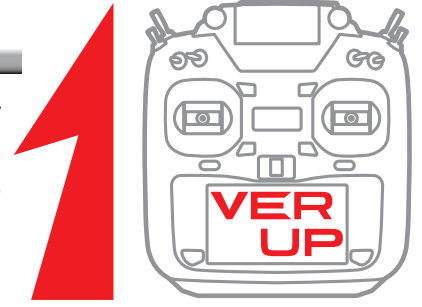# How to update T16IZ

Your Futaba T16IZ transmitter programming can be updated easily online. When functions are added or improved, the update file can be downloaded from our website. Copy the update files to the microSD card and then use the following procedure to update the program. Check our web site for the FAQ regarding updating for more information.

Updating procedure

Note: If the battery fully discharges during program updating, updating will fail. When the remaining battery capacity is 50% or less, always recharge the battery before updating.

Note: The model data in the transmitter can be used unchanged after updating, but to be safe, back up the model data before updating.

1. Download the zip file of the update data from our website.

Futaba WEB

16IZ Update Zip file Download
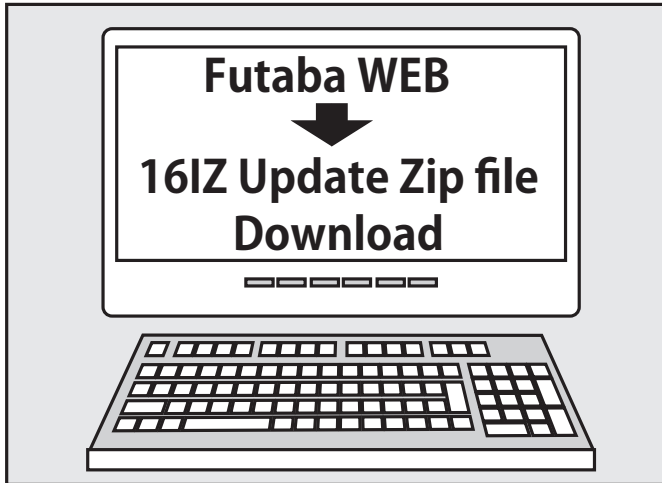
2. Extract the zip file on your computer.

3. The "FUTABA" folder will be created on your computer.

4. Copy the "FUTABA" folder into your microSD card.

FUTABA

Copy the "FUTABA" folder into your SD card.
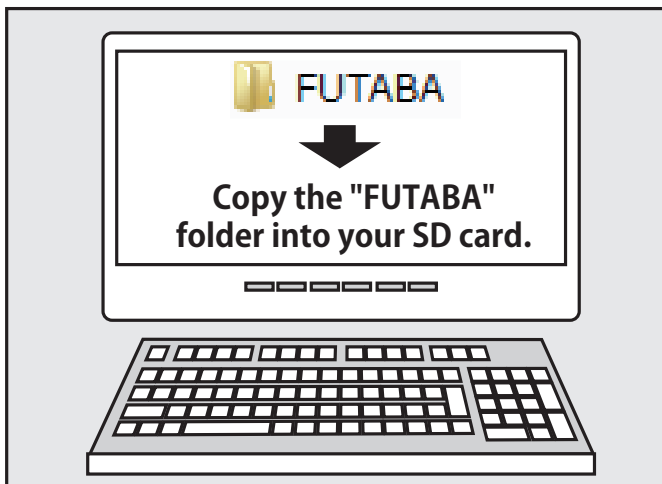
Note: If the microSD card has already had "another FUTABA" folder before you make a copy, the "FUTABA" folder is OVERWRITTEN.

5. Insert the microSD card with "FUTABA" folder that contained the update software into the SD card slot on your T16IZ radio transmitter.

