

## 2.4G FHSS Technology

### EPA Edition

3-Channel 2.4G Radio Control System

# INSTRUCTION MANUAL

- Thank you for purchasing our R/C system.
- Before using, read this manual carefully.



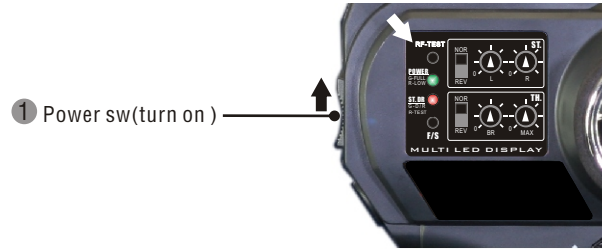
## CAUTION

To work your R/C with your models correctly and safely, read this manual carefully and keep it in a safe way as a reference introduction in the future.

### Warning:

1. This product is only equipped for radio controlled models;
  2. The usage of this product should be approved by local relevant law or regulations;
  3. We will not be responsible for the damages caused by unauthorized modification, adjustment or replacement of parts of this product;
  4. The manual may be altered without prior notice. Please contact us if you have any corrections or clarifications that should be made in the manual..
- Before starting the transmitter, make sure the transmitter batteries are well loaded. The voltage of transmitter batteries is never lower than 8.6V. And please check and confirm that the servos are all well and properly connected.
- Keep the radio system away from moist, high temperature and strong shake. Do not clean the product with solvent.
- The antenna does not touch anything else when power switch is turned on. Do not leave this product and its accessories within the reach of small children.
- Please use this product according to your local relevant law or regulation, we are not responsible for any incidents or damages.

## 2.4G Binding And Reducing Power



### 1. Reducing output power setting

- 1). Keeping RF-TEST button till the "ST.DT" light turn on RED, meanwhile the output power of transmitter reduce to lower mode 18dbm, which done can save the power consumption.
- 2). When press the RF-TEST button again, the "ST.DT" light turn off, and output power becomes normal 20dBm which can control more range.

### 2. The Binding processing

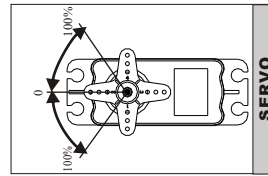
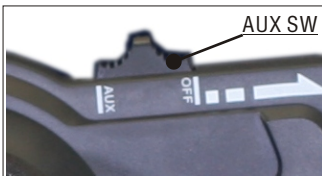
Turn on the transmitter, then connect the power of receiver keeping the receiver "BIND" button till the light turn on GREEN which means the binding is successful. After that, it's unnecessary to bind again.

Caution: making sure that the RX and TX is one meter away, and around 10 meters no similar device.

If the light flashing, showing the binding failure, please do again as above indication.

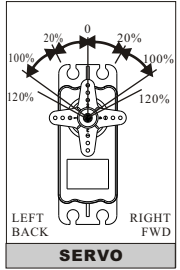
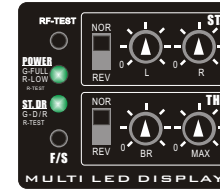


## AUX Channel Function(CH3)



Aux SW in "AUX", servo moving clockwise. In "OFF", anticlockwise.

## Steering Dual Rates Setup



### Function

Using this function to adjust servo travel.

the default is 100%, adjusting value range:20%–120%.

### Setting

1, Press INC button, the "ST.DR" LED flash in green, shown the steering servo of value respond increased.

when LED appears all along RED, shown reach max value

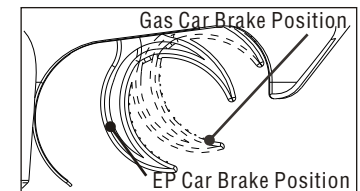
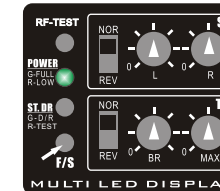
2, Press DEC button, the "ST.DR" LED flash in green, shown the steering servo of value respond decreased. when LED appears all along RED, shown reach min value.

3, when setting D/R value, shown 20%, 100%, 120%. the LED appear RED, normally the LED turn off.

### Caution:

Keeping INC and DEC at the same time, reset the transmitter. To the F/S function, need to be reset again.

## Fail Safe Setup



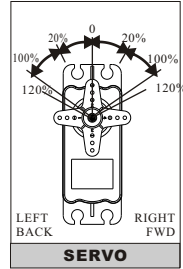
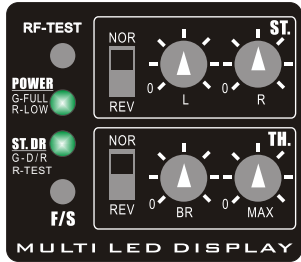
### Function

This F/S Function is protect your car or boat, when the signal become weak or lost.

### How to Set

- 1 Make sure the RX power is enough.
- 2 Put trigger in brake position (above show), keep the F/S button till "ST. DR" led flash
- 3 Then release F/S button, the function finished.

## EPA Adjustment



### Function

Use this when performing left and right steering angle adjustments, throttle high side/brake side operation amount adjustment during linkage. End point adjustment(EPA) adjusting value range: 0~100 %

### Setting

- Steering(left side) adjustment  
Adjusting the potentiometer"L", in"0" position shown the min. value 0%
- Steering(Right side) adjustment  
Adjusting the potentiometer"R", in"0" position shown the min. value 0%
- Throttle(forward side) adjustment  
Adjusting the potentiometer"MAX", in"0" position shown the min. value 0%.
- Throttle(brake side) adjustment  
Adjusting the potentiometer"BR", in"0" position shown the min. value 0%

### Caution:

when adjusting this function, make sure the direction is in agreement with the car or boat direction, you can adjust by the REV button.

