Futaba T16IZ Aircraft Transmitter Instruction Manual

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Futaba T16IZ Aircraft Transmitter

Product Information

The GYA553 is a gyro system for RC airplanes that helps stabilize the aircraft during flight. It displays gyro operation mode, sensitivity, software version, and battery voltage. It also allows users to set the wing type/tail type, servo type, and direction setting of the gyro.

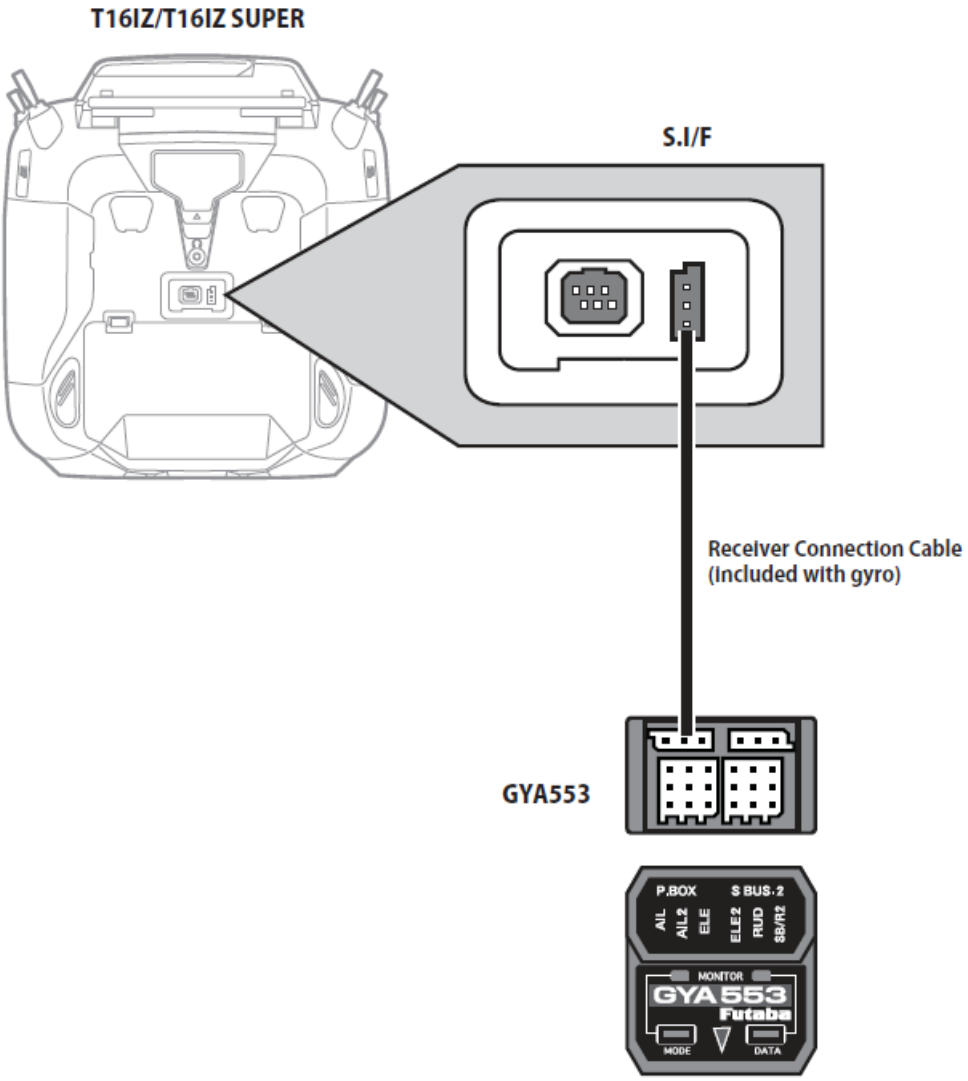
Product Usage Instructions

1. Connect the GYA553 to the receiver battery and install it on the airplane.
2. On the home screen, check the gyro operation mode (AVCS or Normal) and gyro gain of the aileron (roll), elevator (pitch), and rudder (yaw) axis. Adjust the sensitivity as necessary.
3. Set the wing type/tail type of the GYA553 using the instructions provided in the manual. The transmitter's wing type/tail type is not used and should be set to normal.
4. Select the servo type according to the servo to be used and set the neutral position for each servo.
5. Set the direction setting of the gyro. Be careful as it will crash if the direction is reversed. For dual aileron, dual elevator, and dual rudder aircraft, check the operating direction of each second aileron/elevator/rudder.
6. If the SB/R2 port output is set to S.BUS(HS) or S.BUS(STD), the setting menu will display AIL3 and AIL4 setting items. AIL3 and AIL4 settings cannot be set with the button settings on the GYA553 main unit.

By installing the latest software on the T16IZ/T16IZ SUPER, you can setting the airplane gyro GYA553 on the T16IZ/T16IZ SUPER.

Connection

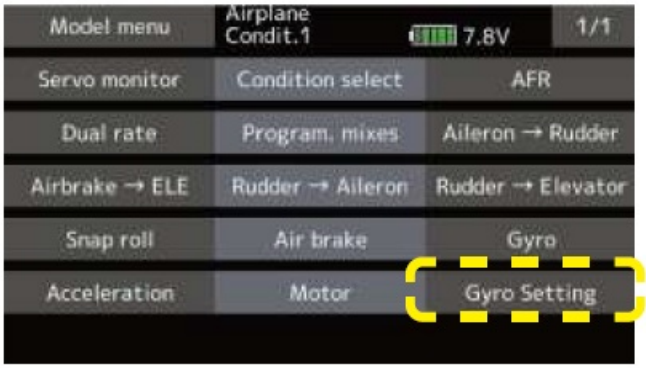
Connection T16IZ/T16IZ SUPER and GYA553



CAUTION
Be sure to connect and disconnect the GYA553 and Transmitter connection cable with the power off.

