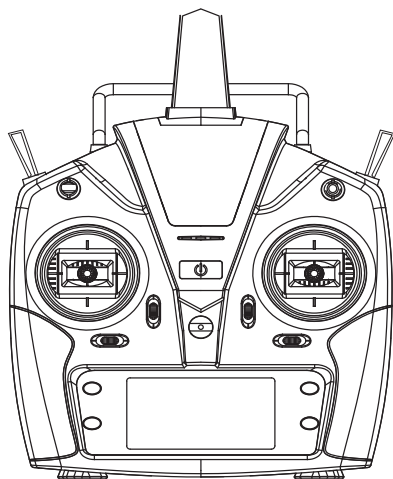# EACHINE

AGE 14+

E160 INSTRUCTION MANUAL FOR REMOTE CONTROLLER

E160 INSTRUCTION MANUAL FOR REMOTE CONTROLLER

Attention

This remote controller supports various models such as fixed–wing aircrafts, helicopters and gliders, etc. and allows for parameter adjustment and multiple storage options with 1.4GHz technology adopted and in compliance with FUTABA communication protocol. So it's featured with remote control, interference–free and error correcting and easy to use. Here are the instructions in details.

Overview

* The remote control uses 4 AA batteries. It is strictly forbidden to use batteries and lithium batteries that do not conform to the product.
* The remote control is not a toy. It is not easy for children under 14 years of age to operate. If you are a beginner, please have an experienced pilot at your side. Manufacturers and distributors bear no responsibility for any damages caused by improper use of the products. Please read through this manual before you start to use it.
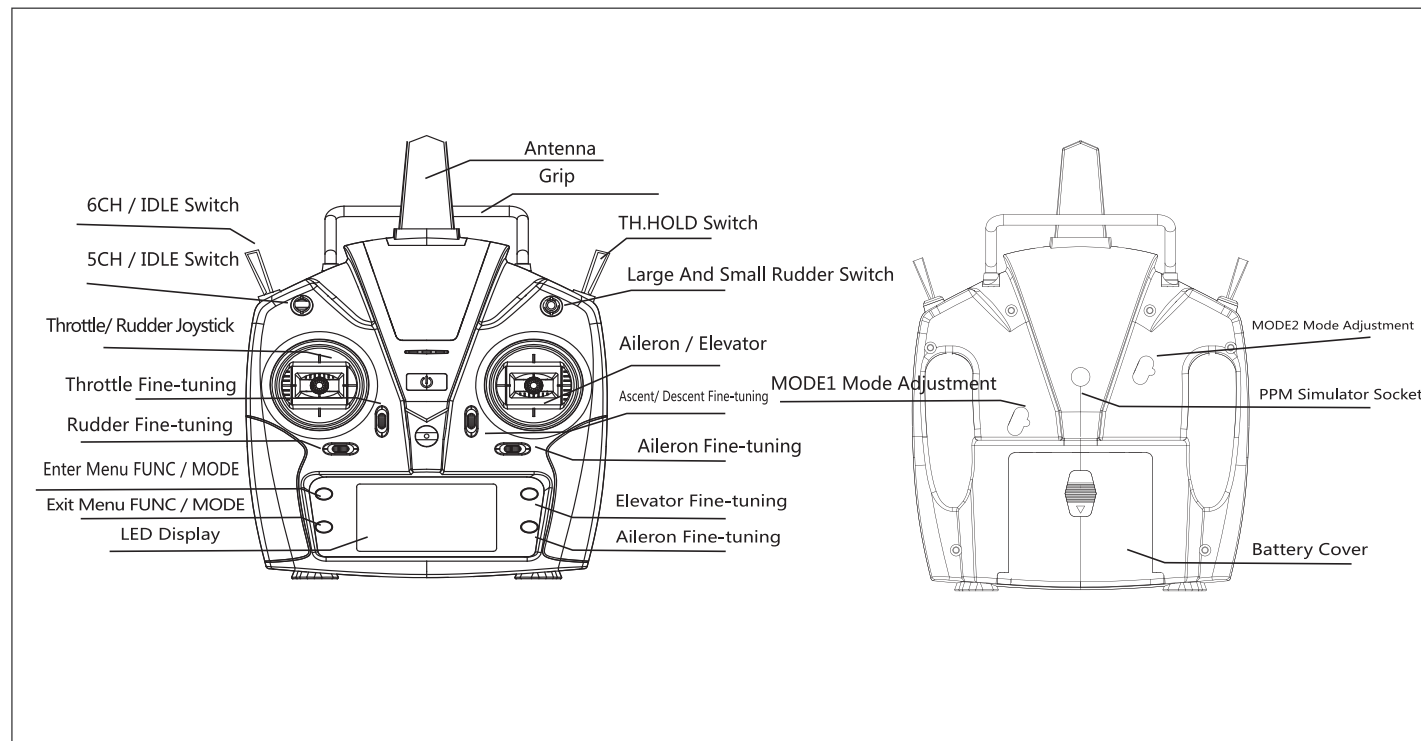
Remote Controller Tech Specs

Battery type 4 1.5v AA batteries, working voltage 6–9V, working current 100–150MA, transmitting power 2 + DBM

Table of Contents

Antenna

Grip

6CH / IDLE Switch

5CH / IDLE Switch

TH.HOLD Switch

Large And Small Rudder Switch

Throttle/ Rudder Joystick

Aileron / Elevator

Throttle Fine-tuning

Ascent/ Descent Fine-tuning

MODE1 Mode Adjustment

MODE2 Mode Adjustment

Rudder Fine-tuning

PPM Simulator Socket

Enter Menu FUNC / MODE

Aileron Fine-tuning

Exit Menu FUNC / MODE

Elevator Fine-tuning

LED Display

Aileron Fine-tuning

Battery Cover

This remote control uses a bright, high-definition, segmented LED display as the user interface, and the following figure shows the full display interface
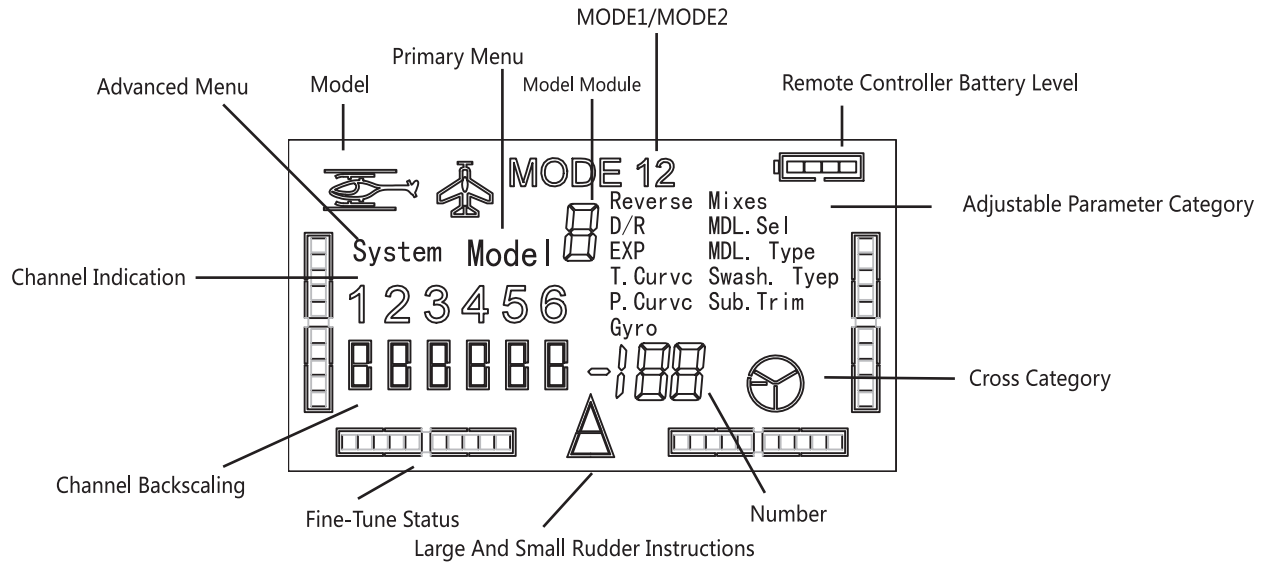
All of the parameters can be set through the above interface, which is easy to operate with hierarchies of:
1) Screen display at start-up: single line frame indicates the channels that are related to parameter settings.
2) Screen display for Helicopter Mode
3) Screen display for Fixed-wing Mode
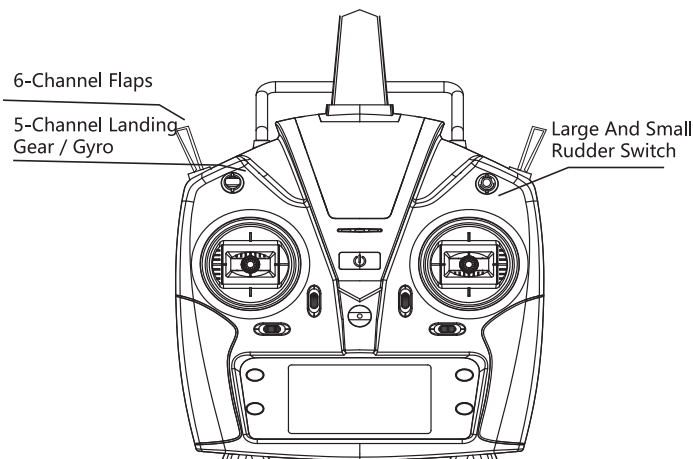
Standby Mode of Remote Controller

Set the switches of the remote control to the normal positions (turn the switch towards where the remote controller's cover indicates), open the remote control to enter the standby state, and the LED displays the flight parameters and related information of the current mode, which can be categorized by fixed-wing mode settings, helicopter mode settings and special function.

