1M23Z12202

# R70SR

◆ FASSTest-2.4GHz System

◆ Backup receiver for Dual Rx Link system

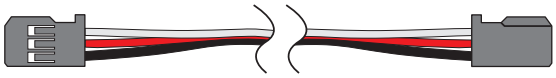
● Applicable systems: Futaba FASSTest-2.4GHz system transmitter

● R70SR can be used with the receivers/CGY770R equipped "Dual Rx Link" function and DLPH series. *Not compatible with DLPH-1/FDLS-1

● R70SR is a backup use of the main receiver and is NOT valid for direct servo operation.

● R70SR is receiving operation only. No telemetry function equipped.

● The connection cable with the main receiver is not included in this set. Please prepare your favorite length of female-female type cable separately.

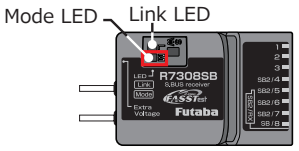


**Sold separately**

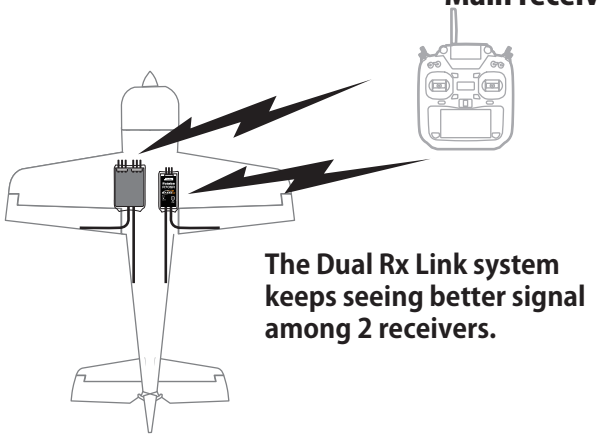
Please use the R70SR for a backup purpose for the Dual RX Link System receiver such as R72xxSB/R73xxSB/CGY770R, or DLPH series.By connecting the R70SR to "Rx" port of the receiver/CGY770R or "RX2" port of the DLPH series, the path of the RF link will be increased.

**To use the R70SR, be sure to update the main receiver/ CGY770R/DLPH-2 to the latest software. Otherwise, the main receiver may not identify the signal from the R70SR.**

*If the main receiver's (R72xxSB/R73xxSB) software version is not latest one, the MODE LED on the main receiver will remain red solid, even if the R70SR is connected to the target transmitter with a green solid LED. In this case, the servos are controlled by the command from the main receiver but the signal from R70SR is rejected, so the Dual Rx Link function is not valid. Hence, please double-check the MODE led on the main receiver as well.




**Main receiver**



**The Dual Rx Link system keeps seeing better signal among 2 receivers.**

## R70SR Specifications

FASSTest-2.4 GHz system (26CH/18CH/12CH mode)

Dual RX system backup receiver

- Dual antenna diversity
- Size: 0.59 x 1.69 x 0.20 in. (15.0 x 43.0 x 5.0 mm)
- Weight: 0.14 oz. (3.9 g)
- Power requirement: 3.7 V to 7.4 V(Voltage range: 3.5 V to 8.4 V)

*Be sure that when using ESCs regulated output the capacity of the ESC must meet your usage condition.

*Never use dry batteries for the power supply of the receiver as they may cause difficulties.

### ⚠ WARNING

● Changes or modification not approved by the party responsible for compliance could void the user's authority to operate the equipment.

● The R70SR receiver should be protected from vibration by foam rubber, Velcro, or similar mounting methods. Protect from moisture.

● Keep away from conductive materials to avoid short circuits.

⊘ Do NOT turn on the receiver first! The transmitter must be activated first.

### Antenna installation precaution

⊘ Do not cut or bundle the receiver antenna wire.

● The antennas must be mounted in such a way to assure they are strain relieved.

● Keep the antenna as far away from the motor, ESC and other noise sources as you possibly can.

⊘ Do not touch the antenna to metal, carbon, or other conductive material.

● Be sure that the two antennas are placed at 90 degrees to each other.

■ The R70SR has two antennas. In order to maximize signal reception and promote safe modeling Futaba has adopted a diversity antenna system. This allows the receiver to obtain RF signals on both antennas and fly problem-free.

### Antenna installation for carbon fuselage

● You must leave 30mm at the tip of the antenna fully exposed. The exposed antenna should be secured so that it cannot move around or back inside of your aircraft.

