How to update T18SZ/T16SZ/FX-36

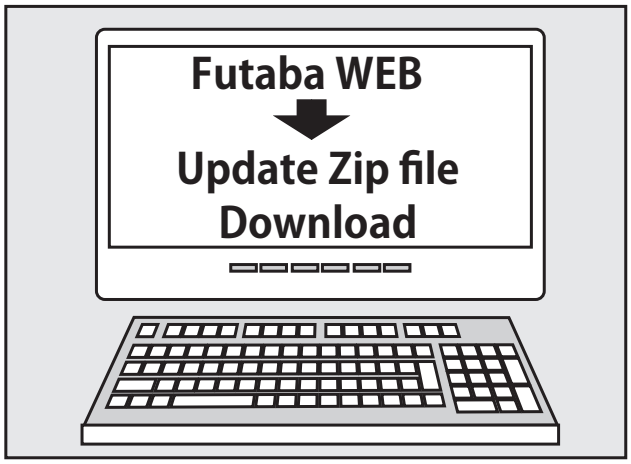
Your Futaba transmitter programming can be updated easily online. When functions are added or improved, the update file can be downloaded from our website. Copy the update files to the SD card and then use the following procedure to update the program. Check our web site for the FAQ regarding updating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

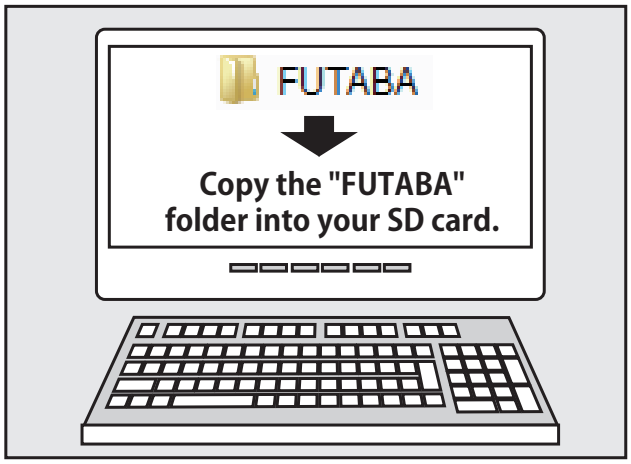
1. Download the zip file of the update data from our website.



2. Extract the zip file on your computer.

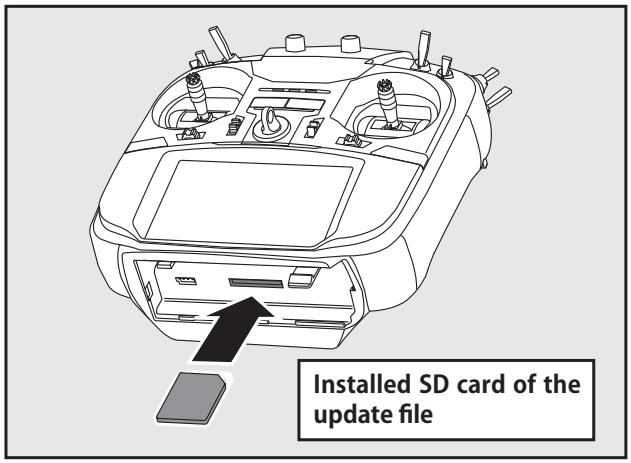
3. The **"FUTABA"** folder will be created on your computer.

4. Copy the **"FUTABA"** folder into your SD card.

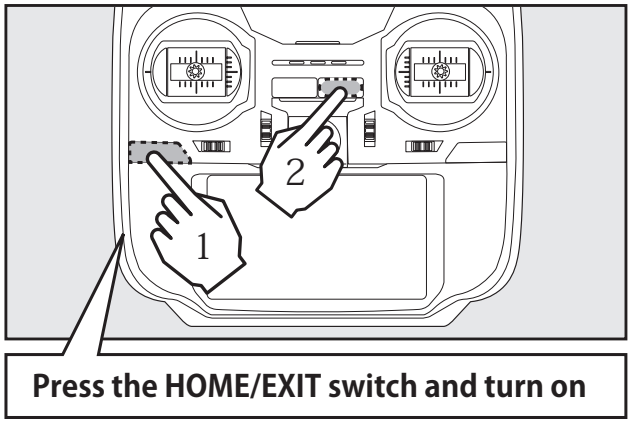


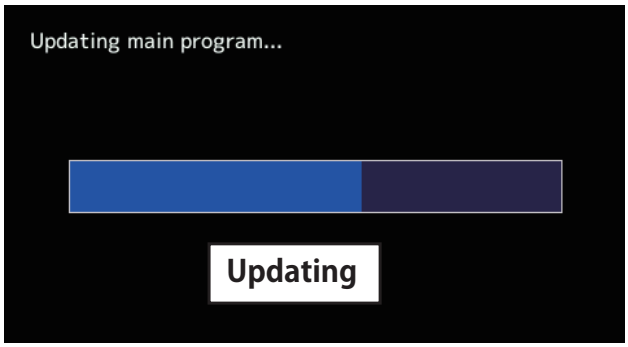
Note: If the SD card has already had "another FUTABA" folder before you make a copy, the "FUTABA" folder is OVERWRITTEN.

