

F-2

2.4GHz system

**INSTRUCTION
MANUAL**

Thank you for purchasing a F-2 2.4GHz system. Before using your F-2 2.4GHz system, read this manual carefully and use your R/C set safely. After reading this manual, store it in a safe place.

1. Safty guides

- Do not cover/hold the built-in antenna part of F-2 transmitter by your hand during running.
- Do not perform the linking procedure while motor's main wire is connected or the engine is operating as it may result in serious injury.
- When using a Ni-Cd/Ni-MH battery to power your system, always charge and check the battery voltage prior to operation.

A. Turning on the power switches

Always check the throttle trigger on the transmitter to be sure it is at the neutral position.

- Turn on the transmitter power switch.
- Turn on the receiver or speed control power switch.

B. Turning off the power switches

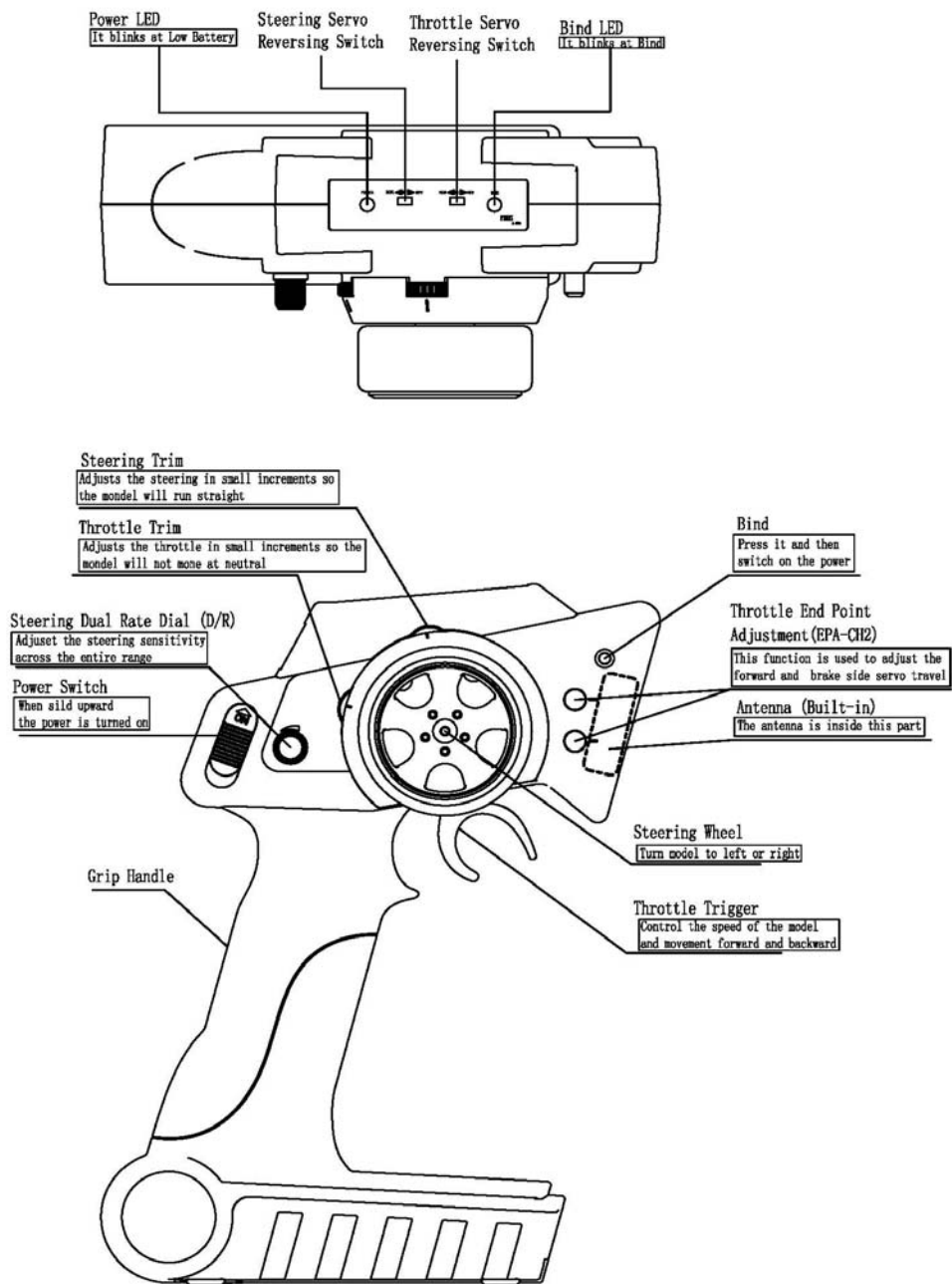
Always be sure the engine is not running or the motor is stopped.

- Turn off the receiver or speed control power switch.
- Then turn off the transmitter power switch.

If the power switches are turned off in the opposite order the model may unexpectedly run out of control and cause a very dangerous situation.

2. Before Operation

● Transmitter



As with all radio frequency transmissions, the strongest area of signal transmission is from the sides of the antenna(built-in). As such, the antenna(arrow direction) should not be pointed directly at the model.