Fixed-wing tuning parameters	Features	
	Channel forward and reverse setting	Reverse
	Big and small rudder settings	D/R
	EXP curve setting	EXP
	Throttle curve setting	T.Curvc
	Mixes channel mixing settings	Mixes
	Flight module settings	MDL.Sel
	Model category setting	MDL.Type
	Servo midpoint setting	Sub.Trim
Helicopter tuning parameters	Channel forward and reverse setting	Reverse
	Big and small rudder settings	D/R
	EXP curve setting	EXP
	Throttle curve setting	T.Curvc
	Pitch curve setting	P.Curvc
	Gyro gyroscope settings	Gyro
	Flight module settings	MDL.Sel
	Model category setting	MDL.Type
	Swash plate category settings	Swash.Tyep
	Servo midpoint setting	Sub.Trim

Special Function Settings
Remote control pairing
3D switch position protection
Throttle position protection
Remote control power management
Emulator function
Restore factory settings
MODE2 / MODE1 conversion
Calibrate the remote control joystick

Mode Settings

6-Channel Flaps

5-Channel Landing Gear / Gyro

Large And Small Rudder Switch

Switch Description

Channel Forward And Reverse Setting

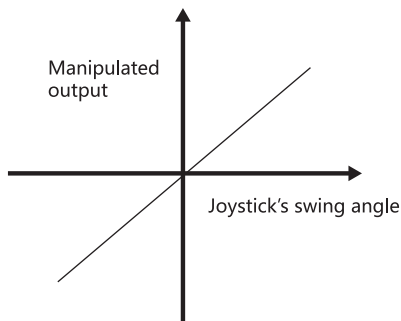| Functions	How to Set Up	Description
Set the directions of the moves based on the installation position of the server for purposeful operations.	1 Power–on status 2 Press the MODE button for one second, the beep sounds, the Revese and 123456 flashes. 3 Press the MODE key again to select the channel to be adjusted, the corresponding channel number flashes, and Revrse and other channel numbers stop flashing. 4 Press the up or down button to reverse the icon, press the MODE button to confirm the setting and skip to the next channel, and press the END button to exit the setting. **1 2 3 4 5 6 1 2 3 4 5 6**	In forward and reverse setting, the transmitter output reflects the current setting status. You must press the confirmation key to save the setting result. It is recommended that the user set it without the propeller installed in the main motor to avoid injuries caused by sudden rotating of the propellers.

Big And Small Rudder Settings

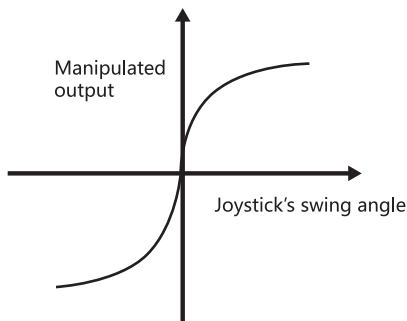| Functions	How to Set Up	Description
Set the amount of rudders for the three channels of the aileron in the lifting direction, and set the required values for the up, down, left, and right of the joystick. This function is used to adapt to the stroke of the server or adjust the control feel.	1 Power–on status 2 Press the MODE button for one second, the beep sounds, the Revese and 123456 flashes. 1 Power–on status 2 Press the MODE button for one second, the beep sounds, the Revese and 123456 flashes. 3 Press the flip button continuously to scroll down, D / R and 12 4 flash. 4 Press MODE to enter the setting. The display channel 1 flashes. Use the joystick to select the channel to be set. The corresponding channel flashes. The other corresponding channel numbers stop flashing. 5 Use the up and down keys to increase or decrease the value. The corresponding channel joystick is used to select the assigned amount. 6 Press the MODE button to confirm and save, then press the END button twice to exit the current setting. 4 Press the up or down button to reverse the icon, press the MODE button to confirm the setting and skip to the next channel, and press the END button to exit the setting.	During forward and reverse setting, the transmitter output reflects the current setting status. You must press the confirmation key to save the setting result. It is recommended that the user set it without the propeller installed in the main motor to avoid injuries caused by sudden rotating of the propellers.

E curve (EXP) Setting

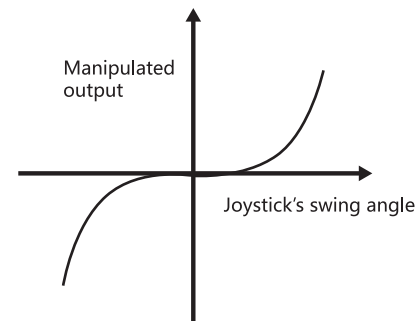| Functions	How to Set Up	Description
Provide users with joystick curve adjustment, improve operation feel, and provide positive and negative curve adjustment of the three channels of the aileron lifting direction.	1 Power-on status 2 Press the MODE button for one second, the beep sounds, the Revese and 123456 flashes. 3 Press the flip button continuously to scroll down and EXP flashes. 4 Press MODE to enter the setting. Display 1 and the quantization digital module flash. Press the MODE button continuously to select the setting channel. 5 Increase or decrease the value by scrolling up or down. 6 Press the MODE key to save the setting and skip to the next channel setting. 7 After all settings are completed, press the MODE key to save the data, and then press the END key twice to exit the current setting.	The joystick curve index is positive, which means that the middle of the joystick changes quickly and the two ends change slowly. When it is negative, the middle change is slow and the two ends change quickly. The curve index setting value is –100%–+ 100%.

The following figure describes the effect of the curve index on the manipulated output

Manipulated output

Joystick's swing angle

■ Joystick index curve value is 0

Manipulated output

Joystick's swing angle

■ The value of the joystick index curve is 60

Manipulated output

Joystick's swing angle

■ Joystick index curve value is -60

Throttle Curve Setting

Functions	How to Set Up	Description
Provide users with linear adjustment settings of the throttle joystick to improve the feel.	1 Power-on status 2 Press the MODE button for one second, the beep sounds, the Revese and 123456 flashes. 3 Press the scroll button continuously to scroll down, T.Curc and 12345 flash on the display. 4 Press the MODE key to enter 1 and the digital module flashes, and 2345 stops flashing. 5 Use the up / down keys to set the current value, up to increase the value, and down to decrease the value. 6 Press the OK key to save the data and skip to the next position. 7 After setting, press the MODE button to confirm and press the END button twice to exit the setting.	The throttle curve 1 2 3 4 5 represents the five positions of the throttle stroke. The default value is 0 25% 50% 75% 100%. The maximum output is set to 100%, and the minimum is 0 output. 1 and 5 represent the minimum and maximum of the throttle setting Please set the throttle stroke according to your own needs.

The following figure describes the effect of the throttle curve index on the output

Joystick
outputoutput

Throttle curve
indication

Default throttle curve indication

Throttle curve indication
1/0 2/40% 3/70% 4/80% 5/100%

Throttle curve indication
1/0% 2/15% 3/35% 4/60% 5/100%
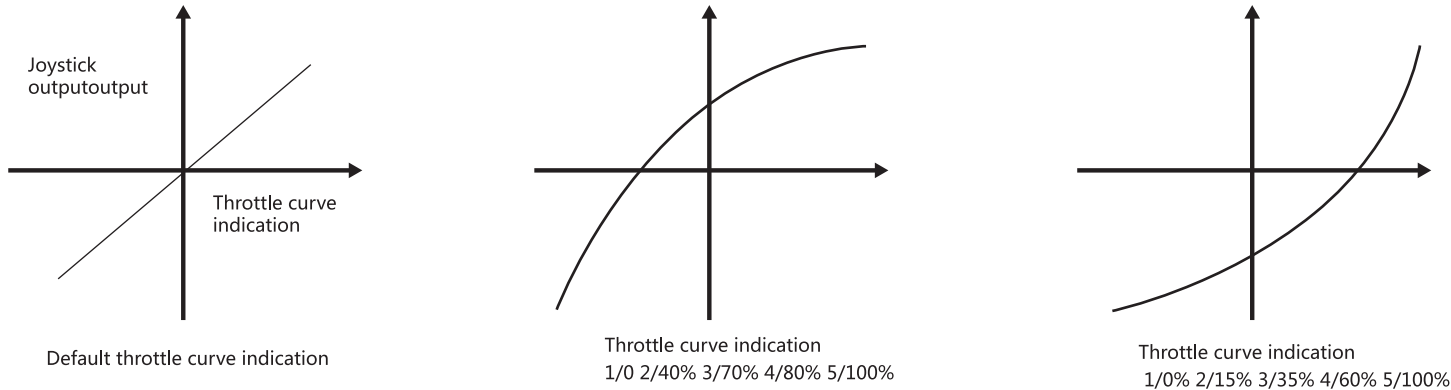
Channel Mixing Settings

Functions	How to Set Up	Description
Provide users with three mixing modes commonly used in fixed-wing.	1 Power-on status 2 Press the MODE button for one second, the beep sounds, the Revese and 123456 flashes. 3 Press the flip button continuously to scroll down. Mixes and 1246 flash. 4 Press the flip key to enter the mixing control mode and select 1 6-channel mixing control 2 4-channel mixing control and 12-channel mixing control. 5 After selecting the channels to be mixed, press the OK key to enter. The current channel and quantization module flash, the preset amount is 100%. 6 After setting the current channel, press the MODE button to confirm and skip to the secondary channel setting. 7 After the secondary channel is set, press the MODE button to confirm, and press the END button twice to exit.	1. After the setting is completed, the channel display area will be displayed.Shows the current mixing control status. 2. 1 and 2 are for delta wing, 2 and 4 for V-shape tail, and 1 and 6 for flaperon. 3. Data setting value -100%-+100%, negative value, which means that the action direction is opposite to the joystick direction.

