

USM-GT3X

DIGITAL PROPORTIONAL RADIO CONTROL SYSTEM

INSTRUCTION MANUAL 用户手册



AFHDS 2A
AUTOMATIC FREQUENCY
HOPPING DIGITAL SYSTEM

WARNING:
This product is suitable for
15 years old and above
本产品不适合15岁以下儿童使用



Special symbols 特殊标志

Please pay attention to the following symbols when they appear in the manual and read carefully.

当以下标志出现在说明书的时候请注意并且仔细阅读。



Danger:

Not following these instructions may expose the user to serious injuries or death.

如果使用者不按照说明方法操作，有可能导致使用者严重受伤，甚至致命的危险。



Warning:

Not following these instructions may expose the user to serious injuries.

如果使用者不按照说明方法操作，有可能导致使用者严重受伤。



Attention:

Not following these instructions may expose the user to minor injuries and even to serious injuries.

如果使用者不按照说明方法操作，有可能导致使用者外伤，甚至严重受伤。



Prohibited
禁止



Mandatory
强制

Safety guide 安全指导



Do not fly at night or in bad weather like rain or thunderstorm as this can cause erratic operation or loss of control.

请不要在夜晚或者雷雨天使用此产品，因为恶劣的天气环境有可能导致遥控设备失控。



Make sure moving direction of all motors be same with the operating direction. If not, please adjust direction first.

操控时，请先确认模型所有舵机的动作方向与操控方向一致。

如果不一致，请调整好正确的方向。



The shutdown sequence must be to first disconnect the receiver battery then to switch off the transmitter, if the transmitter is switched off while the receiver is still powered, it may lead to uncontrolled movement or engine start and may cause an accident.

关闭时，请务必先关闭接收机电源，然后关闭发射机，如果关闭发射机电源时接收机仍然在工作，将有可能导致遥控设备失控或者引擎继续工作而引发事故。



The 2.4G R/C system will affect the plane or the car nearby after you turn on the transmitter.

特别要注意，如果附近有汽车正在运行或飞机正在飞行，开机后2.4 GHz RC系统可能会影响到他们。

Do not operate outdoors on rainy days, run through puddles of water or use when visibility is limited. Should any type of moisture (water or snow) enter any component of the system, erratic operation and loss of control may occur.



不要在户外雨天，有水的地方或当能见度有限的时候使用。
可能水分(水或雪)会进入到系统内部，不稳定的运行和失控可能发生。

Do not operate in the following places:
Near other sites where other radio control activity may occur,
Near people or roads,
On any pond when passenger boats are present,
Near high tension power lines or communication broadcasting antennas,
Interference could cause loss of control,
Improper installation of your Radio Control System in your model could result in serious injury.



不要操作在以下的地方：
基站附近或其他无线电活跃的地方，人多的地方或道路附近，
有客船的水域，高压电线或通信广播天线附近，干扰可能导致失控，
安装不正确，无线电控制系统可能导致模型发生严重的伤害。

Do not operate this R/C system when you are tired, not feeling well or under the influence of alcohol or drugs. Your judgment is impaired and could result in a dangerous situation that may cause serious injury to yourself as well as others.



当你感到疲倦，饮酒或吸毒后，不舒服的影响下，不要操作这个R / C系统。
判断力下降，而且可能发生危险的情况下，对自己或他人可能造成严重的伤害。

Do not touch the engine, motor, speed control or any part of the model that will generate heat while the model is operating or immediately after its use. These parts may be very hot and can cause serious burns.



当模型操作或使用后，请勿触摸发动机、电机、定速设定或任何可能发热的部分，
这些部分可能非常热，会造成严重的烧伤。

Please have an overall check about the model before any operation.
Any problem in radio control system or improper installation may cause out of control.
Simple distance test methods:
One hold the model, and the other one carry the transmitter to a proper place to check the servo system condition.
Please stop operation if any exceptional case occurs.
Please check the model memory to make sure the matching is right.

总是在操作模型之前进行全面的检查。
无线电控制系统出现问题以及不正确安装，都有可能导致模型失控，
简单的距离测试方法：一个人把持模型另一个人持发射机走开，检查该伺服系统运转情况。
测试时要注意到若有异常出现，请不要操作模型。
也检查模型的记忆，以确保模型的匹配是适当的。



Turn on the power, please check if the throttle neutral position is in its lowest position while turning on the transmitter every time. When making adjustments to the model, do so with the engine not running or the motor disconnected, you may unexpectedly lose control and create a dangerous situation.



