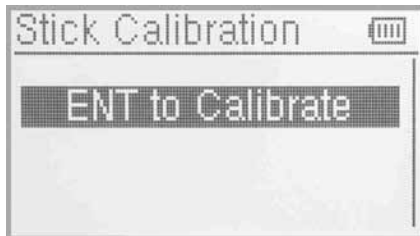
1.7 Stick Calibration

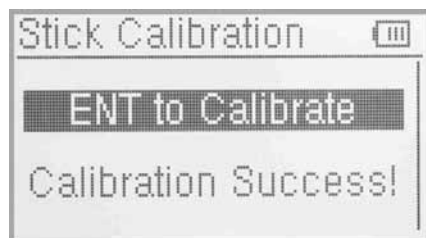It is a function to re-calibration when stick unusual.

Calibration method:

Press "ENT" to the Main Menu, press UP or DN to select System Menu, then press ENT to System Menu. Press UP or DN to select Stick Calibration and press ENT to the Stick Calibration setting interface.Press ENT to enter Calibration,and below interface shows:

Clockwise or counter clockwise mechanically move the right stick and left sticks from minimum levels to maximum levels several times, and then return the sticks to the neutral positions, respectively.It will shows the calibration is successful after you press ENT to confirm.
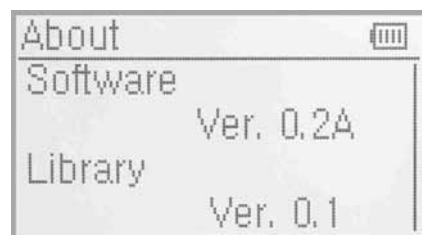
Press EXT to exit after finished.

1.8 About

Press "ENT" to the Main Menu, press UP or DN to select System Menu, then press ENT to System Menu. Press UP or DN to select About and press ENT to the About setting interface.

Press EXT to exit after finished.

2.0 Model Menu

Model Menu manages all the model data saved in DEVO-10. 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

Press ENT to get Main Menu and press UP or DN to make Model Menu is selected. Press ENT to get the Model Menu and press UP or DN to select Model select, press ENT to get the Model Select setting interface.

Press UP or DN to select the model you desired, press ENT to confirm and marks"√"in the front of selected one. Total 30 models are optional. Press EXT to exit after finished.

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.

Press "ENT" to enter Main Menu, press UP or DN to select "MODEL Menu", then Press "ENT" to enter Model Menu; Press UP or DN to select "Model NAME" and then press "ENT" button to get the "Model Name" setting interface.
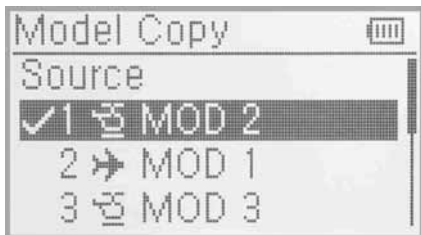

Press UP or DN to select the character and figure which are needed to be changed, press R or L button to change the character and figure, and press UP or DN to set next one. Press EXT to exit after finished.
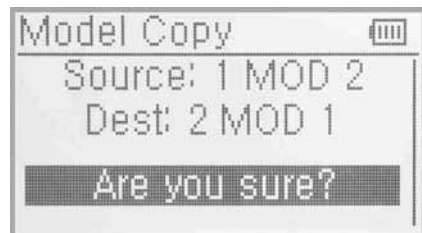
2.3 Model Copy

Press ENT to get "Main Menu" and press UP or DN to make "Model Menu" is selected. Press ENT to get "Model Menu" and press UP or DN to select" Model Copy", press ENT to the "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 below photo.

Then press UP or DN to locate the source model, press ENT to confirm. Then an enquire "Are you sure?" is popped up as below photo. Press ENT to copy, or press EXT to exit.

2.4 Model wireless copy

The model data between two DEVO-10 equipments can be wirelessly copied via Model Transmit and Model Receive in Model Menu.

(1) Model transmission

Press ENT to enter "Main Menu" and press UP or DN to select "Model Menu". Press ENT to get "Model Menu" and press UP or DN to select "Model transmission", continue to press ENT to enter "Model Transmit" setting interface.
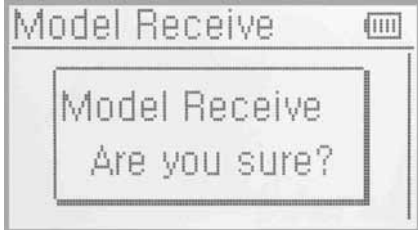
Press UP or DN to choose the source model which will be transmitted, and press ENT to confirm, an enquiry information "Are you sure?" will be shown as below photo.