Mixed Control Mode	Channel Display	Suitable For
1	1 Aileron Channel	Delta wing
1	2 Lifting Channel	Delta wing
2	3 Lifting Channel	V-shape tail
2	4 Direction Channel	V-shape tail
3	5 Aileron Channel	Flap aileron
3	6 Flap Channel	Flap aileron

Cancel Mixed Control Mode

1 Power-on status
2 Press the MODE button for one second, the beep sounds, the Revese and 123456 flashes.
3 Press the flip button continuously to scroll down. Mixes and the current mixed control flash.
4 Press the Enter key to enter, and the Up key to scroll up to 1 2 4 6 flashes.
5 Press MODE to confirm and press END to exit. No mixed control channel is displayed on the display, and the mixed control mode is off.

Flight Module Settings

| Functions	How to Set Up
By setting, users can set ten model parameters.	1 Power-on status 2 Press the MODE button for one second, the beep sounds, the Revese and 123456 flashes. 3 Press the flip button continuously to scroll down, MDL.Sel and Model0 flash. 4 Press the MOED button to confirm, MDL.Sel stops flashing, and the up button will move the setting module up. 5 After setting the module, press the MOED key to confirm the saved settings, and press the END key twice to exit the setting

Model Selection

Functions	How to Set Up
Easy for users to set different models	1 Power-on status 2 Press the MODE button for one second, the beep sounds, the Revese and 123456 flashes. 3 Press the scroll button continuously to scroll down, MDL.Type and 123456 flash. 4 Press the MOED key to confirm that MDL.Type stops flashing, the aircraft icon flashes, Up / Down button to switch helicopter or fixed wing icon 5 After setting the module, press the MOED key to confirm the saved settings, and press the END key to exit the setting

Servo Midpoint Setting

Functions	How to Set Up	Description
It is used to adjust the installation error of the servo rocker arm, which is convenient for users to debug, and does not affect the normal use of external trimming.	1 Power-on status 2 Press the MODE button for one second, the beep sounds, the Revese and 123456 flashes. 3 Press the flip button continuously to scroll down, Sub.Trim and the airplane pattern flash. 4 Press the MOED key to confirm that the Sub.Trim stops flashing and the channel 1 digital quantization module flashes. Press the MODE key continuously to select the channel to be set (1- 2 -4 -5 -6 cycles) 5 After selecting the channel to be set, use the up arrow key to increase the amount, and the down arrow key to decrease the amount.	The setting values are -100- + 100%, and the maximum setting amount on both sides is equivalent to 10% of the joystick stroke. It must be bound to the aircraft when setting. The specific parameters are set according to the actual needs of the aircraft.

Helicopter Setting Mode

TDLE Switch

Gyro Switch

TH.HOLD Switch

Large And Small
Rudder Switch
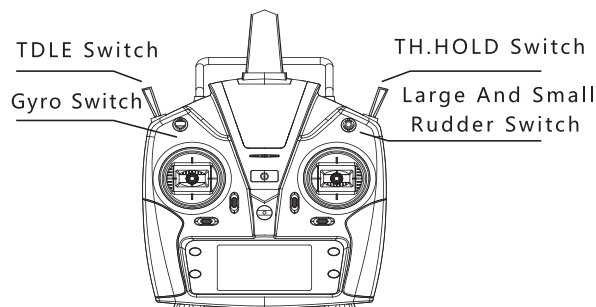
Switch Description

Channel Forward And Reverse Setting

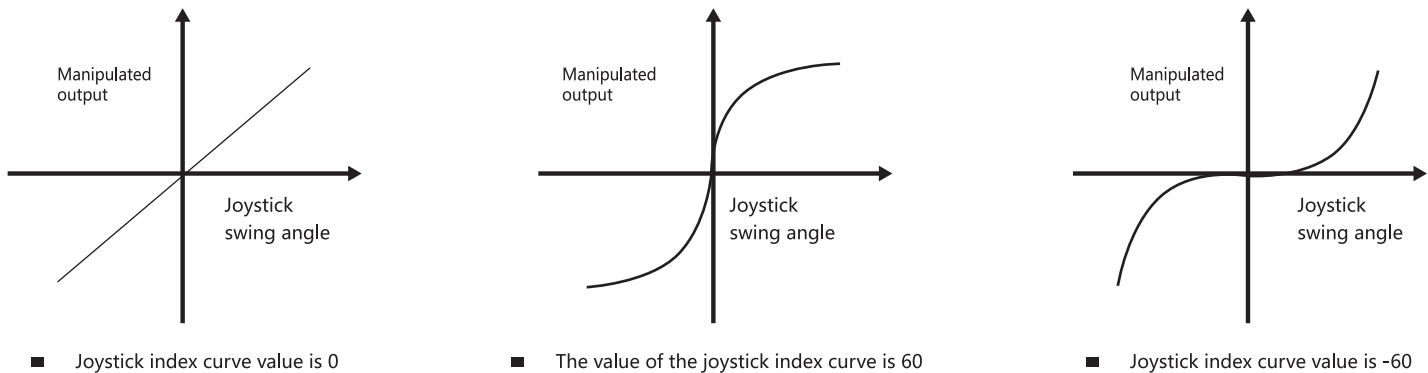| Function Description	Setup Steps	Description
According to the installation position of the server, set the forward and reverse of the action to meet the operation needs	1. Power-on status 2. Press the MODE button for one second.Re-vese flashes with 123456 3. Press the MODE button again to select the channel to be adjusted. The corresponding channel number flashes, Revere and other The channel numbers stop flashing. 4. Press the up or down key to reverse the icon, press MODE key to confirm the setting and skip to the next channel, Press the END key to exit the setting 1 2 3 4 5 6 1 2 3 4 5 6	During forward and reverse setting, the transmitter output reflects the current setting status. You must press the confirmation key to save the setting result. It is recommended that the user set it without the propeller installed in the main motor to avoid injuries caused by sudden rotating of the propellers.

Big And Small Rudder Settings

Functions	How to Set Up	Description
Set the size of the rudders in the three channels of the aileron lifting direction, and set the required values for the up, down, left and right of the joystick. This function is used to adapt to the stroke of the server or adjust the control feel.	1 Power-on status 2 Press the MODE button for one second, the beep sounds, the Revese and 123456 flashes. 3 Press the flip button continuously to scroll down, D / R and 12 4 flash. 4 Press MODE to enter the setting. The display channel 1 flashes. Use the joystick to select the channel to be set. The corresponding channel flashes. The other corresponding channel numbers stop flashing. 5 Use the up and down keys to increase or decrease the value. The corresponding channel joystick is used to select the assigned amount. 6 Press the MODE button to confirm and save, then press the END button twice to exit the current setting.	The position of the large and small rudder switches determines whether a large or small rudder amount is set. When selecting a channel, the displayed value is the current parameter. Use the joystick to select the channel to be set, and press MODE to confirm the direction selection. The setting range of the large and small rudder amounts is -125- + 125%. A negative value indicates that the direction of the joystick movement is opposite to the direction of swing.