开机时，每次都要检查发射器的油门中位是否是最低。
当发射机作出调整时，可能模型的引擎没有运行或电机没有连接，可能会发生失控或意外事故的情况。

System Characteristic  **系统特征**

This radio system works in the frequency range of 2.405 to 2.475GHz. This band has been divided into 142 independent channels. Each radio system uses 16 different channels and 160 different types of hopping algorithm. By using various switch-on times, hopping scheme and channel frequencies, the system can guarantee a jamming free radio transmission.

此系统工作频率范围是2.405到2.475GHz。整个波段被分为142个独立频点。每套遥控系统使用16个不同频点和160种不同的跳频算法。通过开机时间不同，跳频规律不同和使用不同的频点，遥控系统能避免干扰传播信号。



This radio system uses a high gain and high quality multi directional antenna. It covers the whole frequency band. Associated with a high sensitivity receiver, this radio system guarantees a jamming free long range radio transmission.

此系统采用高质量的增益天线，覆盖整个波段带宽。配合高灵敏度接收机，系统能有效的避免远距离传播信号的干扰。



Each transmitter has a unique ID. When binding with a receiver, the receiver saves that unique ID and can accept only data from that unique transmitter. This avoids picking another transmitter signal and dramatically increases interference immunity and safety.

每台发射机有一个唯一的ID码，当和接收机对码之后，接收机保存这个唯一的ID码并且只接受从这个ID码发射机发出的信号。这样可以避免接收到别的发射机信号，大大增强抗干扰能力和安全性。



This radio system uses low power electronic components and a very sensitive receiver chip. The RF modulation uses intermittent signal transmission thus reducing even more power consumption. Comparatively, this radio system uses only a tenth of the power of a standard FM system.

此系统使用低功率电子元件和高灵敏度接收机芯片。无线电频率模块采用间歇性信号传播，因此大大降低了发射功率。比较而言，此系统功耗仅为FM版本的十分之一。



This system uses the two-way communication, which could control the working state of current model better and make the operation more enjoyable and safer than before.

此系统采用信息回传功能，此功能更好的掌握当前模型的工作状态。从而增添了操控乐趣以及更加安全控制模型。

TRANSMITTER

- ① 2.4G ANT ② STEERING WHEEL ③ CH3 ④ BAT BOX
⑤ D/R ⑥ Ch3 TRIM ⑦ POWER



Ⓐ THROTTLE TRIGGER

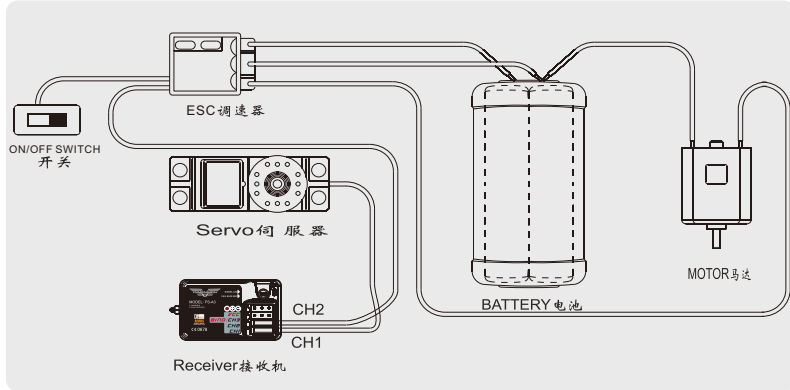


- Ⓐ LCD
- Ⓑ BACK
- Ⓒ BIND
- Ⓓ END
- Ⓔ ENTER (DOWN/UP)
- Ⓕ ST TRIM (RIGHT)
- Ⓖ ST TRIM (LEFT)
- Ⓗ TH TRIM (UP)
- Ⓘ TH TRIM (DOWN)

Operation instruction 接收机操作说明

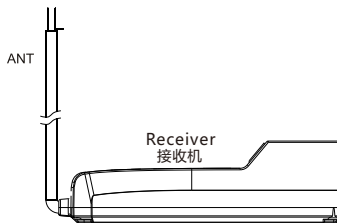
Receiver and servo connections 接收机与伺服器连接

带马达模型的安装连接



注意：为保证良好的遥控距离，请将接收机天线与飞机机身垂直放置并远离金属物体。

Note: To ensure good remote control distance, please set the receiver's antenna on the vehicle vertically and away from metal objects.