Installed microSD card of the update file
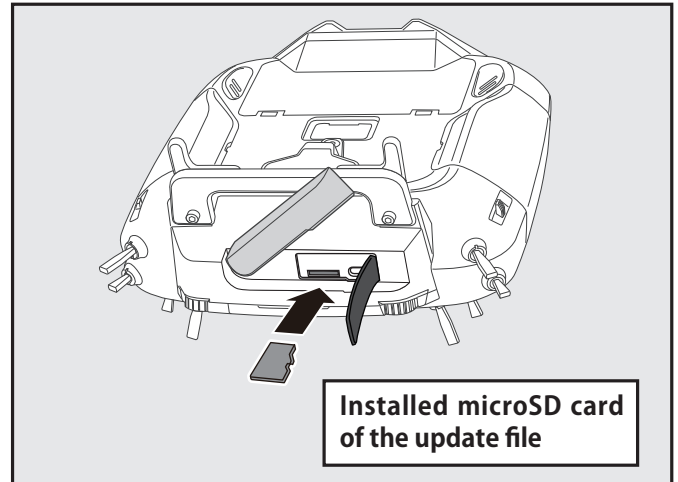
6. Turn on the transmitter power while pressing down the "HOME/EXIT" button. The update screen appears on the LCD display of your T16IZ and the software update is started.
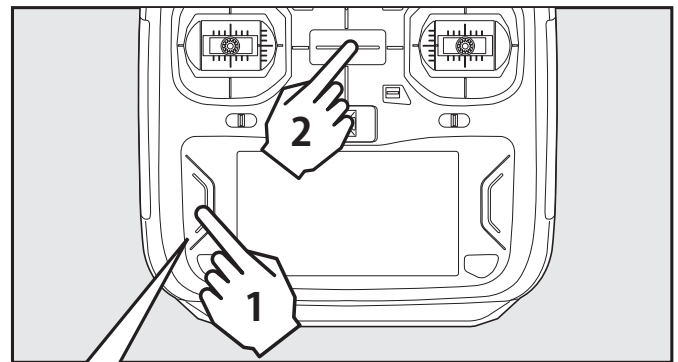
Press the HOME/EXIT switch and turn on

Updating main program...

Updating

7. When the software update is completed, "Completed" message is shown on the LCD display of your T16IZ. (Show below picture.)
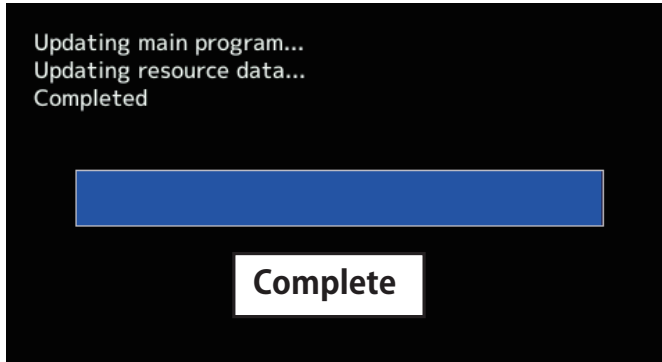
Updating main program...
Updating resource data...
Completed

Complete

8. Turn off the power switch of your T16IZ and remove the microSD card from the card slot.

Possible Problems

When one of the error messages shown below appears on the LCD screen your T16IZ, the software update will not be completed.

"Low battery."

Software update is postponed because of low battery. Retry the software update after the battery is recharged.

"Update file not found."

The T16IZ cannot find the update file on the microSD card. Check to be sure all the update files have been copied onto the microSD card.

"Broken file."

The T16IZ detects the update file error. The update file may be broken or for another transmitter.

"Write error."

The software update procedure is stopped for an unknown reason. Contact your local service center when this error message appears on the LCD screen of your T16IZ.

⚠ Don't absolutely remove the battery and the microSD card from the transmitter during the update.

There is a possibility that the transmitter will be damaged.

Recovering a failed update

If you failed to update for any reason, it may transmitter will not start.

In that case, please update again transmitter in the following procedure.

1. Detach the battery from the transmitter.

2. Insert the microSD card that contained the update files to the transmitter.

3. Attach the battery to the transmitter while pressing down the "HOME/EXIT" button.

4. The update will start.

Even after the above steps, if the transmitter fails to update or does not start, please have it serviced.
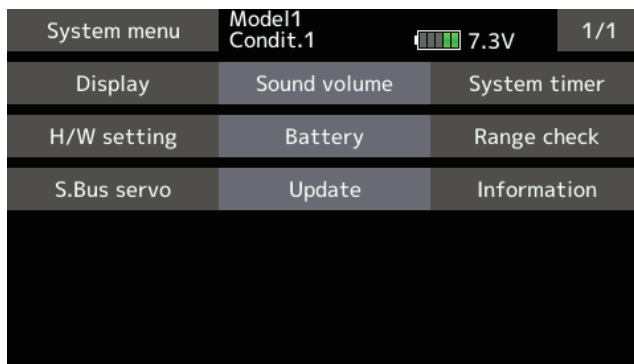
T16IZ SOFTWARE UPDATE CHANGES