### Link precaution

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

● When the linking is complete, please cycle the receiver power and ensure the receiver is properly linked to the transmitter.

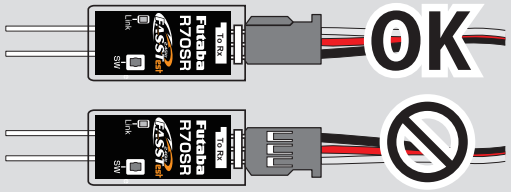
● Power on the system in this order: Transmitter first, followed by the receiver.

● If the R70SR receiver was previously linked to another transmitter, make sure that transmitter is not operating while linking the receiver to the new transmitter.

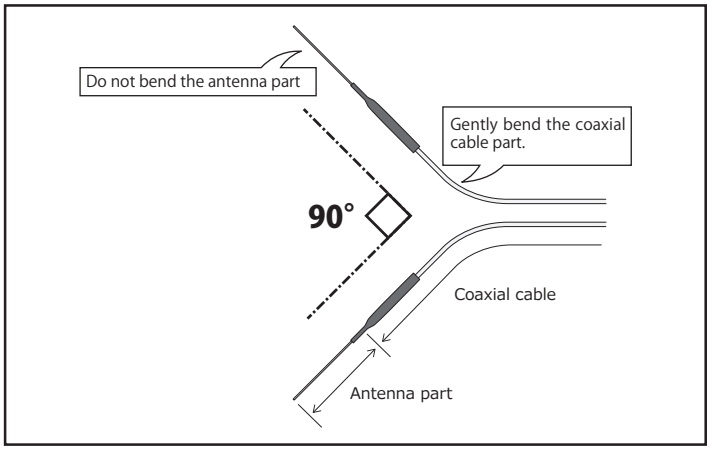
### Be careful of connector insertion

⊘ Don't connect any devices other than the Futaba DUAL RX system receiver to the R70SR connector.

⊘ Do not mistake the insertion position/direction of the connector.
If make a mistake as shown in the diagram below, there is a risk of fire, burnout, or burns.



