

Bay-Tec Fasst comp. Receiver GR7FA

Instruction manual

Thank you for purchasing Bay-Tec's GYRO-Embedded FASST compatible receiver. This production can supply enhancement smooth with FASST link in the flight.

Compatibility:

Bay-Tec 2.4GHz Spread Spectrum FASST Compatible Receiver is designed to use with FUTABA FASST 2.4GHz transmitters, such as TM7, TM8, TM10, TM14 or T6EX-2.4G, 7C-2.4G, 8FG, 10CG, 12FG, 14SG, 18MZ

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.
- Support gyro function switch on and off in flying by Switching signal of CH5

Specifications:

- Voltage Range :3.6~8.5V
- Operating Current: 70mA max
- Operation temperature: -10~70 degC
- Latency: 14mS @ FASST multi-channel mode /16mS @ FASST 7ch mode
- Sensitivity: about -96dBm
- Weight: 16g

Bind procedure:

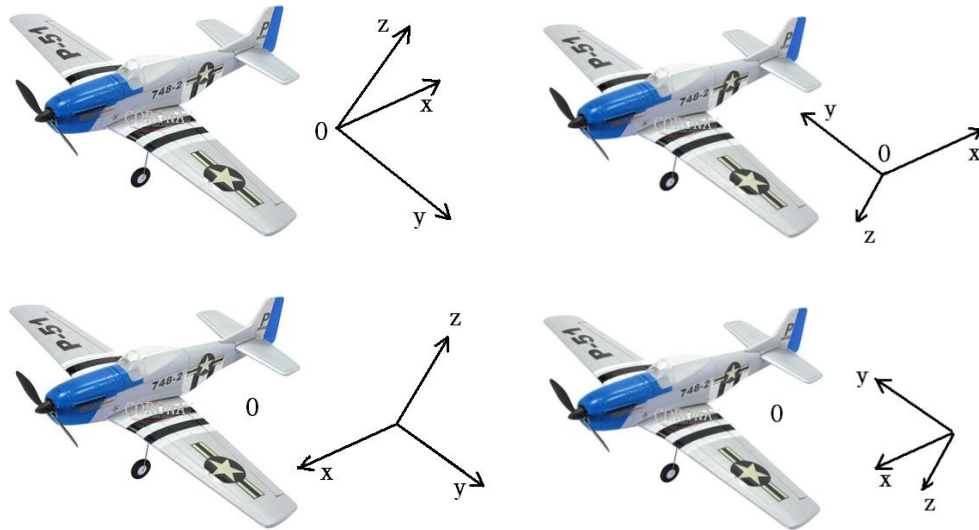
- Turn on the FASST transmitter
- Connect the battery to the receiver while pressing receiver's F/S button.
- The Dual-color LED's continuous will cycle through the following:
 - Red LED light (searching radio signal)
 - Green LED light (acquired the radio signal)
 - Red LED off (bind ok)
 - Green LED flashes 10 times (ID store in memory)
 - Green LED lights solid (normally operation)

Installation Guide:

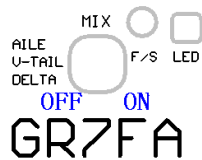
- Make sure that your plane has good status before installing GR7FA and other electrical device on it.
- The receiver need to be firmly mounted near the gravity of the plane by double side tape, refer to illustration below.



Ensure the axis direction is out of four kind types description below. Fixed GR7FA reference the information mentioned in axis description pictures on receiver's box.



- Turn on FASST 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 GR7FA 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 GR7FA 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 GR7FA again to let new feature take effect.**

Fail-safe setting:

Attention: Fail-safe setting must be set after mode selection.

There are two ways to set the Failsafe setting on the R7FA FASST Compatible Receiver;





1. TX-failsafe feature: This method is to set failsafe on the FASST transmitter and has priority (works on channel 3 only under FASST 7ch mode or on multiple-channels under FASST multi-channel mode) while the receiver is working on, just like the FUTABA receivers.
2. RX-failsafe feature: Turn on FASST transmitter and turn on the R7FA Receiver, put all the sticks and switches to where give the control inputs you want if the receiver loses signal and Press the F/S button down for about 5 - 6 seconds while the Green LED light solid (Rx in normal operation), then release the button. You will see the Red LED will flash for about 4 - 5 seconds. (Note: The Red LED will FLASH high speed to indicate the RX-failsafe is turned on OR FLASH low speed to indicate the RX-failsafe is turned off). If you press the F/S button a second time while the Red LED is flashing, the receiver will change its RX-failsafe status (on / off), then the LED will return to Green solid again. If you not press the F/S button. Nothing will be changed and the LED will return to Green solid again. If you want to cancel the RX-failsafe feature (not just turn it off), you can do it by binding the receiver again.


Note: If you do not set a failsafe setting, the receiver will hold all controls at the position of the last command received before signal was lost. When RX-failsafe is turned on, the receiver will initiate the RX-failsafe settings after losing signal for over 1 second, the receiver will hold the last received positions until the failsafe takes over. When the RX-failsafe and TX-failsafe feature are both turned on, the receiver will use the TX-failsafe command.

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:

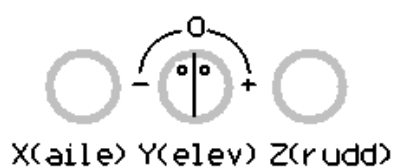
GR7FA supply five kind of mode to select.

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		
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Gyro sensitivity setting:

- GR7FA 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.
- GR7FA 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 GR7FA,please adjust in "END POINT "item on transmitter.

LED status indicated under normal working status:

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