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

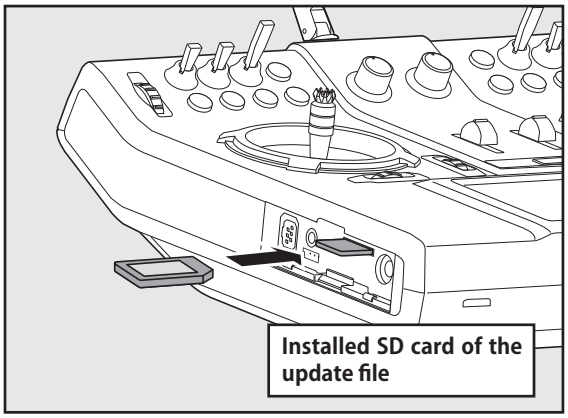


6. Turn on the transmitter power while pressing down the "HOME/EXIT" button. The update screen appears on the LCD display of your transmitter and the software update is started.

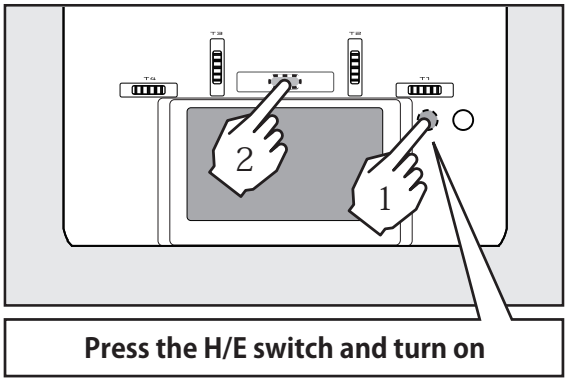




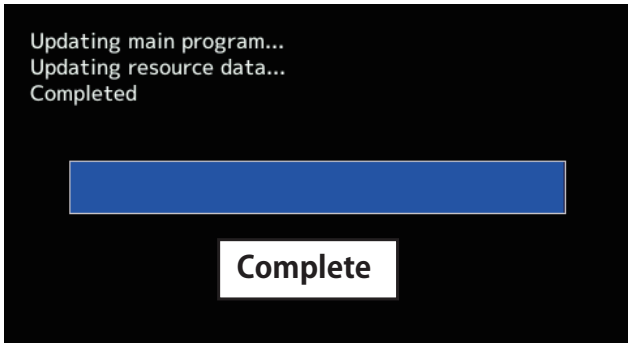
For FX-36



6. Turn on the transmitter power while pressing down the "H/E" button. The update screen appears on the LCD display of your transmitter and the software update is started.



7. When the software update is completed, "Completed" message is shown on the LCD display of your transmitter. (Show below picture.)



8. Turn off the power switch of your transmitter and remove the SD card from the card slot.

Possible Problems

When one of the error messages shown below appears on the LCD screen your transmitter, 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 transmitter cannot find the update file on the SD card. Check to be sure all the update files have been copied onto the SD card.

"Broken file."

The transmitter 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 transmitter.

Don't absolutely remove the battery and the SD 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 SD 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.

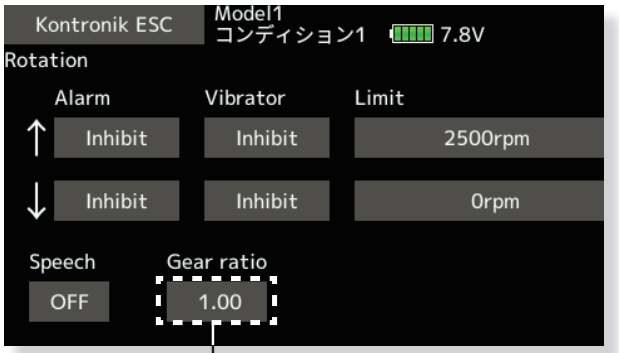
Futaba
1M23Z06016

T16SZ SOFTWARE UPDATE CHANGES

V4.3

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 T16SZ 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.

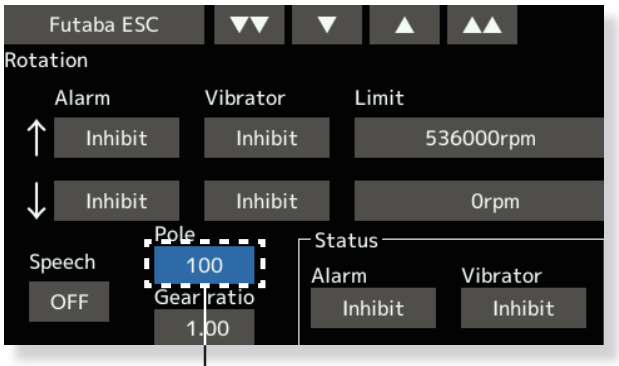
1. Telemetry settings: Added gear ratio setting button to Kontronik ESC and Scorpion ESC.



