GR7SF Instruction manual

Thank you for purchasing CORONA's GYRO-Embedded S-FHSS compatible receiver. This production can supply enhancement smooth with FUTABA S-FHSS link in the flight.

Compatibility:

CORONA 2.4GHz S-FHSS Compatible Receiver is designed to use with FUTABA S-FHSS 2.4GHz transmitters, such as T6J,T8J,T10J and T14SG under S-FHSS protocol mode.

Feature:

Mode supply: No mixer, Dual-aileron, V-tail mixer, Delta mixer
Independent simple gyro gain adjustment for Aileron, Elevator and Rudder
S.BUS output support expanding servo channels @the 8th channel
Support gyro function switch on and off in flying by Switching signal of CH5

Specifications:

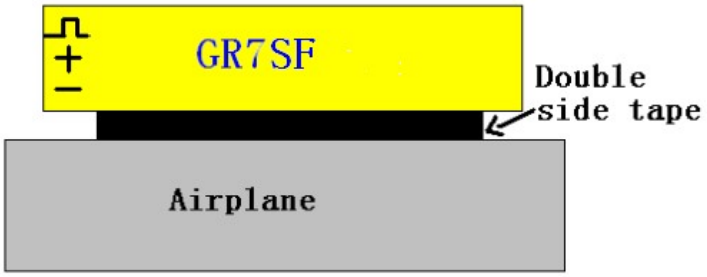
- Voltage Range :3.6~8.5V
- Operating Current: 60mA max
- Operation temperature: -10~70 degC
- Latency: 6.8mS
- Sensitivity: about -96dBm
- Weight: 16g

Bind procedure:

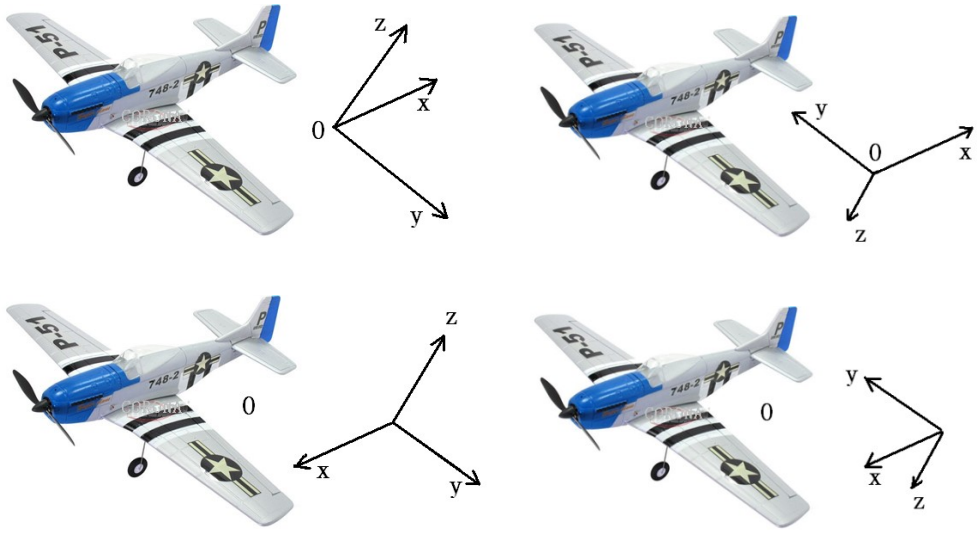
- Turn on the S-FHSS transmitter
- Connect the battery to the receiver while pressing receiver's F/S button.
- Red LED light on and Green LED off when searching signals, and turn to Green LED light on and Red LED off indicate bind is succeeded.

Installation Guide:

- Make sure that your plane has good status before installing GR7SF and other electrical device on it.
- The receiver need to be firmly mounted near the gravity of the plane by double side tape, refer to illustration below.



Ensure the axis direction is out of four kind types description below. Fixed GR7SF reference the information mentioned in axis description pictures on receiver's box.



- Turn on S-FHSS transmitter, turn off any mixer feature on the transmitter, firstly set stick trimming and sub-trim parameters to zero .Preset all sensitivity at about 40~60%, Select the proper mode of mixer on GR7SF and power on it, check and adjust aileron, elevator or rudder to the neutral position of control surface. Adjustment can be done by stick trimming on the transmitter. **If mode selection and sensitivity changed, please power the GR7SF again to let new feature take effect.**
- Check all servo controlling that you need under flying is correct. Reverse the servo direction on the transmitter if need. Roll the model along the x, y or z axis alone to check the compensation direction that you want as the picture show.

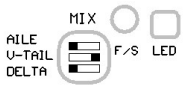
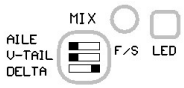
If compensation direction is reversed, set the sensitivity value reverse. **If any sensitivity changed, please power the GR7SF again to let new feature take effect.**

Fail-safe setting:

GR7SF set failsafe on the S-FHSS transmitter just like the operation of the FUTABA receivers. We highly recommend you set 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.

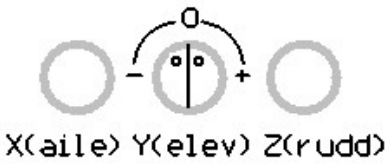
Mode selection guide:

GR7SF supply five kind of mode to select.

NO.	Mode type description	Switch position	Models 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.
- Nine clock position as the negative maximum sensitivity , three clock position as the positive maximum sensitivity and twelve clock position as zero sensitivity.



- Firstly you can try all the axis sensitivity about 50%.After some trying, you can adjust the sensitivity by flight feeling feedback.
- GR7SF support gyro function switch on and off in flying by Switching 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 and large servo travel. If you want to adjust servo travel under mixer mode of GR7SF,please adjust in ”END POINT ”item on 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