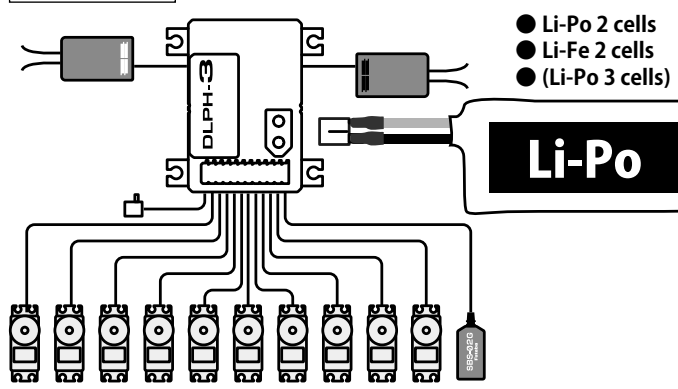


Applicable systems
S.BUS/S.BUS2 receiver
*Except for cars

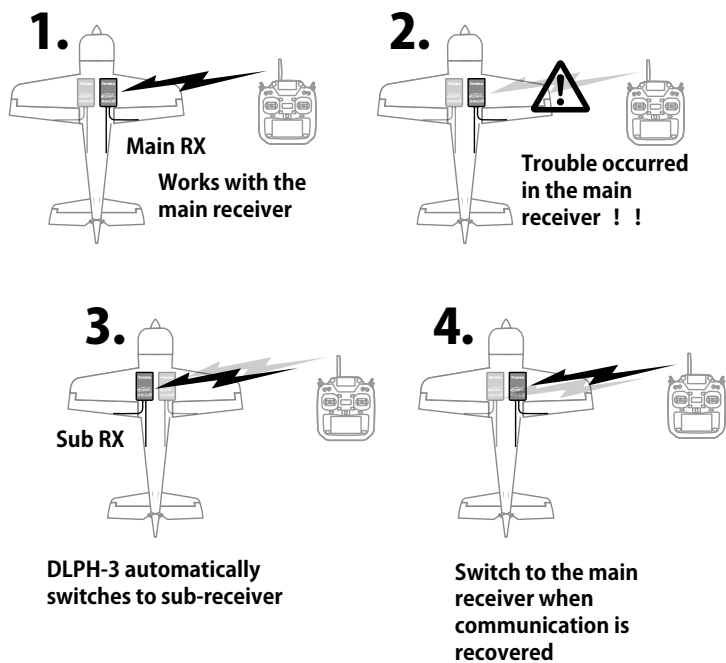


Up to 10 high-performance servos can be PWM connected.

There is less power loss from the receiver battery to the servos compared to receiver connection.

*If the battery level is 40 - 30% or less, the receiver will not turn on for safety.

If one of the two receivers becomes unreceivable, it will automatically switch to the other receiver.



Thank you for purchasing the DLPH-3. Before using your new DLPH-3, please read this manual thoroughly and use the DLPH-3 properly and safely. After reading this manual, store it in a safe place.

Use : Two receivers communication switching device

Size : 43.6 × 66.0 × 19.3 mm
(1.72 × 2.60 × 0.76 in)

Weight : 34.6 g (1.22 oz)

FET rated : Always 60 A

Operating voltage : DC6.4 V to 13.0 V

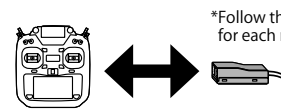
Accessories: ● Switch ● Flange damper ● Eyelet
● Wood screw ● Receiver connection cord x 3
(One cord is used in airplane gyro mode)

Receiver Link

1. Install two receivers on the aircraft as shown in the wiring diagram on the next page.
2. Link the two receivers using the dual receiver feature of the transmitter. For systems without dual receiver capability, link each receiver in turn.