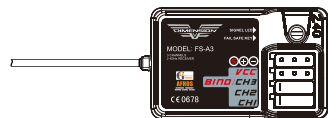
Connector instruction 接口说明

CH1-CH6：表示接收机的相应通道；

BAT：表示用于对码和输入电源的通道；

CH1-CH6: represents corresponding channels.

BAT: represents the binding channel and power supply channel.



Transmitter specifications

Transmitter specifications:

- Number of channels: 3
 Channel resolution: 1024 steps
 Power supply: 6V (1.5 V AA x 4)
 Low voltage warning: <4.2. Red LED will flash
 4.2-4.5V Red
 4.6-5V Orange
 5-6V Green
 <3.2 V Buzzer goes off to alarm
- 2.4 GHz type: AFHDS.

Antenna length: 26mm*2 (dual antenna)
 Color: Black
 Size: 174*89*190mm
 Weight: 335g
 Certification: CE, FCC

机种参数

1. 通道个数：3
2. 数据分辨率：1024级
3. 输入电压：6V (1.5 V AA x 4)
4. 低电压报警：低于4.2V 红色LED灯闪，
 4.2-4.5V 红色，
 4.6-5V 橙色，
 5-6V 绿色，
 低于3.2V 蜂鸣器报警
5. 2.4G模式：AFHDS 第一代自动跳频数字系
 统
6. 天线长度：26毫米*2(双天线)
7. 外观颜色：黑色
8. 外形尺寸：174*89*190毫米
9. 整机重量：335克
10. 安规认证：CE, FCC

发射机参数



AFHDS
 AUTOMATIC FREQUENCY
 HOPPING DIGITAL SYSTEM

MODELS: USM-GT3X



Receiver specifications

MODEL: FS-A3

SPECIFICATIONS :

Number of channels: 3
 RF receiver sensitivity: -105dBm;
 Modulation: GFSK
 System type: AFHDS
 Channel resolution: 1024 steps
 Bind port: yes
 Power port: yes(VCC)
 Power: 4.0-6.5VDC
 Weight: 13g
 Antenna length: 26mm
 Size: 45*23*9mm
 Color: transparent grey
 Certification: CE, FCC.

接收机参数

机种参数：

1. 通道个数：6个通道
2. 接收灵敏度：-105dBm
3. 调制方式：GFSK
4. 系统模式：第二代自动调频
 数字系统
5. 数据分辨率：1024级
6. 对码接口：有
7. 电源接口：有(VCC)
8. 电源标准：4.0-6.5V DC
9. 整机重量：13克
10. 天线长度：26毫米
11. 外型尺寸：45*23*9毫米
12. 外观颜色：透明灰色
13. 安规认证：CE, FCC.



Binding 对码

The supplied transmitter and receiver are already bound at production time. If you are using another transmitter or receiver, you need to bind them before use:

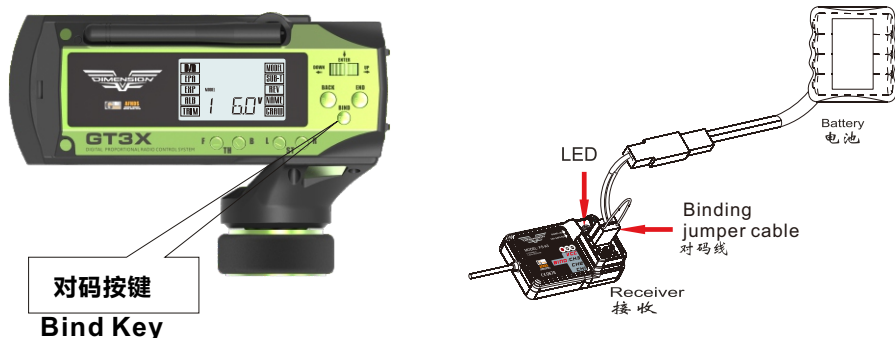
1. Install batteries in the transmitter and turn it off.
2. Connect the binding jumper cable to the battery port on the receiver.
3. Connect the battery of the receiver to any channel on the receiver. The red LED on the receiver will blink, indicating it is in binding mode.
4. Press and hold the bind key on the transmitter and turn it on.
5. The red LED of the receiver will stop blinking, indicating the binding process is completed.
6. Disconnect the receiver battery.
7. Turn off and turn on the transmitter.
8. Connect all the servos to the receiver and connect its battery.
9. Check if all servos are working properly.
10. If anything is not working as expected, restart this procedure from the beginning.

