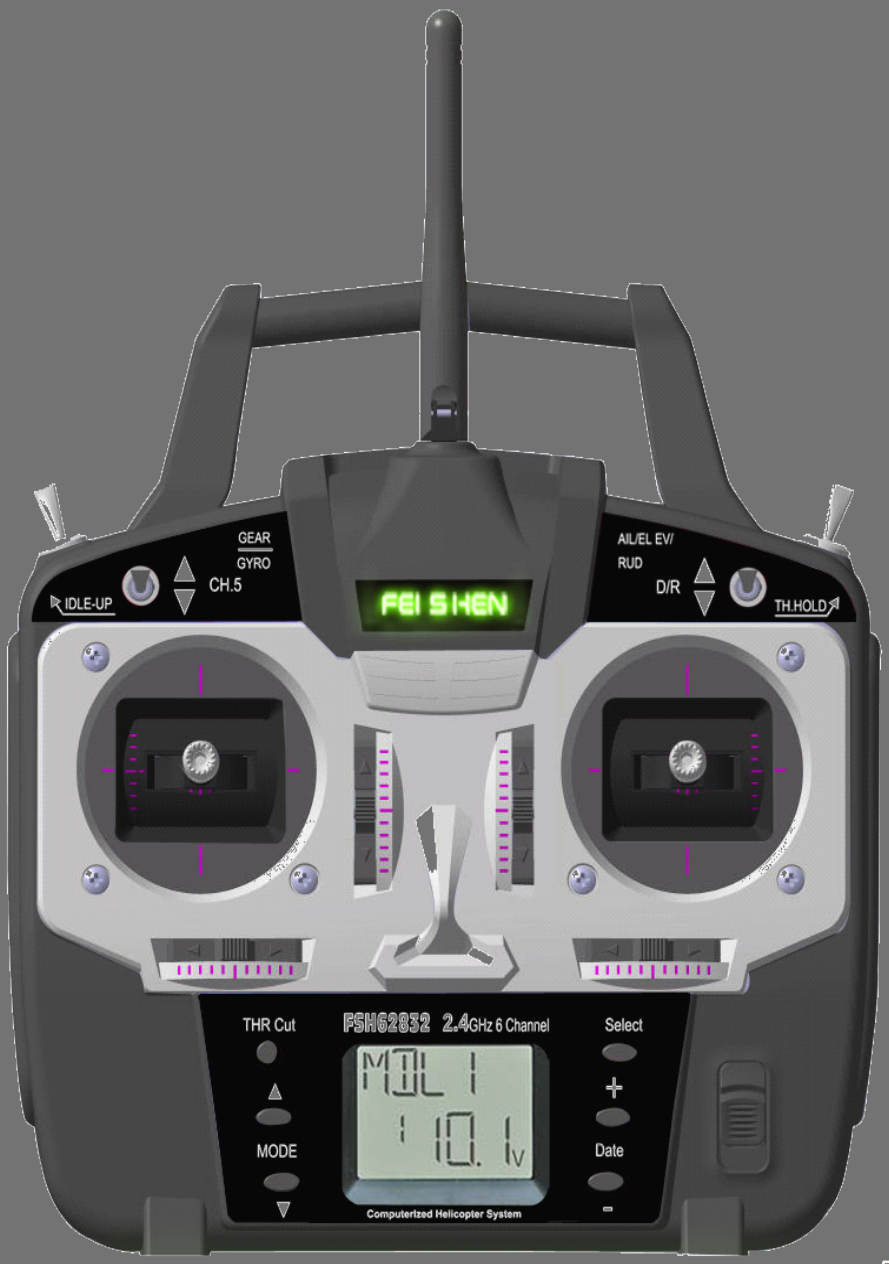
INSTRUCTION MANUAL

FOR FSH62832

2.4G 6-channel FHSS Radio control system for Helicopters



FCC ID: A6EZJFSH62832

Contents

Introduction

Thanks for purchasing the digital proportional R/C helicopter system item No.FSH62832 of Zhejiang FeiShen Vehicle Co.,LTD, If this is your first “computer” radio, rest assured that it is designed to make initial setup and field-tuning of your airplane/helicopter easier and more accurate than using a “non-computer” radio. Although this is a ***beginner*** or ***sport*** system with the requirements of those flyers in mind, in order to make the best use of your FSH62832 and to operate it safely, ***you must carefully read all of the instructions***.

Suggestion: If, while reading the instructions, you are unclear of some of the procedures or functions and become “stuck,”continue to read on anyway. Often, the function or procedure will be explained again later in a different way, providing another perspective from which to understand it. Another suggestion is to connect the battery, switch and servos to the receiver and actually operate the radio on your workbench as you make programming changes. Then, you’ll be able to see the effects of your programming inputs..

This product is to be used for sport and recreational flying of radio-control models only. FEISHEN is not responsible for the results of use of this product by the customer or for any alteration of this product, including modification or incorporation into other devices by third parties. Modification will void any warranty and is done at the owner’s risk.

USAGE PRECAUTIONS

1. Special attention must be paid before turning on the transmitter while other models are running or flying because the 2.4GHz system may affect them.
2. If there is a special regulation for using 2.4GHz radio systems at your flying site, please obey all regulations to enjoy safe flying with your 2.4GHz system.
3. 2.4GHz is very different than the frequencies we currently use. Please keep the model in sight at all times as large objects can block the RF signal. Please keep in mind that objects such as wire fences and wire mesh will also cause loss of signal.
4. NEVER grip the transmitter antenna when flying as this degrades RF quality and cause loss of control.

CONTENTS AND SPECIFICATIONS

Transmitter: FSH62832
Transmit frequency: 2.4G transmitter, transmit bank around 2.4GHz
Operating system: 2-stick, 6-channel system
Battery: 8s AA battery
Current drain: 170mA
The contents and specification change won’t be noticed anymore.

Receiver: FSH62856 *6 channel receiver of FASST system.*
Receiving on 2.4GHz band.
Power supply: 4.8V-6V
Current drain: 80mA (no signal receive)
Size: 41.6x 27.5x 9.2mm
Weight: 11.3g

GLOSSARY

It will be helpful to understand the following terms before reading the rest of the manual. The terms are not in alphabetical order, but are in a logical order that prepares the reader for understanding the next term.

Reversing (servo reversing) - A function that allows the user to determine the direction of response of each servo. If, after hooking up the servos, a control on the model responds in the wrong direction, the user may change the servo's direction so the control responds correctly.

Throw - When speaking of a control surface (such as an elevator or aileron), the throw is the distance the surface moves. Control surface throw is usually measured at the trailing edge of the surface and is expressed in inches or millimeters. The model in the diagram has 1/2" [13mm] of up elevator throw. Throw can also refer to the distance a servo arm (or wheel) travels.

Dual rate (D/R) - On the 6EX-2.4GHz the dual rate switch allows you to instantly switch, in flight, between two different control throws for the aileron, elevator and rudder. Often, different control throws are required for different types of flying. ("Low" throws may be required for flying at high speeds where the model's response becomes more sensitive, and "high" throws may be required for aggressive aerobatic maneuvers or landing or flying at lower speeds where the model's response becomes less sensitive.)

End point adjustment (E.P.A.) - Sets the overall, maximum distance the servo rotates in either direction. (No matter where the dual rates are set, the servo will never travel beyond the limit set by the end point adjustment.)