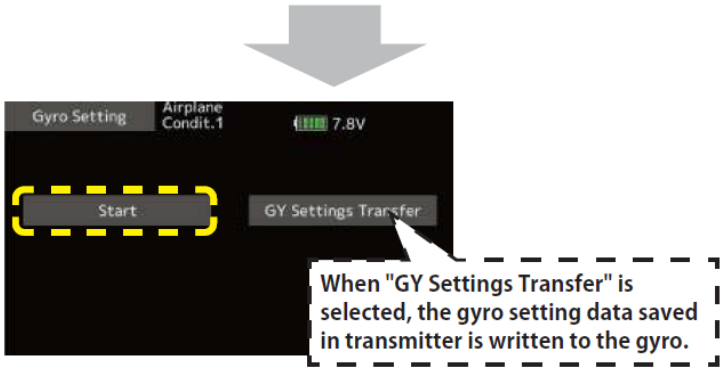
SETTING

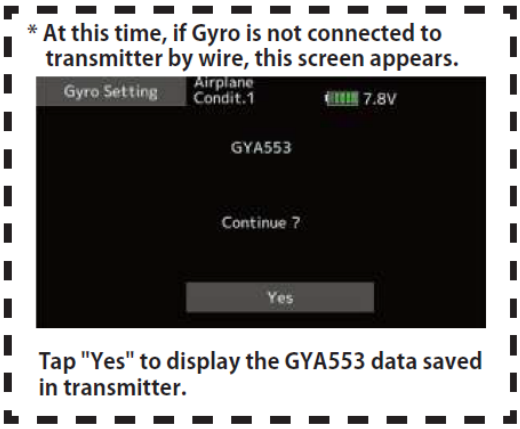
1. Select “Gyro setting” on the last page of the Airplane Model Menu



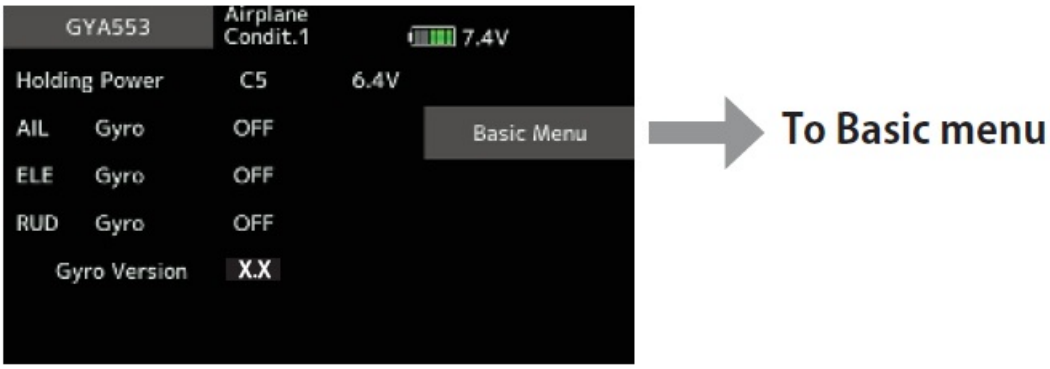
2. Select “Start”

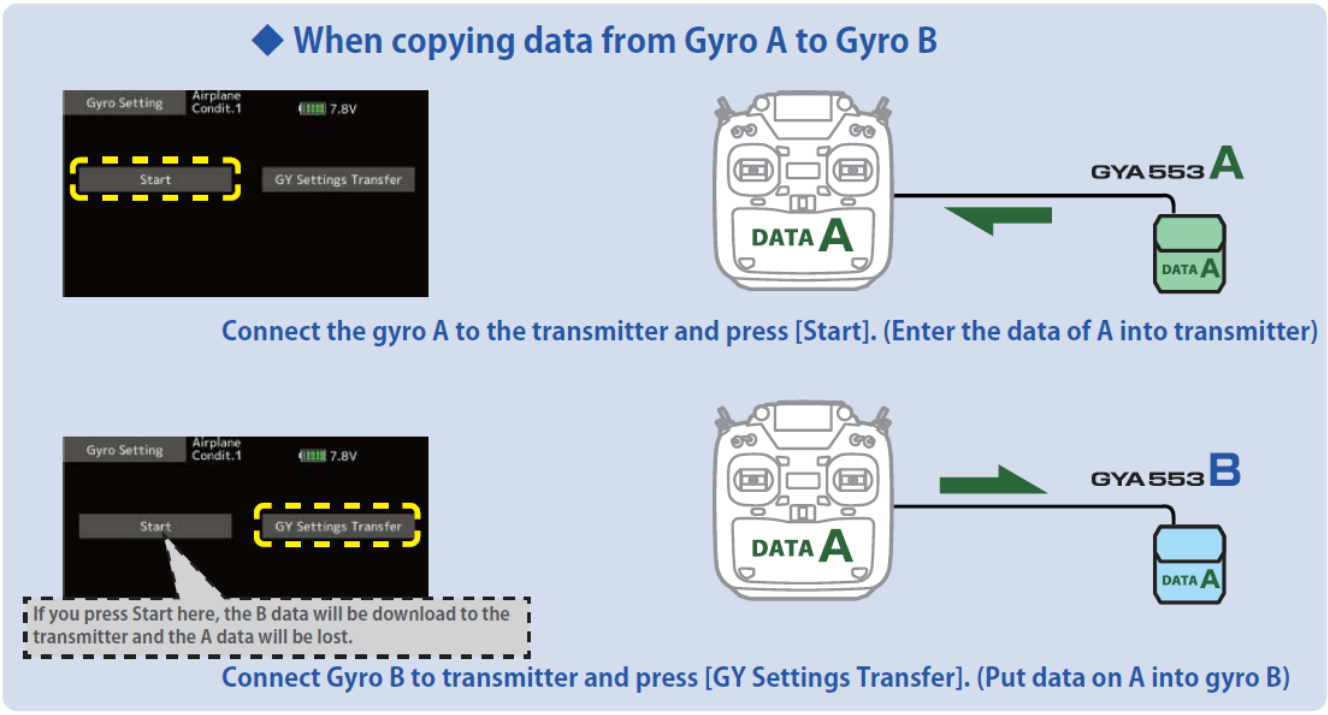
   This will download the gyro data to the transmitter.