V4.0

This software updates or alters the functions and features noted below. The instructions and information that follow are meant as a supplement to the original instruction manual that accompanied the T16IZ transmitter. Please refer to the original instruction manual where applicable, but replace the steps indicated below with these instructions. Please check to ensure that the update has been installed.
1) Select the System Menu.
2) Touch the [Information] button.
3) Confirm that the information in the display indicates the version numbers as noted above.

---

1. Receiver or gyro updates

By connecting a receiver or gyro that supports updates to the S.I/F connector of the transmitter, it is possible to update their software.

① Download the update file of the update data from Futaba website.

② Extract the update file on your computer. The "FUTABA" folder will be created on your computer.

③ Copy the "FUTABA" folder into your microSD card.

④ Insert the microSD card with "FUTABA" folder that contained the update software into the SD card slot on your transmitter.

⑤ Turn on the transmitter and call "System Menu" ⇒ "Update".

System menu	Model1 Condit.1	7.3V	1/1
Display	Sound volume	System timer	
H/W setting	Battery	Range check	
S.Bus servo	Update	Information	

⑥ Select the product to update.

Update	Model1 Condit.1	7.3V
Receiver update		
Gyro update		
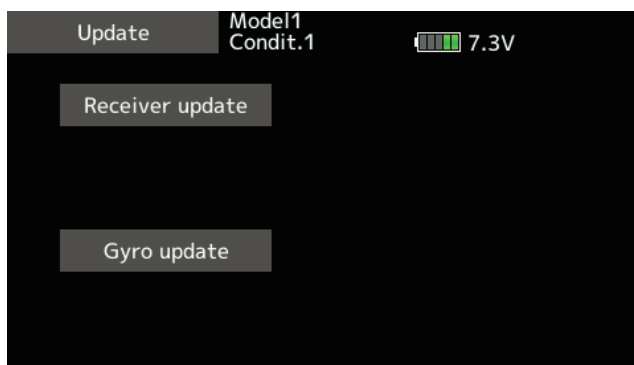
⑦ Select the product name to update.

Receiver update	Model1 Condit.1	7.3V
R7208SB		

⑧ The update screen is displayed. Connect the receiver or gyro to be updated to the S.I/F connector of the transmitter, prepare for update, and then tap the [Update] button.

Receiver update Model1
                 Condit.1   ▮▮▮▮ 7.3V

 Make the connected receiver ready for update,
and press the "Update" button.

                    Update

⑨ Update start.

Receiver update Model1
                 Condit.1   ▮▮▮▮ 7.3V

Please wait.
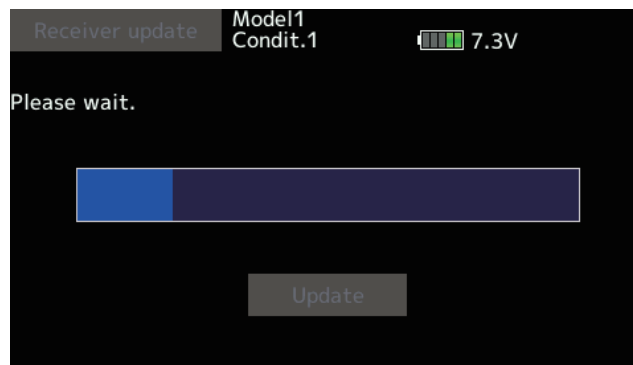
                    Update

⑩ When finished, the following will appear.