E curve (EXP) Setting

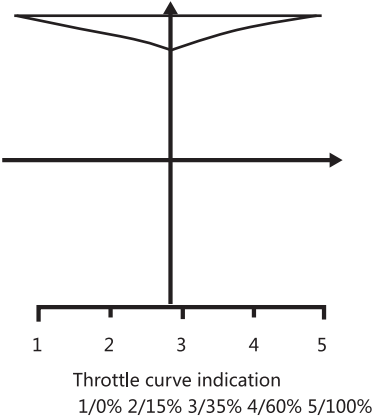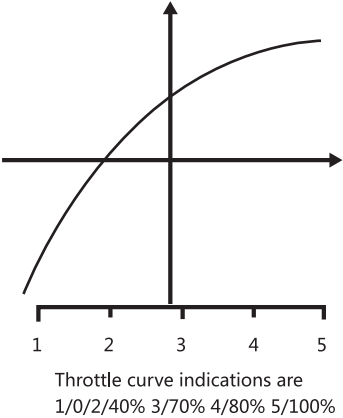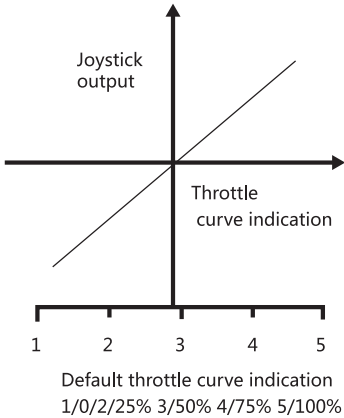| Functions	How to Set Up	Description
Provide users with joystick curve adjustment, improve operation feel, and provide positive and negative curve adjustment of the three channels of the aileron lifting direction.	1 Power-on status 2 Press the MODE button for one second, the beep sounds, the Revese and 123456 flashes. 3 Press the flip button continuously to scroll down and EXP flashes. 4 Press MODE to enter the setting. Display 1 and the quantization digital module flash. Press the MODE button continuously to select the setting channel. 5 Increase or decrease the value by scrolling up or down. 6 Press the MODE key to save the setting and skip to the next channel setting. 7 After all settings are completed, press the MODE key to save the data, and then press the END key twice to exit the current setting.	The joystick curve index is positive, which means that the middle of the joystick changes quickly and the two ends change slowly. When it is negative, the middle change is slow and the two ends change quickly. The curve index setting value is -100%-+100%.

The following figure describes the effect of the curve index on the manipulated output

Manipulated output

Joystick swing angle

■   Joystick index curve value is 0

Manipulated output

Joystick swing angle

■   The value of the joystick index curve is 60

Manipulated output

Joystick swing angle

■   Joystick index curve value is -60

Throttle Curve Setting

Functions	How to Set Up	Description
Provide users with linear adjustment settings of the throttle joystick to improve the feel. The throttle curve is adjusted in 5 points and divided into general throttle curve and 3D throttle curve	1 Power-on status 2 Press the MODE button for one second, the beep sounds, the Revese and 123456 flashes. 3 Press the scroll button continuously to scroll down, T.Curc and 12345 flash on the display. 4 Press the MODE key to enter 1 and the digital module flashes, and 2345 stops flashing. 5 Use the up / down keys to set the current value, up to increase the value, and down to decrease the value. 6 Press the OK key to save the data and skip to the next position. 7 Turn on the 3D IDLE switch (toggle to the direction of the front cover), and set the 5 points of the 3D throttle curve as above. 8 After setting, press the MODE button to confirm and press the END button twice to exit the setting.	Throttle curve 1 2 3 4 5 represents the 5 positions of the throttle stroke. The default value of the general throttle curve is 0 25% 50% 75% 100%. Set the maximum output 100%. 3D IDLE switch is on. Set the 3D throttle curve. The default value is 85%. 85% 80% 85% 85%, please set the throttle stroke according to your needs.

The figure below shows the effect of three kinds of curve indexes on the output of the default throttle curve, the set general throttle curve and the 3D throttle curve.


Joystick output

Throttle curve indication

| 1 | 2 | 3 | 4 | 5 |

Default throttle curve indication
1/0/2/25% 3/50% 4/75% 5/100%

| 1 | 2 | 3 | 4 | 5 |

Throttle curve indications are
1/0/2/40% 3/70% 4/80% 5/100%

| 1 | 2 | 3 | 4 | 5 |

Throttle curve indication
1/0% 2/15% 3/35% 4/60% 5/100%

Pitch Curve Setting

Functions	How to Set Up	Description
According to the requirements, the segment setting provides different pitch parameter settings. 5 points setting and general pitch and 3D pitch curve setting	1 Power-on status 2 Press the MODE button for one second, the beep sounds, the Revese and 123456 flashes. 3 Press the scroll button continuously to scroll down, P.Curc and 12345 flash on the display. 4 Press the MODE key to enter 1 and the digital module flashes, and 2345 stops flashing. 5 Use the up / down keys to set the current value, up to increase the value, and down to decrease the value. 6 Press the OK key to save the data and skip to the next position. 7 Turn on the 3D IDLE switch (toggle to the direction of the front cover), and set the 5 points of the 3D pitch curve as above. 8 After setting, press the MODE button to confirm and press the END button twice to exit the setting.	In the curve setting, 1 2 3 4 5 points respectively correspond to the 5 positions of the throttle stroke. The default is 40% 45% 50% 60% 70%. The 3D IDLE switch is used to respectively general pitch curve and 3D pitch curve. When setting the curve, you must turn on the TH, HOLD switch or unplug the motor to prevent the blade from turning suddenly and causing injury.

Gyroscope Sensitivity Setting

Functions	How to Set Up	Description
Provide users with helicopter sensitivity settings, divided into locked sensitivity and unlocked sensitivity, gyroscope switch control distinction.	1 Power-on status 2 Press the MODE button for one second, the beep sounds, the Revese and 123456 flashes. 3 Press the flip button continuously to scroll down, Gyro and quantization module flash. 4 Press MODE to enter the setting, Gyro stops flashing, the quantization digital module flashes, and the value can be increased or decreased by turning up or down. 5 After all settings are completed, press the MODE button to save the data, and then press the END button twice to exit the current setting.	Switch sensitivity setting. The default is 6G lock sensitivity on the switch. The default value is 75%. The default non-lock sensitivity on the switch is 25%.

The sensitivity and tail-locked or non-tail-locked status are shown in the following figure:
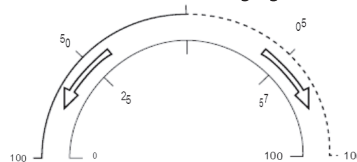
On the way, the thin solid line is the set value, and the thick dashed line and the thick solid line are the corresponding sensitivity values. The thick dotted line indicates the locked sensitivity. The thick solid line indicates the sensitivity of the fee lock mode.

Flight Module Setup

Functions	How to Set Up
By setting, the user can set up ten model parameters.	1. Power-on status. 2. Press... 3. Consecutively press ... 4. Press... 5. Set...

Model Selection

Functions	How to Set Up
By setting, the user can set up ten model parameters.	1 Power-on status 2 Press the MODE button for one second, the beep sounds, the Revese and 123456 flashes. 3 Press the scroll button continuously to scroll down, MDL.Type and 123456 flash. 4 Press the MOED key to confirm that MDL.Type stops flashing, the aircraft icon flashes, and scroll up / down Flip key to switch helicopter or fixed wing icon 5 After setting the module, press the MOED key to confirm the saved settings, and press the END key to exit the setting

Midpoint Setting of Steering Gear

Functions	How to Set Up	Description
It is used to adjust the installation error of the servo rocker arm, which is convenient for users to debug, and does not affect the normal use of external trimming.	1. Power-on status 2. Press the MODE button for one second, the beep sounds, the Revese and 123456 flashes. 3. Continuously press the flip button to scroll down, Sub.Trim and the aircraft pattern flash. 4. Press the MOED key to confirm that the Sub.Trim stops flashing and the channel 1 digital quantization module flashes. Press the MODE key continuously to select the channel to be set (1- 2 -4 -5 -6 cycles) 5. After selecting the channel to be set, use the up arrow key to increase the amount and the down arrow key to decrease the amount. 6. After setting the module, press the MOED key to confirm the saved settings, and press the END key twice to exit the setting	The setting values are -100- + 100%, and the maximum setting amount on both sides is equivalent to 10% of the joystick stroke. It must be bound to the aircraft when setting. The specific parameters are set according to the actual needs of the aircraft.

Swashplate Setting (Helicopter Only)

Functions	How to Set Up
Provide users with 2 different CCPM tilting disk mixing modes	1 Power-on status 2 Press the MODE button for one second, the beep sounds, the Revese and 123456 flashes. 3 Press the flip button continuously to scroll down, Swash.Tyep and flashing appear. 4 Press the MOED key to confirm that MDL.Type stops flashing, the swashplate icon flashes, Scroll up / down to switch CCPM 90 ° swashplate or 120 swashplate 5 After setting the swashplate, press the MOED key to confirm the saved settings, and press the END key to exit the setting

Special Function Settings-Remote Control Pairing

Functions	How to Set Up
Used for communication between the remote control and the receiver. The code pairin is required within 0.5 meters, and there is no FUTABA2.4GHZ S-FHSS communication protocol.	1 Turn on the remote control, make sure the throttle stick is in the lowest position, and all switches are in the OFF position 2 Power on the receiver, the power indicator of the receiver is on 3 Touch the receiver's code button for 1 second, wait for the red light to go out, and enter the code 4 The red and blue lights are on when receiving, and the code pairing is successful.

3D Switch Position Protection

Functions	How to Set Up
Indication of improper user manipulation	When the remote control is turned on, the 3D switch is not in the OFF (pointing to the back cover) position, the remote control sends out beeping sound prompts, please slide the remote control switch to the correct position

Throttle Position Protection

Functions	How to Set Up
Indication of improper user manipulation	When the remote control is turned on, the 3D switch is not in the OFF (pointing to the back cover) position, the remote control sends out beeping sound prompts, please slide the remote control switch to the correct position

Emulator Function

Functions	How to Set Up	Description
Provide users with more ways to contact, output signals through the remote control PPM, practice flight on the simulator	1. Turn on the remote control 2. Insert a 3.5mm dedicated audio cable into the PPM socket of the remote control, connect the dongle to the other end, and connect the dongle to the computer. 3. You can fly after opening the simulation software to set the parameters	The Phoenix Emulator 4.0 or above must be installed on the computer. The remote controller connection simulator only provides the joystick output signal, and the remote controller needs to be turned on. Flight parameters need to be set in the simulator software

Remote Control Power Management

1. The remote control is in the power-on state, and it will be detected that the user does not operate the joystick within 5 minutes, and a power saving alarm will be performed.
2. The power of the remote control is simulated. When the remote control displays a drop alarm and the battery indicator box is blank, please replace the battery in time.