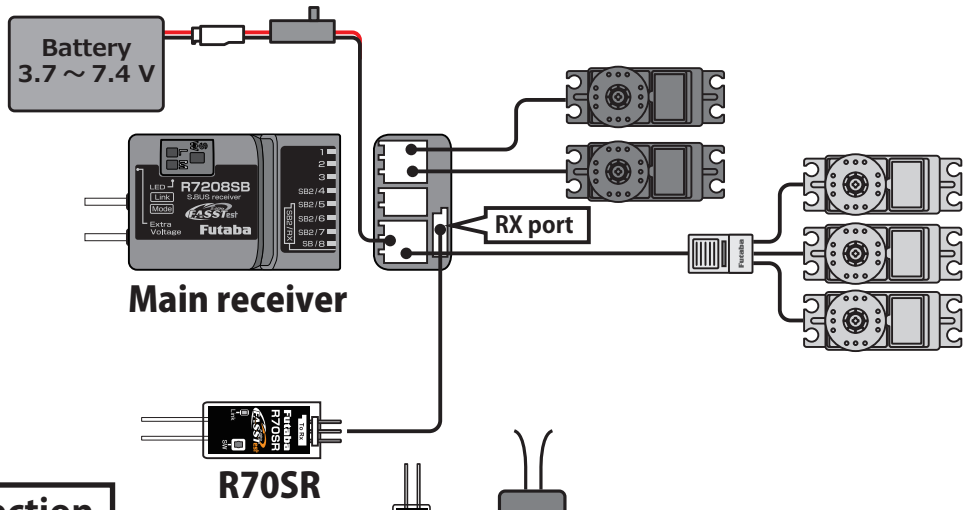

## Antenna installation



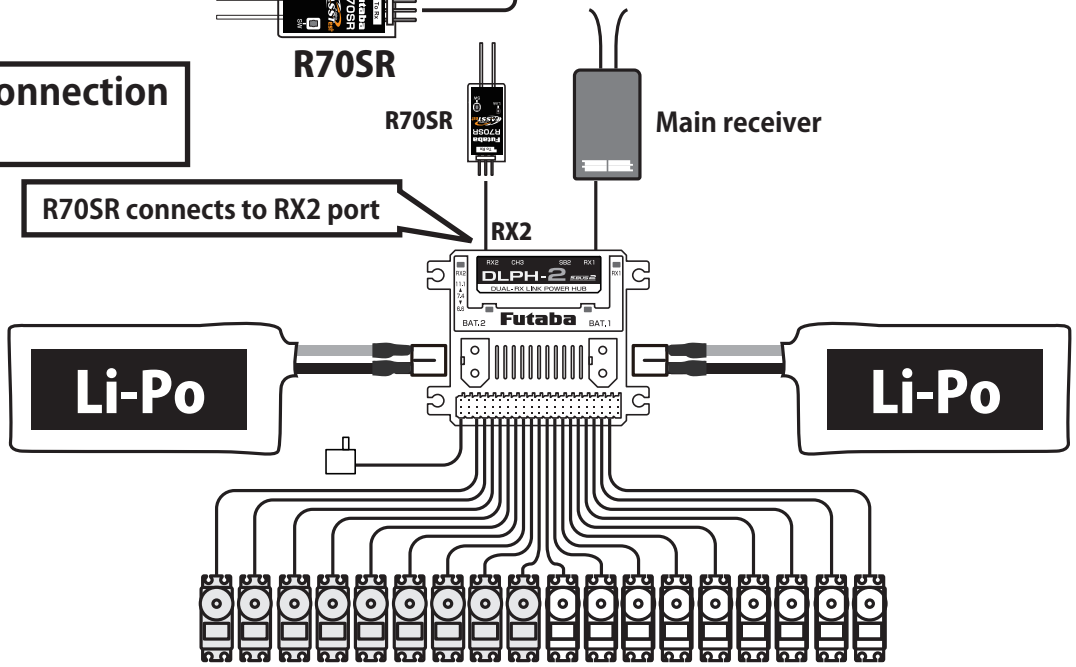

## LED Indication

| Status | LED |
|---|---|
| No signal reception | Red Solid |
| Receiving signals | Green Solid |
| Waiting for link | Start → 2second later → Red Blink（3 second） |
| Unrecoverable error (EEPROM, etc.) | Red Green Alternate blink |