Receiver update Model1
                 Condit.1   ▮▮▮▮ 7.3V

Update succeeded.
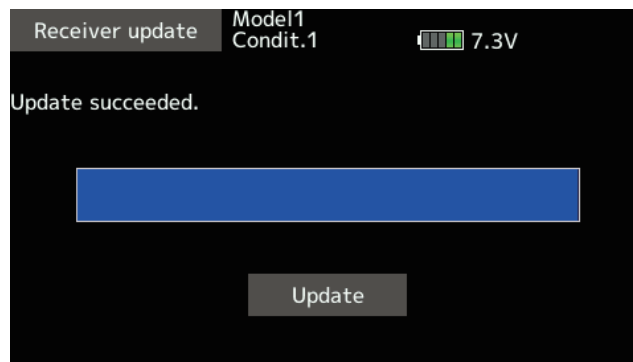
                    Update

⑪ Disconnect the receiver or gyro from the transmitter's S.I/F connector.

T16IZ SOFTWARE UPDATE CHANGES

V3.4

This software updates or alters the functions and features noted below. The instructions and information that follow are meant as a supplement to the original instruction manual that accompanied the T16IZ transmitter. Please refer to the original instruction manual where applicable, but replace the steps indicated below with these instructions. Please check to ensure that the update has been installed.
1) Select the System Menu.
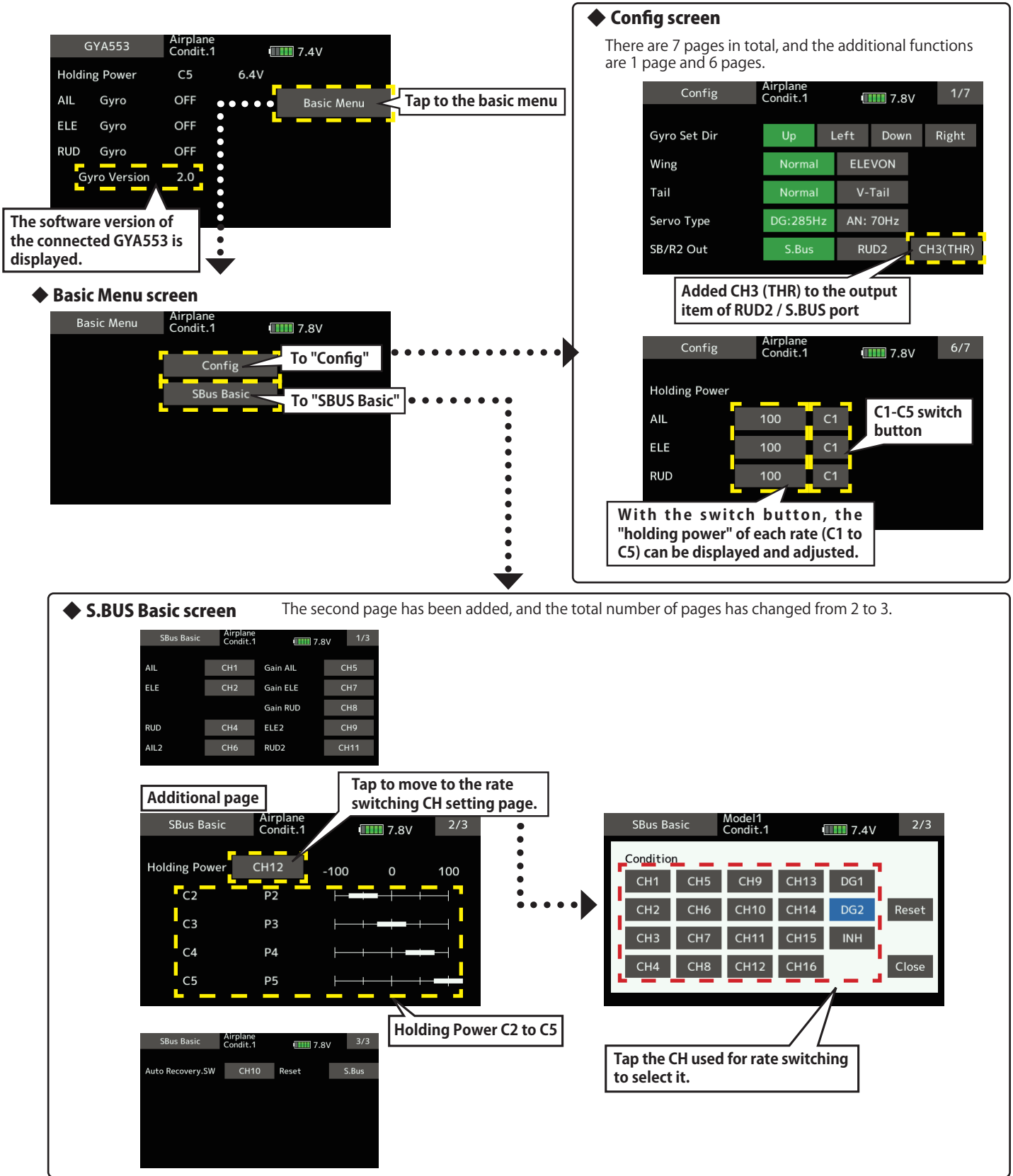2) Touch the [Information] button.
3) Confirm that the information in the display indicates the version numbers as noted above.