Transmitter in link mode

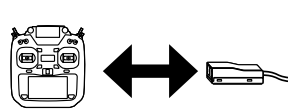
For FASSTest 26/18CH Select dual mode and link primary



Turn on the main receiver and link

Transmitter in link mode

For FASSTest 26/18CH Select dual mode and link secondary



Turn on the sub receiver and link

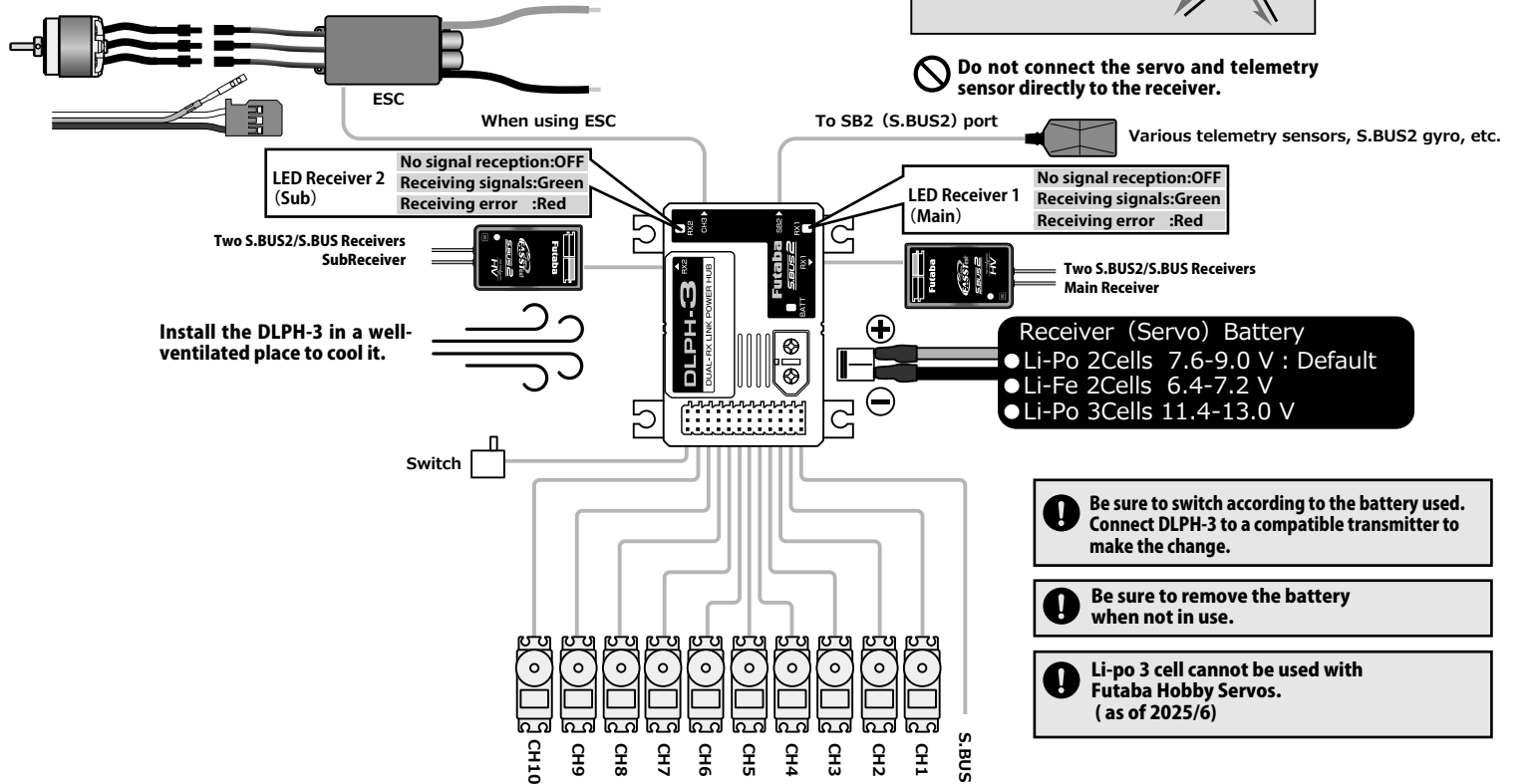
◆ About telemetry system
When using the dual receiver function
• The telemetry function of the main receiver can be used
• Sub-receiver telemetry function is not available
Other than dual receiver function
• Telemetry not available
• Set telemetry to INH (disabled)