Press ENT to transmit, "Transmitting ……" appears in the interface. Or press EXT to exit.Press EXT to exit after another DEVO-10 received the data.

(2) Model receiving

Press ENT to enter Main Menu and press UP or DN to select Model Menu. Press ENT to get Model Menu and press UP or DN to select Model Receiving, continue to press ENT to enter Model Receive setting interface. An enquiry information "Are you sure?" will be shown as below photo.

Press ENT to receive, "Connecting ……" and "Receiving ……" will be shown in series in the interface. The information of "Received" with the model name will be shown after receiving is finished. Or press EXT to exit.

Press UP or DN to choose the save position, an enquiry information "Are you sure?" is shown after press ENT. Press ENT to save or press EXT to exit.

Press EXT to exit after finished.

2.5 Model reset

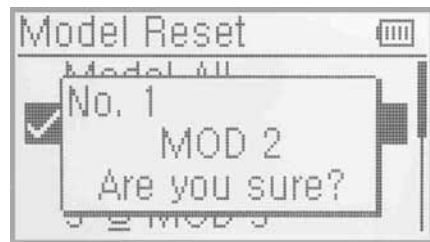All the model data can be restored to factory settings via Model Reset.

Press the ENT to get Main Menu and press UP or DN to select Model Menu. Press ENT to get Model Menu and press UP or DN to select Model Reset, press ENT to get Model reset setting interface.

It is possible to store up to 30 models data in the model list of DEVO-10 equipment. There are two methods to reset the model data: batch reset and single reset.

Batch reset: press UP or DN to select All Models, an enquiry information"are you sure?" will be appears in the interface. Press ENT to reset all models, or press EXT to exit.

Single reset: Press UP or DN to choose the model you want to restore, "Are you sure?" will appear after press ENT. Press ENT to reset or press EXT to exit.
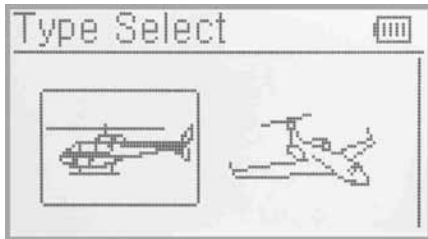
Press EXT to exit after finished.

2.6 Type Select

This device offers two model types menu. They are helicopter and airplane respectively.

Press ENT to get Main Menu and press UP or DN to select Model Menu. Press ENT to enter and press UP or DN to select Type Select and press ENT to enter setting interface.
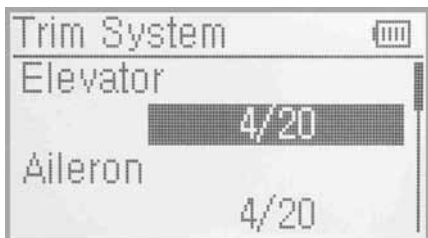
Press "ENT" button to get Helicopter and Airplane selections and press UP or DN to select and press ENT to confirm, then press EXT to exit.
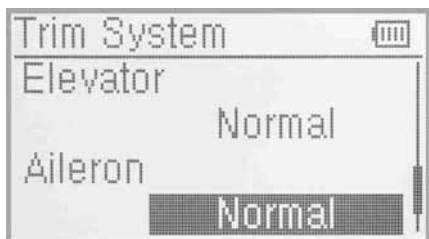
2.7 Trim System

Trim System is able to finely tune the following six items, respectively: Elevator, Aileron, Rudder, Throttle, Left Trim and Right Trim. 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 get Main Menu and press UP or DN to select Model Menu. Press ENT to enter and press UP or DN to select Trim System, press ENT to enter setting interface.

Press UP or DN to select the trim which will set, press R to increase the trim value and press L to reduce. For elevator, aileron, and rudder, there are two more options: Normal and Limited, press R or L you can change the setup. "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 switch 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 the ENT to get Main Menu and press UP or DN to select Model Menu. Press ENT to get Model Menu and press UP or DN to select Stick Position Switch, press ENT to get Stick Position Switch setting interface.

There are four options under the Stick postion switch: SPS0, SPS1,SPS2,SPS3. Press R or L to choose the switch you want to define.
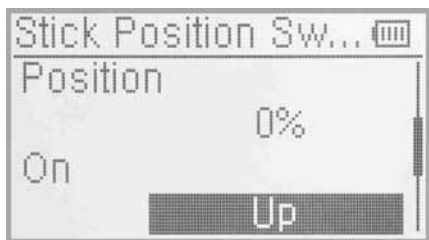

Press UP or DN to inhibit channel in navigation mark, and press L to expand the menu.The channel includes four items: Elevator, Aileron, Throttle and Rudder. The factory default is Inhibit. Take Elevator for example.