---

1. GYA553 New firmware Version 3.x support. → Refer to T16IZ/T16IZS GYA553 V3 Setting manual

Airplane Gyro GYA553 is compatible with 3rd aileron and 4th aileron.

1. GYA553 New firmware Version 2.x support.   → Refer to T16IZ GYA553 V2 Setting manual

1. CH3 (THR) can be output to the RUD2 / S.BUS2 port.
2. The Holding Power rate of the aircraft in AVCS mode has been expanded to 5 types from C1 to C5, and each rate can be set by switching the display.
3. Added the setting of switching CH of Holding Power rate C1 to C5 to S.BUS basic menu.

GYA553	Airplane Condit.1		▥ 7.4V
Holding Power	C5	6.4V	
AIL	Gyro	OFF	
ELE	Gyro	OFF	
RUD	Gyro	OFF	
	Gyro Version	2.0	

Basic Menu — **Tap to the basic menu**

The software version of the connected GYA553 is displayed.

◆ **Basic Menu screen**

Basic Menu	Airplane Condit.1	▥ 7.8V
	Config	**To "Config"**
	SBus Basic	**To "SBUS Basic"**

◆ **Config screen**

There are 7 pages in total, and the additional functions are 1 page and 6 pages.

Config	Airplane Condit.1	▥ 7.8V	1/7
Gyro Set Dir	Up	Left	Down	Right
Wing	Normal	ELEVON		
Tail	Normal	V-Tail		
Servo Type	DG:285Hz	AN: 70Hz		
SB/R2 Out	S.Bus	RUD2	CH3(THR)	

Added CH3 (THR) to the output item of RUD2 / S.BUS port

Config	Airplane Condit.1	▥ 7.8V	6/7
Holding Power			
AIL	100	C1	
ELE	100	C1	
RUD	100	C1	

C1-C5 switch button

With the switch button, the "holding power" of each rate (C1 to C5) can be displayed and adjusted.

◆ **S.BUS Basic screen**   The second page has been added, and the total number of pages has changed from 2 to 3.

SBus Basic	Airplane Condit.1	▥ 7.8V	1/3
AIL	CH1	Gain AIL	CH5
ELE	CH2	Gain ELE	CH7
		Gain RUD	CH8
RUD	CH4	ELE2	CH9
AIL2	CH6	RUD2	CH11

Additional page

Tap to move to the rate switching CH setting page.

SBus Basic	Airplane Condit.1	▥ 7.8V	2/3
Holding Power	CH12	-100	0	100
C2	P2			
C3	P3			
C4	P4			
C5	P5			

Holding Power C2 to C5

SBus Basic	Airplane Condit.1	▥ 7.8V	3/3
Auto Recovery.SW	CH10	Reset	S.Bus

SBus Basic	Model1 Condit.1	▥ 7.4V	2/3
Condition				
CH1	CH5	CH9	CH13	DG1
CH2	CH6	CH10	CH14	DG2	Reset
CH3	CH7	CH11	CH15	INH
CH4	CH8	CH12	CH16	Close