Precautions

- ⚠ WARNING**
Failure to follow these safety precautions may result in severe injury to yourself and others.
- ❗ In order to prevent any short circuits, please observe the polarity of all connections.
 - ❗ Ensure that the unit is connected properly to the receiver.
 - If the connector is disconnected during flight, it becomes inoperable.
 - ❗ Ensure that the unit is mounted in an area that will eliminate exposure to fuel and water.
 - As with any electronic components, proper precautions are urged to prolong the life and increase the performance of the unit.
 - ❗ Allow a slight amount of slack in the unit cables and fasten them at a suitable location to prevent any damage from vibration during flight.
 - ❗ Be sure to link the two receivers with the transmitter.
 - It will not work unless the two receivers are linked. After startup, even if the link on one side is disconnected, the other side will continue to operate normally.
 - ❗ Used in a set of Futaba S.BUS / S.BUS2 systems.
 - ❗ Do not supply receiver power from the ESC. When using the receiver power supply type ESC, remove the red (+) cord of the 3ch wiring from the ESC so that the power is not supplied from the ESC.
 - Use a dedicated battery to power the receiver / servo.
 - ❗ Do not connect the servo and telemetry sensor directly to the receiver.
 - Large current flows through the Rx port of DLPH-3 and is damaged.
 - ❗ Do not connect a high voltage battery beyond the specifications of the servo used.
 - There is a risk of explosion, fire and damage.
 - ❗ Do not use more than 60A for a moment.
 - Reference: Although it depends on the servo used and flight style, acro flight with 10 HPS servos has been confirmed.
 - ❗ To ensure that the DLPH-3 is functioning as desired, please test accordingly.
 - Do not fly until inspection is complete.
 - ❗ Before the flight, disconnect the wiring of the main receiver from the DLPH-3 that is operating normally, and check if the sub receiver alone can control it.
 - Check if the DLPH-3 switches.
 - ❗ Do not use the DLPH-3 with anything other than an R/C model.

How to Use

- ❗ Do not supply receiver power from the ESC. When using the receiver power supply type ESC, remove the red (+) cord of the 3ch wiring from the ESC so that the power is not supplied from the ESC.
 - Use a dedicated battery to power the receiver / servo.

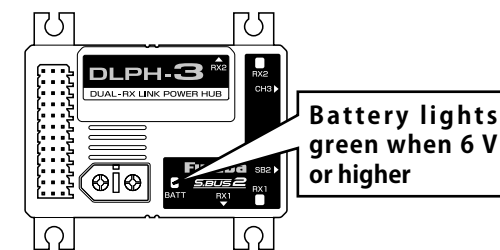


Wiring

- Antenna Make arrange in different four directions.
- ❗ Do not connect the servo and telemetry sensor directly to the receiver.
- To SB2 (S.BUS2) port Various telemetry sensors, S.BUS2 gyro, etc.
- Receiver (Servo) Battery
 - Li-Po 2Cells 7.6-9.0 V : Default
 - Li-Fe 2Cells 6.4-7.2 V
 - Li-Po 3Cells 11.4-13.0 V
- ❗ Be sure to switch according to the battery used. Connect DLPH-3 to a compatible transmitter to make the change.
- ❗ Be sure to remove the battery when not in use.
- ❗ Li-po 3 cell cannot be used with Futaba Hobby Servos. (as of 2025/6)

Battery LED

The LED will light up when the power is turned on. It turns off when each becomes 6 V or less.



Battery F/S

- For receivers that can set the battery F / S, set the battery F / S to 4.8 V or less or OFF.
 - Also, make sure that the battery F / S of the two receivers have the same settings.
- Since the output voltage from DLPH-3 is 5 V, if the battery F / S is set to 5 V or higher, the battery F / S will always operate.

Fail-safe

- If a receiver error occurs, priority is given to the output of RX1 (main receiver) for F/S data.

Telemetry function (voltage display)

The receiver battery voltage can be displayed via telemetry between the transmitter and main receiver. The normal receiver battery voltage displayed via telemetry on the transmitter is a constant value (approximately 5 V), so monitor the voltage with the "battery" on the "telemetry voltmeter." However, if you switch to the sub-receiver, the voltage will not be displayed.