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

2. Telemetry settings: Changed the motor pole number setting for each ESC to "100".

Previously, the number of poles was up to 36, but now it can be set up to 100.



●Enter the number of poles for your motor.

Futaba
1M23Z06014

T16SZ SOFTWARE UPDATE CHANGES

V4.2

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 T16SZ 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. 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.

V4.1

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

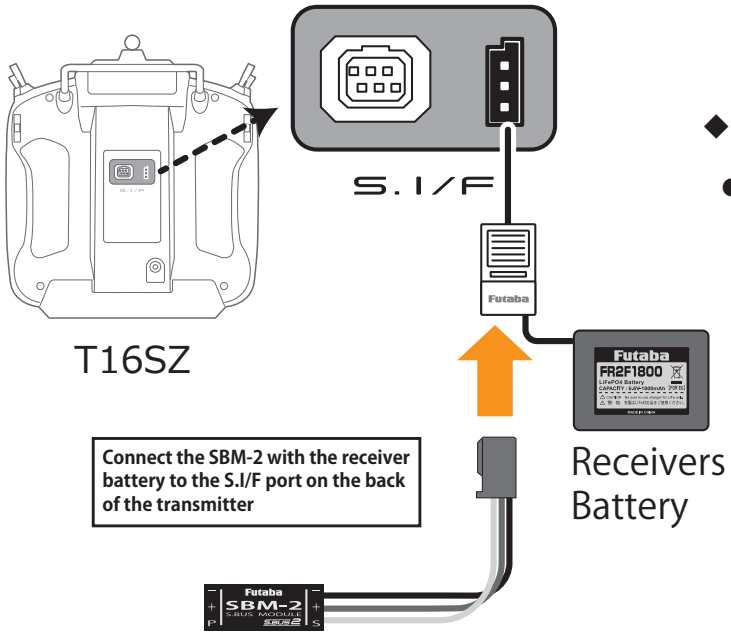
V4

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.**

Registration to transmitter

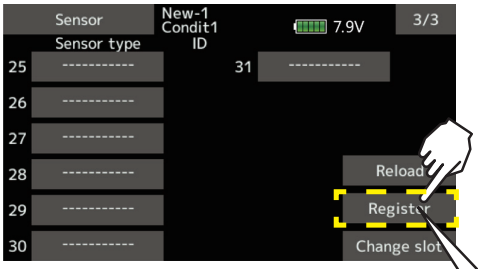


Connect the SBM-2 with the receiver battery to the S.I/F port on the back of the transmitter

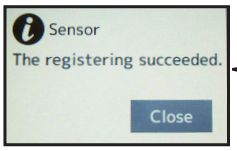
◆ **Alternatively, select [Futaba ESC] in start slot 24.**

◆ **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

Complete registration and remove SBM-2 from the transmitter.

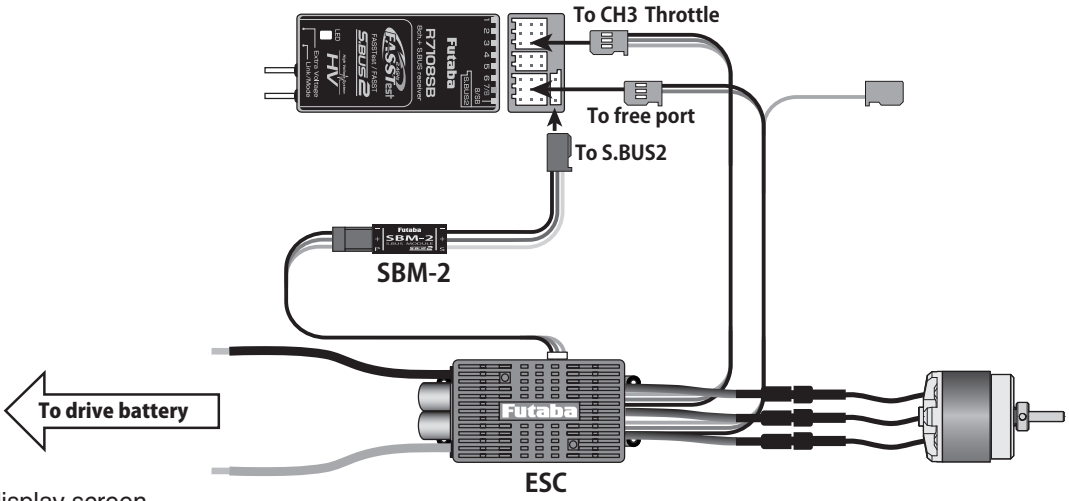
*Please note that the proper default slot for this accessory is number 8 (8-15). This sensor uses eight slots. Being made to a start slot are 8, 16, and 24. Information on how to change the slot assignment is included in the transmitter's manual.