所有遥控产品在出厂的时候都已经对好码，您无需再次对码。如果您需要和其他发射机或接收机对码，您必须在使用前按照以下方法对码：

1. 将电池装入发射机然后关闭发射机。
2. 将对码线插到接收机电池通道插口。
3. 将接收机电池连接至接收机任意通道，接收机红色指示灯闪烁表明处于对码状态。
4. 按住发射机对码按键不松手，同时打开发射机。
5. 接收机红色指示灯停止闪烁表明对码成功。
6. 断开接收机电源。
7. 关闭发射机电源。
8. 将所有舵机连接至接收机，然后就将电池连接到接收机。
9. 检查是否所有的舵机按照要求工作正常。
10. 如果对码失败，请按以上步骤从头再来。

Note: If transmitter or receiver enters into binding state by operation mistake, the transmitter or receiver will not function properly. Restarting the transmitter can return to normal, if not, you will need to rebind the transmitter and receiver again.

注意：配对好的发射机与接收机，当发射机或接收机因误操作而进入对码状态后，会出现不能遥控的现象，一般情况下，关闭电源重开机即可恢复正常，倘若还是不行，则需要重新对码。



LCD FUNCTION EXPLANATION

LCD DISPLAY

**BUTTON FUNCTION:**

Turn the "ENTER" button counterclockwise: decrease the rate

Turn the "ENTER" button clockwise: increase the rate

Press "ENTER" button: select the menu

Press "BACK" button: return to the menu

Press "END" button: end programming

按键定义:

左旋: 逆时针旋转 (做菜单选择及数据减);

右旋: 顺时针旋转 (做菜单选择及数据加);

确认: 确认按键 (做菜单选择确定);

返回: 返回按键 (菜单返回);

END: (结束某一项功能编辑的操作键)。

OPENING SCREEN

Show current model number and user name

Turn the "ENTER" button, the screen will show the current battery voltage and selected model number

显示当前编号及机种名;

在此画面下按左右旋转键, 可显示如下画面 (显示当前电池电压及MODEL编号);



When the battery voltage is lower than 4.2V, the screen will start blinking along with a buzzer sound warning.

在此界面下, 如果电压低于4.2V, 则会出现如下画面:

此时所显示的电压值会闪烁, 同时发出报警声。



MODEL **Function :**

The radio system has the ability to store ten model memories (USM0-USM9), each model memory can be setup individually to match up with different models.

Parameter:

The initial model No. is Model "1".

"USM" is for the name of model.

Operation:

Press the "ENTER" button and turn to the "MODEL" menu. Press the "ENTER" button to enter the "MODEL" menu. There are a total of 10 model memories from 0-9. Select the model by turning the "ENTER" button, then press the "ENTER" button to save and return to the menu screen. Press the "BACK" button and return to the initial menu at any condition.

功能说明：

此发射机 (USM-GT3X) 可存放10组模式 (USM0-USM9) ,每组都可以单独设定, 以适应不同的机型。

参数说明：

MODEL : 机种编号 (工厂预设定值为MODEL 1) ;

ACB : 机种名称 (工厂预设定值为USM)

操作方法：

在开机菜单下通过“确认”键进入菜单选择, 通过“左右旋转”键进行model菜单选择, 再按“确认”键进入此菜单的操作 (“此时” 8 “会闪烁”), 然后按“左右旋转”键进行MODEL选择 (共10组0-9) 。编辑完成后按“确认”键, 结束此菜单的编辑, 返回并进入菜单选择状态。

在任何状态下按“返回”键进入开机画面。

SUB-T

**Function:**

This function allows the user to sub trim the steering "ST", throttle "TH", or auxillary "AUX" channels.

Parameter:

CHANNEL: channel number, from ST channel to AUX channel

功能说明：

记忆微调功能可分别调节3个通道舵机的中位，当舵机调节不能满足需要时，该功能的调节作用就非常明显。工厂预设值为00%；AUX 正负百分比（通道CH3微调），调整量为-100%-00%-100%，工厂预设值为00%。

ST positive percentage	the range of adjustment	factory setting
R	00%-100%	00%
L	-100%-00%	00%
TH positive percentage	the range of adjustment	factory setting
F	00%-100%	00%
B	-100%-00%	00%
UX positive and negative percentage	the range of adjustment	factory setting
Ch3 trim	-100-00%-100%	00%

Operation:

Press the "ENTER" button and turn to the "SUB-T" menu. Press the "ENTER" button to enter the "SUB-T" menu. You now have the option of adjusting "ST", "TH", or "AUX" by turning the "ENTER" button. Press the "END" button to select desired channel, turn the "ENTER" button to make adjustments to channel trim, press the "END" button to finish the setting. The rest can be done in the same way. After finishing the setting of these channels, press the "ENTER" button to save and return to the menu screen. Press the "BACK" button and return to the initial menu at any condition.