**Tap the CH used for rate switching to select it.**

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 switch 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.
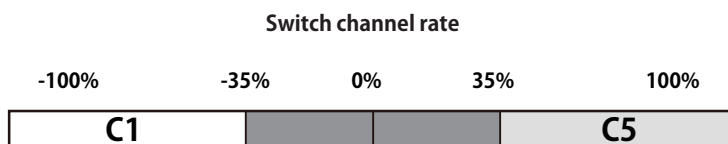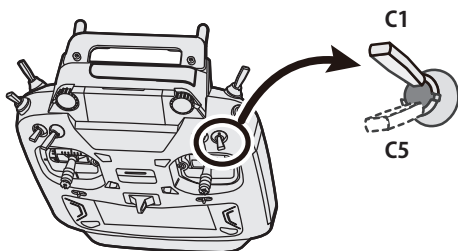
Config 6/7
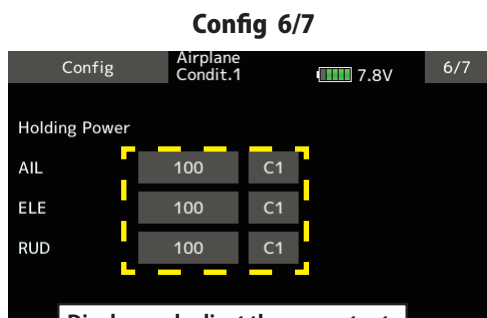
Display and adjust the current rate numbers C1 to C5 by operating the channel on the transmitter.
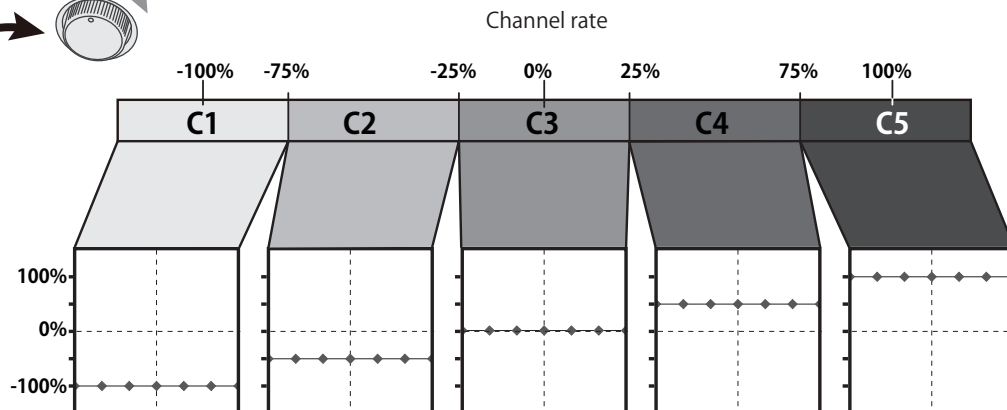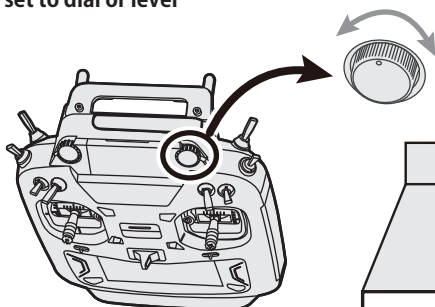
S.BUS Basic 2/3
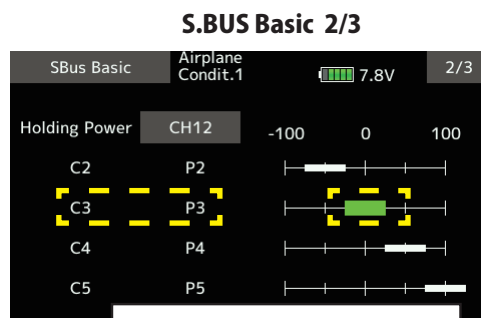
By operating the channel of the transmitter, the channel position of the current rate numbers C1 to C5 will be displayed in green.

When set to SW of DG1 or DG2

Switch channel rate

When set to dial or lever

Channel rate

---

2. O.S.ENGINE EM-100 New firmware Version 9.11 support.

If you have used the EM-100, the update will unregister the EM-100 from the "Sensor" screen. Register the EM-100 again on the "Sensor" screen.

