GR7SF 7-Channel Gyro/Receiver Instruction manual

Thank you for purchasing Radtron's GYRO-Embedded S-FHSS compatible receiver. This 7-channel receiver/gyro will help stabilize and enhance your model's flight performance when using FUTABA S-FHSS.

Compatibility:

The Radtron 2.4GHz S-FHSS Compatible GR7SF Receiver is designed to be used with FUTABA S-FHSS-compatible 2.4GHz transmitters, such as T6J,T8J,T10J and T14SG under S-FHSS protocol mode.

Features:

Mode: No mixer, Dual-aileron, V-tail mixer, Delta mixer
Independent gyro gain adjustments for Aileron, Elevator and Rudder
S.BUS output support expanding servo channels @ the 8th channel
Supports gyro on and off function switch

Specifications:

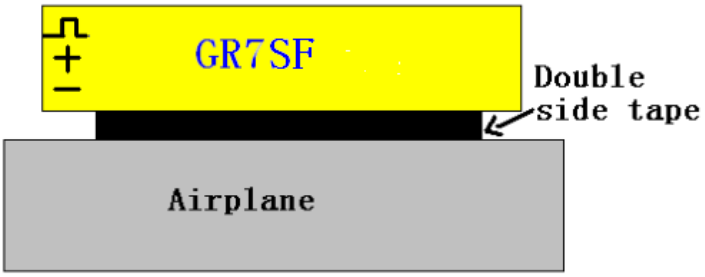
- Voltage Range :3.6~8.5V
- Operating Current: 60mA max
- Operation temperature: -10~70 degC
- Latency: 6.8mS
- Sensitivity: about -96dBm
- Weight: 16g

Bind procedure:

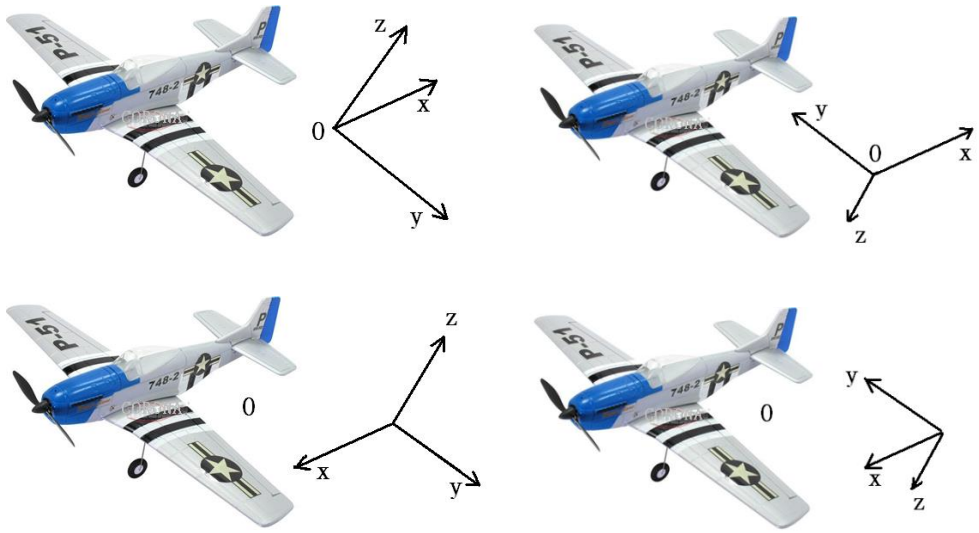
- Turn on the S-FHSS transmitter
- Connect the battery to the receiver while pressing receiver's F/S button.
- The Red LED light will be on and the Green LED will be off while binding, Green LED light on and Red LED off indicates the binding process has been successful.

Installation Guide:

Make sure to properly secure your GR7SF receiver within the battery compartment using double-sided tape to make sure the receiver does not shift around in flight.



Make sure the axis direction of your gyro matches one of the diagrams below. Also refer to the product box.



Turn on your S-FHSS transmitter and turn off any mix feature on the transmitter, make sure the stick trim and sub-trim parameters are set to zero. Preset all sensitivity to about 40~60%. Select the proper mode of mix on the GR7SF and power it on, check and adjust aileron, elevator or rudder to the neutral position of the control surface. Adjustments can be achieved by trimming on the transmitter. **If the mode selection and sensitivity changed, please power the GR7SF off/on again to let new features take effect.** Check all servo controls for correct direction and movement. Reverse the servo direction on the transmitter if needed. Roll the model along the x, y or z axis alone to check the gyro direction that you want as the photos below demonstrate.

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If gyro direction is reversed, set the sensitivity value to reverse. **If any sensitivity changed, please power the GR7SF off/on again to let the new features take effect.**

Fail-safe setting:

GR7SF can set failsafe on the S-FHSS transmitter just like FUTABA receivers. We highly recommend you set the failsafe feature while flying your models. An example of a useful failsafe setting would be to shut down the model's throttle, so that it does not fly or drive away uncontrolled.

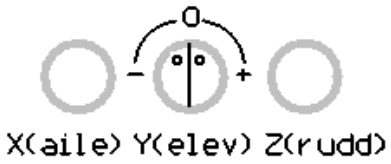
Mode selection guide:

GR7SF supplies five kind of modes to select:

NO.	Mode type description	Switch position	Model type
1	Without any mixer		Airplane
2	Dual-aileron		Airplane
3	V-tail mixer		V-tail
4	Delta mixer		Delta wing
5	Dual-aileron + V-tail mixer		

Gyro sensitivity setting:

- GR7SF offers three potentiometers to adjust the sensitivity for X,Y and Z axis independently.
- The nine o'clock position is negative maximum sensitivity, the three o'clock position is positive maximum sensitivity and the twelve o'clock position is zero sensitivity.



- First you may wish to try all axis sensitivity around 50% as a starting point. Adjust from there based on your personal preference.
- The GR7SF gyro function on and off switch can be used by switching the signal of CH5, ppm width <1200uS gyro function on, and ppm width >1800uS gyro function off.

Servo selection guide:

The servos must be digital, high speed, high resolution with large servo travel. If you want to adjust servo travel under the mix mode of the GR7SF receiver please adjust your end points on your transmitter.

LED status indicated under normal working status:

RED LED	GREEN LED	Status
on	off	No signal searched
off	solid	Signal is very good
off	flash	Signal is not very good
off	off-flash	Signal is weak

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