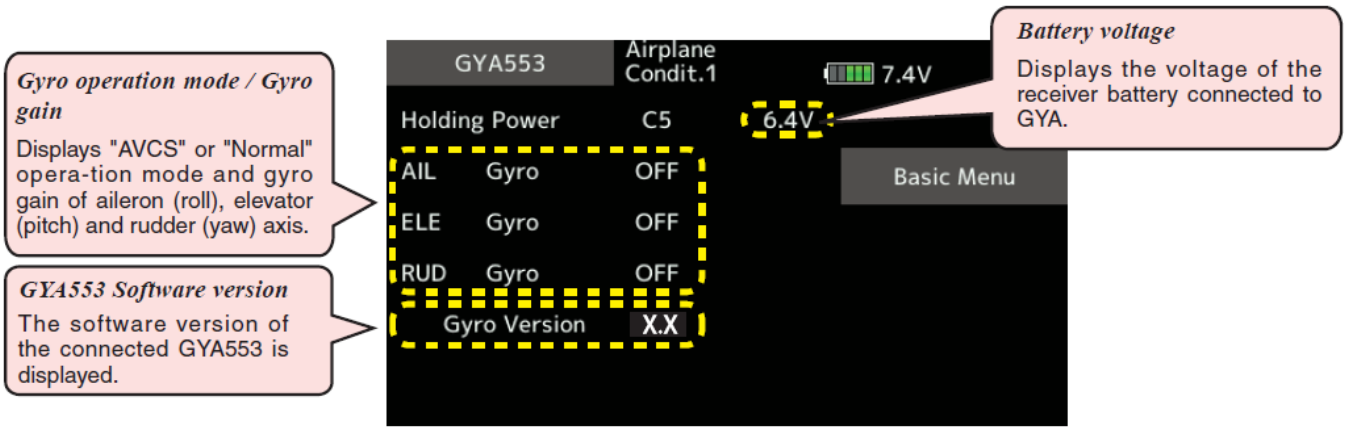
3. Home screen is displayed



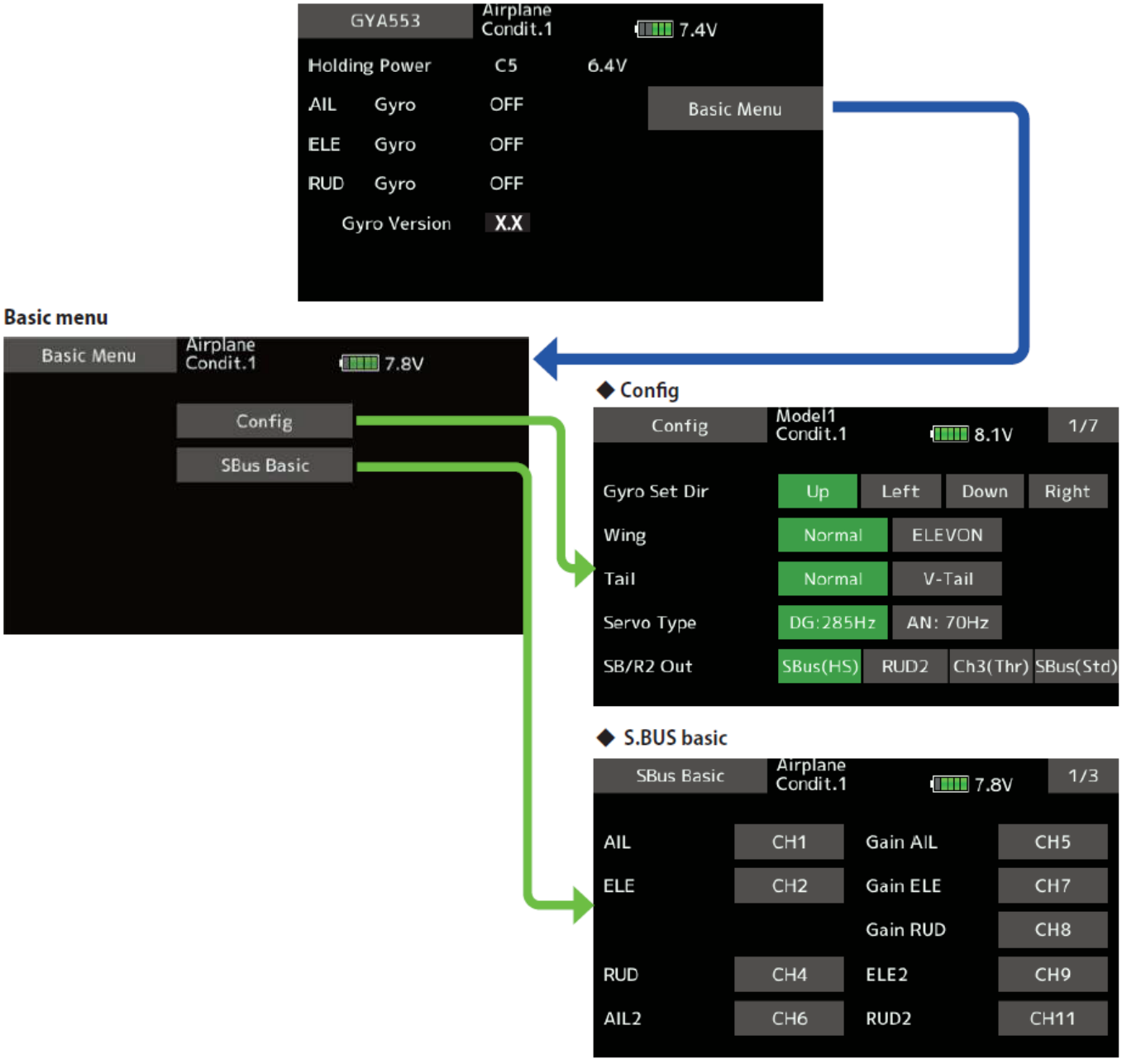


Home Home screen

On the home screen, basic information such as gyro operation mode, sensitivity, battery voltage are displayed.