Exponential - Normally, servos respond proportionally to control stick input from the transmitter (e.g., if the stick is moved halfway, the servo will move halfway). However, with "exponential," the servo can be made to move more or less than initial stick movement (less servo movement is more common). Exponentials are commonly used to "soften," or decrease initial servo travel for the ailerons, elevators and rudder. This way, initial control stick inputs from the pilot result in small servo movement for a smoother flying airplane.
(Dual rates adjust the ***amount*** of servo travel. Exponentials determine ***where*** most of the travel will occur.)

Mixing - Two (or more) servos can be made to operate together either by mechanically joining the wires (with a Y-connector) or by electronically "joining" them through programming functions in the transmitter. When servos are electronically joined via programming, they are said to be "mixed." Unlike joining servos with a Y-connector, when servos are mixed electronically they can be made to move in opposition. Additionally, each servo's end points can be independently set.

INTRODUCTION TO THE FSH62832 SYSTEM

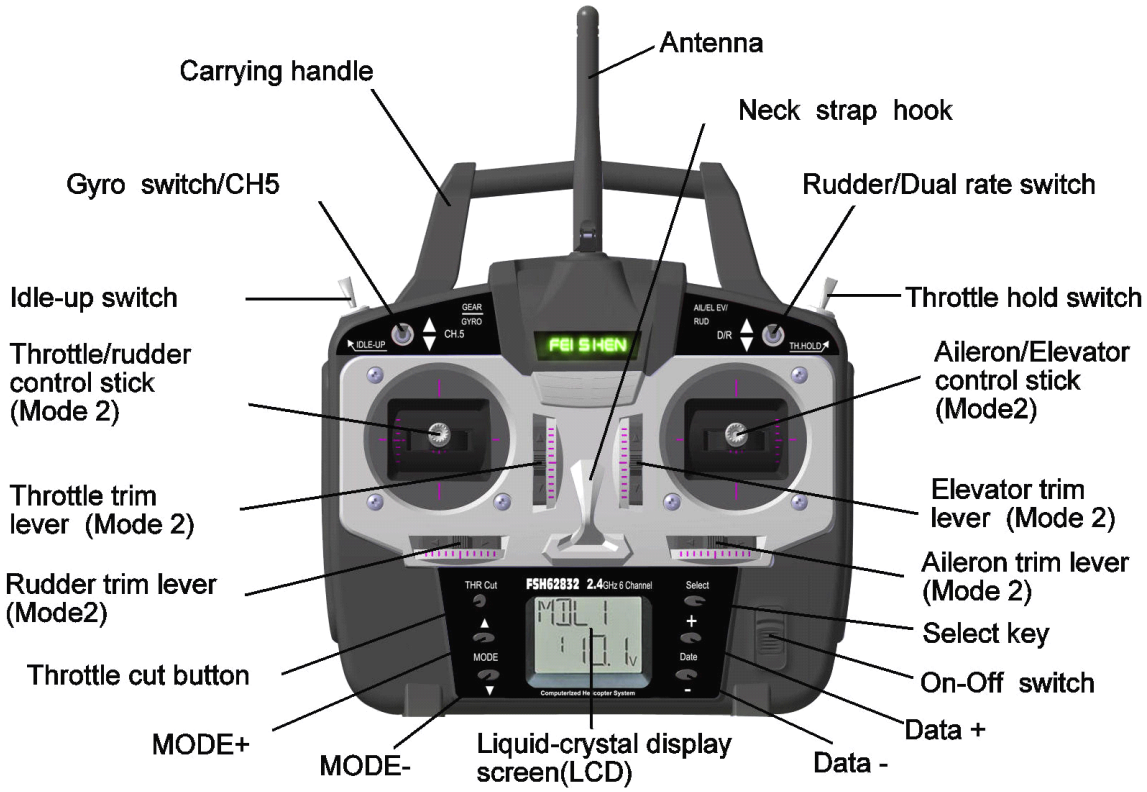
IMPORTANT!: Always turn on the transmitter first, then the receiver. When turning off the system, always turn off the receiver first. The object is never to have the receiver on by itself Don't place the equipment erectly, or the radio will be blown down by wind and the control stick will be in operated state, Otherwise, the servos or control surfaces could be damaged, or in the case of electric-powered models, the motor may unexpectedly turn on causing severe injury.

HELI mode: Dual rate (D/R), Idle up, Throttle hold, and Gyro sense can be operated by switch. Two different gyro senses can be set with FEISHEN GY510 Gyro on gyro function of this transmitter. Programming features include servo reversing and E.P.A on all channels, dual rates, exponentials, throttle curve, pitch curve, throttle hold, and pit to rudder mixing(REVO). Additionally, any one of two, factory-set, preprogrammed "swashplate type" mixers, including two servo type 1-S/3-s, may be selected.

Transmitter controls

The diagram and explanations briefly describe the functions of the FSH62832 transmitter. Full instructions on how to operate the controls are provided beginning on page 9.

NOTE: The diagram shows a Mode 2 system as supplied.



ESCRIPTIONS:

Aileron, Elevator and Rudder dual rate switch -Use this switch to "flip" between two

aileron, elevator and rudder control throw settings. The throws can be set up however you prefer, but generally, when the switch is “up” the throws are greater (“high rate”) and when the switch is “down” the throws are less (“low rate”). This switch also flips between exponential rates (if used).

Throttle – hold switch - This switch operates to hold the engine in the idling position and disengage it from the Throttle Stick. It is commonly use to practice auto-rotation.

Neck strap hook - Mounting point for optional neck strap.

Aileron/elevator control stick - Operates the servos connected to channel 1 (aileron) and channel 2 (elevator) in the receiver

Trim levers (All) Used to shift the neutral or center position of each servo as labeled in the diagram

Charging jack - Port for charging the transmitter batteries with the included battery charger.

On/off switch

DATE“+”or"-" Used to change the values of the various functions displayed on the LCD screen

Liquid-crystal display screen (LCD) - Displays programming modes and values entered.

Mode"▲"and"▼"button- Displaying the menu rolling clockwise or anti-clockwise.

Select key-Used to display the values for the current function

Throttle - cut button Be used to shut the throttle completely and immediately.

Elevator/rudder control stick-Operates the servos connected to channel 3 (throttle) and channel 4 (rudder) in the receiver.

Idle- up switch--This switch operates to change the fight condition which sets the throttle curve and pitch curve of mid air maneuvers (rolls, loops, stall turns) and 3D flight.

Gyro switch/ Channel 5--You can connect the sense adjust connector to channel 5 of the receiver to operate the gyro which has two different senses. Also if you use the 510 Gyro, two different gyro sense settings on the gyro function in this transmitter can be called by this switch.

Antenna--Radiates signals to the receiver.

IMPORTANT: Since the 2.4GHz have different characteristics than that of the conventional 27MHz and 72MHz frequencies, please read this section carefully to enjoy safe flight with the 2.4GHz system.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

This device complies with part 15 of the FCC Rules. Operation is subject to the fol lowing two conditions:

(1) This device may not cause harmful interference,

(2) This device must accept any interference received, including interference that may cause und esired operation.

Transmitter Antenna

1. The transmitter antenna is adjustable so please make sure that the antenna is never
pointed directly at the model when flying as this creates a weak signal for the receiver.
2. Keep the antenna perpendicular to the transmitter's face to create a better RF condition
for the receiver. Of course this depends on how you hold the transmitter, but in most cases, adjusting the transmitter antenna so that it is perpendicular to the face will give the best results. Please adjust the transmitter antenna to the way you hold the transmitter.

