RadioLink
RC Solution

Digital 4-Channel Proportional RC System

Instruction Manual

RC3S

RadioLink Electronics Co., Ltd
Http://www.radiolink.com.cn

CE FCC ROHS

MENU

Introduction and Service

Thank you for choosing RadioLink RC system, if you are the first time to use this type of products, please read this statement carefully and strictly in accordance with the requirements of operation. You could refer to the Manual if you meet any problems during the operation . Please well keep the manual after use because you might have to use it again next time.

If you found any problems during the operation process, please refer to the manual. If the problem still exists, you could contact our dealers to find out the way to solve it. And you could also log on our website for service:
Http://www.radiolink.com.cn

Safety guides

Important Safety Notice:

The following two symbols will appear in this manual（please pay attention to the paragraph with this two symbols labeled）:

 Prohibition  Testing and confirmation

 Do not use in bad weather such as rainy or thundering to assure the safety of you and others.

 Forbid to use this product in the crowd and the place against national law!

 You need to turn the throttle channel(ch3) and inch switch to the lowest before you use. Then switch on the transmitter, finally connect the receiver.

 Before using, please make sure the movements of servo are corresponding with the direction of joystick. If inconsistent, please adjust them before using.

The transmitter needs to be powered by 4 AA alkaline 5# batteries, Ni-MH batteries or 2S-4S LiPo battery. Please check the voltage of batteries before using, as it might lead to uncontrolled situation and accidents when the voltage is lacked. So you must change the battery or recharge them in time.

Battery recharge notice

Recharge steps:

A. Install the batteries to transmitter with correct directions, and cover it.

B. Connect the charger to the main connector.

C. Connect the charger to the transmitter charging port.

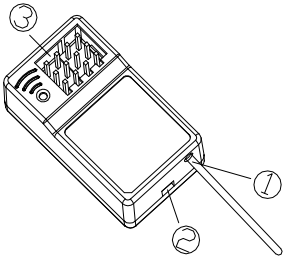
D. Cut off the power supply immediately while recharging completed.

Warning: Don't try to charge to one-off dry batteries, avoiding a fire, explosion or other severe consequence. Don't Charge LiPo battery on transmitter, please use balance charger change LiPo battery!

If you are using a nickel-cadmium, nickel-metal hydride batteries for recharging, please use our company dedicated charger(optional accessory). If the electrical current is too large and it might lead to overheated and cause a burning accident. Please cut off the power supply immediately after recharging. Please take out the batteries from the transmitter when you are not using it within a period, because the battery might damage the battery connection metal flake, thus cause bad connection.

Above safety notices must be complied strictly, our company will not be responsible for any damage caused by the behaviors forbidden in above notices.

Contents and Specifications：



Contents：

1.Antenna　2.Binding key

3.Channel connection pin

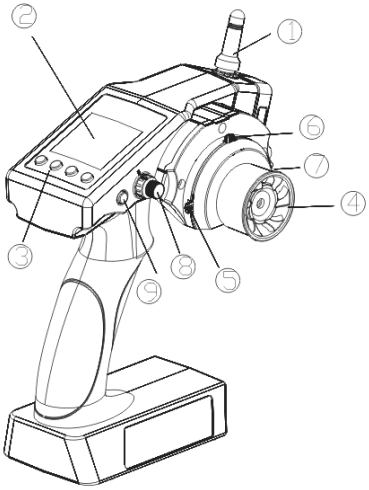
Specs：

Size：51.5*24*15（mm）

Channel number：4 channels

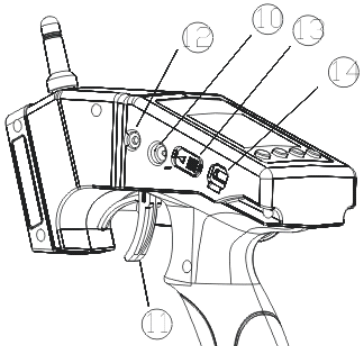
Power standard：4.6-6 V

Frequency：2.4GHz　Weight：5g



Contents：

1. Antenna
2. LCD
3. Menu key
4. Turning wheel
5. Function key A throttle
6. Function key B Direction
7. Function key C the 3rd channel
8. The 3rd/4rd channel VR
9. The 3rd/4rd channel button
10. Recharge connection slot
11. Throttle trigger
12.Simulator port
13.Power switch
14. USB hardware upgrade port



Specs：

Size：213*117*115.5(mm)

Antenna length：21mm

Weight：420g

Channel number：4 channels

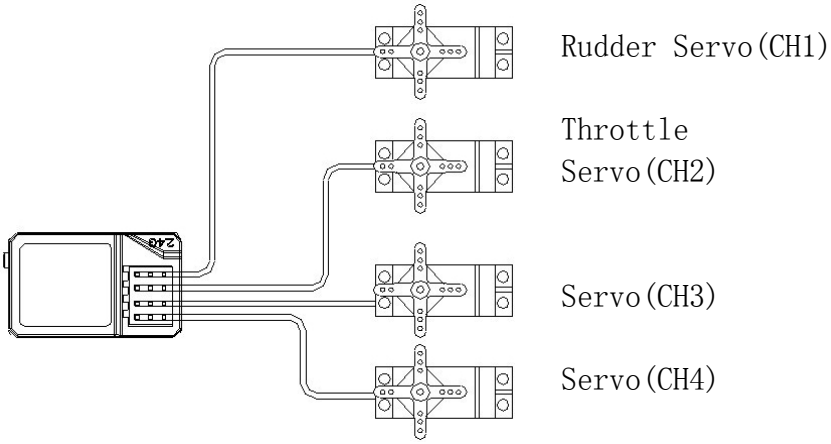
LCD：128*64 lattice（with backlight）

Power standard：6V-18VDC (1.5AA*4 or 2S-4S LiPo battery)
RF power：less than 10dbm
Power extending: JST port 2S~4S LiPo/LiFePo battery
Modulation: FHSS
Low voltage alert：Yes（lower than 4.6V）custom alarm voltage for 2S-4S LiPo battery.
Data resolution：2048
Frequency：2.4GHz
RF range: 260 meters on ground

Failsafe: in 1 second receiver fail getting signal from TX, the throttle will be 0, servos keep the last status.