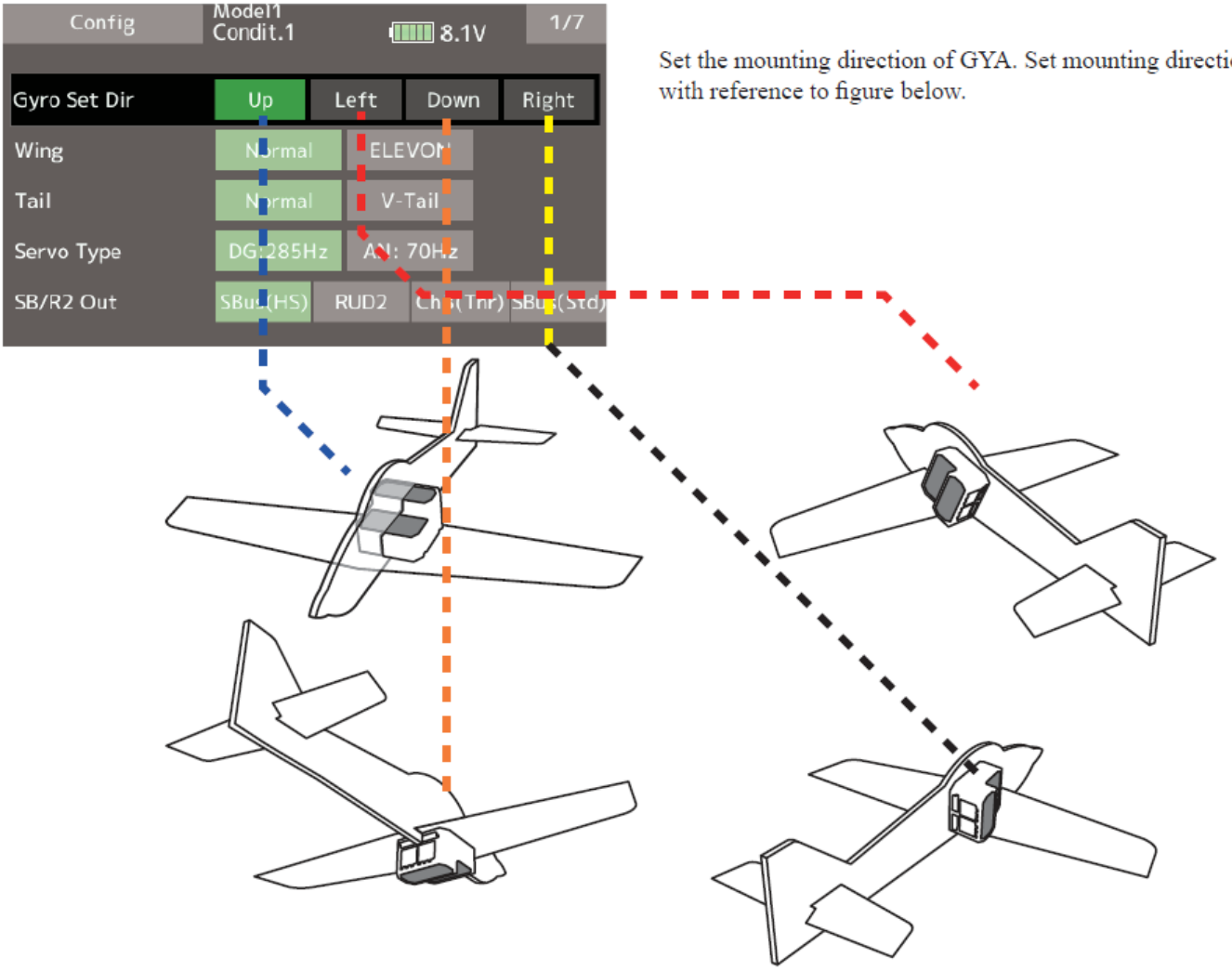
Basic Basic menu



Configuration

Config 1/7 Gyro set mounting direction

Set the mounting direction of GYA. Set mounting direction with reference to figure below.

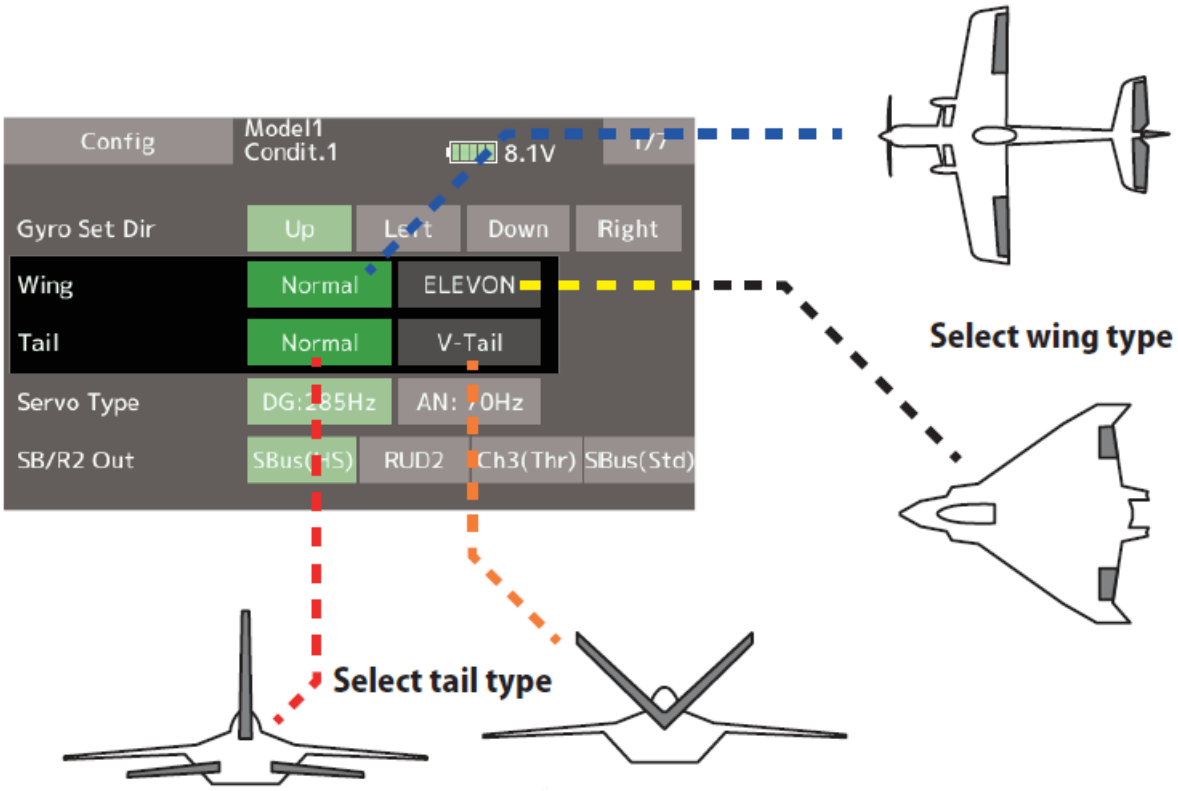


Set the mounting direction of GYA. Set mounting direction with reference to figure below.

Config 1/7 WING/TAIL

Set with the wing type/tail type of GYA553. The wing type/tail type of the transmitter is not used and is normal.

- Turn off the elevon/V-tail mixing on the transmitter side.
- Do not use transmitter sub-trim. Adjust using the gyro neutral offset.
- When using the S.BUS servo, you can also use the neutral offset function of the S.BUS servo setting parameters.