## Trim Adjustment

Please start the motor or the engine while making the adjustment of these settings.

- Connect the receiver, servos, and other components and then turn on the power switches of transmitter and receiver.
- Be sure the Steering trim and Throttle trim on the transmitter are at their neutral position.
- Before turning on the transmitter, please make sure the transmitter antenna is completely extended. Turn on the transmitter before turning on the receiver, while turn off the receiver before turning off the transmitter.

### Steering Trim

Steering neutral adjustments can be made by moving the steering trim knob to the left or the right.

### Racers Tip

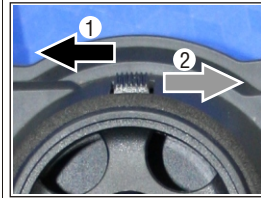
Always check and be sure the servo is at its neutral position before installing a servo. Adjust the servo horn hole position and linkage so that both are parallel. When a servo saver is used, place it as closer to center position as possible. Be sure the steering trim on the transmitter is at the neutral position.

### Trim Operation And Maximum Travel.

Changing the trim can effect the overall settings, when adjustments are made with the trims, please recheck your installation for maximum servo travel.

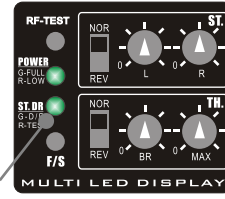
When Trim movement goes to extremes

That means if you make a lot of trim movement to get a servo to the neutral position, please reposition the servo horn or servo saver on the servo and inspect your linkage installation.

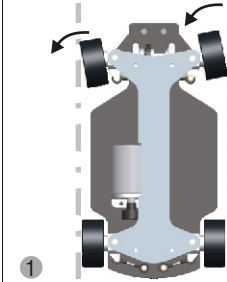


Caution:  
When find the direction is wrong, changing the relevant REV button.

FLASH

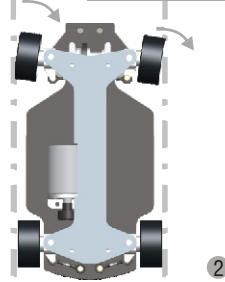


### TURN LEFT



- When adjust the TRIM button, the "ST.DR" LED appears GREEN flash.
- When in the neutral position, the LED appears RED.
- When in max position, LED appears RED flash, then all along appears.

### TURN RIGHT



### Throttle Trim

Throttle neutral adjustments can be made by moving the throttle trim to the left or the right.

### Racers Tip

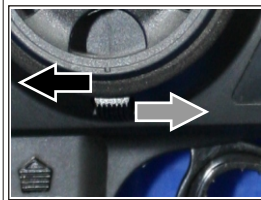
When using a electronic speed control, please set the throttle trim to neutral and make adjustments to the speed control. On a gas powered model, set the trim to neutral and adjust the linkage to the point where carburetor is fully closed in accordance with the engine instruction manual.

### Trim Operation and Travel

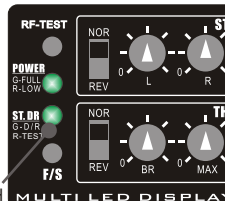
Trim adjustments will effect the overall servo travel, so please check the (back-ward) movement after the adjustment

When trim movement goes to extremes

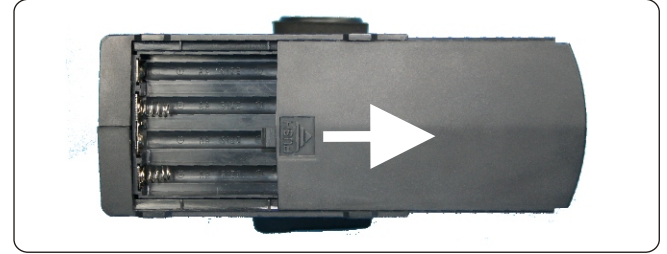
That means if you make a lot of the trim movement to get the servo to the neutral position, please recenter the servo horn closer to the neutral position and inspect your throttle linkage.



FLASH



## Handling Procedure For Batteries



### Battery Replacement

- Remove the battery cover from the transmitter by sliding it in the direction of the arrow .2) Remove the used batteries.3)Load the new AA size batteries. Pay very close attention to the polarity marking and reinsert accordingly.
- Slide the battery cover back onto the case.

### Caution

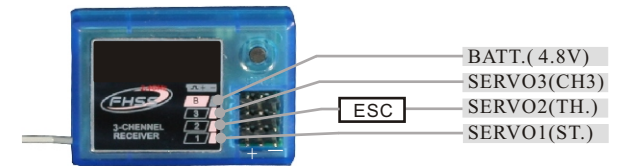
Always be sure your reinsert the batteries are in the correct polarity order. If the batteries are loaded incorrectly, the transmitter may be damaged. When the transmitter is not used , always remember to remove the batteries. If the batteries do happen to leak, clean the batteries case and contacts thoroughly. Make sure the contacts are free of corrosion.

### Battery Disposal

Some countries require special handling of used batteries ,please contact the agencies responsible for recycling hazardous wastes in your local area.

Battery low voltage alarm indicator.

## Receiver Connection Diagram



## Technology Data

### Transmitter

Channels:3  
Resolution:4096  
Frequency:2.4GHz ISM Frequency range  
Modulation:GFSK  
Spread Spectrum Mode: FHSS  
Number of frequency channels:20  
Hopping rate:240 Jump / S  
Output Power:<=20dBm  
working current:<=150mA  
Working voltage:1.2Vx8 NiCad /NiMH

### Receiver

Channel: 3  
Frequency:2.4G ISM  
FREQUENCY RANGE  
Spread spectrum mode:FHSS  
Power: 4.5-5.5V/<30mA