Reset

Functions	How to Set Up
This function can be used to quickly restore to factory settings when user settings are confused.	This function can be used to quickly restore to factory settings when user settings are confused.

MODE2 / MODE1 Conversion

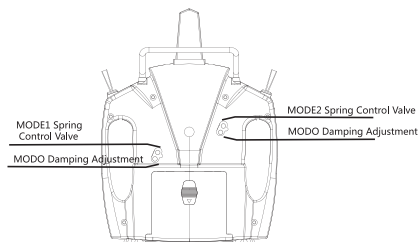| Functions	How to Set Up	
Convenient for users to switch according to flight habits. Electronic adjustment and structural adjustment are required to exchange between Asian and American hands.	1. Press and hold the MODE button to turn on the remote control. When the display is full and becomes MODE1 or MODE, release the MODE button. At this time, the remote control will issue a beep sound. You need to pull the corresponding throttle stick to the bottom to display. The screen returns to normal display, and the electronic conversion is OK. 2. Adjust the structure according to the following figure	Structure adjustment requires a Phillips screwdriver. Only MOE1 and MODE2 flight modes can be switched.

Structural Adjustment:

1. Use a Phillips screwdriver to loosen the current throttle rocker spring adjustment valve and damper adjustment to restore the elasticity of the current rocker.

2. Then lock the spring regulating valve on the other side, suppress the spring force, and lock the damping adjustment according to personal preference.

MODE1 Spring Control Valve

MODO Damping Adjustment

MODE2 Spring Control Valve

MODO Damping Adjustment

Calibrate The Remote Control Joystick

Functions	How to Set Up
Improve the error of the remote control and improve the accuracy of the control. The rocker must be calibrated after the potentiometer is replaced for more accurate control.	1. Rudder fine-tuning, right-click and turn on the remote control at the same time, the display is full and 123 beeps are released. Turn the trim button. 2 Hit the aileron, the lift stick, the throttle and the direction stick to the maximum and minimum, or draw a circle on the left and right sticks. Set the throttle stick to the middle position. 3 After completing the above actions, fine-tune the direction and dial to the right to exit the calibration. Click, pull the throttle stick to the lowest position, and the calibration is complete.

E160遥控器使用说明书

E160 remote control instruction manual

<table>
<tr><td colspan="2" align="center">警告</td></tr>
</table>

本遥控器支持固定翼 直升机 滑翔机等多种机型，具备模型参数调节功能，支持多机种储存，采用2.4GHZ通讯协议，兼容FUTABA（S-FHSS）通讯协议，具有遥控距离长 抗干扰能力强，纠错能力强等特点，该遥控器操作方便 功能简便，以下是该遥控器的详细介绍

<table>
<tr><td align="center">概述</td></tr>
</table>

*该遥控器采用4颗AA电池，严禁使用与产品不符合的电池及锂电池
*该遥控器不是玩具，14岁以下儿童不易操作，如果你不具备丰富的操作经验，
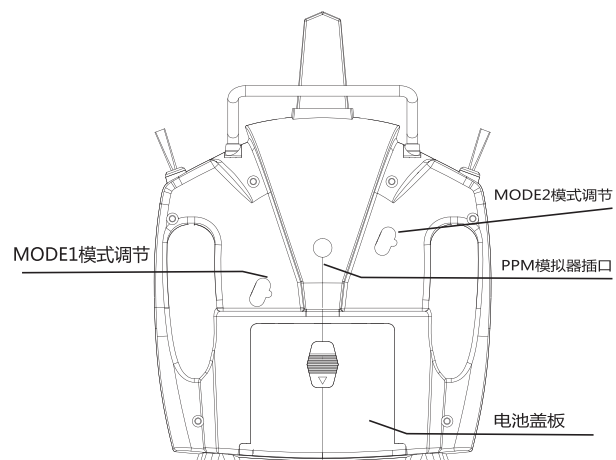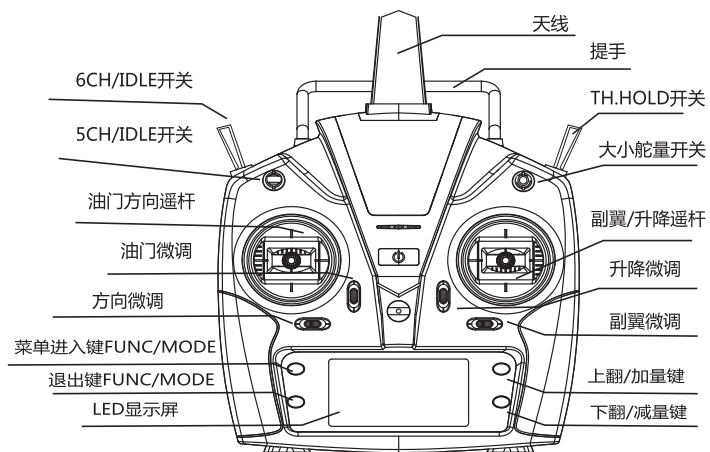*建议你在一位有丰富经验的人士指导下进行操作。厂家和经销商不对产品使用不当承担任何责任，使用前请务必认真阅读说明书。

<table>
<tr><td align="center">遥控器技术参数</td></tr>
</table>

电池型号 4颗1.5v AA电池（需另购），工作电压6-9V，工作电流 100-150MA，发射功率2+DBM

<table>
<tr><td align="center">目录</td></tr>
</table>

天线

提手

6CH/IDLE开关

5CH/IDLE开关

TH.HOLD开关

大小舵量开关

油门方向遥杆

副翼/升降遥杆

油门微调

升降微调

方向微调

菜单进入键FUNC/MODE

副翼微调

退出键FUNC/MODE

上翻/加量键

LED显示屏

下翻/减量键

MODE1模式调节

MODE2模式调节

PPM模拟器插口

电池盖板

本遥控器采用高亮、高清晰度、分段式LED显示屏作为用户界面，下图为显示屏全显界面

MODE1/MODE2

高级菜单　　　模型　　　初级菜单　模型模组　　　　　　　遥控器电量显示

通道指示

可调参类别

十字盘类别

通道反向标

微调状态　　　　　大小舵量指示　　　数字量化显示
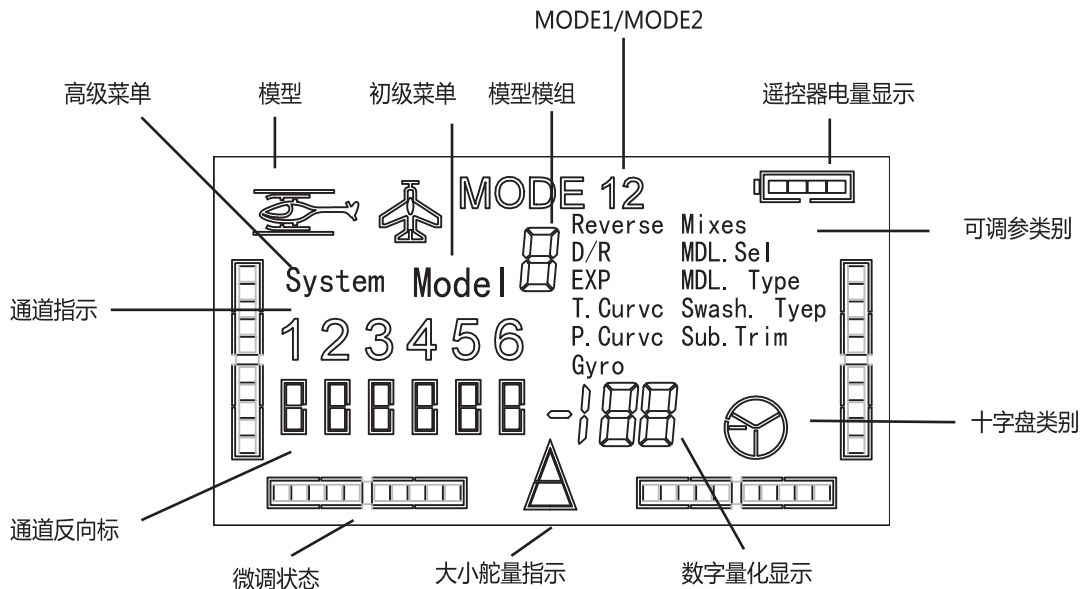
该遥控器设置参数均在上图内完成，整体菜单采用分层结构，层次分明，操作简便，整体LED显示分为：

1）开机基本显示，单线框对应通道表示区，用于参数设置时进行通道指示。

2）直升机模式显示

3）固定翼模式显示

将遥控器各个开关置于常态位置，（开关位置拨向遥控器后盖），打开遥控器进入待机状态，LED显示为当前模式 飞行参数及相关信息，可分类为固定翼调参 直升机调参及特殊功能。
遥控器