Receiver installation and binding

Receiver's connection and installation：（such as some car model）



NOTICE：

1. Confirm battery, switch, servos and etc are connected with receiver right.
2. While installing servos, please keep servo's distance from model body,

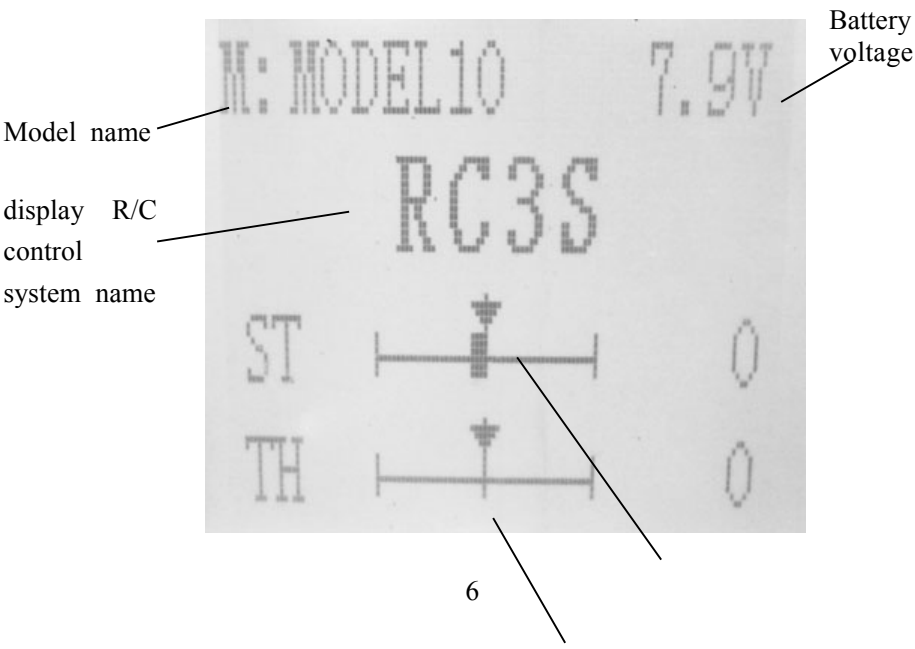
otherwise the vibration can lead to servo and make servo damaged.

3. After installation of servos, please try to control the servo to full travel, if it got stuck or sounded abnormal, you must solve the problem. Even if servo was not damaged, large circuit occurred.
4. Do not cut off or bind the receiver antenna, and try the best to keep it far away from metal and carbon graphite material.
5. Receiver is made up from precise electronic components, it need to be protected from vibration by packaged with sponge or other shock absorption materials.

Code-matching method between transmitter and receiver:

1. Load the battery into transmitter, power on it.
2. Connect the power to the 2nd Channel pin of receiver.
3. Press the binding button on the receiver till LED starts twinkling.
4. LED stops the twinkle, bright light indicates a successful code-matching was completed.

Display when power switch turned on



Steering trim display

Throttle trim display

LCD Screen

When you power on the transmitter, LCD screen shows battery voltage, R/C control system name, model name, steering trim, throttle trim.

Model Name

RC3S can store the data for 10 models, model name will show on the LCD when you power on the transmitter. Please make sure the model name the screen displayed is the right what you want. If the model name you chose is not corresponding with your model, the pre-settings should be wrong.

Transmitter battery voltage

In addition to the model#, LCD can show the voltage of battery. When the voltage is lower than 4.6V, it would start the low-voltage alert, it would send out "BeBe…" sounds, till the transmitter is power-off. When you hear the low-voltage alert, you have no more than 4 minutes for controlling your model, please safely stop your model before the uncontrolled situation. Please make sure the battery voltage is higher than this voltage data while radio controlling. If you are using 2S-4S LiPo battery, please adjust the Lower voltage alarm on "Low voltage alarm"(Page 31).

Transmitter function menu setting

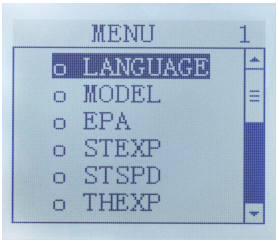
When you want to browse or change a setting of transmitter, you should go into function menu setting mode. Under function menu setting mode, you can set up Language Select "LANGUAGE", Model Select "MODEL", End Point Adjuster "EPA", Steering EXP "STEXP", Steering Speed "STSPD", Throttle EXP "THEXP", Throttle Speed "THSPD", A.B.S. Function "A.B.S", Throttle Acceleration "ACCEL", Idle-Up "IDLUP", Subtrim "SUBTR", Servo Reverse "REV", Steering Dual Rate/Second Dual Rate "D/R", ATL Function "ATL", Programmable Mixes "PMIX", Auxiliary Channel 3 and 4 "AUX"，Model name "NAME", Reset function "RESET".

Notice: The functions of transmitter are ranged in the display in sequence, please read all program setting orders before setting up your model data.

Language Select "LANGUAGE"

Both English and Chinese version menu are available for RC3S, which is convenient for Chinese and English-speaking players to personalize function menus.

1. Access the function menu (**By pressing "Exit" and "Enter" buttons simultaneously and holding them down for one second**), the Language select function will be chosen.



2. Press "Enter" button to get into "LANGUAGE" function interface。

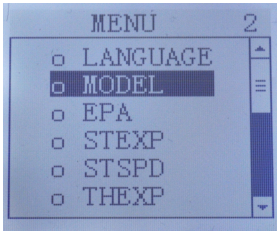
3. Use "Dec(-)" or "Inc(+)" key to select "中文" or "English",the selected language will be with black shading effect.

4. Press "Enter" button, the desired language is selected, and return to the initial screen automatically.

Model Select "MODEL"

The RC3S transmitter can store model memories for ten models. Use this function to call a new model #.