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

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

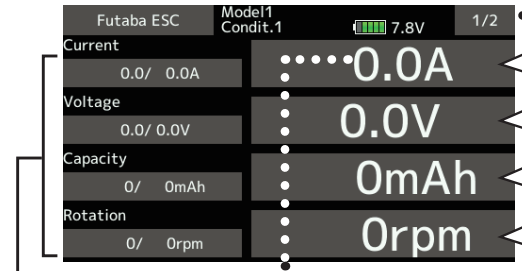
For details on Hobbywing ESC telemetry support, refer to the Hobbywing website.

◆ MC-9130H/A telemetry connection example



◆ ESC telemetry display screen

The ESC status is displayed. Alarm setting is also possible.



Tap to move to the current setting page.

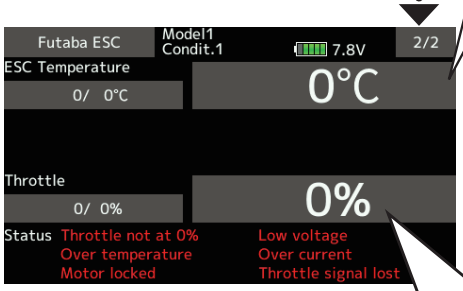
Tap to move to the voltage setting page.

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.

Tap to move to the temperature setting page.



Display max / min value
Press and hold to reset.

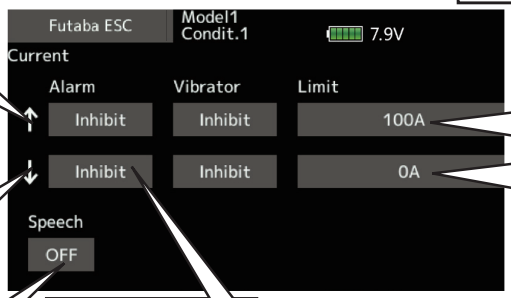
Shows the output level from the ESC to the motor, not the position of the throttle stick.
Even if the stick is in the 50% position, the output may not be 50% depending on the ESC setting.

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.



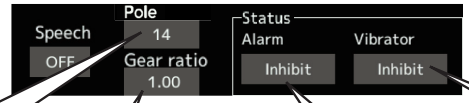
Sets the current on which the alarm operates.

Allows Speech to be turned ON or OFF.

Alarm is chosen from Buzzer, Voice, and Inhibit.

*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.



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. Hobbywing ESC telemetry compatible

Supports the telemetry function installed in some Hobbywing ESCs.

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

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

3. Compatible with SCORPION ESC telemetry

Added support for SCORPION POWER SYSTEM ESC some models.

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T16SZ SOFTWARE UPDATE CHANGES

V3.12

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 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. Fixed defect

Fixed a problem that could not be linked with R3206SBM.

V3.11

1. Fixed defect

Fixed a problem that telemetry reception time.

V3.10

1. Add O.S.ENGINE EM-100 Telemetry function — FASSTest, T-FHSS

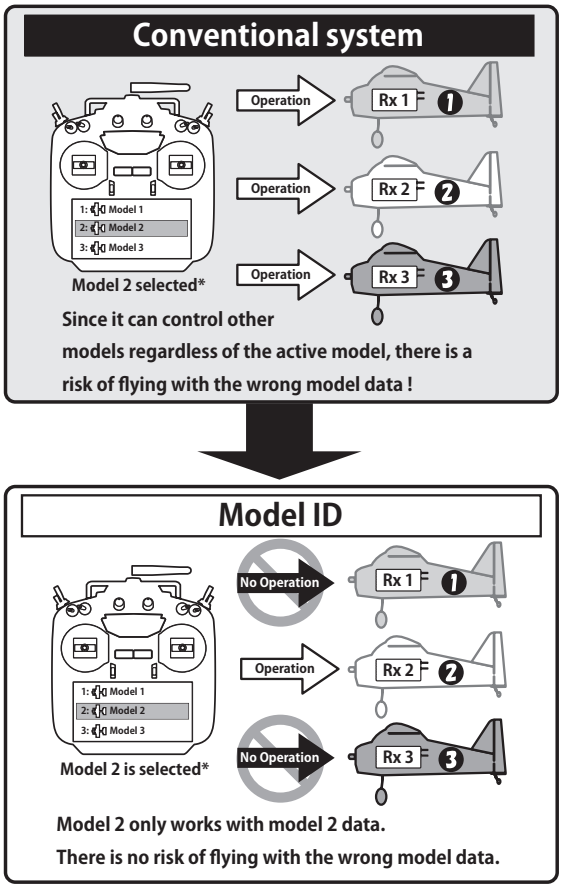
Supports EM-100 firmware version Ver.8.00 or later.