V3.2

1. Fixed an issue where the Vario Melody settings were not saved.

V3.1

1. Fixed telemetry voice for Futaba ESC and Hobbywing ESC.

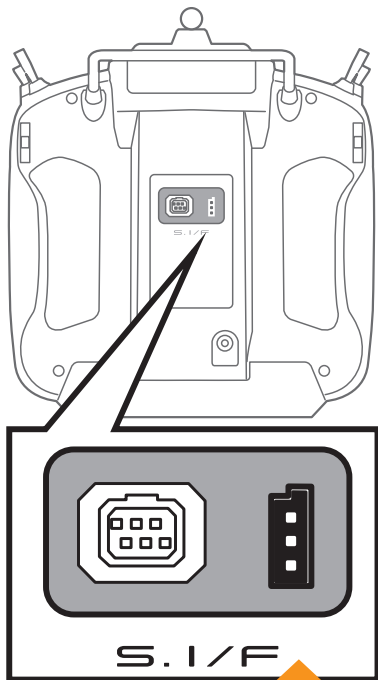**2. Fixed the problem that model copy fails.**

V3

1. Compatible with Futaba ESC MC-980H/A, MC-9130H/A, MC-9200H/A

Supports the telemetry function of MC-980H/A, MC-9130H/A, and MC-9200H/A.

◆ **Register the ESC with transmitter.**   ◆ **Alternatively, select [Futaba ESC] in start slot 24.**
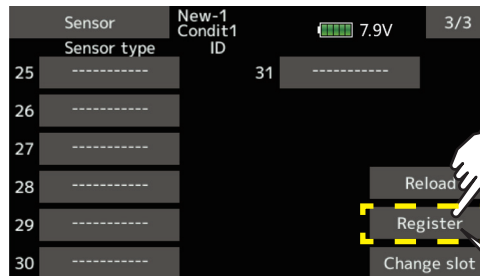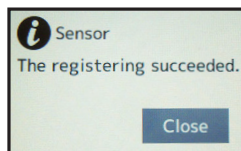
Registration to transmitter

◆ **Linkage menu → Sensor → 3/3**

● Call page 3 of [Sensor].

Connect the SBM-2 to the transmitter as shown, then tap Register.

Registration is complete when this screen appears

Connect SBM-2 to the S.I / F port on the back of transmitter.

Complete registration and remove SBM-2 from the transmitter.

*Please note that the proper default slot for this accessory is number 8 (8-15). This sensor uses eight slots. Being made to a start slot are 8, 16, and 24. Information on how to change the slot assignment is included in the transmitter's manual.

◆ **The registered ESC will be displayed as "Futaba ESC".**

◆ **The registered Hobbywing ESC is displayed as "Hobbywing ESC".**

For details on Hobbywing ESC telemetry support, refer to the Hobbywing website.

◆ MC-9130H / A telemetry connection example

To CH3 Throttle

To free port

To S.BUS2

SBM-2

To drive battery

ESC
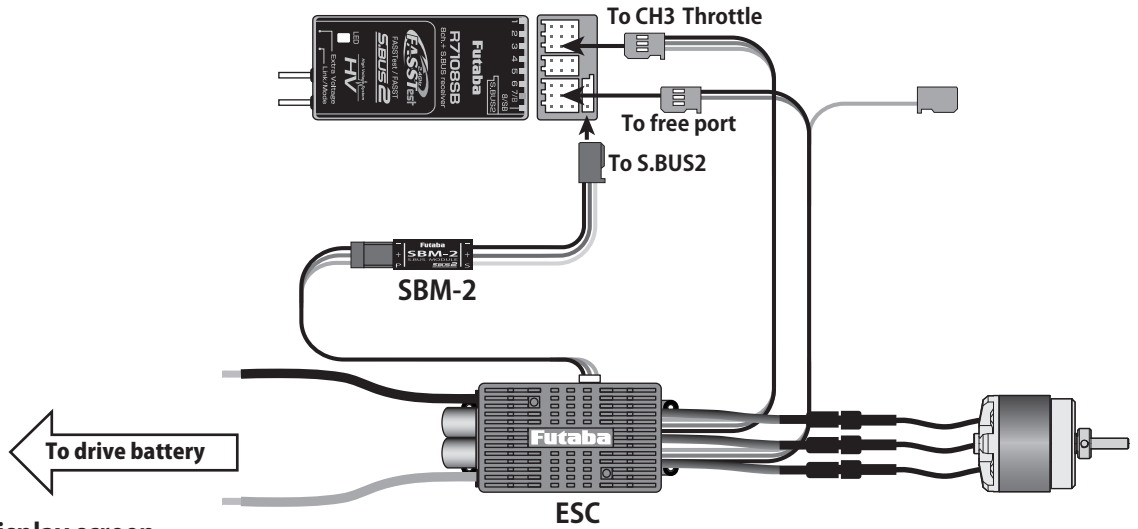
◆ ESC telemetry display screen
The ESC status is displayed. Alarm setting is also possible.