NEVER grip the antenna when flying as this degrades RF quality.

Features of receiver

1) FSH62856 receiver, applying 2.4G FHSS tech, has function of matching code and indicate situation of receiving signals

2)The signal output of 7 channels enables smooth action decomposition and powerful ,practical function.

Main functions of receivers

Number	Name	Function
1	Aileron	connecting to the Aileron servo and receiving the control signal of Aileron servo
2	Elevator	connecting to the elevator servo and receiving the control signal of elevator.
3	Throttle	connecting to the ESC and receiving the signal of throttle.
4	Rudder	connecting to the tail servo and receiving the control signals from tail servo
5	Gyro sensitivity	connecting to the gyro and receiving control signal of

		sensitivity
6	Pitch	connecting to the pitch servo and receiving the control signal of pitch servo.
7	Assistance(batter y	Assistant channel or connecting to 4.8V battery
8	antenna	receiving remote control signal
9	"ID SET" switch	Pressing the key for 3 sec and entering into code learning access.

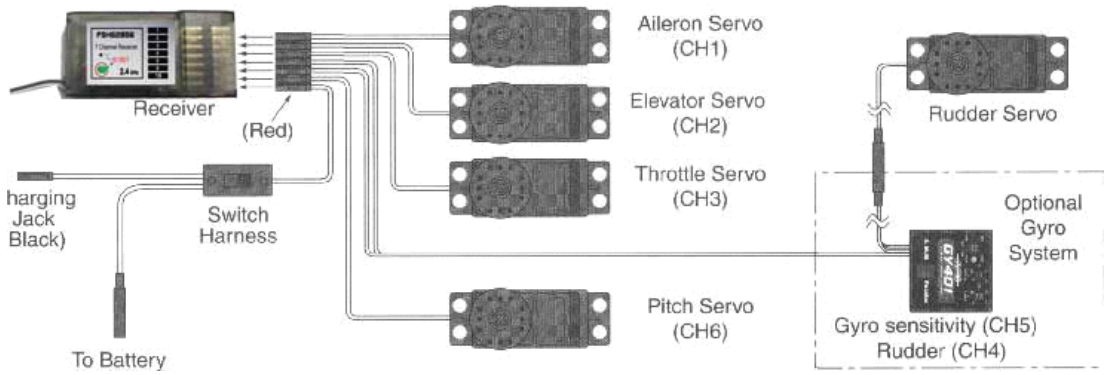
Link Procedure

Each transmitter has an individually assigned, unique ID code. In order to start operation, the receiver must be linked with the ID code of the transmitter with which it is being paired. Once the link is made, the ID code is stored in the receiver and no further linking is necessary unless the receiver is to be used with another transmitter. (For T/R set, the link is already done at factory. When you purchased another FSH62856, this procedure is necessary; otherwise the receiver will not work.

1. Place the transmitter and the receiver close to each other within one (1) meter
2. Turn on the transmitter.and check the transmitter LED on the surface. Radio is outputting singals when LED always lighted
3. Turn on the receiver.
4. Press down the **"ID SET"** switch on the side of radio ffor more than 3 sec (the light will flicker and release the switch. The receiver starts the linking operation

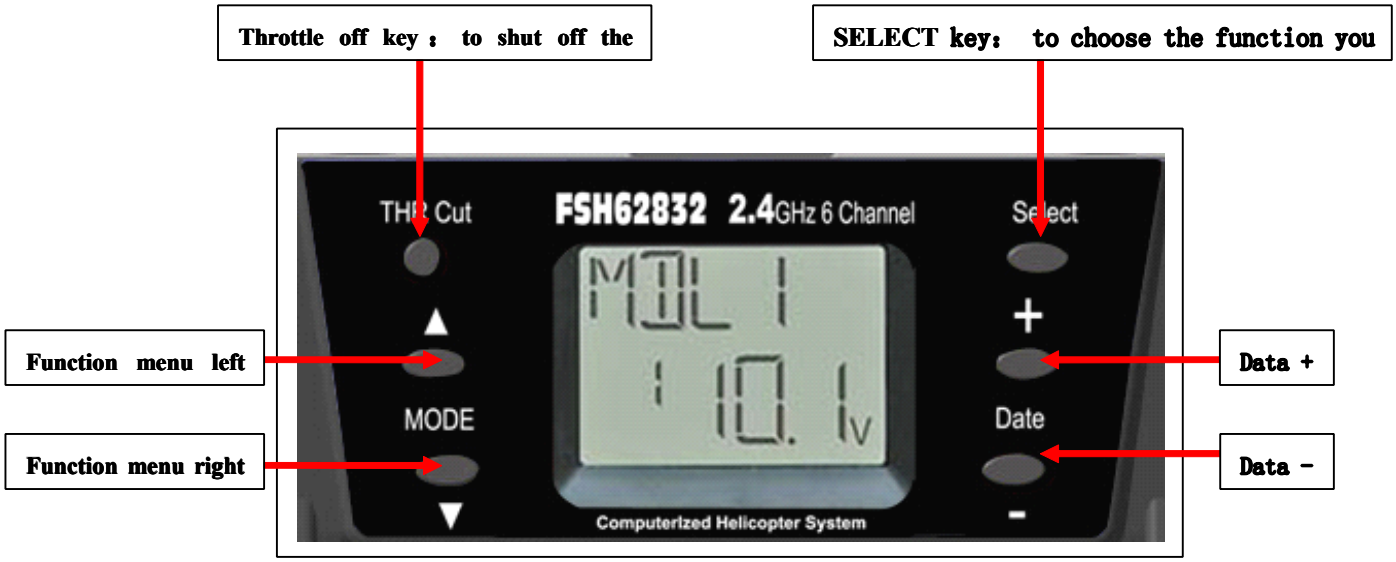
5,When the linking is complete, the LED in the receiver will change to solid green Please confirm that the servos will now operate by your transmitter

The picture below shows the connection of helicopter model. The gyro and Servo should be purchased separately.



LIQUID CHIP DISPLAY (LCD) & PROGRAMMING CONTROLS

TO open the **programming menu**: press MODE"▲"and"▼"key for one sec.

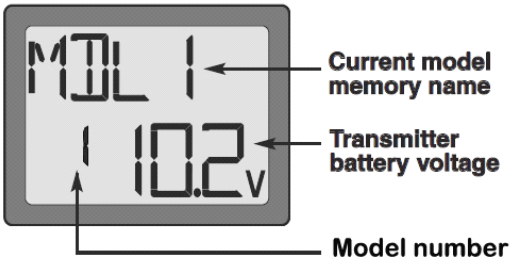


LCD display screen

When the transmitter is **initially** turned on, the **model type, model memory name**, **modulation type** and **transmitter battery voltage** are displayed on the LCD screen. When prompted by the user, the functions and settings stored in the memory can also be read on the screen. The user accesses the different functions using the MODE key and SELECT key to visit various functions and DATE"+""-" key to change number and set.(also called program)

Notes：

Feel free to explore by scrolling through the programs and viewing the displays using the MODE and SELECT keys.The MODE and SELECT keys only determine what will be displayed on the screen and will not change any of the settings. Only when using the DATA INPUT lever will you be able to change any of the settings.