MODEL- Model select function



1. Access the function menu (By pressing "Exit" and "Enter" buttons simultaneously and holding them down for one second), press "Enter" key once, the Model select function will be chosen.

2.Press "Enter" button, the current active model will be blinking.

3.To activate a different model# by pressing "Dec(-)" or "Inc(+)" button until the

desired model# blinks.

4.Press “Enter” button, the selected model# stops blinking, now the model# has been selected.

5. Return to the initial screen by pressing “Exit” button twice.

End Point Adjuster "EPA"

Use this when performing left and right steering angle adjustments, throttle high side/brake side operation amount adjustment, and channel 3 servo up side/down side operation amount adjustment during linkage.

Correct the maximum steering angle and left and right steering angles when there is a difference in the turning radius due to the characteristics, etc. of the vehicle.

Setting item (channel and direction)

ST-LFT: Steering (left side)

ST-RGT: Steering (right side)

TH-FWD: Throttle (forward side)

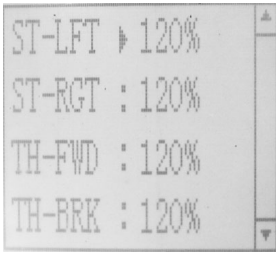
TH-BRK: Throttle (brake side)

3C-LFT: 3rd channel (left side)

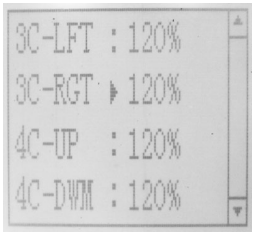
3C-RGT: 3rd channel (right side)

4C-UP: 4th channel (up side)

4C-DWN: 4th channel (down side)



Steering EPA	Throttle EPA
ST-LFT:0~120	TH-FWD:0~120
ST-RGT:0~120	TH-BRK:0~120
Initial value:120	Initial value : 120



Aux Servo EPA	Aux Servo EPA
3C- LFT:0~120	4C-UP:0~120
3C-RGT:0~120	4C-DWN:0~120
Initial value :120	Initial value :120

End point adjustment

1. Access the function menu (By pressing “Exit” and “Enter” buttons simultaneously and holding them down for one second),press “Inc(+)” button twice to chose EAP function.

2.Press “Enter” button to get into EPA function interface, use “Dec(-)” or “Inc(+)” button to select the desired setting item , press “Enter” key the initial value of your selected setting item will blink, then you can press “Dec(-)” or “Inc(+)” button to adjust the value of your selected setting item.

(Note: In the interface of adjusting the value, return to the initial value "120" by pressing “Dec(-)” and “Inc(+)” buttons simultaneously for about 1 second.)

3. Press “Enter” button, the adjusted value of your selected setting item stops blinking, now the value of your selected setting item has been set.

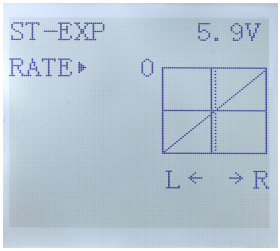
4. Return to the initial screen by pressing “Exit” button twice.

Steering EXP "STEXP"

This function is used to change the sensitivity of the steering servo around the neutral position. It has no effect on the maximum servo travel.

Setup item

RATE: Steering EXP rate



Adjustment range

-100~0~+100

Initial value :0

Steering operation curve adjustment

1.Access the function menu (By pressing “Exit” and “Enter” buttons simultaneously and holding them down for one second), press “Inc(+)” button three times to chose EAP function.

2.Press “Enter” button to get into STEXP function interface, press “Enter” key and

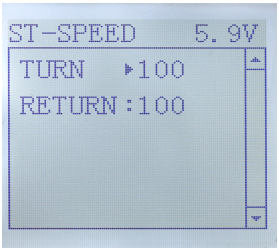
the initial value of the rate will blink, then you can press “Dec(-)” or “Inc(+)” button to adjust the value and the curve of the rate shown in the figure will change correspondingly.
(Note: In the interface of adjusting the value, return to the initial value "0" by pressing “Dec(-)” and “Inc(+)” buttons simultaneously for about 1 second.)
3. Press “Enter” button, the adjusted value of the rate stops blinking, now the value of the rate has been set.
4. Return to the initial screen by pressing “Exit” button twice.

Note: the Vertical cursor shown in the figure moves in step with steering wheel operation.

Steering Speed "STSPD"

Quick steering operation will cause momentary understeering, loss of speed, or spinning. This function is effective in such cases.

Setup item
TURN:TURN direction
RETURN:RETURN direction



Adjustment range
1~100% (each direction)
At 100%, there is no delay

Steering servo delay

1.Access the function menu (By pressing “Exit” and “Enter” buttons simultaneously and holding them down for one second), press “Inc(+)” button four times to chose STSPD function.
2.Press “Enter” button to get into STSPD function interface, press “Dec(-)” or

“Inc(+)” button to select setup item, then press “Enter” key and the initial value of selected setup item will blink.

3.Use “Dec(-)” or “Inc(+)” button to adjust the value of the selected setup item.

(Note: In the interface of adjusting the value, return to the initial value "100" by pressing “Dec(-)” and “Inc(+)” buttons simultaneously for about 1 second.)

4. Press “Enter” button, the adjusted value of the selected setup item stops blinking, now the value of the selected setup item has been set.

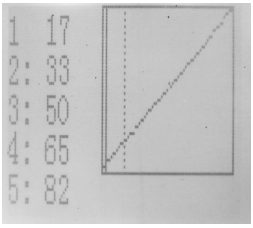
5. Return to the initial screen by pressing “Exit” button twice.

Throttle EXP "THEXP"

This function makes the throttle high side and brake side direction servo operation quicker or milder. It has no effect on the servo maximum operation amount.For the high side, selection from among three kinds of curves (CRV/VTR/EXP) is also possible.