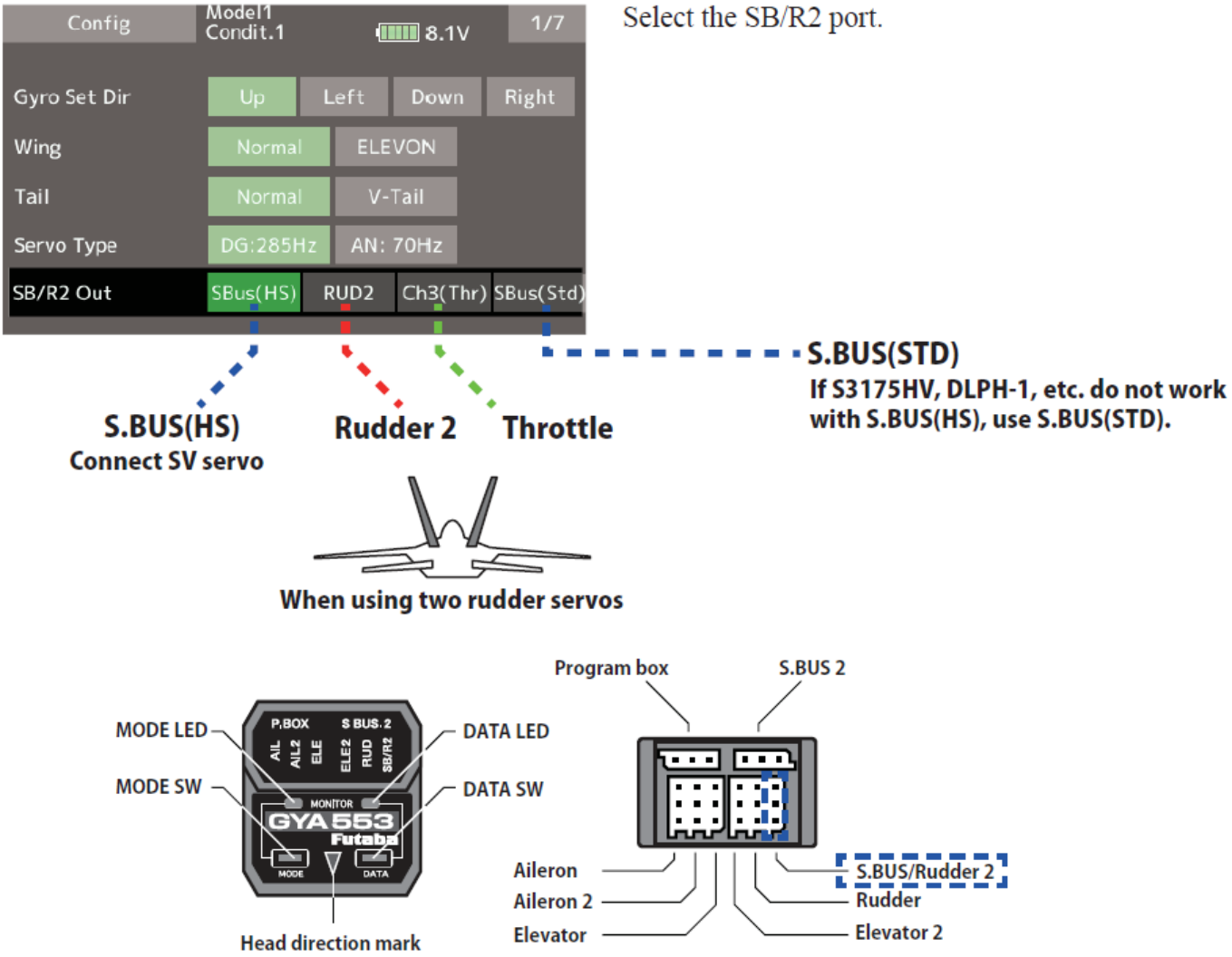
Config 1/7 Servo type
Select the servo type according to the servo to be used.

- Digital servo → DG : 285 Hz
- Analog servo → AN : 70 Hz

The stability of the digital-servo mode of a flight increases in order to perform a high-speed control action.

Config 1/7 SB/R2 OUT

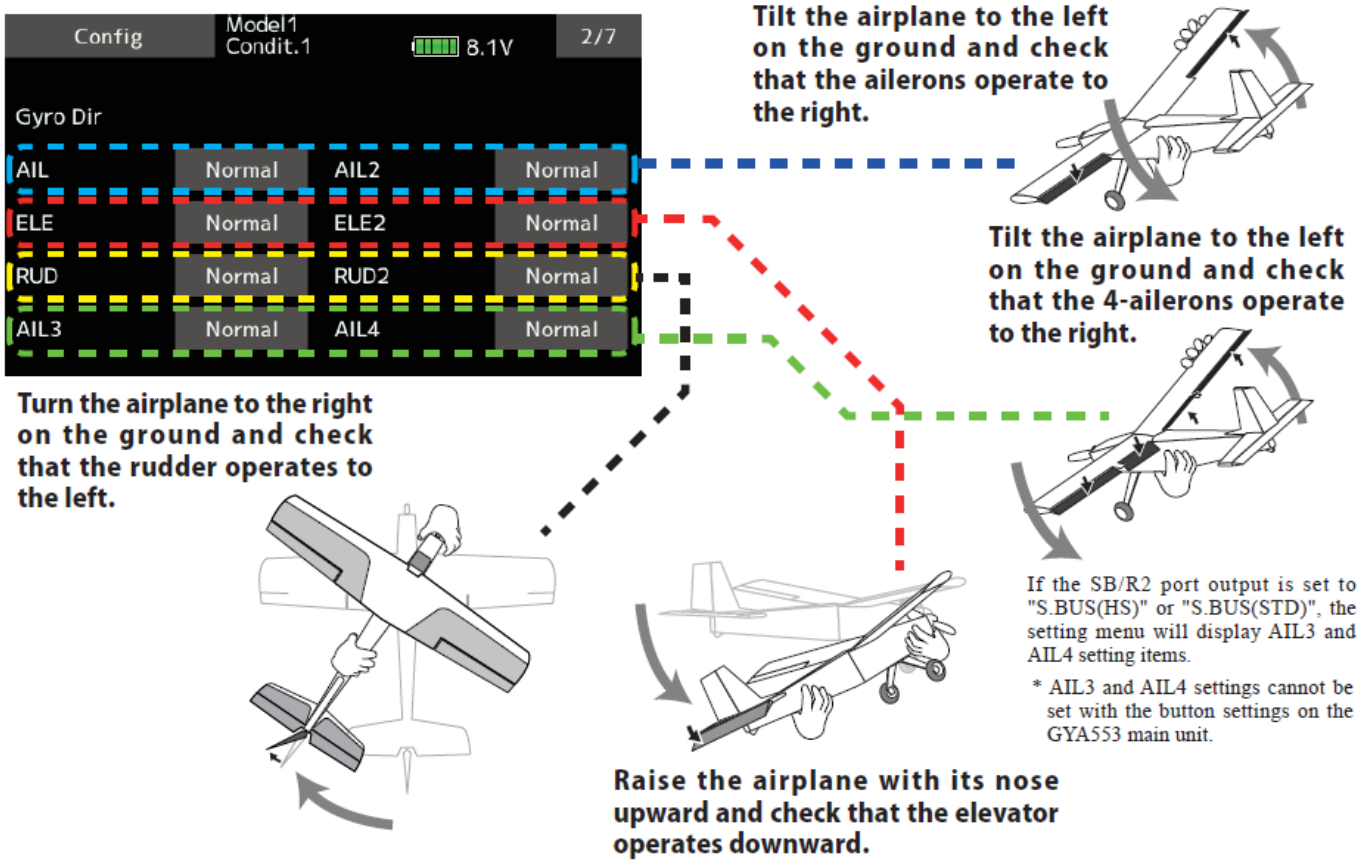
- Select the SB/R2 port.