Model name

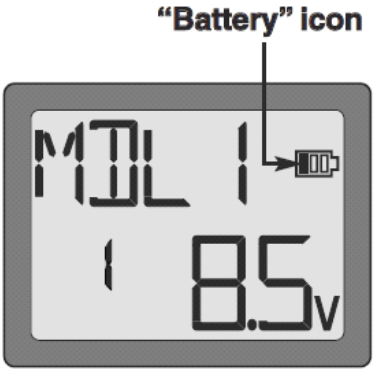
The FeiShen FSH62832 stores model memories for six models.This means all the data (control throws, trims, end points,etc.) for up to six different models can be stored in the transmitter and activated at any time depending upon which model you choose to fly that day). This eliminates the requirement for

reconfiguring the transmitter each time you decide to fly a different model with it! When the transmitter is turned on the **model type, model name, modulation** and the **transmitter voltage** will be indicated on the LCD screen. Before every flight **BE CERTAIN** that the correct model name for the model you intend to fly appears on the screen. If the transmitter is not operating the correct model, some (or all) of the controls could be reversed and the travels and trims will be wrong

Flying a model with the wrong program will result in a crash, so always be certain the model name in the transmitter is correct. One way to ensure this is to write the corresponding model name directly on the airplane or helicopter, or attach a list to the bottom or back of the transmitter.

Transmitter battery voltage

In addition to the model type, the LCD screen also displays the **transmitter battery voltage.**When the voltage goes below approximately **8.5 Volts** the "battery" icon will ***flash*** and the low battery alarm will continuously beep until the transmitter is turned off. When the low-battery alarm sounds, land **immediately** your model before losing control.



Note: If the transmitter ever reaches 8.9 Volts, land as soon as safely possible. A more reasonable margin of safety would be to quit flying for the day (or recharge the batteries) when the transmitter battery reaches 9.4 Volts.

SUGGESTED GUIDELINES:

9.4 Volts - No more flying until recharge.
8.9 Volts - Land as soon as safely possible.
8.5 Volts - **Emergency- Land immediately**.

Mixer alert warning

IIf the transmitter is turned on with the throttle hold or idle up function switched on, the screen will show "MIX" and a warning will sound. Please turn the throttle hold and idle up functions off to precede.

PROGRAMMING THE FSH62832 RADIO

Anytime you wish to **view** or **change** any of the current settings in the transmitter, the programming mode must first be entered by, of course, turning on the power, then by pressing the **MODE** "▲" and "▼" keys simultaneously and holding them down for one second. Once in the program , you can see every function on the rolling menu with MODE"▲"and"▼" after entering the program， SELECT key could be used to show changeable function set. **DATE "+" or "-"** key could be used to add or decrease change figure.

You can return to the home screen (where the model name and battery voltage is displayed) by pressing the **MODE**"▲" and "▼" keys simultaneously and holding them down for one second.

Note: The functions are listed and described in the order that they appear in the transmitter. Read all the way through the programming instructions before setting up your model (if you won't be using any of the mixing functions for a while you can read those instructions when ready).

Model choose/data reset/Model type option/Model name

Model choose function

MODL choose model serial number

1、After entering into program mode (press **MODE** "▲" and "▼" keys for 1 sec), The number for the current, active model will be blinking.

2、Pressing **DATE "+" , "-"** key till the model serial number you need appears.

3、Now the model has been selected. All programming inputs from this point forward will affect only the model number on the screen (until another model number is selected

REST Data reset function

All the data for any model memory can be reset to the original factory defaults. Often this function is done to get a "fresh start" and clear the memory before inputting new model settings.

Reset data:

1、 Enter into the program mode (pressing **MODE "▲" and "▼"** key S at same time for 1 seconds.

2、 Press DATE"+","-"keys till the model serial number appears

3、 Once the desired model number is displayed on the screen, press the SELECT key. **"REST"** will appear on the screen.

4、 Press **DATE "+" or "-"** key for about 2 seconds to clear and reset the memory. "CLR" blinks first, and then it stops blinking with a sound. Now the model data is reset

to the initial setting that is the default value set at the factory.
The existing modulation and swashplate type settings are not reset. If the power switch is turned off while reset is underway, the data may not be reset.

Warning: Resetting current model storage will delete all information of this model forever and it's beyond recovery (unless you keep the record in the model data record sheet on the back of notebook). Do not use reset function optionally unless you want to Start it again.

Setting the name and function of model

To set a name for model sample, you can pick the model sample you need if you need through naming a name which easy to remember and identify for every model sample.
1、Entering program setting mode. Using **DATE"+"or"-"**key to choose the model serial number which you want to change
2、Pressing **"SELECT"** key 3 times, the screen will show the name of current model sample
3、By applying **DATE "+" or "-"** key to modify the first character and pressing "SELECT" key to move to next character, you can modify with the same method. Go on modifying
The third and fourth character, you can name your model with four characters.

REVR servo reversed

Servo reversed function is used to react to the radio control input(control stick or switch) and change the direction of servo action. After setting reverse, please check all of control on model to ensure all it can move in the right direction. Servo
reverse mistake is the most common reason causing the crash accident.
After applying REVR function, please check operated function of servo structure on your model. Unless you reverse the servo on purpose, the reverse mistaken servo and not check the reaction of control before flying will cause the injury and heli crash.

How to set the servo reverse

1、Enter the programming mode, press **MODE"▲" or "▼" key** to access REVR programming mold
2、Press the SELECT key to select the channel you wish to reverse.
3、Press the **DATA "-"** key to reverse (REV) the servo, press **DATA "+"** key to make the servo operate in a normal (NOR) direction.
4、Press the **"SELECT"** key to select other channel you wish to reverse

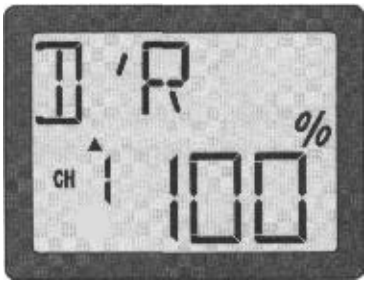
Dual Rates/Exponential Settings

The aileron, elevator and rudder dual rates on the FSH62832 are simultaneously activated by the dual rate switch. The amount of travel decrease for each control may be set between 0% and 100% of the values set for the end points (explained in End Point Adjustment on page 14).

Note: It is possible to set a dual rate value to zero, thus causing no response from that channel. If the dual rates are inadvertently set to zero, a crash could result.
Note: When performing initial model setup, the E.P.A.s should be set **prior to** setting the dual rates. When setting the E.P.A.s for the first time on a new model, the dual rates should be set to 100%..

D/R Dual Rate Settings

To select the Switch/position to control the dual rates:



1、Enter the programming mode, press **MODE"▲" or "▼"** key to access D/R programming mold

2、 Press the **"SELECT"** key to choose the desired channel (1-aileron, 2-elevator, 4- rudder). The channel number appears on the left side of the screen

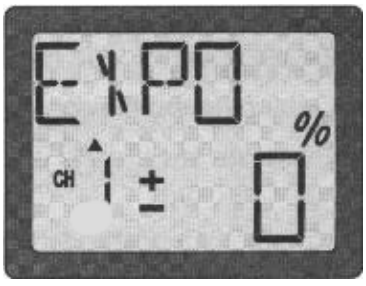
Note：if an **"EXPO"** is shown on the screen, that means you press **"SELECT"** too long, and access **"EXPO "**set mode. Press **"SELECT"** to get back to dual rate setting.

3、Place the dual rate switch (selected previously) in the desired position for the value you wish to change. (generally, pilots prefer to have the switch in the "up" position for the high rate, and in the **"down"** position for the low rate.