操作方法：

在开机菜单下通过“确认”键进入菜单，通过“左右旋转”键进行SUB-T菜单选择，再按确认键进入此菜单的操作（此时ST字符合闪烁），然后通过“左右旋转”键进行通道ST到通道AUX的选择，选好要变更的通道后，按“END”键，此时两个字符会闪烁，在此状态下通过按“左右旋转”键进行-100%-00%-100%设定调整，完成后按“END”键切换通道的设定，此时ST会闪烁。以此类推，对三个通道进行设定。

功能说明：

此功能是对发射机存放的机种进行名字的编写（使用三个字符）。以方便记忆及调用，可使用的字符为：0123456789 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z.

REV

**Function:**

This function reverses the operating direction of the channels: steering, throttle, and channel 3.

Parameter:

CHANNEL: channel number, ST, TH, AUX

REV: reverse

NOR: normal

Operation:

Press the "ENTER" button and turn to the "REV" menu. Press the "ENTER" button to enter the "REV" menu. The channel function will be blinking. Select the channel by turning the "ENTER" button. Then press the "END" button (now the "REV" or "NOR" will be blinking). Turn the "ENTER" button to select "REV" or "NOR". After this, press the "END" button to finish the setting. The rest can be done in the same way. After finishing the setting of these channels press the "ENTER" button to save and return to the menu screen. Press the "Back" button to return to the opening screen.

功能说明：

此功能是对三个输出通道做正反向输出的设定，以适应不同机种、不同伺服器规格的要求。

参数说明：

CHANNEL：通道编号，通道ST到通道AUX。

NOR：正向输出（工厂预设值为NOR）。

REV：反向输出。

操作方法：

在开机菜单下通过“确认”键进入菜单，通过左右旋转键进行REV菜单选择，再按确认键进入此菜单的操作（此时“ST”字符会闪烁），然后通过左右旋转键进行通道ST到通道AUX的选择，选好要变更的通道后按“END”键，此时三个字符（REV或NOR）会闪烁，在此状态下按左右旋转键进行REV与NOR的设定。完成后按“END”键可进入第二个通道的设定。依类推对三个通道都可进行设定。

编辑完成后按“确认”键返回并进入菜单选择状态。

在任何状态下按“返回”键进入开机画面。

NAME **Function:**

This function allows you to assign a user name (three characters) to each model memory.

Parameter:

MODEL NO: Model number.

"USM": User name

Operation:

Press the "ENTER" button and turn to the "NAME" menu. Press the "ENTER" button to enter the "NAME" menu. The first letter will be blinking. Turn the "ENTER" button to select letter.

Press the "END" button to move between the three letters. Press the "ENTER" button to save and return to the menu screen. Press the "Back" button to return to the opening screen.

功能说明：

此功能是对发射机存放的机种进行名字的编写（使用三个字符）。以方便记忆及调用，可使用的字符为：0123456789 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z。

参数说明：

MODEL NO: 机种编号。

ACB: 机种名称。

操作方法：

在开机菜单下通过按“确认”键进入菜单，通过“左右旋转”键进行NAME菜单选择，再按确认键进入此菜单的操作（此时第一字符“U”会闪烁）。然后通过“左右旋转”键进行字符的编写。此时如需对第二个字符进行编写，先按“END”键此时第二个字符会闪烁，并进入可编辑状态。依类推对三个字符进行编辑。连续按“END”则在三个字符中来回切换。

编辑完成后按“确认”键返回并进入菜单选择状态。

在任何状态下按“返回”键进入开机画面。

CRAW

**Function:**

This function allows the usage of 4 wheel steering for specifically for crawling or other vehicles that require mixing.

Parameter:

There are 4 different modes to control the composition of the direction.

Model A: channel 1 control Model A direction.

Model B: channel 1 control Model B direction, reversed control.