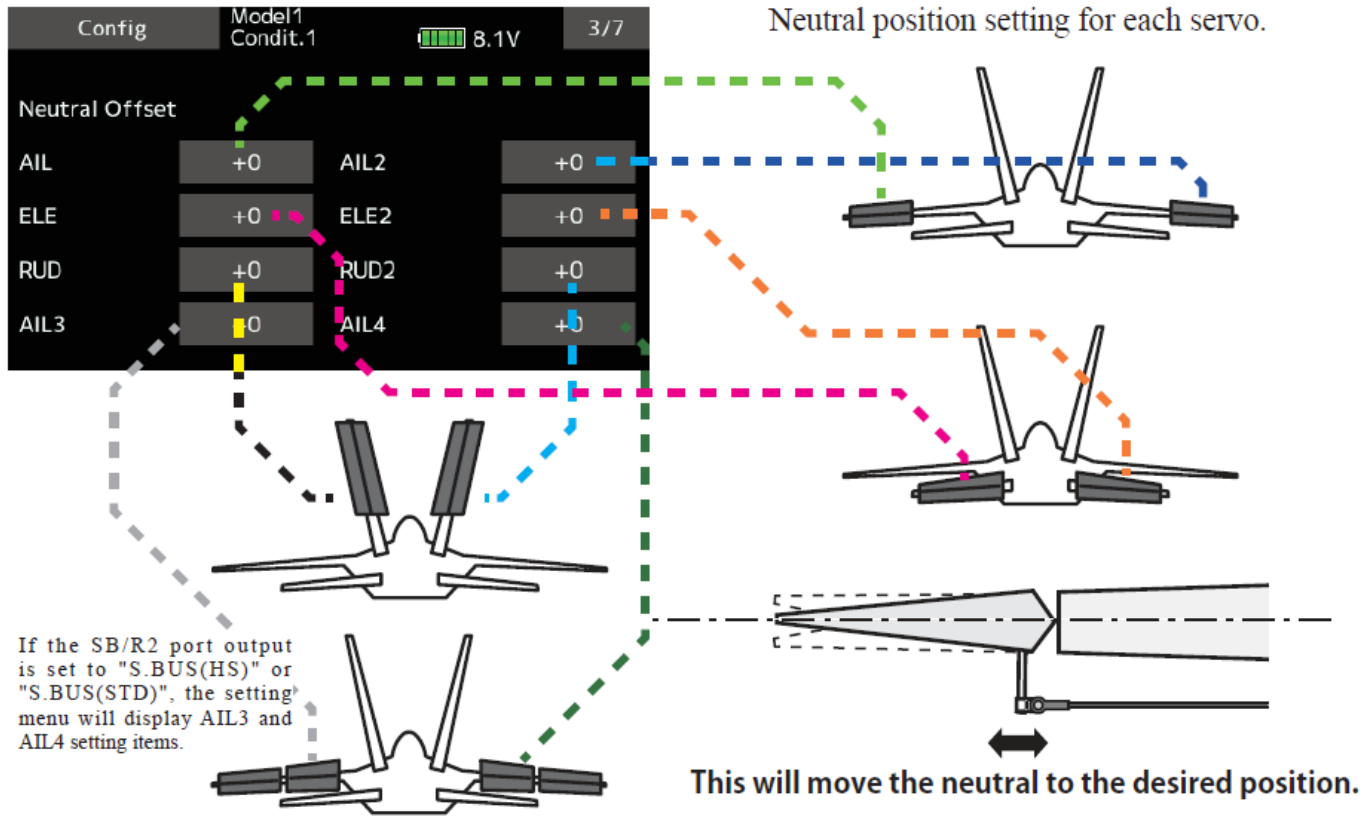
Select the SB/R2 port.

Config 2/7 Gyro direction

It is the direction settting of the gyro. Be careful as it will crash if the direction is reversed. For dual aileron, dual elevator, and dual rudder aircraft, check the operating direction of each second aileron/elevator/rudder.



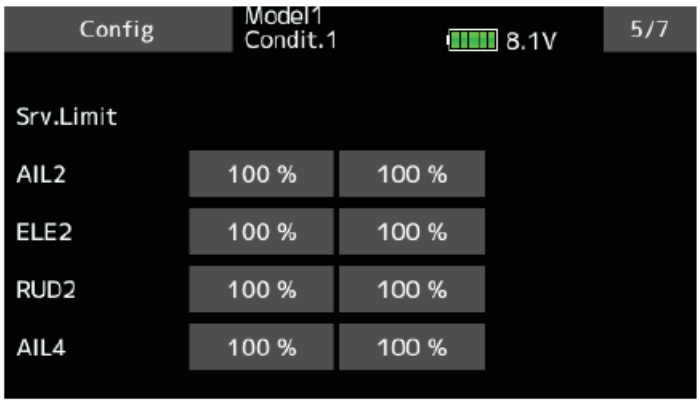
Config 3/7 Neutral offset
Neutral position setting for each servo.



- AIL3 and AIL4 settings cannot be set with the button settings on the GYA553 main unit.