Do not cover/hold the built-in antenna part of F-2 transmitter by your hand during running.

Do not put any conductive plate/sticker on the antenna part.

Otherwise, the operating range may become shorter.

3. Assembly / Adjustment

➤ Battery Replacement Method

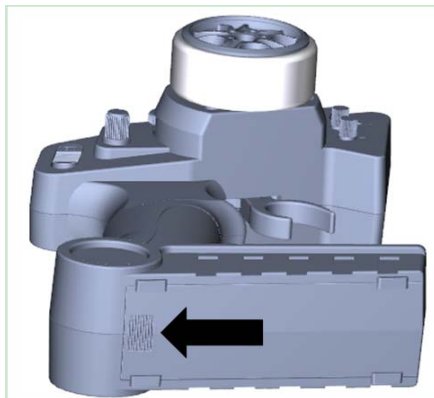
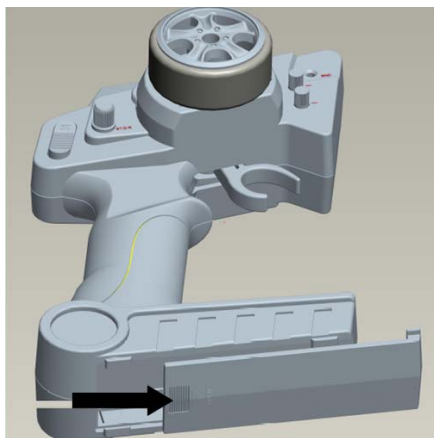
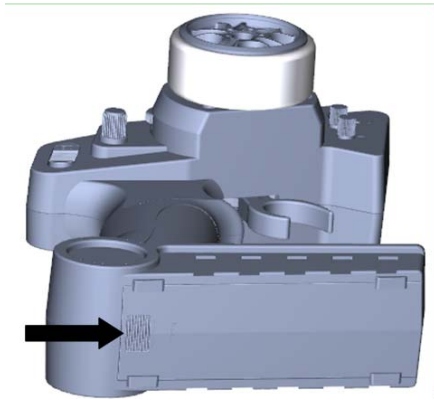
(4 AA size batteries)

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

CAUTION

Always be sure you reinsert the batteries in the correct polarity order. If the batteries are loaded incorrectly, the transmitter may be damaged.

When the transmitter will not be used for any short or long period of time, always remove the batteries. If the batteries do happen to leak, clean the battery case and contacts thoroughly. Make sure the contacts are free of corrosion.

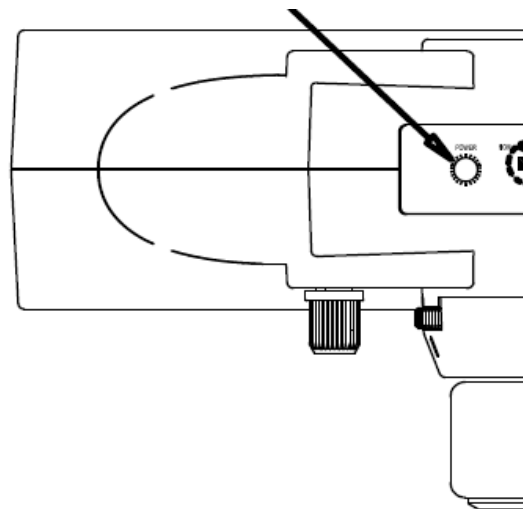


Check:

Turn the power switch on the transmitter to the ON position. Check the battery voltage display on the LED light. If the voltage is low, check the batteries for insufficient contact in the case or incorrect battery polarity.

Low Battery :

When the LED starts blinking, change the batteries immediately.



The low battery alarm is meant to be a safety feature only. Do NOT operate your radio below low battery. Always shut your radio off as soon as possible after the low battery warning loss of control.

➤ **Transmitter/Receiver Binding**

- Insert the Binding line to the BIND port of the receiver.
- Power on the receiver and the LED blinks quickly .This means the receiver are going to binding mode.
- Press and hold the BIND button of the transmitter, then power on the transmitter. The bind LED of transmitter flickers and this means the transmitter are going into binding mode.
- Transmitter and receiver begin to bind. After binding is completed, the LED of transmitter and receiver will change to solid GREEN. Otherwise, please repeat the above operation again.

4. F-2 Functions

A. Steering Trim

- **Racers Tip**

When you install a servo, always check to be sure the servo is at its neutral position. Adjust the Steering neutral adjustments can be made by moving the Steering trim knob to the left or right.

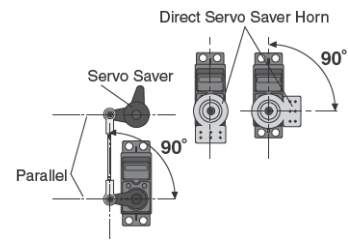
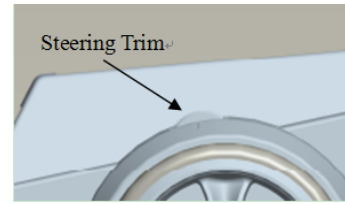
servo horn hole position and linkage so both are parallel. When a servo saver is used, place it as close to center position as possible. Be sure the steering trim on the transmitter is at the neutral position.