Throttle curve adjustment

Adjustment method for CRV curve



Setup items

Mode: INT/ACT

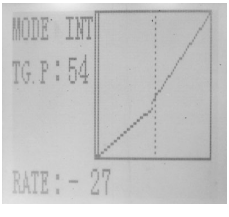
TG.P: 20~80

RATE: -100 ~ 0 ~ +100

1. Enter the function menu and use “Dec(-)” or “Inc(+)” button to access THEXP function. Select “FWD-CRV” function.

2. Press “Dec(-)” or “Inc(+)” button to select curve points 1~5 for curve point adjustment that you want, from the graph you will clearly see the changes you have made.

Adjustment method for VTR curve

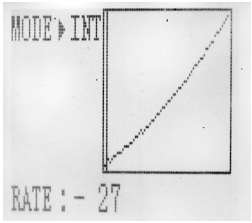


Adjustment range
RATE: 0 ~ +100

1.Enter the function menu and use "Dec(-)" or "Inc(+)" button to access THEXP function. Select "FWD-VTR" function.
2. Press "Dec(-)" or "Inc(+)" button to select RATE for forward side adjustment that you want, when the "MODE" value is "INT" the VTR will not work, only the "MODE" value set to "ACT" the VTR function is available. From the graph you will clearly see the changes you have made on TG.P and RATE.

Adjustment method for EXP curve

Setup items
MODE: EXP turn on or turn off
RATE: EXP rate

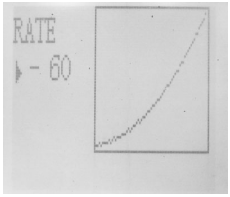


Adjustment range
MODEL: INT/ACT
RATE: -100 ~ 0 ~ +100

1. Enter the function menu and use "Dec(-)" or "Inc(+)" button to access THEXP function, then select the "FWD-EXP" function.
2. Press "Dec(-)" or "Inc(+)" button to select RATE for adjustment, set the most comfortable value you want. From the graph you will clearly see the changes you have made on the EXP RATE, also move the trigger to check the throttle status.

Adjustment method for BRK-EXP curve

Setup items
RATE: BRK-EXP rate



Adjustment range
RATE: -100 ~ 0 ~ +100

Brake side adjustment (select BRK)

(1).Press “Enter” key, the current BRK value will blink, use “Inc(+)” button to adjust the + side when you want to quicker the rise and use “Dec(-)” button to adjust the - side when you want to make the rise milder.

(Note: In the interface of adjusting the value, return to the initial value "0" by pressing “Dec(-)” and “Inc(+)” buttons simultaneously for about 1 second.)

(2). Press “Enter” button, the adjusted BRK value stops blinking, now the BRK value has been set.

3. When ending setting, return to the initial screen by pressing “Exit” button twice.

Throttle Speed "THSPD"

Throttle servo delay

Sudden trottle trigger operation on a slippery road only causes the wheels to spin and the ve-hicle cannot accelerate smoothly. Setting the throttle speed function reduces wasteful battery consumption while at the same time permitting smooth, enjoyable operation.

Operation

Throttle servo (amp) operation is delayed so that the drive wheels will not spin even if the trottle trigger is operated more than necessary. This delay function is not performed when the trottle trigger is returned and at brake operation.

OFF,Speed 1 or speed 2 can be selected.

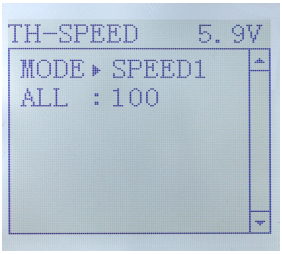
OFF means shut down the throttle speed function

Adjustment method for SPEED 1

Setup items

MODE: Speed type selection

ALL: Speed adjustment



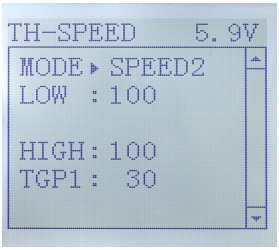
Adjustment range

1~100 (each direction)
At 100, there is no delay

1.Enter the function menu and use "Dec(-)" or "Inc(+)" button to access THSPD function.
2. Press "Enter" button to get into THSPD function interface.
3.If initial MODE setup item is SPEED 1,{ if initial MODE setup item is SPEED 2 or OFF, you need to select SPEED 1 by pressing "Dec(-)" or "Inc(+)" button to select MODE setup item , then press "Enter" key, SPEED 2 or OFF will blink, press "Dec(-)" or "Inc(+)" button, when the blinking SPEED 2 or OFF change to blinking SPEED 1, press "Enter" key, SPEED 1 will stop blink, now SPEED 1 is selected}, press "Dec(-)" or "Inc(+)" button to select ALL setup item, then press "Enter" key, the initial value will blink, use "Dec(-)" or "Inc(+)" button to adjust the delay of the entire throttle forward side range.
(Note: In the interface of adjusting the value, return to the initial value "100" by pressing "Dec(-)" and "Inc(+)" buttons simultaneously for about 1 second.)
Press "Enter" button, the adjusted value stops blinking, now the value has been set.
4.When ending setting, return to the initial screen by pressing "Exit" button twice.

Adjustment method for SPEED 2

Setup items
MODE:Speed type selection
LOW:Low side range speed adjustment
HIGH:High side range speed adjustment
TGP1:Low and medium speed switching point



Adjustment range
LOW:1~100
HIGH:1~100
At 100, there is no delay
TGP1:1~100

1.Enter the function menu and use "Dec(-)" or "Inc(+)" button to access THSPD function.

2.Press "Enter" button to get into THSPD function interface.

3.If initial MODE setup item is SPEED 2,{ if initial MODE setup item is SPEED 1, you need to select SPEED 2 by pressing "Dec(-)" or "Inc(+)" button to select MODE setup item , then press "Enter" key, SPEED 1 or OFF will blink, press "Dec(-)" or "Inc(+)" button,when the blinking SPEED 1 or OFF change to blinking SPEED 2,press "Enter" key,SPEED 2 will stop blinking, now SPEED 2 is selected}, press "Dec(-)" or "Inc(+)" button to select "LOW" or "HIGH" delay adjustment or "TGP1" Speed switching point adjustment.