开关说明

功 能	
固定翼调参数	通道正反向设置	Reverse
	大小舵量设置	D/R
	EXP曲线设定	EXP
	油门曲线设定	T.Curvc
	Mixes 通道混控设定	Mixes
	飞行模组设定	MDL.Sel
	模型类别设定	MDL.Type
	舵机中点设定	Sub.Trim
直升机调参数	通道正反向设置	Reverse
	大小舵量设置	D/R
	EXP曲线设定	EXP
	油门曲线设定	T.Curvc
	螺距曲线设定	P.Curvc
	Gyro 陀螺仪设定	Gyro
	飞行模组设定	MDL.Sel
	模型类别设定	MDL.Type
	十字盘类别设定	Swash.Tyep
	舵机中点设定	Sub.Trim

特 殊 功 能 设 定
遥控器对码绑定
3D开关位置保护
油门位置保护
遥控器电源管理
模拟器功能
恢复出厂设定
MODE2/MODE1转换
校准遥控器摇杆

6通道襟翼

5通道起落架/Gyro

大小舵量开关

通道正反向设置

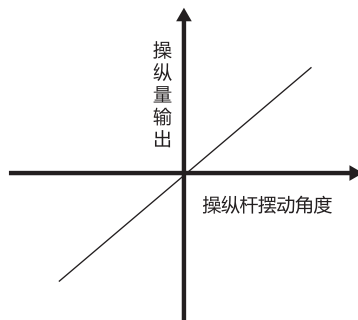| 特 殊 功 能 设 定	设 定 步 骤	设 定 步 骤
根据伺服器的安装位置，设定动作的正反向以适应操作需求。	1 开机状态 2 按MODE键一秒，滴声提示，显示屏Revese与123456闪动 3 再按MODE键来选择要调整的通道，对应通道数字闪动，Reverrse与其他通道数字停止闪动。 4 按上翻或下翻键进行反转图标，按MODE键确认设定并跳至下一通道，按END键退出设定。 123456　123456	正反向设置时，发射机输出反映当前设置状态，必须按确认键保存设定结果，建议用户在主马达不安装螺旋桨情况下进行设置，防止螺旋桨突然转动，照成伤害。

大小舵量设置

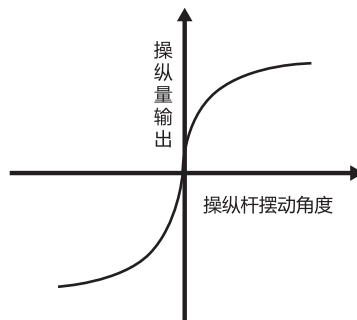| 特 殊 功 能 设 定	设 定 步 骤	设 定 步 骤
设置副翼 升降方向三个通道的大小舵量，操纵杆的上下 左右分别设置所需值，该项功能用来适应伺服器的行程或调节操纵手感。	1 开机状态 2 按MODE键一秒，滴声提示，显示屏Revese与123456闪动 3 连续按下翻键向下翻动，出现D/R与12 4闪动。 4 按MODE确定进入设置，显示屏1通道闪动，摇杆来选择要设定的通道，对应通道闪动，其它对应通道数字停止闪动。 5 通过上翻下翻键来加大或减少数值，相对应通道摇杆用来选择设定量归属。 6 按MODE键确定并保存，再按两下END键退出当前设置。	正反向设置时，发射机输出反映当前设置状态，必须按确认键保存设定结果，建议用户在主马达不安装螺旋桨情况下进行设置，防止螺旋桨突然转动，照成伤害。

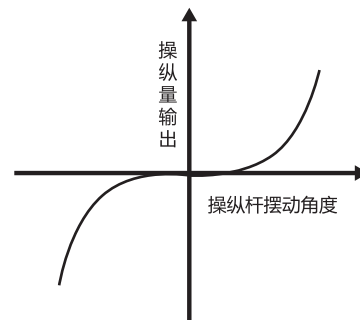| 特 殊 功 能 设 定	设 定 步 骤	说 明
为用户提供操纵摇杆曲线调节，改善操作手感，提供副翼 升降方向三个通道的正负值曲线调节。	1 开机状态 2 按MODE键一秒，滴声提示，显示屏Revese与123456闪动 3 连续按下翻键向下翻动，出现EXP闪动。 4 按MODE确定进入设置，显示屏1和量化数字模块闪动，持续按MODE键来选择设定通道。 5 通过上翻下翻键来加大或减少数值。 6 按MODE键确定保存设置，并跳到下一通道设定。 7 全部设置完成后按MODE键保存数据，再按两下END键退出当前设置。	摇杆曲线指数为正值，表示摇杆中间变化快两端变化慢，为负值时中间变化慢两端变化快，曲线指数设置值为-100%-+100%

下图描述曲线指数对操纵输出量的作用
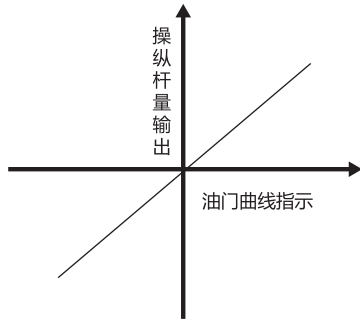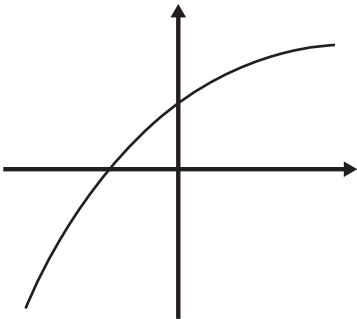

■ 操纵杆指数曲线值为0状态

■ 操纵杆指数曲线值为60状态

■ 操纵杆指数曲线值为-60状态

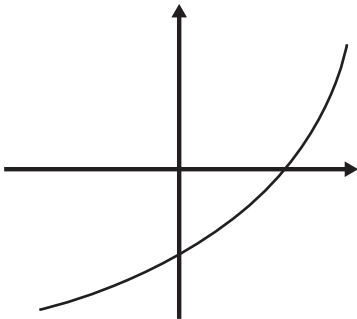| 特 殊 功 能 设 定	设 定 步 骤	说 明
为用户提供油门操纵杆线性调节设置，改善手感。	1 开机状态 2 按MODE键一秒，滴声提示，显示屏Revese与123456闪动 3 连续按下翻键向下翻动，显示屏出现T.Curc与12345闪动， 4 按MODE键进入出现1与量话数字模块闪动，2345 停止闪动。 5 通过上翻/下翻键设置当前的数值，上翻增加数值，下翻减少数值。 6 按确定键进行数据保存并跳到下一个位置。 7 设置完毕后按MODE键确认并按两下END键退出设置。	油门曲线1 2 3 4 5分别代表油门行程5个位置，默认值为0 25% 50% 75% 100% 设置输出最大量是100%，最小是0输出，1和5代表了油门行程最小和最大位置。请根据自身需要来设定油门行程。

下图是描述油门曲线指数对输出量的作用

操纵杆量输出

油门曲线指示

默认油门曲线指示

油门曲线指示分别1/0 2/40% 3/70% 4/80% 5/100%

油门曲线指示分别1/0% 2/15% 3/35% 4/60% 5/100%

特 殊 功 能 设 定	设 定 步 骤	说 明
为用户提供固定翼常用的三种混控模式。	1 开机状态 2 按MODE键一秒，滴声提示，显示屏Revese与123456闪动 3 连续按下翻键向下翻动，出现Mixes与1246闪动。 4 按下翻键进入混控模式选择依次选择1 6道混控 2 4通道混控和1 2通道 混控 。 5 选择好要混控的通道后按确定键进入，当前通道与量化模块闪动，预设量为100%。 6 设置好当前通道后按MODE键确认并跳至副通道设定。 7 待副通道设置完成后按MODE键确认，并按两下END键退出。	1 设定完成后通道显示区域会显示当前混控状态。 2 1 2代表三角翼混控 2 4代表V型尾翼混控 ， 1 6代表襟副翼混控 3　数据设置值-100%-+100%,负值代表动作方向与摇杆方向相反。

混 控 模 式	通 道 显 示	适 用 于
1	1 副 翼 通 道	三 角 翼 混 控
	2 升 降 通 道	
2	2 升 降 通 道	V 型 尾 翼 混 控
	4 方 向 通 道	
3	1 副 翼 通 道	襟 翼 副 翼 混 控
	6 襟 翼 通 道	

解 除 混 控 模 式

1 开机状态
2 按MODE键一秒，滴声提示，显示屏Revese与123456闪动
3 连续按下翻键向下翻动，出现Mixes与当前混控模式出现闪动。
4 按确定键进入，上翻键向上翻动至1 2 4 6闪动。
5 按MODE键确定并按END键退出。显示屏上无混控通道显示，解除混控。