- **Trim Operation And Maximum Travel**

Changing the trim can affect the overall settings. When adjustments are made with the trims, recheck your installation for maximum travel. (Steering D/R).

- **When Trim usage is extreme**

If it takes most of your trim movement to get a servo to the neutral position, reposition the servo horn or servo saver on the servo and inspect your linkage installation.



B. Throttle Trim

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

- **Racers Tip**

When using an electronic speed control, 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 the carburetor is fully closed in accordance with the engine instruction manual.

- **Trim Operation and Travel**

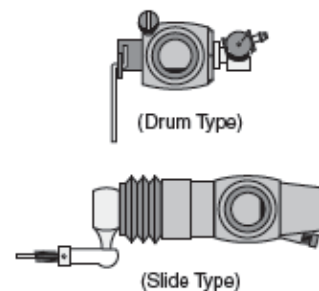
Trim adjustments will affect the overall servotravel. Check the brake side (backward) movement when changes are made.

- **When trim movement is extreme**

If you use most of the trim movement to get the servo to the neutral position, recenter the servo horn closer to the neutral position and inspect your throttle linkage.

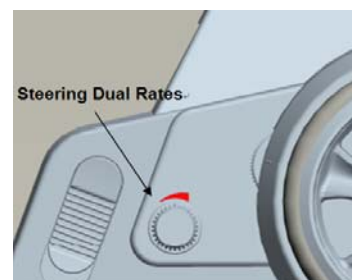


Carburetor Fully Closed



C. Steering Dual Rates

Use this function to adjust the steering travel of your model. If the model understeers, take away steering by turning CCW of the D/R button. When the model oversteers, take away steering by turning CCW of the D/R button.

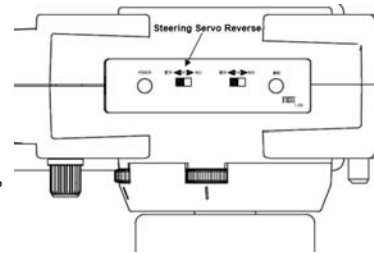


Be sure that the steering linkage does not bind or come in contact with any suspension parts or arms. If unreasonable force is applied to the servo, the servo may be damaged and result in loss of control.

D. Steering Servo Reversing

This function reverses the rotation direction of the Steering servo.

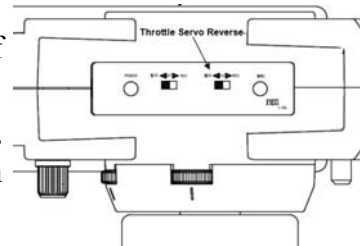
When the trim position deviates from the center, the deviation will be on the opposite side when the servo is reversed.



E. Throttle Servo Reversing

This function reverses the rotation direction of the throttle servo.

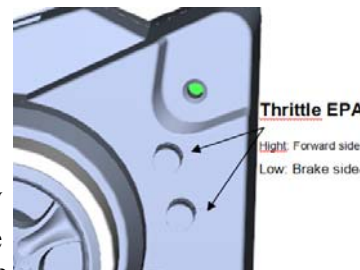
When the trim position deviates from the center, the deviation will be on the opposite side when the servo is reversed.



F. Throttle End Point Adjustment(EPA)

This function is used to adjust the forward and brake side servo travel. Each direction can be adjusted independent of each other. Use this feature to set the throttle servo travel.

Be sure that your throttle linkage does not apply excessive force to the servo. If your linkage installation causes an unreasonable amount of force to be applied to the servo, the servo may be damaged and result in loss of control.



G. Fail Safe Function (F/S)

This function moves the throttle servo to a preset position when the receiver cannot receive the signal from the transmitter for some reason.

● Setting

- Turn on the transmitter and receiver power switches.
- Insert the binding lines to the binding port of the receiver.
- After 2 seconds the LED of the receiver blinks quickly. This means the receiver are going to F/S setting.
- Push the throttle trigger to brake position and keep this position.
- Remove the binding lines from the receiver.
- Setting finish.

● Cancel setting

- Transmitter and receiver binding again.

5. Transmitter parameters

Transmitter specifications:

- 🌀 Use in: car/boat
- 🌀 Channels: 2
- 🌀 Frequency: 2.4GHz ISM Frequency Range
- 🌀 Spread Spectrum Mode: FHSS
- 🌀 Modulation format : FSK/GFSK
- 🌀 Output Power: $\leq 100\text{mW}$
- 🌀 Working current: $\leq 150\text{mA}$
- 🌀 Resolution: 1024
- 🌀 Steering Dual Rates
- 🌀 Throttle End Point Adjustment
- 🌀 Low Voltage Warning
- 🌀 Fail Safe Function
- 🌀 Dimensions: 152mm * 163mm * 65mm
- 🌀 Net weight: 252g
- 🌀 Certificate : CE, FCC

FCC Warning

This device 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.

NOTE 1: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.