V3.9

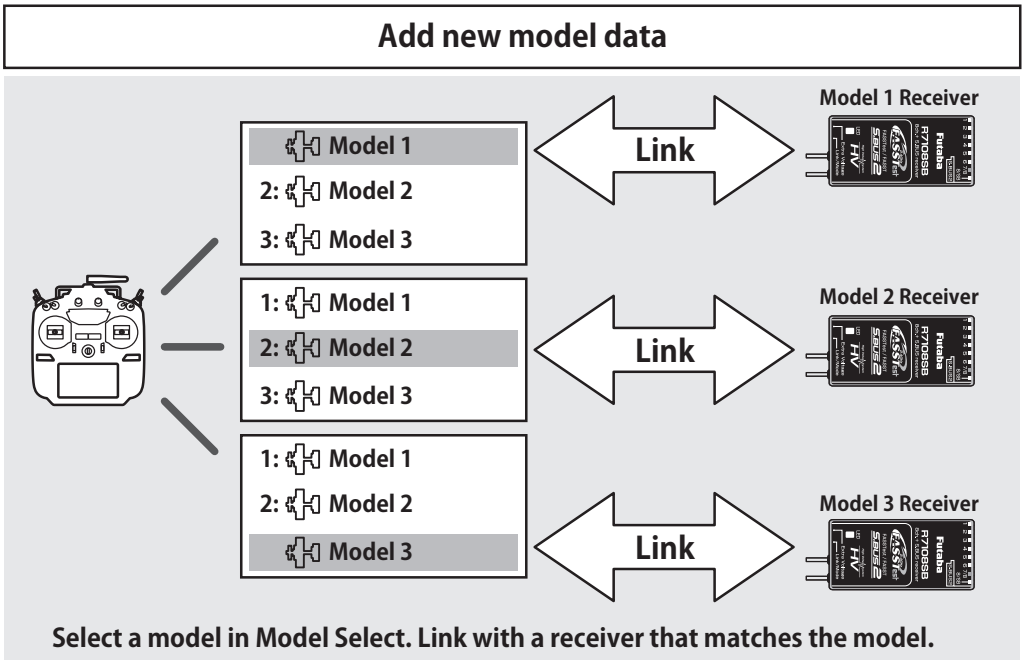
⚠ **Important:** When you update your radio to V3.9 and add the Model ID function, you must re-link existing FASSTest or T-FHSS receivers in your current models.

1. Add Model ID — FASSTest, T-FHSS

As an added level of safety in the form of Model ID, which will prevent the accidental control of a model when using a different model data by preventing link.



Link is required when a new model is made from a model selection.



■ In the system types (FASSTest, T-FHSS) compatible with the model ID function, a unique ID number (model ID) is set to each model data. Linking with a receiver stores the model ID of the model data in that receiver. The receiver operates only when it receives radio waves transmitted using model data that matches the stored model ID. As a result, the receiver does not operate even if model data of an unintended setting is used by mistake, so it is possible to prevent a malfunction due to a model selection mistake.

■ If you want to use different model data from the model data that you have been using, link again.

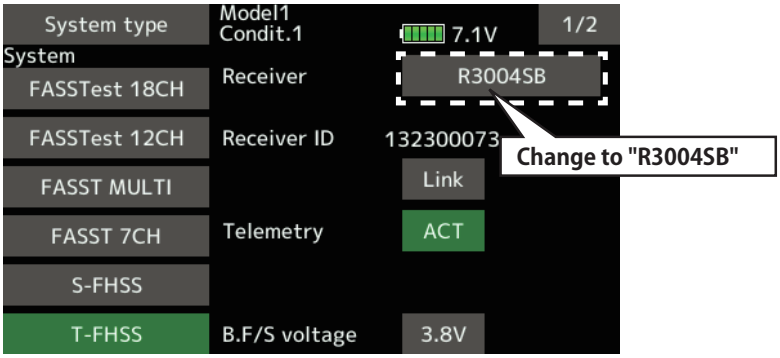
■ Model ID feature is enabled only if the system type is FASSTest or T-FHSS. Please note that model ID function can not be used on other systems.

■ For safety reasons, model ID function can not be disabled.

■ Model ID is automatically set when copying or adding model data.

When using R3004SB

■ When using the **R3004SB**, set “Receiver” in the system type screen T-FHSS mode setting to **[R3004SB]**. When using other T-FHSS compatible receivers, set "Receiver" to [Normal].



⚠ R3004SB receiver does not support model ID function.

2. Improved model copy function

Conventionally, only the model data currently active can be copied. In version 3.9, you can copy any model data.

T16SZ SOFTWARE UPDATE CHANGES

V3.8

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 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. Telemetry sensor assignment

Third-party telemetry sensor JetCat V10 can be assigned from slot 1. This allows JetCat V10 and PowerBox to be used simultaneously.

V3.7

1. Fixed defect

Fixed a problem that an AFR rate of conditions 2 to 4 ("Gasvorw. 1" to "Gasvorw. 3") cannot be set properly when the language mode is set to German and model type of a model data is Helicopter.