Press R or L to choose the Elevator as stick, then Press UP or DN to move nagivation mark to value of position. It's possible to adjust the stick position via pressing R or L.

Press UP or DN to navigate the OPEN setting,press R or L to change the direction of the channel stick.
Press UP or DN to navigate the STATUS, which can check the sketch map of the stick OPEN/CLOSE direction. Check if it was set correctly.

After finished the setting,press EXT to exit.

2.9 Device select

This setting can help you configure various functional switches, or adjust levers. It includes Flight Mode Switch, Stunt Trim Select, Throttle Hold Switch, Hover pitch select, Hover throttle select.

Press ENT to enter Main Menu, press UP or DN to move navigation mark to select Model menu. Press ENT to enter Model menu function. Press UP or DN to select Device Option. Press ENT to Device Option interface.

(1) Flight Mode Switch:Press UP or DN to move navigation mark to Flight Mode Switch item 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 equally effects on all the flight modes.In Flight Mode, the trim value,

each of which stick is corresponding to, puts independently 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:Refers to "(1) Flight Mode switch"

(4) Hover pitch select:Refers to "(1) Flight Mode switch"

(5) Hover throttle select:Refers 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.There are eight items in total: FMOD switch, MIX switch,ELEV D/R switch, AILE D/R switch, RUDD D/R switch,GEAR switch, SPSO, SPS1, SPS2, SPS3, left trim, right trim, AUX4 knob,AUX5 knob.

Setting:

Press ENT to enter main menu, press UP or DN to move navigation mark to Model Menu. Press ENT to enter Model menu. Press UP or DN to select Output device and press ENT to enter Output device interface.
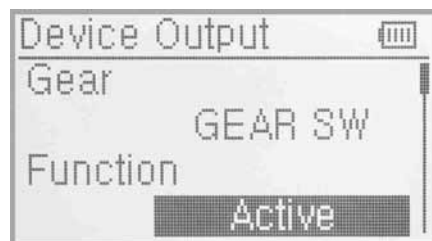

There are 5 settings:Gear, AUX2,AUX3,AUX4,AUX5.

(1) Gear

Press UP or DN in OUTPU interface can change the gear switch. It includes FMOD, MIX ,ELEV D/R, AILE D/R, RUDD D/R, GEAR, SPSO, SPS1, SPS2, SPS3, Left trim, Right trim, AUX4 knob, AUX5 knob. Press R or L to select the setting switch, The default setting is GEAR SW.

Press UP or DN to select Function setting after you select the switch,Press R or L can enter the interface of Gear activate,inhibit and Governor. The default setting is Activate. You can continue to set others items after finished.

(2) AUX 2

Press UP or DN to enter the AUX2 interface.Press R or L can change the AUX2 switch. It includes FMOD, MIX, ELEV D/R, AILE D/R,RUDD D/R,GEAR,SPSO,SPS1,SPS2,SPS3,Left trim,Right trim,AUX4 knob,AUX5 knob,The default setting is FMOD switch.

Press UP or DN to select the Function setting, press R or L to choose the switch, it inculdes inhibit, activate, Gyro, Governor, the default setting is Gyro. You can continue to set others items after finished .

(3) AUX3

Press UP or DN to enter the AUX3 interface. Press R or L can change the AUX3 switch. It includes RUDD D/R,GEAR,SPSO,SPS1,SPS2,SPS3,Left trim,Right trim,AUX4 knob,AUX5 knob,The default setting is RUDD D/R switch.

Press UP or DN to move navigation mark to Funtion setting. Press R or L to desired item.The optional items are Inhibit, Active, Gyro and Governor. The factory default is Active. Continue to set up other items after setting finished.

(5) AUX4,AUX5 settings please refers to the AUX3 settings. AUX4 default setting is AUX4 knob, AUX5 default setting is AUX5 knob.

After finished the setting, press EXT to exit.

2.11 Swash Type

The swash type is grouped into five options: 1 Servo Normal, 2 Servos 180°, 3 Servos 120°,3 Servos 140°, 3 Servos 90° and 4 Servos 90°.

Press "ENT" key to enter Main Menu, press UP or DN until "MODEL" flash , and then press "ENT" key to enter Model Menu; Press UP or DN choose"SWASH"press ENT enter to Swash setting interface.

Press UP or DN to choose the requiring swashplate type. Press ENT to confirm then the corresponding items will have the"√"mark in front of the items.Press EXT to exit after finished.

2.12 Power Amplifier

The transmission output power of DEVO-10 is adjustable. It is divided into six grades from small to big. 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 enter the main menu. Press UP or DN to choose "Model menu"and then press ENT to enter the interface. Press UP or DN to choose the appropriate output power , press ENT to confirm.