4.Press "Enter" key to confirm "LOW" or "HIGH" or "TGP1" setup item, and the value of your selected setup item will blink. Use "Dec(-)" or "Inc(+)" button to adjust the value.

(Note: In the interface of adjusting the value, return to the initial value （the initial value of LOW and HIGH is "100", the initial value of TGP1 is "30"） by pressing "Dec(-)" and "Inc(+)" buttons simultaneously for about 1 second.)

Press "Enter" button, the adjusted value stops blinking, now your selected value has been set.

5.When ending setting, return to the initial screen by pressing "Exit" button twice.

A.B.S. Function "A.B.S"

Pulse brake

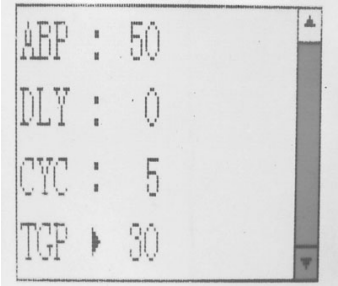
When the brakes are applied while cornering with a 4 Wheel Drive or other type of vehicle, understeer may occur. The generation of understeer can be eliminated and corners can be smoothly cleared by using this function.

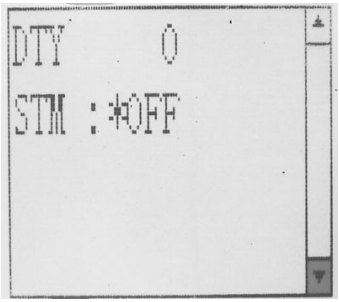
Operation

- When the brakes are applied, the throttle servo will pulse intermittently. This will have the same effect as pumping the brakes in a full size car.
- The brake return amount, pulse cycle, and brake duty can be adjusted.
- The region over which the ABS is effective can be set ac-cording to the steering

operation. (Mixing function)

Setup items
ABP: Brake return amount
DLY: Delay amount
CYC: Cycle speed
TGP: Operation point
DTY: Cycle duty ratio
STM: Steering mixing





- ABP : Amount of brake returnSets the rate at which the ser-vo returns versus trigger oper-ation for brake release. When set to 0%, the ABS function is not performed. When set to 50%, the servo returns 50% (1/2) of the trigger operation amount and when set to 100%, the servo returns to the neutral position.
- DLY : DelaySets the delay from brake op-eration to ABS operation. When set to 0%, the ABS function is activated without any delay. AT 50%, the ABS function is activated after a delay of approximately 0.7 second and at 100%, the ABS function is activated after a delay of approximately 1.4 seconds.
- CYC : Pulse speedSets the pulse speed (cycle). The smaller the set value, the faster the pulse cycle.
- TGP : Trigger pointSets the trigger point at which the ABS function begins to operate at brake operation.
- DTY : Cycle duty ratioSets the proportion of the time the brakes are applied and the time the brakes are re-leased by pulse operation. The ratio can be set to +3 ~ 0 ~ -3 in 7 steps.
- STM : Steering mixingSets ABS operation ON/OFF according to the steering operation range.

A.B.S function adjustment

Enter the function menu and use "Dec(-)" or "Inc(+)" button to access A.B.S function, then press "Enter" button to get into A.B.S function interface.

1. (Brake return amount adjustment)

Select the setting item "ABP" by pressing "Dec(-)" or "Inc(+)" button, then press "Enter" key and the initial value of "ABP" will blink. Use "Dec(-)" or "Inc(+)" button to adjust the return amount.

(Note: In the interface of adjusting the value, return to the initial value "50" by pressing "Dec(-)" and "Inc(+)" buttons simultaneously for about 1 second.)

Press "Enter" button, the adjusted value stops blinking, now the value has been set.

"0":No return

"50":Return to the 50% position of the brake operation amount

"100":Return to the neutral position.

Brake return amount (ABP)

0 ~ 50 ~ 100

Initial value; 50

- Brake return amount (ABP) is influenced by the "EXP" rate on the brake side.

2. (Delay amount setup)

Select the setting item "DLY" by pressing "Dec(-)" or "Inc(+)" button, then press "Enter" key and the initial value of "DLY" will blink. Use "Dec(-)" or "Inc(+)" button to adjust the delay amount.

(Note: In the interface of adjusting the value, return to the initial value "0" by pressing "Dec(-)" and "Inc(+)" buttons simultaneously for about 1 second.)

Press "Enter" button, the adjusted value stops blinking, now the value has been set.

"0":A.B.S. function performed without any delay

"50":A.B.S function performed after an approximate 0.7 sec delay

"100":A.B.S. function performed after an approximate 1.7 secs delay

Delay amount (DLY)
0 ~ 100
Initial value; 0

3. (Pulse speed adjustment)
Select setting item "CYC" by pressing “Dec(-)” or “Inc(+)” button, then press “Enter” key and the initial value of “CYC” will blink. Use “Dec(-)” or “Inc(+)” button to adjust the pulse speed (cycle).
(Note: In the interface of adjusting the value, return to the initial value "5" by pressing “Dec(-)” and “Inc(+)” buttons simultaneously for about 1 second.)
Press “Enter” button, the adjusted value stops blinking, now the value has been set.

- The smaller the set value, the faster the pulse speed.

Cycle speed (CYC)
0 ~ 30
Initial value; 5

4. (Operation point setup)
Select setting item "TGP" by pressing “Dec(-)” or “Inc(+)” button, then press “Enter” key and the initial value of “TGP” will blink. Use “Dec(-)” or “Inc(+)” button to adjust the operation point.
(Note: In the interface of adjusting the value, return to the initial value "30" by pressing “Dec(-)” and “Inc(+)” buttons simultaneously for about 1 second.)
Press “Enter” button, the adjusted value stops blinking, now the value has been set.
- Sets the throttle trigger position at which the A.B.S. function is performed. The number is the % display with the full brake position made 100.