V3.6

1. Compatibility of model data created with T18SZ 70th anniversary model

It is necessary to update software to Ver.3.6 or later in order to use model data created with the T18SZ 70th anniversary model.

* There are no difference in functions between the 70th anniversary model and standard model.

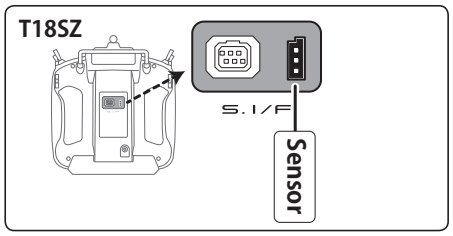
V3.5

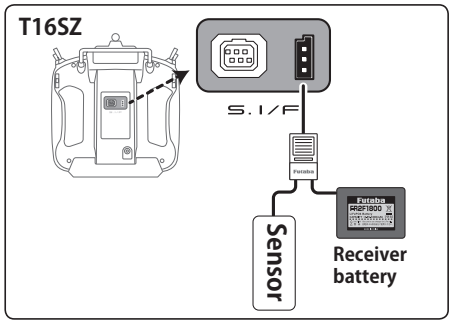
1. Telemetry Airspeed sensor function

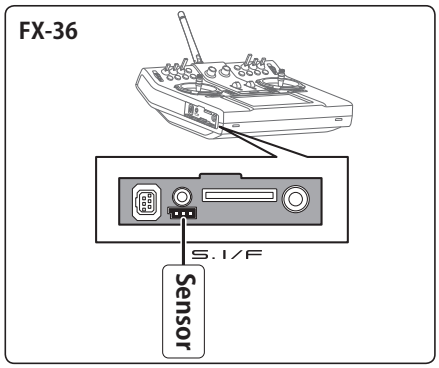
The T18SZ/T16SZ/FX-36 has been made compatible with the telemetry airspeed sensor.

***Airspeed sensor must be installed in the aircraft.**

◆ Airspeed sensor is registered with the transmitter.





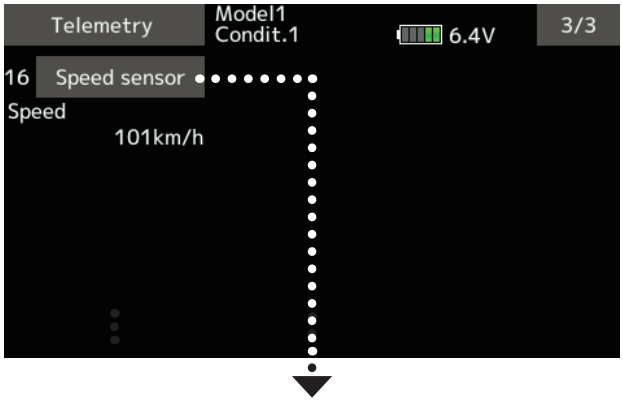


① Connect the sensor to the transmitter as shown in the figure.
② [Linkage menu] → [Sensor] → [Page 3/3] is opened from the transmitter.
③ Tap [Register]
④ Complete registration and remove sensor from the transmitter.