4、Change the dual rate value for the respective channel using the **DATA "+" or "-"** lever until the desired control throw is achieved. If you wish to change the control throw when the switch is in the other position as well, move the switch accordingly, then use the **DATA "+" or "-"** lever to change the throw rates.

5、 Repeat procedure 3 and procedure 4 to set the dual rates for other channels. (channel 2-elevator, channel 4-rudder)

Exponential Settings



Exponential, or **"EXPO "**as it is commonly abbreviated, affects the travel of the servos around their center in relationship to stick movement. Exponential does NOT impact the overall travel volume of the servos. A negative "-" exponential input will soften or reduce the servo's movements near the control's neutral position. A positive "+" exponential input will increase the servo's movements near the control's neutral position. Exponential set could between -100% and +100%.

To set the exponentials:

1、Enter the programming mode, press MODE **"▲" or "▼"** key to choose **"D/R"** function

2、Press DELECT to choose **"EXPO"** function

3、Press the **"SELECT"** key to choose the desired channel (1-aileron, 2-elevator, 4-rudder), the channel number appears on the left side of the screen. Note if the D/R was shown on the screen, it because you have pressed SELECT many times and access to D/R setting screen, press **"SELECT "** key to get back to the setting screen.

4、Place the dual rate switch in the desired position for the value you wish to change

5、Change the exponential rate value for the respective channel using the **DATE "+" or "-"** until the desired exponential value is achieved, as stated above, an exponential value with a **"-"** in front of it makes the initial servo movement less, or "softer".

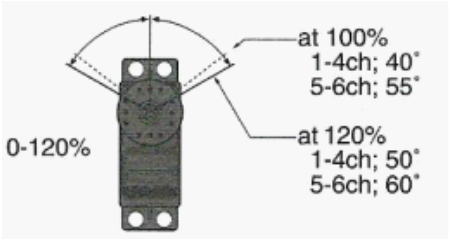
6、Place the dual rate/exponential switch in the opposite position, adjust the rates accordingly.

7、Repeat the procedure for the remaining channels as desired.

EPA End Point Adjustment setting

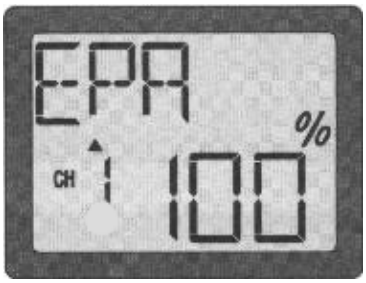
Note: since changing the end points will also change the dual rates, the end points should be set prior to setting the dual rates. If you set the dual rates first, and the go back and change the end points, the dual rate throws will also change.

Adjusting each servo throw, and each servo's left & right throw could be adjusted separately.(When EPA setting in 100%, the maximum servo throw for channels 1,2,3 and 4 is approximately 40 degree, and approximately 55 degree for channels 5 and 6.



To set the end points:

1、Enter the programming mode, press either **MODE** "▲" or "▼" to scroll through **"EPA"** function menus, activate channel No. will shown on the left side of screen, the sign of "%" will flicker.



2、Moving the aileron stick to right and press **DATE "+" or "-"** key to change the value as desired.

3、Moving the aileron stick to left and press **DATE "+" or "-"** key to change the value as desired.

4、Press **"SELECT"** key to display the next channel to be adjusted. Note: moving the stick (or switch) from one end to the other changes the value displayed and the position of the arrow for that "end" of the control input.

TRIM Trim settings

There are four trim levers (“trims”) on the front of the transmitter. Three of the trims are for adjusting the neutral position of the aileron, elevator and rudder servos. The fourth trim is for setting the idle r.p.m. of the engine when the throttle stick is all the way down. The intended use of the trims is to make small servo adjustments, in flight, to get the model properly “trimmed” (so it will fly straight-and-level). Because the trims are intended to be used while the model is in flight, you do not have to “enter the program” to adjust the trims. Simply push or pull on the trim levers while flying and the neutral position of the servos will shift. Keep in mind that you should start out with the control surfaces centered when the servos are centered and the trims are “zeroed” (or near zero). ***THEN*** you can adjust the trims once airborne.

Center the servos:

1、Turn on the transmitter and receiver. Operate the controls to make sure the servos respond in the correct direction. Use the reversing function to reverse any servos necessary.

2、Center the throttle control stick.

3、Place the servo arms on the servos so they are perpendicular to the pushrods . It is okay to cut off any unused

servo arms.

4、Connect the pushrods to the control surfaces. Adjust the length of the pushrods until the control surfaces are centered when the servos are centered

Note: The throttle trim affects the throttle servo only when the throttle stick is below “1/2 stick.” This way, the final closing of the carburetor can be adjusted without affecting the servo throughout the rest of the range.

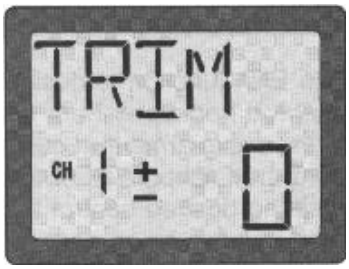
To adjust the trim settings:

Once the servos and control surfaces have been connected and the control throws have been set using the end points and dual rates, get the model airborne. Adjust the trims as necessary to get the model to fly straight-and-level. If much trim is

required on any one control it is a good idea to readjust the pushrods so the trims can be returned to neutral (zero). Adjusting the trims with the trim levers changes the servo’s position in increments of “4.” If finer adjustments are required, land the model, then enter the program as described below to adjust the trims in increments of “1.”

1、Enter program setting, press **MODE "▲" or "▼"** to get into “**TRIM “**menu**.**

2、Press **“SELECT”** key to display the channel to be adjusted (the figure shows adjustments for CH1)



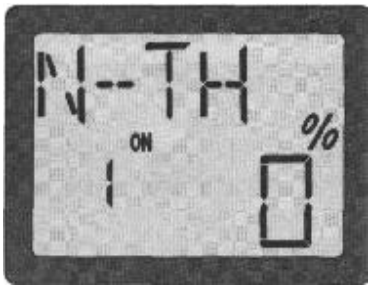
3、Adjust the trim using the **DATE “+” or “-”**key, note that values change in increments of “1” at initial, but if the **DATA “+” or “-” i**s held long enough the values will change more rapidly.

4、Adjusting other channels based on above.

N-TH Normal throttle curve function

Used to set throttle curve for normal flight. 5-point throttle curve is utilized to best match the blade collective pitch to the engine RPM for consistent load on the engine. Throttle curve can be adjusted from 0-100% each point. This normal throttle curve creates a basic curve for hovering. Use this function together with the normal pitch curve (see Normal pitch curve) so that up/down control has a constant engine speed.

To set the normal throttle curve:



1、Enter the programming mode, press **MODE** "▲" or "▼"key to access the **"N-TH"** function.,Throttle stick position number will appear on left side of display and "%" symbol will be flashing.

2、Press **"SELECT"** key to select the desire curve point. Point 1 is shown initially which is throttle stick all the way downward (slow) position. Point 5 is throttle stick all the way upward (hi) position.

3、Press **DATE "+" or "-"** to set the servo position

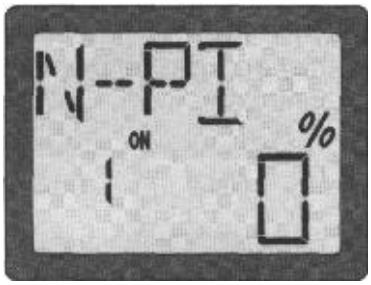
4、Use "**SELECT"** key to set other points in same manner

N-PI Normal pitch curve function

Used to set pitch curve for normal flight. 5-point pitch curve is utilized to best match the blade collective pitch to the engine RPM for consistent load on the engine. Pitch curve can be adjusted from 0-100% each point.