Operation point (TGP)
0 ~ 100
Initial value; 30

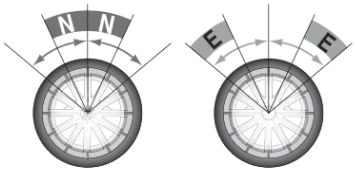
5. (Cycle duty ratio setup)
Select setting item "DTY" by pressing “Dec(-)” or “Inc(+)” button, then press “Enter” key and the initial value of “DTY” will blink. Use “Dec(-)” or “Inc(+)” button to adjust the duty ratio.
(Note: In the interface of adjusting the value, return to the initial value "0" by pressing “Dec(-)” and “Inc(+)” buttons simultaneously for about 1 second.)
Press “Enter” button, the adjusted value stops blinking, now the value has been set.

"-3":Brake application time becomes shortest. (Brakes lock with difficulty)
"+3":Brake application time becomes longest (Brakes lock easily)
(Remark) For low grip, set at the - side and for high grip, set at the + side.

Duty ratio (DTY)
-3 ~ 0 ~ +3
Initial value; 0

6. (Steering mixing setup)
Select setting item "STM" by pressing “Dec(-)” or “Inc(+)” button, then press “Enter” key and the initial value of “STM” will blink. Use “Dec(-)” or “Inc(+)” button to adjust the steering mixing range.
(Note: In the interface of adjusting the value, return to the initial value "OFF" by pressing “Dec(-)” and “Inc(+)” buttons simultaneously for about 1 second.)
Press “Enter” button, the adjusted value stops blinking, now the value has been set.

- Sets the range within which the A.B.S. function is performed relative to steering wheel operation.



Steering operation

Steering mixing (STM)
OFF, N10 ~ N100, E10 ~ E100
Initial value; OFF

When steering mixing is set and steering operation enters the set range, "*" is displayed in front of the number. When mixing is OFF, the A.B.S function can operate over the entire steering range.

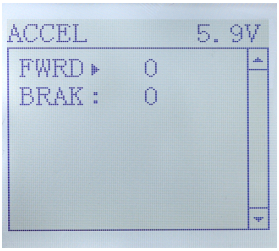
7. When ending setting, return to the initial screen by pressing “Exit” button twice.

Throttle Acceleration "ACCEL"

Function which adjusts the movement characteristic from the throttle neutral position

The servo will jump to the input position at its maximum possible speed. Unlike exponential, which adjusts the whole throttle movement into a curve, throttle acceleration simply "jumps" away from neutral and then leaves the remaining response linear.

Setup item
FWRD:Forward side acceleration amount
BRAK:Brake side acceleration amount



Throttle acceleration adjustment

Enter the function menu and use “Dec(-)” or “Inc(+)” button to access ACCEL function, then press “Enter” button to get into ACCEL function interface.
1.(Forward acceleration amount adjustment)
Press “Dec(-)” or “Inc(+)” button to select “FWRD”, press “Enter” key to confirm and the initial value of “FWRD” will blink, then use “Dec(-)” or “Inc(+)” button adjust the acceleration amount.
(Note: In the interface of adjusting the value, return to the initial value "0" by pressing “Dec(-)” and “Inc(+)” buttons simultaneously for about 1 second.)
Press “Enter” button, the adjusted value stops blinking, now the value has been set.

"0":No acceleration

"100":Maximum acceleration (Approximately 1/2 of the forward side steering angle)

Forward acceleration amount(FWRD)
0~100
Initial value: 0

2. (Brake side acceleration amount adjustment)
Press “Dec(-)” or “Inc(+)” button to select “BRAK”, press “Enter” key to confirm and the initial value of “BRAK” will blink, then use “Dec(-)” or “Inc(+)” button adjust the acceleration amount.
(Note: In the interface of adjusting the value, return to the initial value "0" by pressing “Dec(-)” and “Inc(+)” buttons simultaneously for about 1 second.)
Press “Enter” button, the adjusted value stops blinking, now the value has been set.

"0":No acceleration
"100":Maximum acceleration (Brake side maximum steering angle)

Brake side acceleration amount(BRAK)
0~100
Initial value: 0

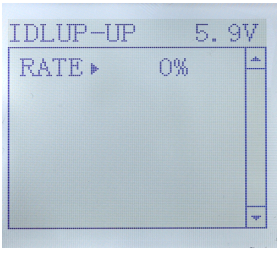
3. When ending setting, return to the initial screen by pressing “Exit” button twice.

Idle-Up "IDLUP"

Idle up at engine start

Use this function to improve the starting characteristics of the engine by raising the idling speed when starting the engine of a gas powered car.

Idle-Up rate (RATE)
D50% ~ D1%, 0%, U1% ~ U50%
Initial value: 0%



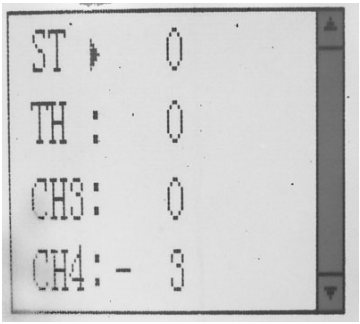
"D": Brake side
"U": Forward side

1.Enter the function menu and use "Dec(-)" or "Inc(+)" button to access IDLUP function.
2.Press "Enter" button to get into IDLUP function interface.
3.Press "Enter" key, and the initial value of RATE will blink. Use "Dec(-)" or "Inc(+)" button to adjust the value.
(Note: In the interface of adjusting the value, return to the initial value "0%" by pressing "Dec(-)" and "Inc(+)" buttons simultaneously for about 1 second.)
Press "Enter"button, the adjusted value stops blinking, now the value has been set.
4.When ending setting, return to the initial screen by pressing "Exit" button twice.

Subtrim "SUBTR"

Servo center position fine adjustment

Use this function to adjust the neutral position of the steering, throttle and channel 3 servos.