Model C: channel 1 control Model A direction, channel 3 control model B direction, channel 3 replicates channel 1 data.

Model D: channel 1 control Model A, channel 3 control model B, channel 3 replicates channel 1 data in reverse.

Operation:

Press the "ENTER" button and turn to the "CRAW" menu. Press "ENTER" button to enter the "CRAW" menu. Turn the "ENTER" button to select desired mode A, B, C, or D. Press the "ENTER" button to save and return to the menu screen. Press the "Back" button to return to the opening screen.

功能说明：

此功能可选择四种方向模式。

参数说明：

4个不同的模式组成方向控制

MODEL A：1通道控制MODEL A方向。

MODEL B：1通道控制MODEL B方向，且此通道是反向的。

MODEL C：1通道控制MODEL A方向，3通道控制MODEL B方向，3通道复制了1通道的数据

MODEL D：1通道控制MODEL A方向，3通道控制MODEL B方向，3通道反向复制了1通道的数据。

操作方法：在开机菜单下通过“确认”键进入菜单，通过“左右旋转”键进行CRAW菜单选择，再按确认键进入此菜单的操作（此时A字符会闪烁），然后通过“左右旋转”键进行MODEL A到MODEL D的选择，选好要变更的模式后，改为按确认键保存设置
在任何状态下，按“返回”键，进入为主界面

TRIM

**Function:**

Use this function to adjust the neutral position of the steering, throttle and AUX channel.

Parameter:

CHANNEL: channel number, from ST to AUX

ST. RBU: steering or 3rd channel right side, adjustment range: 00%--100% (initial value is 00%)

ST. LFU: steering or 3rd channel left side, adjustment range: 00%--100% (initial value is 00%)

TH. LFU: throttle forward side, adjustment range: 00%--100% (initial value is 00%)

TH.RBU: throttle backward side, adjustment range : 00%--100% (initial value is 00%)

Operation:

Press the "ENTER" button and turn to the "TRIM" menu. Press the "ENTER" button to enter the "TRIM" menu. The selected channel will be blinking. Select the channel by turning the "ENTER" button, and then press the "END" button (now the percentage will be blinking). Turn the "ENTER" button to adjust the rate. After this, press the "END" button to finish the setting. The rest can be done in the same way. Press the "ENTER" button to save and return to menu screen. Press the "BACK" button to return to the opening screen.

参数说明：

CHANNEL：通道编号，通道ST到通道AUX。

ST. RBU通道右边微调，调整量为00%--100%，工厂预设值为00%；

ST. LFU通道左边微调，调整量为00%--100%，工厂预设值为00%；

TH. LFU通道前进微调，调整量为00%--100%，工厂预设值为00%；

TH. RBU通道后退微调，调整量为00%--100%，工厂预设值为00%；

AUX. RBU通道CH3向上微调，调整量为00%--100%，工厂预设值为00%；

AUX. LFU通道CH3向下微调，调整量为00%--100%，工厂预设值为00%；

操作方法：

在开机菜单下通过“确认”键进入菜单，通过“左右旋转”键进行TRIM菜单选择，再按确认键进入此菜单的操作（此时ST字符会闪烁），然后通过“左右旋转”键进行通道ST到通道AUX的选择，选好要变更的通道后，按“END”键，此时两个字符会闪烁，在此状态下通过按“左右旋转”键进行00%--100%设定调整，完成后按“END”键切换通道的设定，此时ST会闪烁。以此类推，对三个通道进行设定。

编辑完成后，按“确认”键返回并进入菜单选择状态。

在任何状态下，按“返回”键，进入开机画面。

ALB

**Function:**

while applying the brakes, locking them up can be easily done. which can cause your vehicle to spin out of control, this can be eliminated by pulsing the brakes, so that full control of your vehicle can be achieved at all times. The effect as like that of a A.B.S in a real passenger car.

Parameter:

CHANNEL: channel number, it's only available in channel 2:

OFF: A. B. S. function is OFF:

Operation:

Press the "ENTER" button and turn to the "ALB" menu. Press the "ENTER" button to enter the "ALB" menu. The selected function will be blinking. Turn the "ENTER" button to change the setting.

Press the "ENTER" button to save and return to menu screen. Press the "BACK" button to return to the opening screen.