Tap to move to the temperature setting page.

| Futaba ESC | Model1 Condit.1 | 7.8V | 1/2 |

Current
0.0/ 0.0A
0.0A

Voltage
0.0/ 0.0V
0.0V

Capacity
0/ 0mAh
0mAh

Rotation
0/ 0rpm
0rpm

Tap to move to the current setting page.

Tap to move to the voltage setting page.

Tap to move to the capacity setting page.

Tap to move to the rotation setting page.

Display max / min value
Press and hold to reset.

| Futaba ESC | Model1 Condit.1 | 7.8V | 2/2 |

ESC Temperature
0/ 0°C
0°C

Throttle
0/ 0%
0%

Status Throttle not at 0%   Low voltage
Over temperature   Over current
Motor locked   Throttle signal lost

Display max / min value
Press and hold to reset.

Shows the output level from the ESC to the motor, not the position of the throttle stick.
Even if the stick is in the 50% position, the output may not be 50% depending on the ESC setting.

Tap to move to the throttle setting page.

◆ Alarm setting

↑ An upward arrow indicates the alarm will sound when the current reaches above your set value.

↓ A downward arrow indicates the alarm will sound when the current reaches below your set value.

Allows Speech to be turned ON or OFF.

Alarm is chosen from Buzzer, Voice, and Inhibit.

| Futaba ESC | Model1 Condit.1 | 7.9V |

Current

	Alarm	Vibrator	Limit
↑	Inhibit	Inhibit	100A
↓	Inhibit	Inhibit	0A

Speech
OFF

Sets the current on which the alarm operates.

*The current and capacity consumption display may vary depending on the usage conditions, so use it as a guide.

◆ Alarms can be set for Voltage, Capacity, Rotation, ESC temperature, and Throttle using the same procedure.

Speech
OFF

Pole
14
Gear ratio
1.00

Status

| Alarm | Vibrator |
| Inhibit | Inhibit |

Enter the number of poles for your motor.

If the gear is down, enter the gear ratio to display the helicopter rotor speed and the airplane gear down propeller speed.

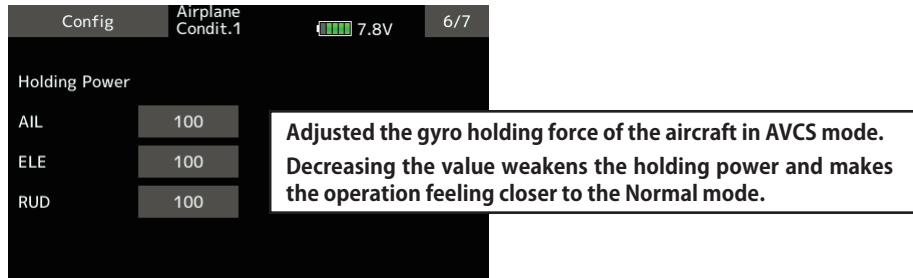When enabled, the alarm will be activated in the following warning state.

When enabled, the vibrator will start in the following warning state.

◆ Warning state

Throttle not at 0%	When the throttle stick is not low when ESC is started
Low voltage	When the battery voltage is below the cutoff voltage
Over temperature	When the ESC temperature is 110 ° C or higher
Over current	Peak current over
Motor locked	When the motor locks
Throttle signal lost	When no throttle signal is received for more than 0.25 s

2. GYA553 Addition of setting parameters

AIL / ELE / RUD holding power setting has been added to the setting parameters of GYA553.

| Config | Airplane Condit.1 | ▥▥▥ 7.8V | 6/7 |

Holding Power

AIL	100
ELE	100
RUD	100

Adjusted the gyro holding force of the aircraft in AVCS mode. Decreasing the value weakens the holding power and makes the operation feeling closer to the Normal mode.

V2

---

1. Add GYA553 Airplane Gyro setting function. (Refer the T16IZ GYA553 Setting Manual)

---

2. Compatible with SCORPION ESC telemetry

Added support for SCORPION POWER SYSTEM ESC some models.