

# Futaba R2104GF

**S-FHSS/FHSS-2.4GHz system  
(Auto Detection),  
4-channel receiver**



Thank you for purchasing the R2104GF receiver. The R2104GF is designed for use with the Futaba S-FHSS or FHSS system transmitter. The S-FHSS system has two(2) operation mode as shown below.

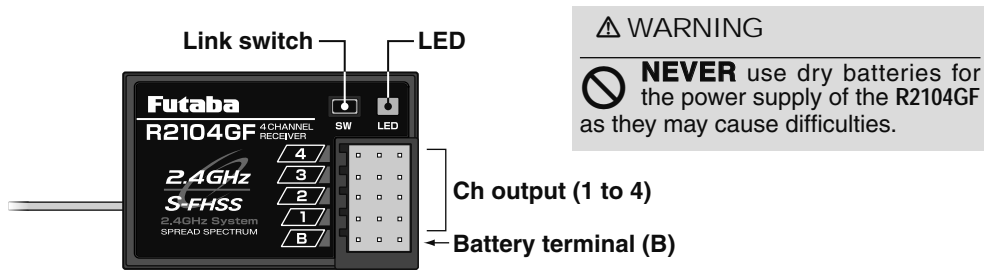
### •Normal mode/High Speed mode

The "Normal mode" accepts any type of servos or the peripherals as the frame rate of the output is 13.6ms. The "High Speed mode" only accepts the digital servos, including BLS series, and most peripheral equipments such as the brushless ESCs.

The frame rate of the outputs is 6.8ms.

Please pay special attention to the information contained within this manual and transmitter's manual in order to have a pleasant running/flying experience.

The R2104GF is compatible with the S-FHSS or FHSS system transmitters as shown "Transmitter and Receiver Compatibility".



### ⚠ WARNING

⊘ **NEVER** use dry batteries for the power supply of the R2104GF as they may cause difficulties.

### Usage condition on "High Speed mode"

#### ⚠ CAUTION

⊘ When using the high-speed mode, use a Futaba digital servo (including brushless servo). Analog servos cannot be used.

- The use of analog servos may cause servo trouble.

### Operating Precautions:

Once the R2104GF detects the S-FHSS normal mode, S-FHSS high speed mode or FHSS mode, the detected mode is locked as long as the power is ON. When need to change the mode, please cycle power.

### FHSS-2.4GHz/S-FHSS-2.4GHz System Transmitter and Receiver Compatibility

Transmitter			FHSS Receiver	S-FHSS/FHSS Receiver	
			R603GF R2004GF	R2104GF	
T2PL-2.4G (FHSS)			Okay	Okay	F/S function: Ch2
T3PL-2.4G (FHSS)			Okay	Okay	F/S function: Ch2
T4YF-2.4G (FHSS)			Okay	Okay	
T4PL-2.4G	S-FHSS	High Speed	—	Okay	F/S function: All channels B-F/S function: Ch2 *Digital servo only at High Speed mode
		Normal			
	FHSS		Okay	Okay	F/S function: Ch2

**Note:** Futaba FHSS/S-FHSS system and FASST system are not compatible each other.

### Link Procedure

Each transmitter has an individually assigned, unique ID code. In order to start operation, the receiver must be linked with the ID code of the transmitter with which it is being paired. Once the link is made, the ID code is stored in the receiver and no further linking is necessary unless the receiver is to be used with another transmitter.

- 1 Place the transmitter and the receiver close to each other within one (1) meter
- 2 Turn on the transmitter and the receiver.
- 3 Push and hold the Link switch on the receiver.
- 4 When the link is complete, the LED on the receiver changes to solid green.

\* Please refer to the table below for LED status and receiver condition.

No signal reception	Red : On
Receiving signals	Green: On
Receiving signals, but ID is unmatched.	Green: Blink

\* If there are many S-FHSS/FHSS systems turned on around your receiver, it might not link to your transmitter. In this case, even if the receiver's LED stays solid green, unfortunately the receiver might have established a link to one of the other transmitters. This is very dangerous if you do not notice this situation. In order to avoid the problem, we strongly recommend you to double-check whether your receiver is controlled by your transmitter by giving throttle input, etc. and then checking servo response.

### ⚠ WARNING

⊘ After the linking is done, please cycle receiver power and check if the receiver to be linked is really under the control by the transmitter to be linked.

⊘ Do not perform the linking procedure with motor's main wire connected or with the engine operating as it may result in serious injury.

### R2104GF Specifications:

(S-FHSS/FHSS system, 4-channel receiver)

- Receiving on 2.4GHz band
- System: S-FHSS/FHSS system (auto detection)
- Operation mode: Normal/High speed (auto detection)
- Power requirement: 4.8V or 6V (shared with servo)
- Current drain: 30mA (at no signal)
- Size: 1.54x1.02x0.39" (39x26x10mm)
- Weight: 0.28oz. (8g)

### Compliance Information Statement (for U.S.A.)

This device, trade name Futaba Corporation of America, model number R2104GF, complies with part15 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.

The responsible party of this device compliance is:

Futaba Service Center  
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TEL (217)398-8970 or E-mail: support@futaba-rc.com (Support)

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