功能说明：

此功能是对油门输出通道作自动刹车（点刹）设定，适应不同机种赛道以及不同人的操作习惯，以达到最佳刹车效果及弯道的操控效果，而不至于有甩尾及转弯不足现象出现。

参数说明：

CHANNEL:通道编号，只有第二通道（油门通道）有此功能；

OFF:表示ABS功能关闭（工厂预设值为OFF）；

ON: 表示ABS功能开启。

操作方法：

在开机菜单下通过“确认”键进入菜单,通过“左右旋转”键进行ABS菜单选择，再按确认键进入此菜单的操作（此时三个字符会闪烁），然后通过“左右旋转”键进行OFF-ON-OFF的设定。

编辑完成后按确认键“返回”并进入菜单选择状态。

在任何状态下按“返回”键进入开机画面。

EXP

**Function:**

This function is used to change the sensitivity of the 2 channels around the neutral position. In order to "soften" or make aggressive the response, according to user 's demand.

Parameter:

CHANNEL: channel number, from ST and TH;

100%: steering "EXP" rate, when you want aggressive steering operation, turn the button to increase the rate. When you want to make steering operation less aggressive, turn the button to decrease the rate. adjustment range: -100%~0~+100% (initial value is 0)

Operation:

Press the "ENTER" button and turn the "EXP" menu. Press the "ENTER" button to enter the "EXP" menu. The selected channel will be blinking. Select the channel by turning the "ENTER" button and then press the "END" button (now the percentage will be blinking). Turn the "ENTER" button to adjust the rate. After this, press the "END" button to finish the setting. The rest can be done in the same way. Press the "ENTER" button to save and return to the menu screen. Press the "BACK" button to return to the opening screen.

功能说明：

此功能是对两个输出通道作指数变化量调整设定，适应不通机种对不同赛道以及不同人的操作习惯，以达到最佳的操控效果。

参数说明：

CHANNEL:通道编号，通道ST和TH通道.100%:指数输出百分比率,-100%表示中心点位置反应会越小,也就是反应越迟钝;

100%表示中心点位置反应会越大,也就是反应越灵敏,EXP调整量为:-100%到100%(工厂预设值为0%)。

操作方法：

在开机菜单下通过“确认”键进入菜单，通过“左右旋转”键进行EXP菜单选择，再按“确认”键在进入此菜单的操作（此时ST符号会闪烁）然后通过“左右旋转”键进行通道ST到通道AUX的选择,选好要变更的通道后按“END”键,此时两个字符会闪烁,在此状态下按“左右旋转”键进行-100%到100%的设定.完成后按“END”键可进入另一个通道的设定.类推推对两个通道进行设定。

编辑完成后按“确认”键返回并进入菜单选择状态。

在任何状态下按“返回”键进入开机画面。

EPA

**Function:**

Use this function when performing left and right steering angle adjustments, throttle high side/brake side amount adjustment, and channel 3 servos up side/down side operation amount adjustment during linkage setup. Used to correct steering angle of adjusting left and right steering angles when there is a difference in the left and right turning radios.

Parameter:

CHANNEL: channel number, from St to AUX

100%:output value. Adjustment range : 0~120% (initial value is 100%)

: LEFT, FORWARD, or RIGHT, BACK (select by steering wheel or throttle trigger)

Operation:

Press the "ENTER" button and turn to the "EPA" menu. Press the "ENTER" button to enter the "EPA" menu. The selected channel will be blinking. Select the channel by turning the "ENTER" button, and then press the "END" button (now the percentage will be blinking). Select the icon by using the steering wheel, throttle or CH 3 button. Turn the "ENTER" button to adjust the rate. After this, press the "END" button to finish the setting. The rest can be done in the same way. Press the "ENTER" button to save and return to the menu screen. Press the "BACK" button to return to the opening screen.

功能说明：

此功能是对三个输出通道做输出变化量的调整设定，此项设定分为两部分（正半部负半部份）来分别单独进行设定，以适应不同机种及不同伺服器输出量的要求，另外对伺服器的两边输出行程不对称做修正。

参数说明：

CHANNEL:通道编号，从ST到AUX

100%：输出量百分比率，值越小输出越小，反之越大（此调整量为0%到120%，工厂预设值为100%）。

:此图标表示当前你所设定调整的是哪一部分（分正负两部分，由方向盘及油门扣机来选定）。

操作方法:

在开机菜单下通过“确认”键进入菜单，通过“左右旋转”键进行EPA菜单选择，再按“确认”键进入此菜单的操作（此时ST字符闪烁），然后通过“左右旋转”键进行通道ST到AUX通道的选择，选好要变更的通道后按“END”键，此时两个字符会闪烁，在此状态下通过方向盘及油门扣机进行单边选择（被选中的那边对应的图标会进行切换），然后按“左右旋转”键进行0-120%的设定，完成后按“END”键可进入另一个通道的设定，依类推对三个通道进行设定。

编辑完成后按“确认”键返回并进入菜单选择状态。

在任何状态下按“返回”键进入开机画面。

D/R

**Function:**

By setting the dual rates function, you can limit the total travel of each individual Channel.