This normal pitch curve creates a basic curve for hovering. Use this function together with the normal throttle curve so that up/ down control has a constant engine speed.

To set the normal pitch curve:



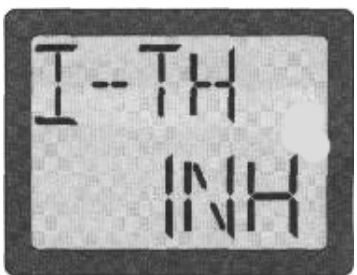
1、Enter the programming mode, press either the **MODE "▲" or "▼"** to access the **"N-PI"** function**,** Throttle stick position number will appear on left side of the display and "%" symbol will be flashing.

2、Press **"SELECT"** key to select the desired curve point. Point 1 is shown initially, which is throttle stick all the way downward (slow) position. Point 5 is throttle stick all the way upward (hi) position.

3、Press **DATE "+" or "-" to** set the servo position

4、Use **"SELECT"** key to set other points with same manner.

I-TH Idle-up throttle curve function



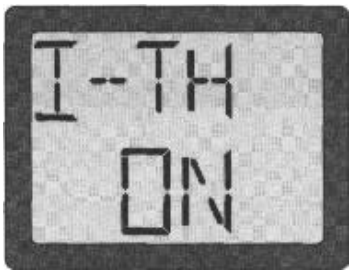
Used to set throttle curve for idle up flight. 5-point throttle

curve is utilized to best match the blade collective pitch to the engine RPM for consistent load on the engine when idle up function is on. Throttle curve can be adjusted from 0-100% each point. This idle up throttle curve is to set consistent engine RPM and can be activated at any time when mid air maneuvers are executed, such as loops, rolls, and 3D flight, even when the blade collective pitch is reduced.

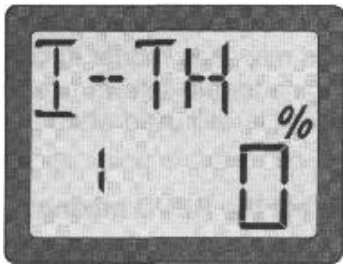
To set the idle-up throttle curve:

1、Enter the programming mode, press **MODE"▲" or "▼"** key to access the **"I-TH"** function

2、press **DATE "+"key,** this will cause the flashing INH display to change to a flashing ON display. The throttle curve point indication on the left side of screen, and the sign of "%" will flicker.



3、Push "**SELECT"** key to select the desired curve point. Point 1 is shown initially which is throttle stick's all the way downward (slow) position. Point 5 is throttle stick's all the way upward (hi) position.



4、press **DATE "+" or "-"** key to set the servo position..

5、Use **"SELECT"** key to set other points in same manner

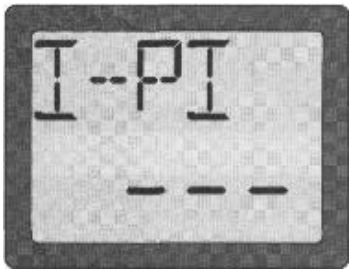
I-PI Idle-up pitch curve function:

Used to set pitch curve for idle up flight. 5-point pitch curve is utilized to best match the blade collective pitch to the consistent engine RPM when idle up is used. Pitch curve can be adjust from 0-100% each point.

The high side pitch curve should be set to not overload the engine and keep consistent engine RPM. Generally, set less pitch than normal maximum pitch. The low side pitch curve should be set for desired maneuvers such as loops, rolls, and 3D flight

To set the idle-up pitch curve:

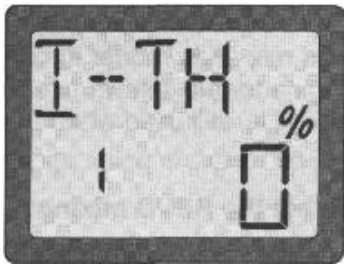
1. Enter the programming, press **MODE"▲" or "▼"** key to access the **"I-PI"** function



2. Press **DATE:"+"** key, the flash "INH" will be changed into flash "on" so that I-TH function has been turned on. And then,the number in each

curve will be shown on the left of screen, meanwhile, the sign of right "%" will flash. When the function of **"I-TH"** being shutted down, this function couldn't be operated. **"I-TH"** should be activated before applying **"I-PI".**

3、Press **"SELECT"** key to select the desired curve point. Point 1 is shown initially which is throttle stick's all the way downward (slow) position. Point 5 is throttle stick's all the way upward (hi) position.

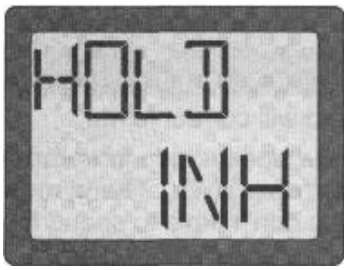


4、press **DATE "+" or "-"** key to set the servo position.**.**

5、Use SELECT key to set other points in same manner

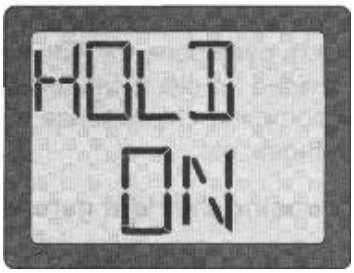
HOLD Throttle hold function

Throttle hold function is to be used for autorotations where only pitch control is used to make a descent and landing. Just flip the hold switch on to set the engine in the idling or cut position and disengage it from the Throttle Stick. It can be set from (-)50 to (+)50% from throttle trim position.



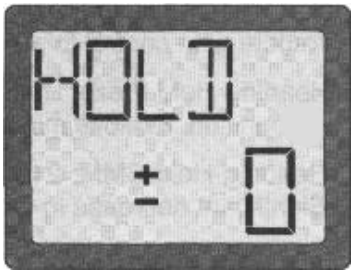
To set the throttle hold:

1. Enter the programming, press **MODE"▲" or "▼"** key to access the **"HOLD"** function



2. Press DATE "+" button, you could switch into flash "ON" from flash "INH". This way, HOLD functions will be on!

3. Pressing SELECT once, the screen will show numbers.Using DATE "+"or "-" button to set up the throttle servo position when throttle keep.



REVO Screw pitch-rudder mixing functions:

This mix adds rudder in conjunction with pitch. This helps compensate for rotation of the helicopter caused by the increased engine torque. (Never use revo. mixing with a heading-hold/AVCS gyro which is in heading hold/AVCS mode.

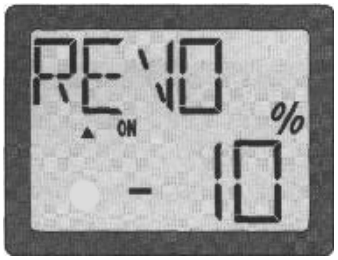
However, revo.mixing is still used when a heading-hold/AVCS gyro is in normal mode.)