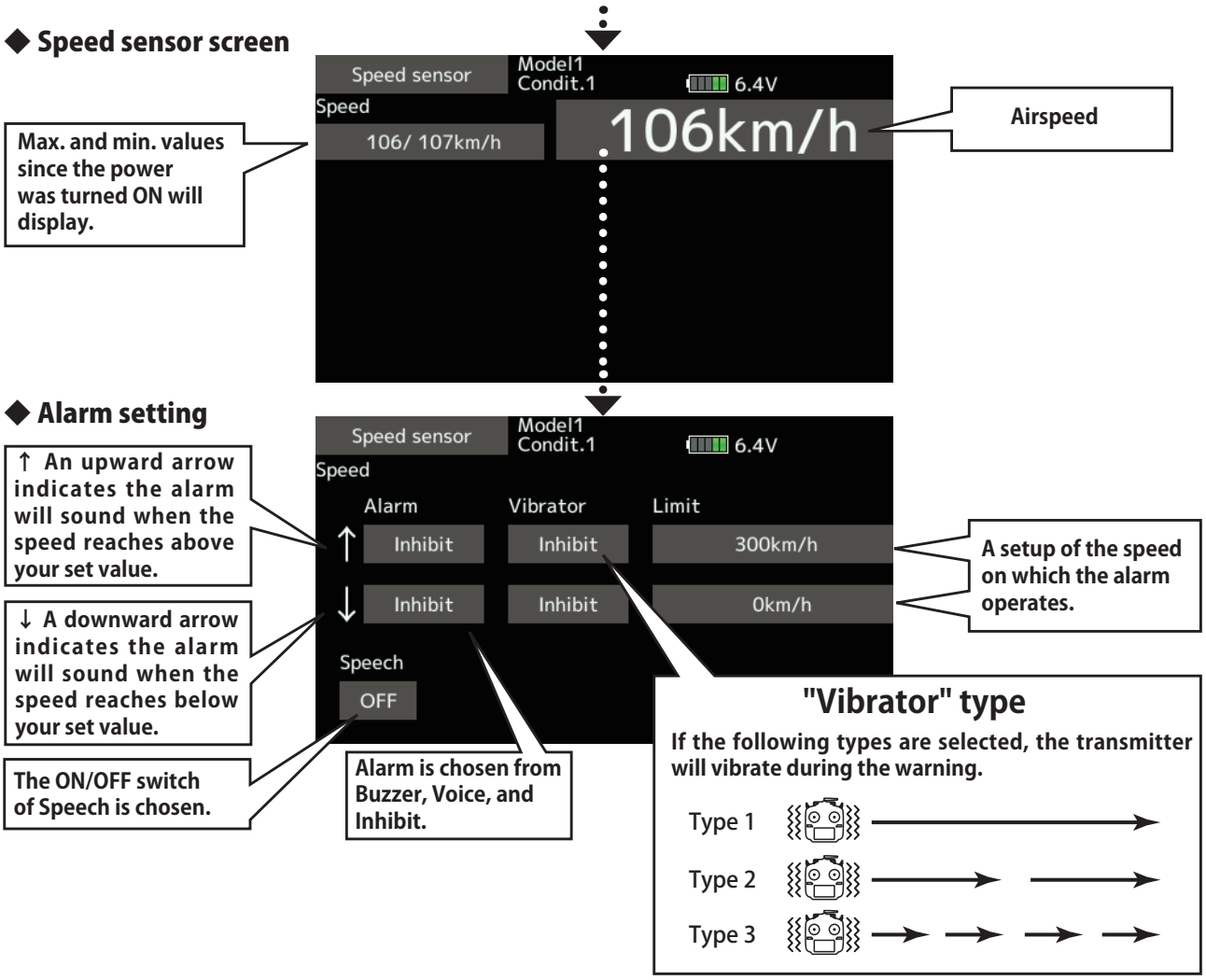
◆ How to display the Airspeed sensor screen.

① [Linkage menu] → [Telemetry]

② Tap [Speed sensor]



◆ **Speed sensor screen**



◆ **Alarm setting**

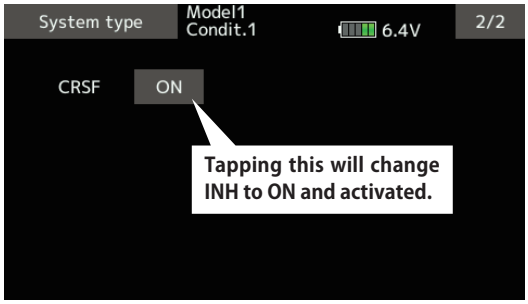
2. CRSF Protocol for TBS

The T18SZ/T16SZ/FX-36 has been made compatible with the CRSF (TBS) protocol.

■ Bidirectional communication function of CRSF is not supported.

Futaba is not responsible for damage sustained by combination with parts other than Futaba Genuine equipment.

① [Linkage menu] → [System Type] → [Page 2/2] is opened from the transmitter.



② Tap the "CRSF" button to [ON]. A signal conforming to the CRSF standard is output from the S.BUS setting connector (S.I/F) of the transmitter.

■ When using CRSF, the S.BUS servo setting function and [Reload] [Register] [Change slot] functions cannot be used. When setting S.BUS servo and sensor, set CRSF to INH.

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T16SZ SOFTWARE UPDATE CHANGES

V3.3

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 T18SZ/T16SZ/FX-36 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. Fixed defect

- ◆ Fixed a problem that the power switch may not operate when the timer alarm is set to [Constant] mode.
- ◆ Fixed a problem that the position of the stick switch is not displayed correctly on the AFR. (FX-36 only)
- ◆ Fixed a problem that the power switch may not operate depending on the position of the trim dial. (FX-36 only)

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T16SZ SOFTWARE UPDATE CHANGES

V3.2

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 T18SZ/T16SZ/FX-36 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. Change of the trainer connector power supply specification

The update enables the trainer connector to supply power to external equipment connected to the trainer connector, when turning on the power by pressing the power switch in the trainer student mode.

! Futaba is not responsible for damage sustained by combination with parts other than Futaba Genuine equipment.

! When connecting Futaba transmitters to the trainer code, do not operate the power switch on the student side transmitter and operate the power switch on the teacher side transmitter as before. The student side transmitter turns power automatically in conjunction with the teacher side.

2. Telemetry sensor made by O.S.ENGINES MFG.

It corresponds to O.S. EM-100 flight controller(under development). For details, please refer to the instruction manual of EM-100.

*The EM-100 is not handled at Futaba.