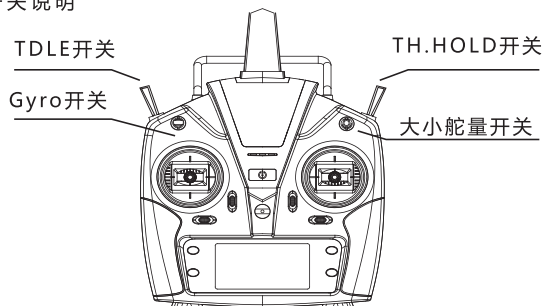| 功能描述	设定步骤
飞行模组设置	
通过设定，用户可以设定十款模型参数。	1 开机状态 2 按MODE键一秒，滴声提示，显示屏Revese与123456闪动 3 连续按下翻键向下翻动，出现MDL.Sel与Model0闪动。 4 按MOED键确认，MDL.Sel停止闪动，上翻键向上翻动设定模组 5 设定好模组后，按MOED键确认保存设置，并按两下END键退出设定

功能描述	设定步骤
模型选择	
便于用户设定不同模型	1 开机状态 2 按MODE键一秒，滴声提示，显示屏Revese与123456闪动 3 连续按下翻键向下翻动，出现MDL.Type与123456闪动。 4 按MOED键确认MDL.Type停止闪动，飞机图标闪动， 　上翻/下翻键切换直升机或固定翼图标 5 设定好模组后，按MOED键确认保存设置，并按END键退出设定

舵机中点设置

特 殊 功 能 设 定	设 定 步 骤	说 明
用于调整舵机摇臂安装误差，便于用户调试，而且不影响外部微调正常使用	1 开机状态 2 按MODE键一秒，滴声提示，显示屏Revese与123456闪动 3 连续按下翻键向上翻动，出现Sub.Trim与飞机图案闪动。 4 按MOED键确认Sub.Trim停止闪动，通道1数字量化模块闪动，持续按MODE键来选择要 　设定的通道（1- 2 -4 -5 -6循环） 5 选择好要设定的通道后，使用上翻键加量 下翻键减量， 6设定好模组后，按MOED键确认保存设置，并按两下END键退出设定	设定值分别为-100-+100％，两边最大设定量相当于摇杆行程的10％，设定时要和飞机绑定好。具体参数依照飞机实际需求来设定。

直升机设定模式

开关说明

TDLE开关

Gyro开关

TH.HOLD开关

大小舵量开关

通道正反向设置

功 能 描 述	设 定 步 骤	说 明
根据伺服器的安装位置，设定动作的正反向以适应操作需求	1，开机状态 2，按MODE键一秒，滴声提示，显示屏Revese与123456闪动 3，再按MODE键来选择要调整的通道，对应通道数字闪动，Reverrse与其他通道数字停止闪动。 4，按上翻或下翻键进行反转图标，按MODE键确认设定并跳至下一通道，按END键退出设定 123456 123456	正反向设置时，发射机输出反映当前设置状态，必须按确认键保存设定结果，建议用户在主马达不安装螺旋桨情况下进行设置，防止螺旋桨突然转动，照成伤害。

大小舵量设置

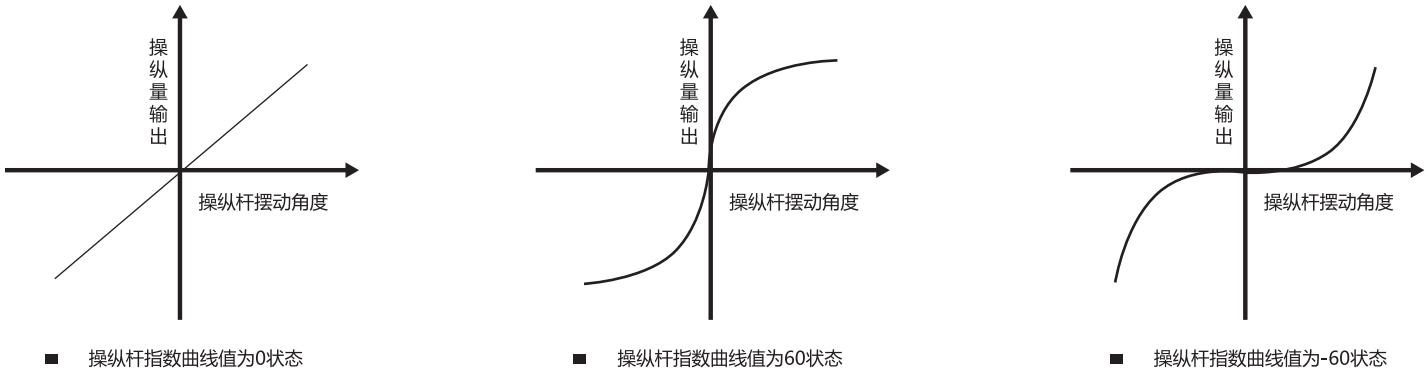| 功 能 描 述	设 定 步 骤	说 明
设置副翼升降方向三个通道的大小舵量，操纵杆的上下左右分别设置所需值，该项功能用来适应伺服器的行程或调节操纵手感。	1 开机状态 2 按MODE键一秒，滴声提示，显示屏Revese与123456闪动 3 连续按下翻键向下翻动，出现D/R与12 4闪动。 4 按MODE确定进入设置，显示屏1通道闪动，摇杆来选择要设定的通道，对应通道闪动，其它对应通道数字停止闪动。 5 通过上翻下翻键来加大或减少数值，相对应通道摇杆用来选择设定量归属。 6 按MODE键确定并保存，再按两下END键退出当前设置。	大小舵量开关位置决定设定的是大舵量还是小舵量。选择通道时，显示数值为当前参数，摇杆来选择要设定的通道，按MODE确认后还用来设定的方向选择。大小舵量设置范围-125-+125%，负值表示摇杆动作方向与摆动的方向相反。

E曲线（EXP)设置

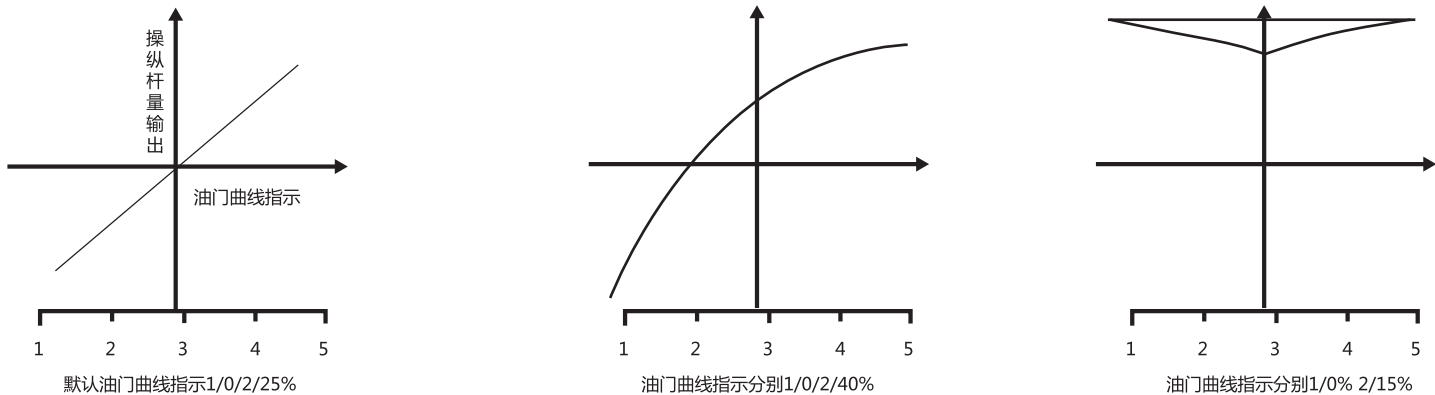| 特 殊 功 能 设 定	设 定 步 骤	说 明
为用户提供操纵摇杆曲线调节，改善操作手感，提供副翼　升降方向三个通道的正负值曲线调节。	1 开机状态 2 按MODE键一秒，滴声提示，显示屏Revese与123456闪动 3 连续按下翻键向下翻动，出现EXP闪动。 4 按MODE确定进入设置，显示屏1和量化数字模块闪动，持续按MODE键来选择设定通道。 5 通过上翻下翻键来加大或减少数值。 6 按MODE键确定保存设置，并跳到下一通道设定。 7 全部设置完成后按MODE键保存数据，再按两下END键退出当前设置。	摇杆曲线指数为正值，表示摇杆中间变化快两端变化慢，为负值时中间变化慢两端变化快，曲线指数设置值为-100%-+100%

下图描述曲线指数对操纵输出量的作用

操纵量输出 / 操纵杆摆动角度

操纵量输出 / 操纵杆摆动角度

操纵量输出 / 操纵杆摆动角度

- 操纵杆指数曲线值为0状态

- 操纵杆指数曲线值为60状态

- 操纵杆指数曲线值为-60状态

功 能 描 述	设 定 步 骤	说 明
为用户提供油门操纵杆线性调节设置，改善手感。油门曲线分5点调整并分一般油门曲线和3D油门曲线	1 开机状态 2 按MODE键一秒，滴声提示，显示屏Revese与123456闪动 3 连续按下翻键向下翻动，显示屏出现T.Curc与12345闪动， 4 按MODE键进入出现1与量话数字模块闪动，2345 停止闪动。 5 通过上翻/下翻键设置当前的数值，上翻增加数值，下翻减少数值。 6 按确定键进行数据保存并跳到下一个位置。 7 打开3D IDLE开关（拨动到前盖方向），同上设置3D油门曲线的5个点 8 设置完毕后按MODE键确认并按两下END键退出设置。	油门曲线1 2 3 4 5分别代表油门行程5个位置，一般油门曲线默认值为0 25% 50% 75% 100% 设置输出最大量100%3D IDLE开关打开，设置3D油门曲线，默认值85% 85% 80% 85% 85%，请根据自身需要来设定油门行程。