To set the REVO mixing:

1. Enter the programming mode and use the **MODE "▲"or"▼"** key to access the **"REVO"** function.

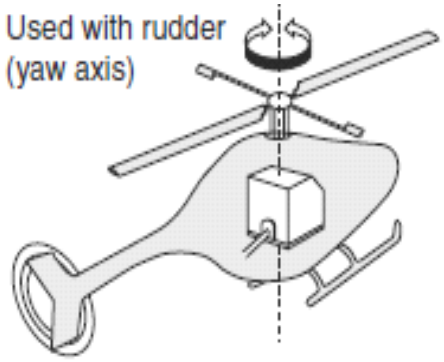
2. Press **DATE "+"** key, This will cause the flashing **"INH"** display to change to a flashing **"ON"** display. Now the **"REVO"** function is on.

Press **"SELECT"** key once This will cause the flashing "%" symbol on the display. this time, It can set mixing amount on throttle stick hi side and low side separately. When you move the throttle stick to the low side from neutral, the arrow indicates down direction., this time, press **DATE "+" or "-"** key to set the mixing amount of the low side. When you move the throttle stick to the high side from neutral, the arrow indicates up direction. the arrow indicates up direction. Then press **DATE "+" or "-"** key to set the mixing amount of the low side.



GYRO Gyro mixing function

GYROS : Using electronics to take some of the complexity out of setups and flight. What is a gyro? A gyroscope is an electronic unit that senses rotational movement and corrects for it. For example, if the wind blows your helicopter's tail to the left, a gyro will sense that motion (and confirm that no input was given) and will correct for it.



How does it help in helicopter setup? A good gyro will totally eliminate the need for revo. mixing. The gyro will sense and correct the unwanted motion for you, so you don' t have to spend time to get a complex curve operating properly

Gyro sensor kinds: There are many different kinds of gyros. Early gyros were mechanical, with a spinning drum similar to a child's gyroscope toy. The next generation utilized a special type of crystal, called piezoelectric, which sensed the motion and provided an electrical pulse. The finest gyros at the time of this writing are SMM technology. These silicone micro machines, or computer chips, sense the motion. SMM is far more accurate and less susceptible to inaccuracies caused by temperature changes, etc.

Choosing the right gyro for your skills, your helicopter, and your budget:

• **Mechanical:** some are still available. They are very challenging to set up and not as reliable as piezo or SMM.

• **Non-Heading-Hold Piezo:** these are now inexpensive gyros that are reliable and easy to set up. Some have dual rates and
remote gain control to adjust sensitivity in flight. Lack heading-hold capabilities for precision flying.

• **Heading-Hold Piezo:** Until recently, the cream of the crop. Expensive, and more complex to set up. Adds GPS-like heading
recognition. Exhibits minor difficulties with temperature drift (position setting varying with unit's temperature).

•**Heading-Hold SMM:** 21st Century gyro technology. Computer chip technology. Expensive, easier set up, higher durability.
Significant decrease in temperature sensitivity. Many include frame rate settings to allow faster response when using specialized digital servos.

Gyro mixing function is used for adjusting the gain of the gyro. Select from two different gain settings using a switch on the transmitter.

To set the GYRO mixing:

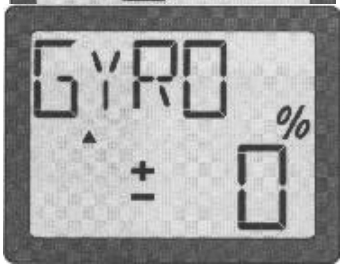
1. Plug the gyro's sensitivity adjustment to channel 5 of the receiver. (not assignable)

2. **"EPA "**of channel 5 (see page 14-15) to set 100% both UP and DOWN..

3. Enter the programming mode and press the **MODE "▲"or"▼"** key to access the **"GYRO"** function

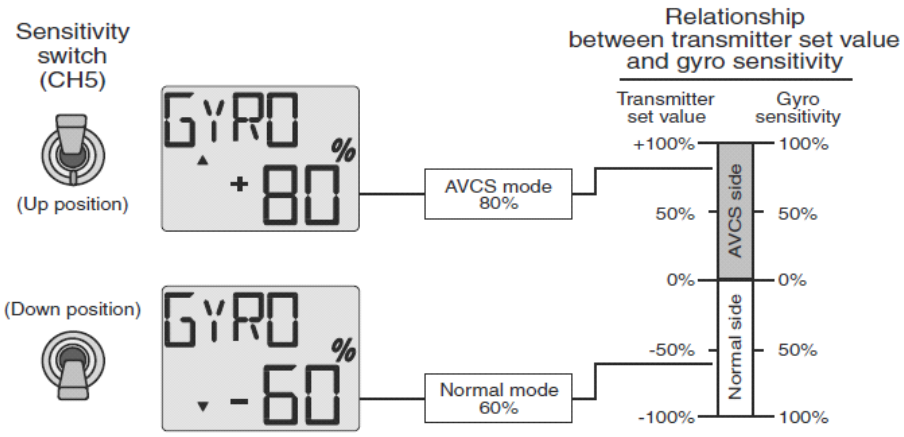
4. press **DATE "+"** key. you could switch into flash "ON" from flash "INH" , this mixedcontrol function will work.

5. Pressing **"SELECT "**key once This will show the gyro gain setting and flashing "%" symbol on the display.



Flip the gyro (CH5) switch up and down. This will cause the arrow on the display to point up and down corresponding to the switch position. Push up or down DATA INPUT lever to set the gyro gains for both switch up and down position. Gyro gain can
be adjust from -100% to +100%.

Example of sensitivity setting with GY401

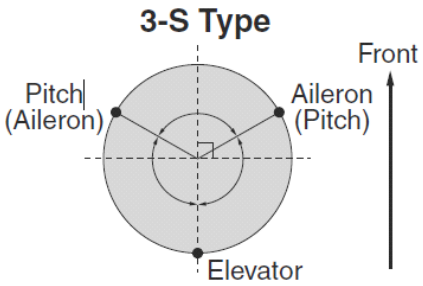


You can choose the FEISHEN GY510 specially digital gyroscope, its configuration simple. Practice stunt flying to 3D flying ideal choice. Product Numbers for FSH62851.

SWSH Swashplate types selection & Swash AFR

This function can select from two swashplate types. Swash AFR can be set, if you choose 3-S type.

1-S: Independent aileron, pitch and elevator servos linked to the swashplate. Most kits are 1-S type



3-S: With Aileron inputs, the aileron and pitch servos tilt the swashplate left and right; with Elevator inputs, the three servos tilt the swashplate fore and aft; with Pitch inputs, all three servos raise the swashplate up and down.

To select the swashplate types:

1. Enter the programming mode and press the **MODE "▲"or"▼"** key to access the **"SWSH"** function.

2、Using **DATE"+"or"-"**key for about two Seconds to select swashplate mode. Please press **DATE"+"** key when you want to choose "1-S"mode; Please press **DATE"-"** key when you want to choose "3-S"mode

3、1-S or 3-S on the screen will flicker and stop flickering with warning tone when you are chaging swashplate mode.

4、Now the swashplate mode has been setted well.

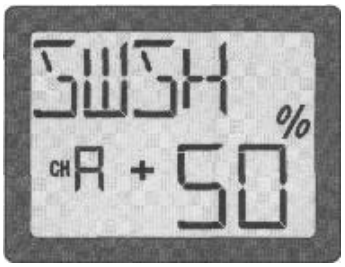
To set the swash AFR:

Only when you choose 3-S swashplate mode then you can use the function **"SWASH AFR"**.The function is used to change the moving direction and stroke of aileron,pitching and pitch servo.

At first, please assemble aileron,pitching and pitch servo with model well according to instruction manual.Then to set the three servo's **"EPA"value** (see page 14) to 100% and set servos "reverse"function (see page 12) to keep swashplate moves up and download horizontal and correct when operating pitch(up and down throttle lever).