Config 4/7 5/7 Servo limit
This is the limit setting for each servo. The position of the maximum operation is read into the gyro in the first

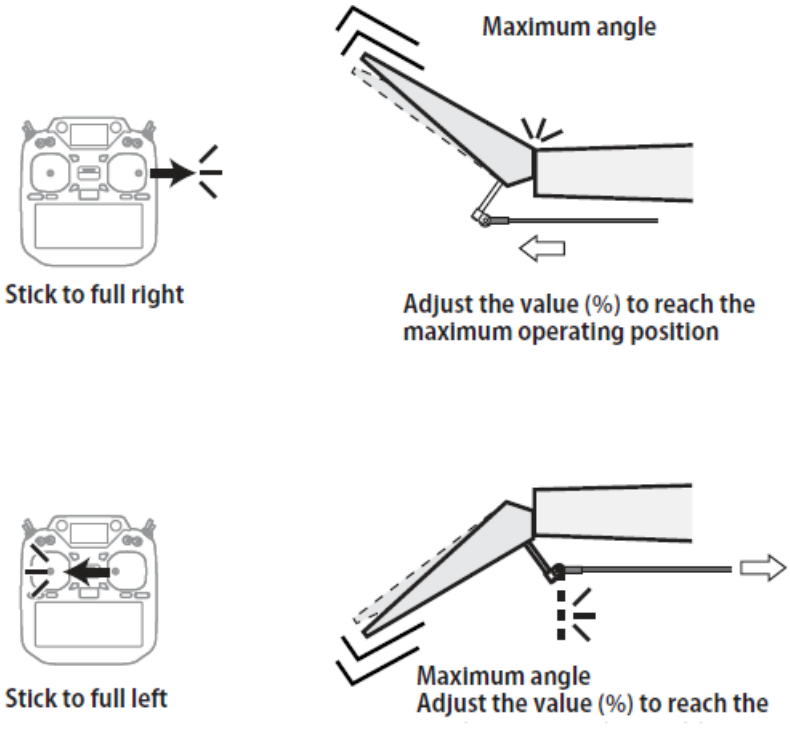
setting.



If the SB/R2 port output is set to “S.BUS(HS)” or “S.BUS(STD)”, the setting menu will display AIL3 and AIL4 setting items.

- AIL3 and AIL4 settings cannot be set with the button settings on the GYA553 main unit.

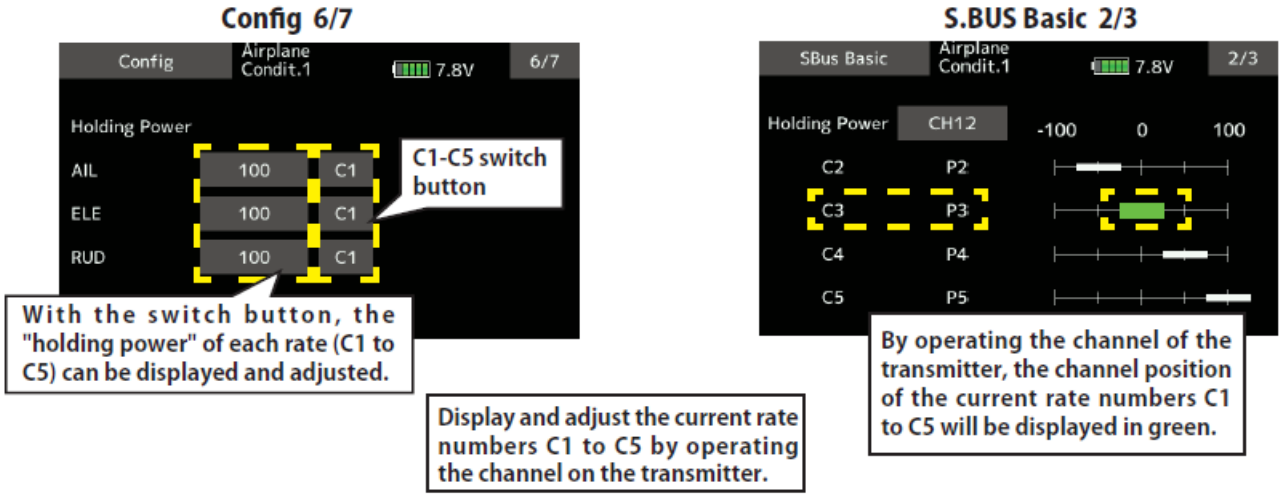
Aileron example



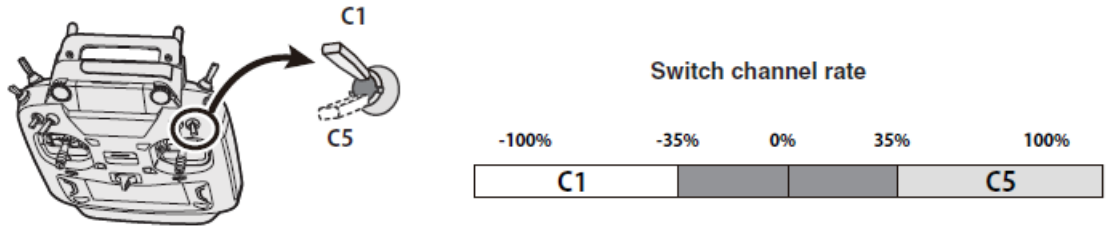
Config 6/7 Holding Power

It is a function to adjust the posture-holding force of the aircraft in AVCS mode. Decreasing the value weakens the holding power and makes the operation feel closer to the normal mode.

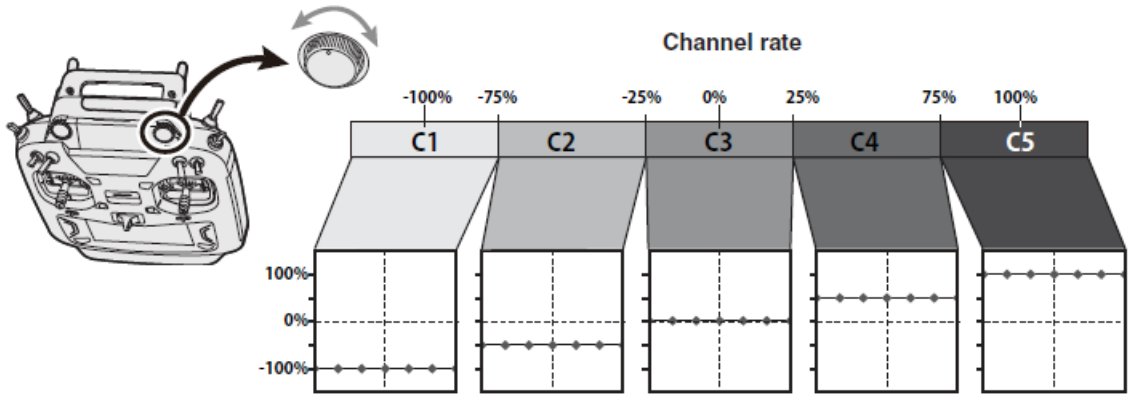
The current rate numbers C1 to C5 are displayed by operating the channel of the transmitter. Like the flight condition function of the transmitter, you can set up to 5 different data for the attitude holding force rate of the aircraft in AVCS mode by operating the switch from the transmitter and switching between them. You can set the holding power rate selector switch to the channel with the AFR function of the transmitter, and set the point for each rate on the AFR point curve to switch. It is also possible to use the flight condition function to work with the flight condition switch.