下图是默认油门曲线和设置过的一般油门曲线及3D油门曲线3种曲线指数对操纵输出量的作用

默认油门曲线指示1/0/2/25%

油门曲线指示分别1/0/2/40%

油门曲线指示分别1/0% 2/15%

螺距曲线设置

功 能 描 述	设 定 步 骤	说 明
根据需求，分段设置提供不同的螺距参数设置。分5个点设置及一般螺距和3D螺距曲线设定	1 开机状态 2 按MODE键一秒，滴声提示，显示屏Revese与123456闪动 3 连续按下翻键向下翻动，显示屏出现P.Curc与12345闪动， 4 按MODE键进入出现1与量话数字模块闪动，2345 停止闪动。 5 通过上翻/下翻键设置当前的数值，上翻增加数值，下翻减少数值。 6 按确定键进行数据保存并跳到下一个位置。 7 打开3D IDLE开关（拨动到前盖方向），同上设置3D螺距曲线的5个点 8 设置完毕后按MODE键确认并按两下END键退出设置。	曲线设定里面1 2 3 4 5个点分别对应油门行程的5个位置默认40%　45% 50% 60% 70%,3D IDLE开关用来分别一般螺距曲线和3D螺距曲线。设置曲线时必须打开TH,HOLD开关或拔开马达插头，防止桨叶突然转动照成伤害。

陀螺仪感度设置

功 能 描 述	设 定 步 骤	说 明
为用户提供直升机感度设置，分锁定感度和非锁定感度，陀螺仪开关控制区分。	1 开机状态 2 按MODE键一秒，滴声提示，显示屏Revese与123456闪动 3 连续按下翻键向下翻动，出现Gyro与量化模块闪动。 4 按MODE确定进入设置，Gyro停止闪动，量化数字模块闪动，通过上翻下翻键来加大或减少数值。 5 全部设置完成后按MODE键保存数据，再按两下END键退出当前设置。	开关区分感度设置，开关上默认为6G锁定感度 默认值75%，开关下默认非锁定感度，默认值25%

感度大小与锁尾或非锁尾状态如下图所示：
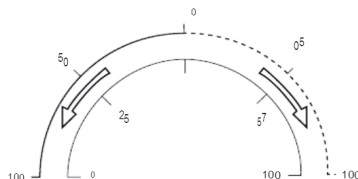
途中细实线为设定数值，粗虚线与粗实线部分为对应的感度值。粗虚线部分表示锁定杆感度。粗实线部分表示费锁定模式感度。

飞行模组设置

功 能 描 述	设 定 步 骤
通过设定，用户可以设定十款模型参数。	1 开机状态 2 按MODE键一秒，滴声提示，显示屏Revese与123456闪动 3 连续按下翻键向下翻动，出现MDL.Sel与Model0闪动。 4 按MOED键确认，MDL.Sel停止闪动，上翻键向上翻动设定模组 5 设定好模组后，按MOED键确认保存设置，并按两下END键退出设定

模型选择

功 能 描 述	设 定 步 骤
通过设定，用户可以设定十款模型参数。	1 开机状态 2 按MODE键一秒，滴声提示，显示屏Revese与123456闪动 3 连续按下翻键向下翻动，出现MDL.Type与123456闪动。 4 按MOED键确认MDL.Type停止闪动，飞机图标闪动，上翻/下翻键切换直升机或固定翼图标 5 设定好模组后，按MOED键确认保存设置，并按END键退出设定

舵机中点设置

功 能 描 述	设 定 步 骤	说 明
用于调整舵机摇臂安装误差，便于用户调试 ，而且不影响外部微调正常使用	1 开机状态 2 按MODE键一秒，滴声提示，显示屏Revese与123456闪动 3 连续按下翻键向下翻动，出现Sub.Trim与飞机图案闪动。 4 按MOED键确认Sub.Trim停止闪动，通道1数字量化模块闪动，持续按MODE键来选择要设定的通道（1- 2 -4 -5 -6循环） 5 选择好要设定的通道后，使用上翻键加量 下翻键减量， 6设定好模组后，按MOED键确认保存设置，并按两下END键退出设定	设定值分别-100-+100%，两边最大设定量相当于摇杆行程的10%，设定时要和飞机绑定好。具体参数依照飞机实际需求来设定。

十字盘设定（直升机模式具有功能）

功 能 描 述	设 定 步 骤
为用户提供2种不同CCPM倾斜盘混控模式	1 开机状态 2 按MODE键一秒，滴声提示，显示屏Revese与123456闪动 3 连续按下翻键向下翻动，出现Swash.Tyep与　闪动 4 按MOED键确认MDL.Type停止闪动，十字盘　图标闪动，上翻/下翻键切换CCPM90°　十字盘或120°　十字盘 5 设定好十字盘后，按MOED键确认保存设置，并按END键退出设定

特殊功能设定-遥控器对码绑定

功 能 描 述	设 定 步 骤
用于遥控器和接收机之间通讯联系，对码要求在0.5米内进行，并且四周没有FUTABA2.4GHZ　S-FHSS通讯协议遥控器开启的环境下进行对码绑定	1 开启遥控器，确认油门摇杆在最下位置，所有开关在OFF位置 2 给接收机上电，接收机电源指示灯长亮 3 轻触接收机对码键1秒，待红灯熄灭，进入对码 4 待接收红灯与蓝灯长亮，对码绑定成功

3D开关位置保护

功 能 描 述	设 定 步 骤
使用者操纵不当给予提示	开启遥控器时，3D开关未在OFF（指向后盖）位置，遥控器发出滴滴声提示,请将遥控器开关拨动到正确位置

油门位置保护

功 能 描 述	设 定 步 骤
使用者操纵不当给予提示	开启遥控器时，3D开关未在OFF（指向后盖）位置，遥控器发出滴滴声提示，请将遥控器开关拨动到正确位置

模拟器功能

功 能 描 述	设 定 步 骤	说 明
为用户提供更多方式联系，通过遥控器PPM输出信号，在模拟器上练习飞行	1 打开遥控器 2 使用3.5mm专用音频线插入遥控器PPM插口，另一端连接加密狗，并将加密狗连接电脑。 3 打开模拟软件设置参数后即可飞行	电脑上需安装凤凰模拟器4.0以上版。遥控器连接模拟器只提供摇杆输出信号，遥控器需开启。飞行参数需在模拟器软件内进行设置

遥控器电源管理

1 遥控器在开机状态，检测到用户在5分钟时间内没有操纵摇杆会进行节电报警 嘀嘀嘀声提示，提示用户关闭遥控器
2 遥控器电量采用模拟显示，当遥控器出现滴滴报警及电池指示框显示空白，请及时更换电池。

恢复出厂设置

功 能 描 述	设 定 步 骤
用户设置参数混乱时可通过该功能快速恢复到出厂设置	遥控器关机状态下。长按END键同时开机，至到遥控器出现嘀嘀嘀三声响，才能松开END按键

校准遥控器摇杆

功 能 描 述	设 定 步 骤
改善遥控器出现误差，提升操纵精度，更换电位器后必须校准摇杆，控制更精确	1 方向微调右拨同时打开遥控器，显示屏满显并发出123 滴滴音后松开微调按键。 2 依次将副翼与升降摇杆 油门与方向摇杆打到最大和最小，或左右摇杆画圆。将油门摇杆放到中间位置。 3 完成上述动作后，方向微调再向右拨退出校准，遥控器发出快速嘀嘀嘀声，将油门摇杆拉到最下位置，校准完成。

MODE2/MODE1转换

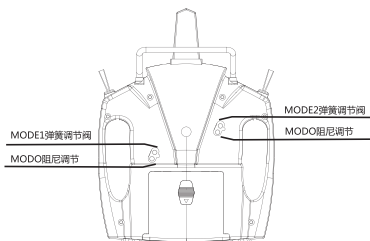| 功 能 描 述	设 定 步 骤	
方便用户根据飞行习惯进行转换，需电子调节和结构调节配合，进行亚洲手和美国手的互换	1 长按MODE键打开遥控器，待显示屏满显变为MODE1或MODE后松开MODE键，此时遥控器会发出滴滴提示声，需将对应的油门摇杆拉到最下，显示屏恢复正常显示，电子转换OK。 2 根据下面图示进行结构调节	结构调节需自备十字螺丝刀只支持MOE1和MODE2飞行模式相互转换。

结 构 调 整 ：

1，使用十字螺丝刀松开当前油门摇杆弹簧调解阀和阻尼调节，使当前摇杆恢复弹性。

2，再将另一边弹簧调节阀锁紧，压制弹簧弹力，根据个人手感喜好锁紧阻尼调节。

MODE2弹簧调节阀
MODE1弹簧调节阀
MODO阻尼调节
MODO阻尼调节