1、.Enter the programming mode and use the MODE **"▲"or"▼" key** to access the **"SWSH"** function.

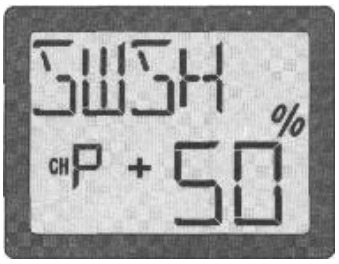
2、Ensure you have choosed 3-S swashplate mode.If not,please set according to "Choose swashplate type".



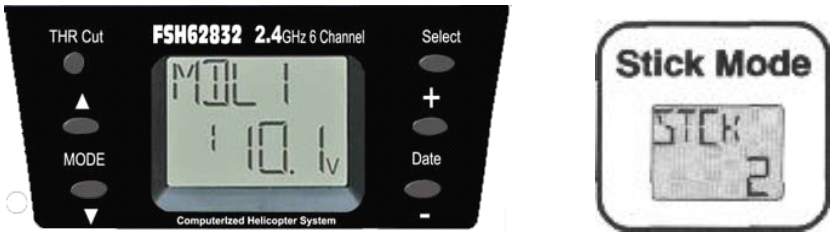
3、Press "**SELECT**" key to select the channel that you want to set. Aileron channel **"CHA"** is displayed at first and "%" is flashing.
Move aileron lever left and right, use **DATE"+"or"-"** key to set the direction and amount of aileron servo. The movement of aileron servo can be adjusted between -100% and +100%.

4、Select other channels (elevator and pitch) by **"SELECT"** key to set the direction and amount of servo movement in same manner as aileron channel setting.

"**CHE**" shows elevator channel, "**CHP**"shows pitch channel.

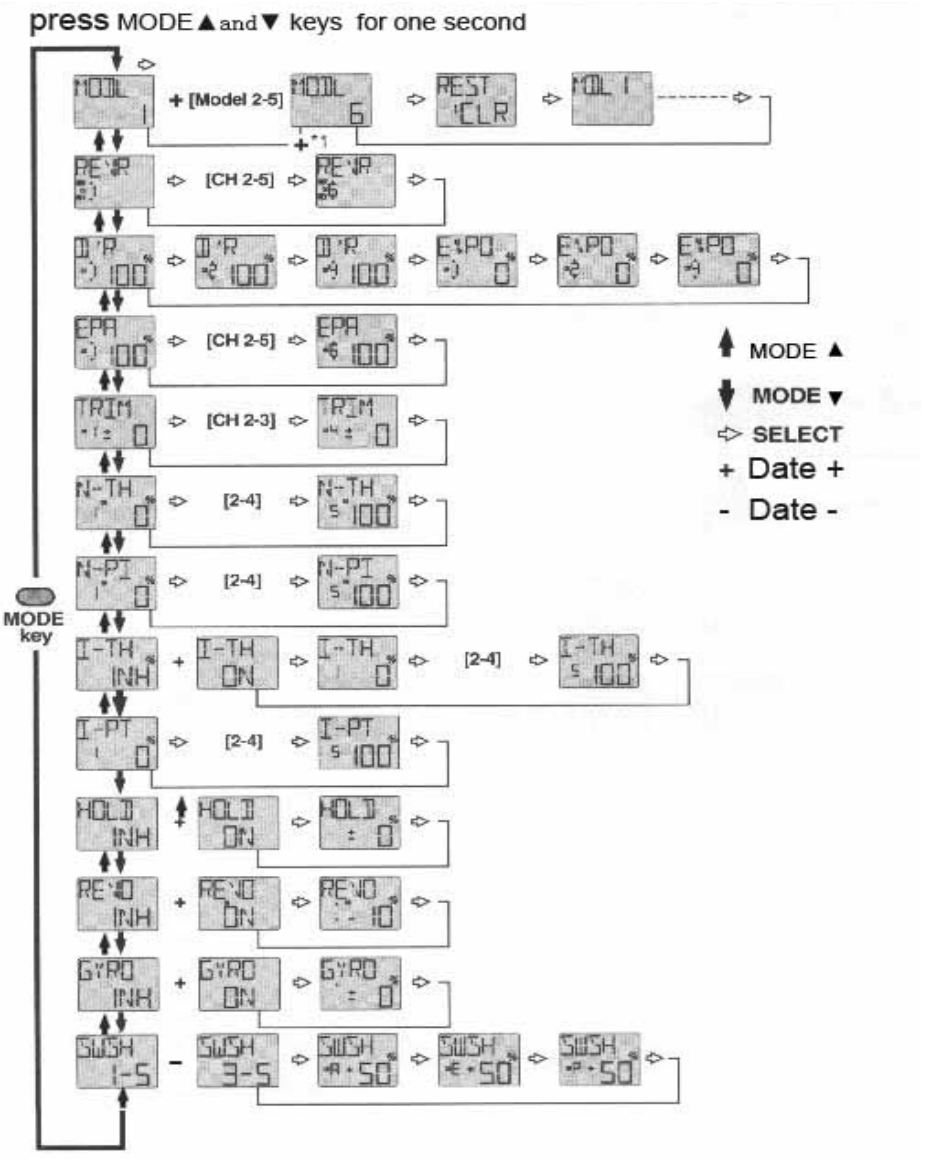


FLOW CHART of FSH62832



Enter or exit the program mode and keep pressing **MODE "▲"** and **"▼"** key for a second.

If you want to change control lever mode, please keep pressing **MODE "▲"**and **"▼"** key and open transmitter power. Use **DATE"+"or"-"**key to display the control lever mode.



Other functions of FSH62832

simulator

Simulator function of FSH62832 is a function for beginners to practise by connecting to computer

How to use simulator?

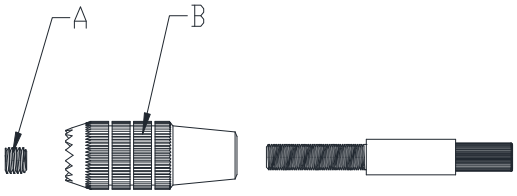
Please connect one end of simulated line to computer and the other end to simulate output terminal at the back of transmitter. Now we can set data after we connecting all well and turning transmitter on.

Throttle-cut function

Throttle closing function is used when engine need to be switched off by human.It can be rapid and convenient to switched off engine by use "**THR CUT**"switch.Throttle output to be zero at moment when keep pressing "**THR CUT**"no matter where is throttle lever.But throttle value returns to lever equivalent value when loosen "**THR CUT**" button.

Adjustable-length control sticks

You can adjust control lever length according individual need. Rotate set screw A counterclockwise unscrew and then rotate lever nut B up or down when you need adjust the lever length.Rotate set screw A clockwise to tight lever nut B after adjust the lever length.



Changing the FSH62832 stick mode

The transmitter may be operated in four different stick "modes" (1, 2, 3 & 4). The modes determine the functions that will be operated by control sticks. Currently, the transmitter is in "mode 2" and should be left in mode 2 unless you are an experienced flyer and have learned to fly in a different mode. In mode 2, the right control stick operates the aileron and elevator and the left stick operates the rudder and throttle. This is how 99% of Americans fly their models.

If you want to change mode just open power and press **MODE"▲"or"▼"** key at the same time, it will appear mode adjustment interface. Try to change mode by using **DATE"+"or"-"**key

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