Parameter:

CHANNEL: channel number, channel ST

100%:Dual Rate, when you want to increase the servo travel, turn the button to increase the rate. when you want to decrease the servo travel, turn the button to decrease the rate.0% is no signal output ,100% is maximum signal output. Adjustment range: 0~100% (initial value is 100%)

Operation:

Press the "ENTER" button and turn to the "D/R" menu. Press the "ENTER" button to enter the "D/R" menu. The selected function will be blinking. Turn the "ENTER" button to adjust the rate. Press the "ENTER" button to save and return to the menu screen. Press the "BACK" button to return to the opening screen.

功能说明：

此功能是对ST输出通道做输出变化量调整设定，此项设定同时对两部份（正半部负半部份）按同一比率进行设定,适应不通机种及不同伺服器输出的要求,以达到最佳的操控效果.

参数说明:

CHANNEL 通道编号，通道ST

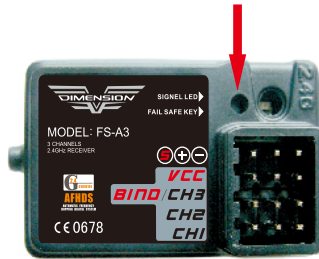
100%:输出量百分比率,值越小输出越小,反之越大(此调整量为0%到100%,工厂预设值为100%),0%表示此通道没有输出,100%表示全部输出,也就是最大输出.

操作方法：

在开机菜单下通过“确认”键进入菜单，通过“左右旋转”键进行D/R菜单选择，再按确认键进入此菜单的操作（此时三个字符会闪烁），在此状态下通过按“左右旋转”键进行00%--100%设定调整，编辑完成后，按“确认”键返回并进入菜单选择状态。

在任何状态下，按“返回”键，进入开机画面。

FAIL SAFE FUNCTION

**Function:**

Failsafe aims to prevent control loss during operation due to radio control signal loss between transmitter and receiver. If the receiver is not able to receive any signal from the transmitter, the throttle setting on the receiver will default back to its original setting.

Setting:

1. Turn on the transmitter.
2. Connect power on the receiver, the LED on the receiver will turn solid.
3. Adjust transmitter's throttle to the stop or break position, then keep still.
4. Press the "Setting" button on the receiver (shown on the picture above), the LED will start flashing for 3 seconds and then stop, indicating the fail safe setting is completed.

Testing:

- a. Turn on the transmitter.
- b. Connect power on the receiver.
- c. Turn off the transmitter:
- d. The throttle servo will turn back to its original setting automatically.

失控保护功能说明**1.功能说明**

失控保护功能是对模型车或船进行失控保护，避免因失控造成损失。主要是对油门通道进行控制，当接收机收不到控制信号时，接收机的油门通道将会自运行到当初设定的值，以免误动作。



2.设定方法

- 1.将发射机开通电源进入工作状态。
- 2.将接收机接通电源进入工作状态，此时信号灯恒亮。
- 3.控制发射机的油门通道，使油门控制伺服器或调速器进入刹车或熄火状态，然后保持不动。
- 4.此时可看到油门通道的伺服器便会自动进入设定状态的位置。

3.测试

- a.将发射机打开进入工作状态。
- b.将接收机接通电源进入工作状态。
- c.将发射机关闭电源。
- d.此时可以看到油门通道的伺服器便会自动进入设定状态的位置。

Packaging content 包装内容

NO:	Model	Sum	Remarks
1	3 channel 2.4G transmitter (USM-GT3X) 3 通2.4G发射机(USM-GT3X) 	1	
2	3 channel 2.4G receiver (FS-A3) 3 通2.4G接收机(FS-A3)	1	
3	User manual 说明书 	1	

FCC Statement 声明**FCC Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example use only shielded interface cables when connecting to computer or peripheral devices).

This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter

Caution!

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment.

DIGITAL PROPORTIONAL RADIO CONTROL SYSTEM