Channel
ST:Steering
TH:Throttle
CH3:Channel3
CH4:Channel4

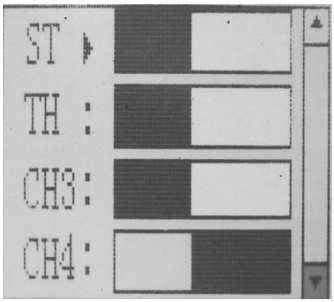
Subtrim
ST:L100~R100
TH:B100~F100
CH3:-100~+100
CH4:-100~+100
Initial value : 0

1.Enter the function menu and use "Dec(-)" or "Inc(+)" button to access SUBTR function.
2.Press "Enter" button to get into SUBTR function interface.
3. Use "Dec(-)" or "Inc(+)" button to select ST channel, press "Enter" key, and the initial value of ST will blink. Use "Dec(-)" or "Inc(+)" button to adjust the center.
(Note: In the interface of adjusting the value, return to the initial value "0" by pressing "Dec(-)" and "Inc(+)" buttons simultaneously for about 1 second.)
4.Press "Enter" key, the adjusted value stops blinking, now the center of ST has been adjusted.
5. TH channel and CH3 channel can be set similarly.
6.When ending setting, return to the initial screen by pressing "Exit" button twice.

Servo Reverse "REV"

Servo operation reversing

This function reverses the direction of operation of the servos related to transmitter steering, throttle, channel 4 and channel 3 operation.



Channel
ST: Steering
TH: Throttle
CH3:Channel3
CH4:Channel4

1. Enter the function menu and use "Dec(-)" or "Inc(+)" button to access REV function.
2. Press "Enter" button to get into REV function interface.
3. Use "Dec(-)" or "Inc(+)" button to select ST channel, press "Enter" key, and the symbol "▸" will blink.
4. Press "Enter" key, the symbol "▸" stops blinking, Use "Dec(-)" or "Inc(+)" button to reverse the ST servo operation direction.

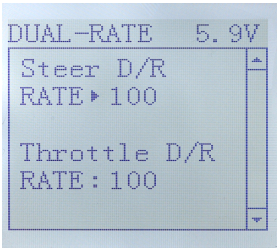
5. TH channel, CH3 and CH4 channel can be set similarly.
6. When ending setting, return to the initial screen by pressing “Exit” button twice.

Steering Dual Rate/Throttle Dual Rate "D/R"

Dual rate

The steering left and right servo travels are adjusted simultaneously. When you want to increase the servo travel, adjust the + side. When you want to decrease the servo travel, adjust the – side.

Setup Item
Steering D/R
RATE
Throttle D/R
RATE



Steering D/R rate (RATE)
0~100%
Initial value: 100
Throttle D/R rate (Throttle D/R RATE)
0~100%
Initial value: 100

1.Enter the function menu and use “Dec(-)” or “Inc(+)” button to access D/R function.
2.Press “Enter” button to get into D/R function interface.
3. Use “Dec(-)” or “Inc(+)” button to select Steering D/R RATE, press “Enter” key, and the initial value of Steering D/R RATE will blink. Use “Dec(-)” or “Inc(+)” button to make adjustments.
(Note: In the interface of adjusting the value, return to the initial value "100" by pressing “Dec(-)” and “Inc(+)” buttons simultaneously for about 1 second.)
4.Press “Enter” key, the adjusted value stops blinking, now the steering D/R RATE has been set.

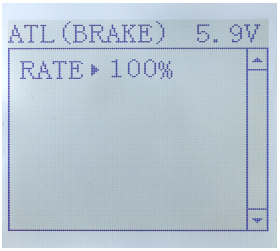
5. Throttle D/R RATE can be set similarly.

6.When ending setting, return to the initial screen by pressing “Exit” button twice.

ATL Function "ATL"

Brake side adjustment

This function decreases the set value when the braking effect is strong and increases the set value when the braking effect is weak.



Setup Item

RATE:Brake amount

Brake amount (RATE)

0~100%

Initial value: 100%

1.Enter the function menu and use “Dec(-)” or “Inc(+)” button to access ATL function.

2.Press “Enter” button to get into ATL function interface.

3.Press “Enter” key, and the initial value of RATE will blink. Use “Dec(-)” or “Inc(+)” button to adjust the value.

(Note: In the interface of adjusting the value, return to the initial value "100%" by pressing “Dec(-)” and “Inc(+)” buttons simultaneously for about 1 second.)

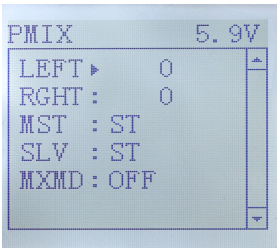
Press “Enter” button, the adjusted value stops blinking , now the value has been set.

4.When ending setting, return to the initial screen by pressing“Exit” button twice.

Programmable Mixes "PMIX"

Programmable mixes between arbitrary channels

These functions allow you to apply mixing between the steering, throttle, and channel 3 channels.



Setup items

LEFT:Mixing rate (Left side)
RGHT:Mixing rate (Right side)
MST:Master channel
SLV:Slave channel
MXMD:Mix mode

Enter the function menu and use "Dec(-)" or "Inc(+)" button to access PMIX function, then press "Enter" button to get into PMIX function interface.

1.(Master channel)
Channel selection (MST)
ST, TH, CH3
Initial value: ST
Select setup item "MST" by pressing "Dec(-)" or "Inc(+)" button, press "Enter" button, the initial master channel will blink. Use "Dec(-)" or "Inc(+)" button to select the master channel you wish to adjust, press "Enter"button, the blinking master channel you selected will stop blinking.

2.(Slave channel)
Channel selection (SLV)
ST, TH, CH3
Initial value:ST
Select setup item "SLV" by pressing "Dec(-)" or "Inc(+)" button, press "Enter" button, the initial slave channel will blink. Use "Dec(-)" or "Inc(+)" button to select the slave channel you wish to adjust, press "Enter" button, the blinking slave channel you selected will stop blinking.

3. (Left, forward or up side mixing amount adjustment)
Mixing amount
-100~0~+100
Select the setting item "LEFT", "FWRD", or "UP"(These setup items are different depend on the master channel. ST: "LEFT"; TH: "FWRD"; CH3: "UP") by pressing

“Dec(-)” or “Inc(+)” button . press “Enter” key, the initial value of "LEFT", "FWRD", or "UP" will blink, Use “Dec(-)” or “Inc(+)” button to adjust the left, forward, or up side mixing amount.
(Note: In the interface of adjusting the value, return to the initial value "0" by pressing “Dec(-)” and “Inc(+)” buttons simultaneously for about 1 second.)
Press “Enter” key, the adjusted value stops blinking, the selected mixing amount has been adjusted.