DLPH-3 uses two continuous slots. Please note that the proper default start slot for this accessory is number 6. When setup-changing or adding, it is the following numbers that are made to a start slot.

1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30.

By connecting the transmitter and SB2 port, it is possible to register to the transmitter and change the start slot. In that case, it is necessary to connect the battery to DLPH-3 and supply power. Information on how to change the slot assignment is included in the transmitter's manual.

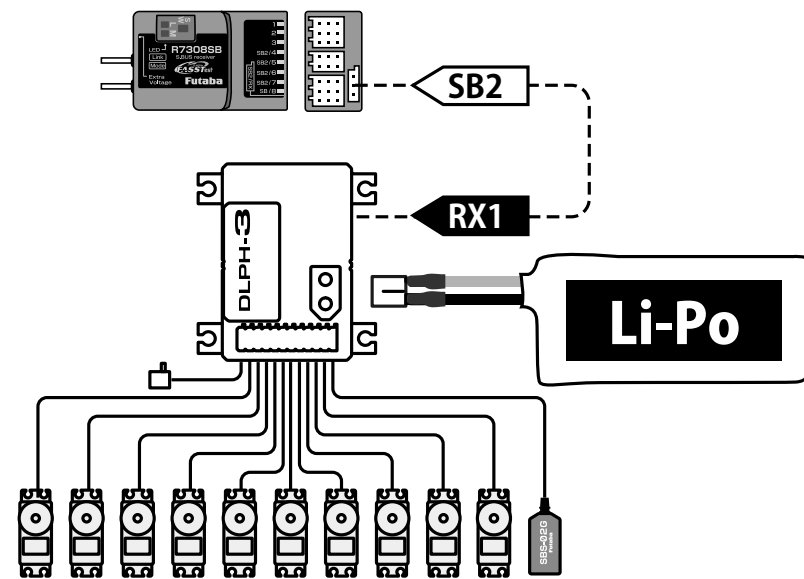


Connection example for each application

Single receiver

Single receivermode

Connect the DLPH-3 to the compatible transmitter's S.I/F connector and change the mode.

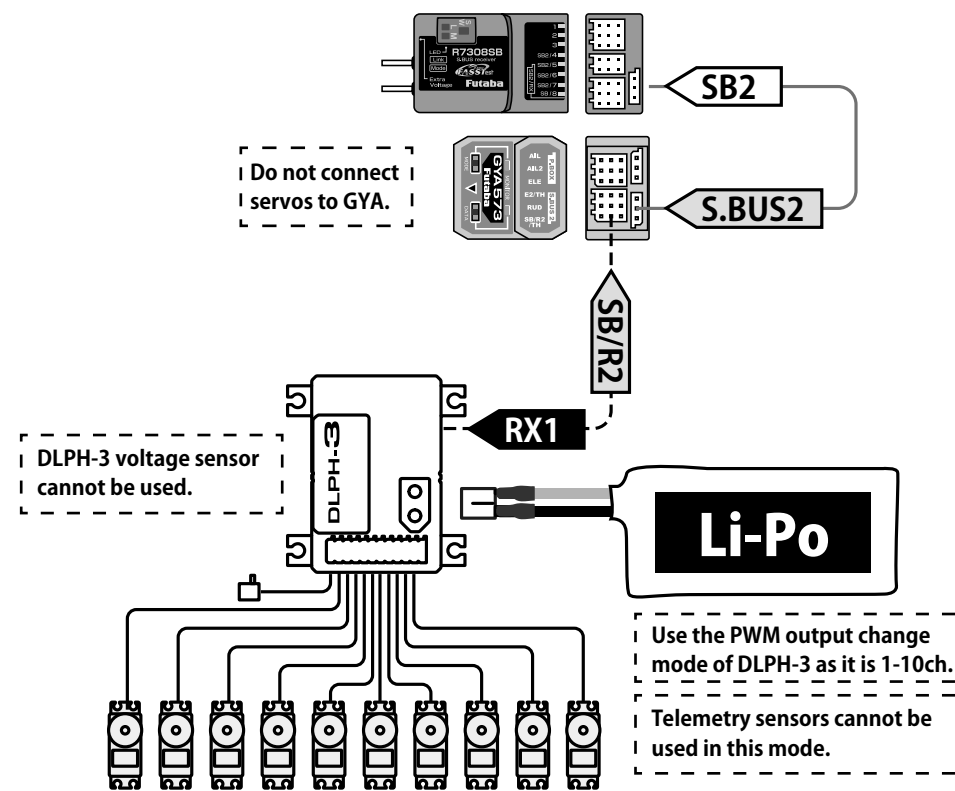


This is an example of using one receiver. Since the dual RX function is not movable, it does not correspond to any reception troubles.