When set to SW of DG1 or DG2



When set to dial or lever



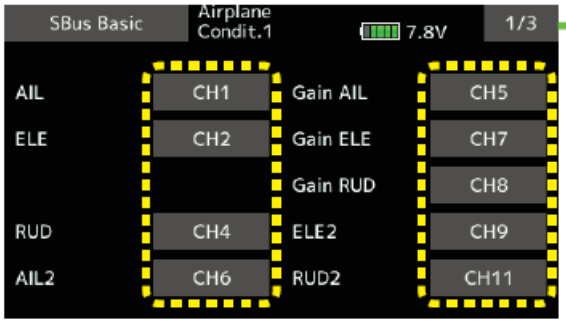
Config 7/7 Reset

Reset each Config item. It returns to the initial value.

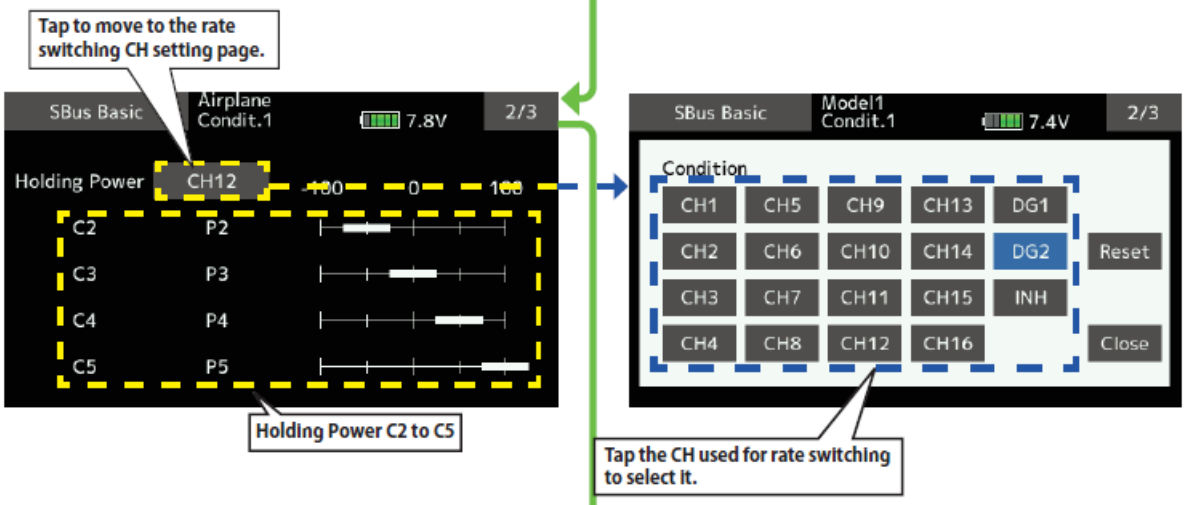
SBUS Basic menu

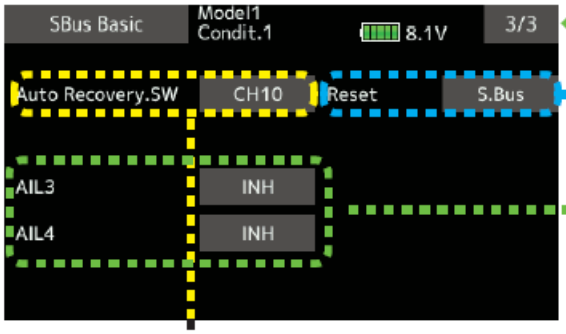
Set the CH for each function according to the transmitter to be used. Any unused functions should be set to INH (Inhibited).

WARNING
Always verify that the S.BUS function assignments match your transmitter' s function (in the FUNCTION menu) assignments. If any changes are made within the transmitter function assignments, then it will also be necessary to make the changes within the S.BUS function assignments. To change the channel, GYA553, and T16IZ must be connected.



The channel of each function can be changed.





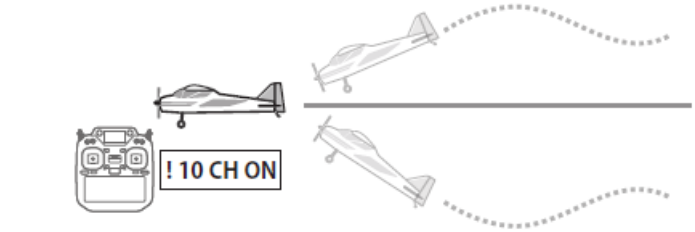
Reset each S.BUS function. It returns to the initial value.

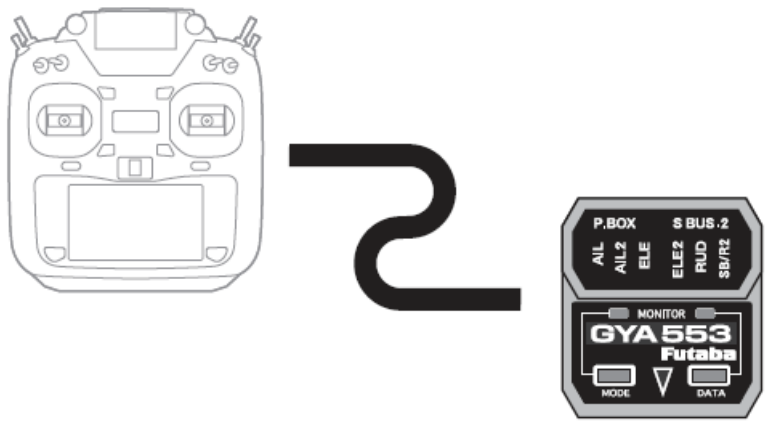
CH setting items for AIL3 and AIL4 are displayed on the final screen of the S.BUS basic setting screen. By setting the operation CH of AIL3 and AIL4, the gyro-controlled signal is output to the corresponding CH of the S.BUS output.

* Match the operation CH and CH setting on the function setting screen on the transmitter side.

*When the AIL3 and AIL4 CH settings are INH, the gyro control is not performed and the data sent from the transmitter is output as is.

ON-OFF channel for auto recovery





Documents / Resources

	Futaba T16IZ Aircraft Transmitter [pdf] Instruction Manual T16IZ, T16IZ SUPER, GYA553, T16IZ Aircraft Transmitter, Aircraft Transmitter, Transmitter