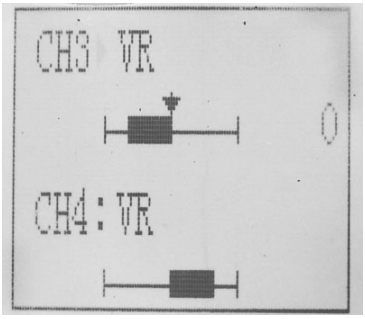
4.(Right, brake or down side mixing amount adjustment)
Mixing amount
-100~0~+100
Select the setting item "RGHT", "BRAK", or "DOWN" (These setup items are different depend on the master channel. ST: "RGHT"; TH: "BRAK"; CH3: "DOWN") by pressing “Dec(-)” or “Inc(+)” button . Press “Enter” key, the initial value of "RGHT", "BRAK", or "DOWN" will blink, Use “Dec(-)” or “Inc(+)” button to adjust the right, brake, or down side mixing amount.
(Note: In the interface of adjusting the value, return to the initial value "0" by pressing “Dec(-)” and “Inc(+)” buttons simultaneously for about 1 second.)
Press “Enter” key, the adjusted value stops blinking, the selected mixing amount has been adjusted.

5. (Mixing mode setup)
Mixing mode (MXMD)
OFF, MIX
Initial value: OFF
Select setup item "MXMD" by pressing “Dec(-)” or “Inc(+)” button, press “Enter” button, the initial mixing mode “OFF” will blink. Press “Dec(-)” or “Inc(+)” button to switch “OFF” to “MIX” , press “Enter” button, the blinking “MIX” will stop blinking.
"OFF":Mixing proportional to master channel operation.
"MIX":Mixing by master channel another function considered.

6. When ending setting, return to the initial screen by pressing “Exit” button twice.

Channel 3 and Channel 4 Position "AUX"

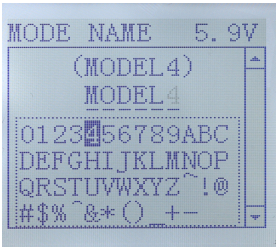
The channel 3 and channel 4 servo position can be set from the transmitter. When CH3 is assigned to the 3rd channel key, this setting is linked to the key. When CH3 and CH4 is not assigned to the 3rd channel key, it can be set with this screen.
You can also set the CH3 and CH4 as VR at the same time, or SW.



Channel 3 position (POSI)
-100~+100
Channel 4 position (POSI)
-100~+100
Initial value: 0
1.Enter the function menu and use “Dec(-)” or “Inc(+)” button to access AUX function.
2.Press “Enter” button to get into CH3 or CH4 function interface.
3.Use “Dec(-)” or “Inc(+)” button to select Channel setup item.
Use “Dec(-)” or “Inc(+)” button to select POSI, press “Enter” key and the value will blink, use “Dec(-)” or “Inc(+)” button to select “VR” or “SW”.
Press “Enter” button, the adjusted value stops blinking, now the value has been set.

Model name "NAME"

RC3S stores model memories for five models. Each model memory can be named separately according to user’s requirement.
Factory default name: MODEL5
1.Enter the function menu and use “Dec(-)” or “Inc(+)” button to access NAME function.
2.Press “Enter” button to get into NAME function interface, the first character of current name will blink, and the blinking character can be reset. The common use



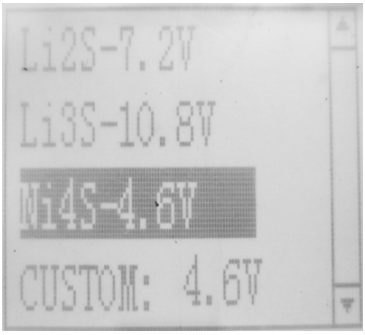
characters appear at the bottom of the screen, use "Dec(-)" or "Inc(+)" button to choose the character you desired. Press "Enter" button again, the next character of current name will blink. Reset other characters of current name in same manner.

3.After accomplishment of naming, all characters of current name will stop blinking, the new name will be stored automatically.

4.When ending setting, return to the initial screen by pressing"Exit" button twice.(the new setting model name will appear on the initial screen)

Low battery voltage alarm

The transmitter's low voltage alarm is 4.6V, if you use 2S or 4S LiPo battery, the 4.6V is unsuitable, that may cause the battery over discharge and damage the battery. So you can set transmitter's warning voltage when you use different battery.



There are four options you can choose:

Li2S-7.2V

Li3-10.8V

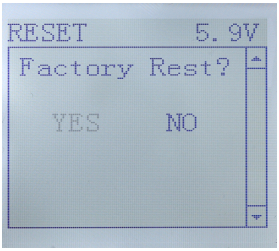
Ni4S-4.6V

CUSTOM: adjustable 4.6V to 16.0V.

Reset function "RESET"

REST- Data reset function:

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



1.Enter the function menu and use "Dec(-)" or "Inc(+)" button to access RESET function.

2.Press “Enter” button to get into RESET function interface, the symbol “YES” will blink.

Be sure to reset

Press “Enter” key, the symbol “YES” will stop blinking, and return to the initial screen. Now the model data is reset to the initial setting that is the default value set at the factory.

Not to reset

Press “Dec(-)” or “Inc(+)” button, the symbol “YES” will stop blinking and the symbol “NO” will blink, press “Enter” key, the symbol “NO” will stop blinking, return to the initial screen by pressing “Exit” button twice.

Or you can press “Exit” button twice to quit resetting directly.

CAUTION: Resetting the current model memory will permanently erase ALL programming information for that model. The data cannot be recovered .Do not reset the model unless you are certain you want to clear-out that memory and start from scratch.

Thank you again for using our product, we hope it can bring you happiness!