Single receiver+Airplane gyro GYA

Single receivermode

Connect the DLPH-3 to the compatible transmitter's S.I/F connector and change the mode.

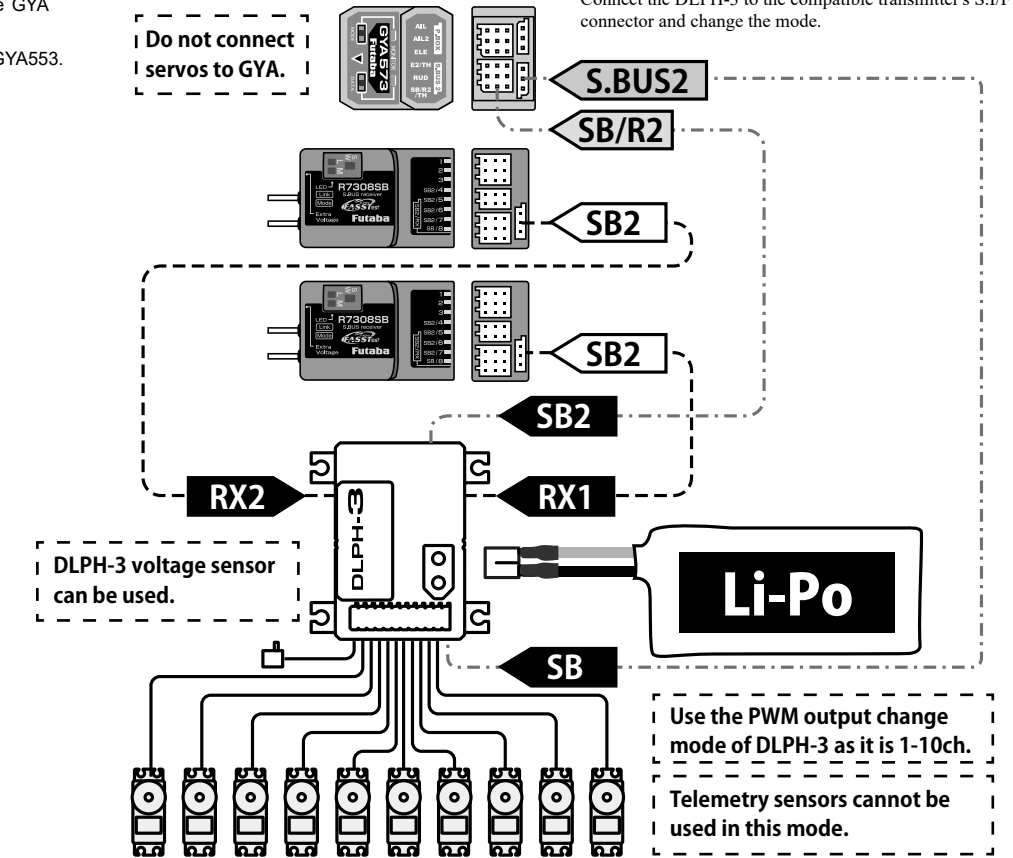


Here is an example using one receiver and an airplane gyro GYA. Since the dual RX function is not movable, it does not correspond to any reception troubles.