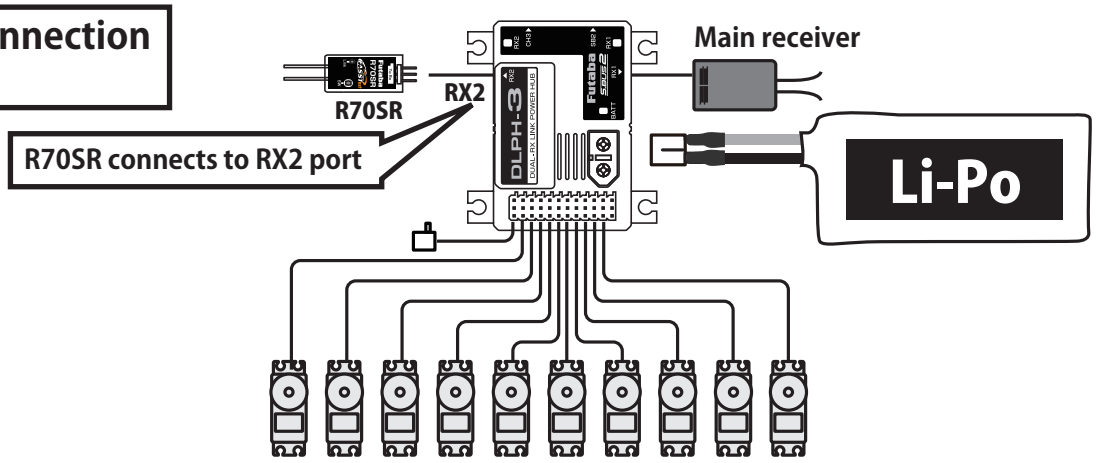
## Connection example



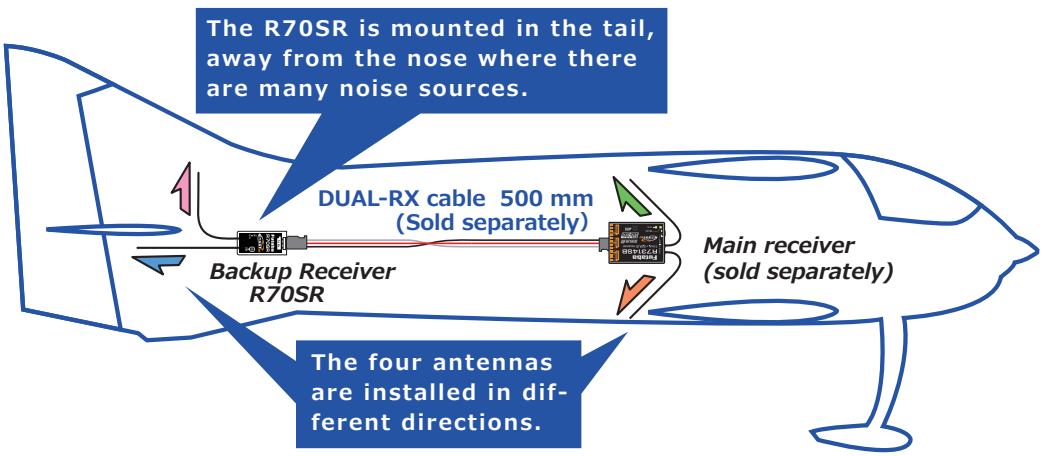

## Example of connection with DLPH-2




## Example of connection with DLPH-3




## Layout example



## Link for FASSTest18CH/26CH

### Link to the transmitter

1. Bring the transmitter and the receiver close to each other, within 20 inches (half meter).
2. On the transmitter's System type screen, set [Receiver] to [Dual].
3. On the transmitter's System type screen, set [Primary] or [Rx 1] to link mode, then turn on the **main receiver**.
4. The receiver will wait for the linking process to begin for 2 seconds. Following that it will return to the normal operation mode.
5. When the LED of the receiver changes from blinking red to solid green, linking is complete.

   (A link waiting state is ended in 3 second.)
6. On the transmitter's System type screen, set [Secondary] or [Rx 2] to link mode, then turn on the **R70SR** receiver.
7. The receiver will wait for the linking process to begin for 2 seconds. Following that it will return to the normal operation mode.
8. When the LED of the receiver changes from blinking red to solid green linking is completed. Due to the **R70SR** not being able to send back the linking status, the transmitter cannot display the link completion message.

   (A link waiting state is ended in 3 second.)

- Refer to the transmitter's operation manual for complete details on how to place the transmitter into the linking mode.
- If there are many FASSTest systems turned on in close proximity, your receiver might have difficulty establishing a link to your transmitter. This is a rare occurrence. However, should another FASSTest transmitter/receiver be linking at the same time, your receiver could link to the wrong transmitter. This is very dangerous if not noticed. To avoid the problem, we strongly recommend double-check if the R70SR is really connected to your transmitter by staying receiver's power ON and cycling power of the transmitter, and by examining the LED's attitude of R70SR.
- If the System Type of the transmitter is changed, the receiver will need to be re-linked to the transmitter.
- When using the dual receiver function, only the main receiver can use the telemetry function. If you switch to the backup receiver, the telemetry display will be disabled.
- When linking the R70SR, be sure to link it using the [Secondary] or [Receiver 2].

## Link for FASSTest12CH

### Link to the transmitter

1. Bring the transmitter and the receiver close to each other, within 20 inches (half meter).
2. On the transmitter's System type screen, set to link mode, then turn on the **R70SR** receiver.
3. The receiver will wait for the linking process to begin for 2 seconds. Following that it will return to the normal operation mode.
4. When the LED of the receiver changes from blinking red to solid green linking is completed. Due to the **R70SR** not being able to send back the linking status, the transmitter cannot display the link completion message.

   (A link waiting state is ended in 3 second.)
5. On the transmitter's System type screen, set to link mode, then turn on the **main receiver**.
6. The receiver will wait for the linking process to begin for 2 seconds. Following that it will return to the normal operation mode.
7. When the LED of the receiver changes from blinking red to solid green, linking is complete.

- The transmitter will show the telemetry information of the last linked receiver.

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

This device, trade name Futaba Corporation, model number R70SR, 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 Corporation of America
2681 Wall Triana Hwy Huntsville, AL 35824, U.S.A.
Phone:1-256-461-9399 FAX:1-256-461-1059
E-mail: service@futabaUSA.com

**FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
--Reorient or relocate the receiving antenna.
--Increase the separation between the equipment and receiver.
--Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
--Consult the dealer or an experienced radio/TV technician for help.

### Compliance Information Statement (for Canada)

**CAN ICES-3(B)/NMB-3(B)**

### Compliance Information Statement (for EU)

**Declaration of Conformity**

Hereby, Futaba Corporation declares that the radio equipment type R70SR is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:

**http://www.rc.futaba.co.jp/english/dl/declarations.html**

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