Dual receiver+Airplane gyro GYA

Airplane gyro mode

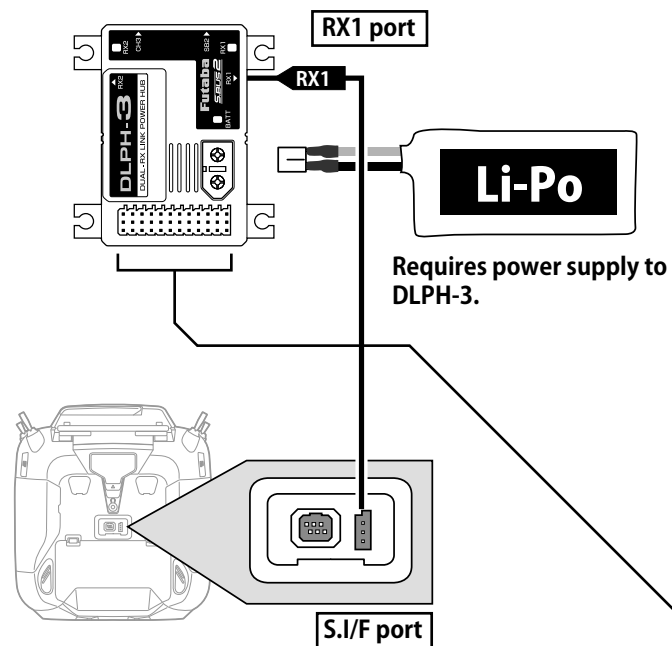
Connect the DLPH-3 to the compatible transmitter's S.I/F connector and change the mode.



Here is an example using 2 receivers and an airplane gyro GYA. Deal with battery problems. The dual RX function is activated to deal with any possible reception troubles.

DLPH-3 mode change

The mode change of DLPH-3 is done by connecting to the S.I/F connector of the compatible transmitter. The setting method is described in the update manual of the compatible transmitter.



Functions that can be changed with compatible transmitters

1. Battery type

- Li-Po 2 cells : Default setting
- Li-Fe 2 cells
- Li-Po 3 cells

2. Change setting mode

- Dual RX mode : Default setting
- **Single receivermode**
- **Airplane gyro mode**

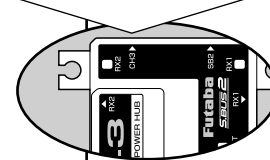
3. PWM output change

- CH 1-10 : Default setting
- CH 11-20
- CH 21-24

This PWM port can be changed from CH 1-10(default setting) to CH 11-20, CH 21-24.

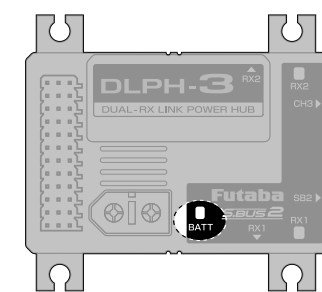
When using single receiver + Airplane gyro GYA or airplane gyro mode, use CH 1-10 as they are.

- For CH 11-20, this CH 3 becomes CH 13.
- For CH 21-24, this CH 3 becomes CH 23.

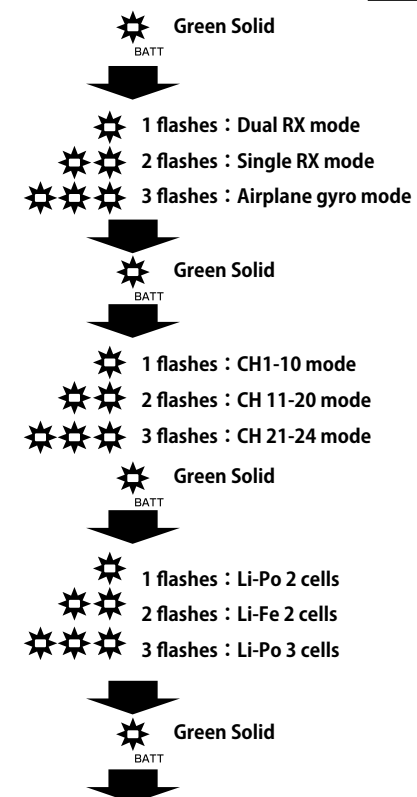


Compatible transmitter
Corresponding to the
corresponding update

Battery LED display at startup



The battery LED display at startup informs you of the current status of the DLPH-3.



During this time, LED will be lit regardless of battery voltage. To monitor the battery, check the LED display after this.

Battery LED

The LED will light up when the power is turned on. It turns off when each becomes 6 V or less.