3. Fixed defect

- ◆ The count value of the integration timer has been corrected.
- ◆ Fixed the behavior of Ailevator.
- ◆ Fixed a problem that seldom the power switch does not work.

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T16SZ SOFTWARE UPDATE CHANGES

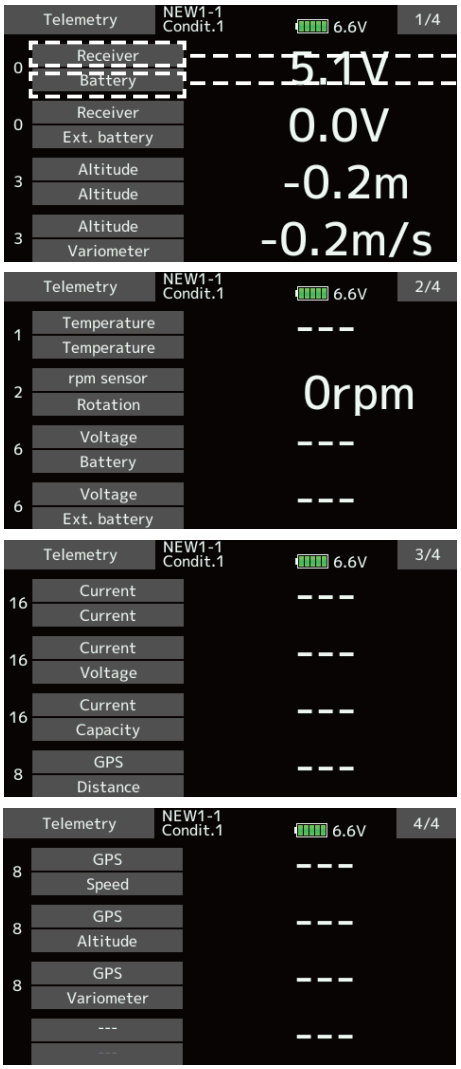
V3.1

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 T16SZ 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.

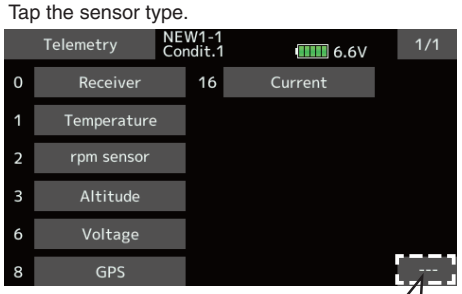
1. Telemetry display (The extension of the number of telemetry data which is shown)

The number of telemetry data which is displayed to Telemetry display screen is extended. It is 16 items (4 pages) maximum.



Sensor type selection screen

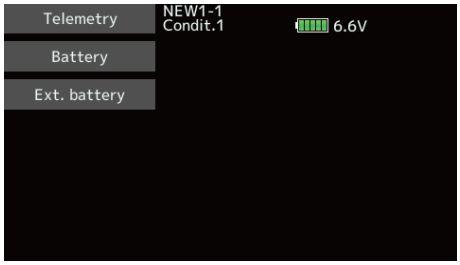
You can choose which type of sensor to displays. Tap the sensor type.



If you do not want to display telemetry data on the telemetry monitor screen, select "---".

Sensor selection screen

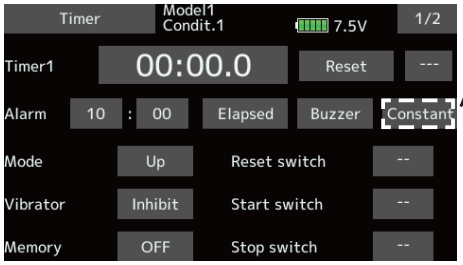
For some sensor types, you can choose the display item. Tap to select.



2. Timer Alarm

Added a setting to keep the alarm after the alarm set time.

Constant: The alarm does not stop
One time: Stop the alarm at once



3. Model select

Model data of FX-32 can be used.

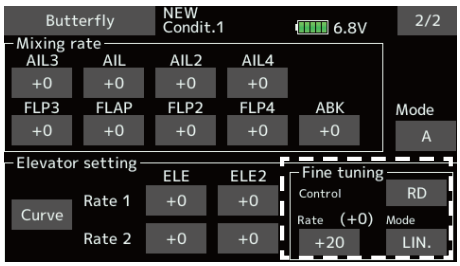
4. Data Converter

FX-30 and T12FG have been added to the data converter compatible models.

The transmitter name is displayed on icon.

5. Butterfly Elevator setting (Glider)

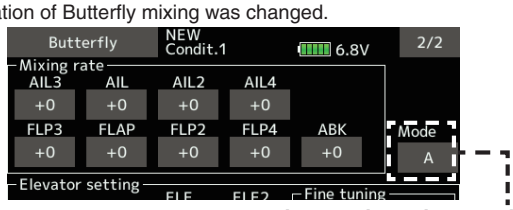
Added fine tuning function to butterfly elevator setting.



*When Flying wing type, it was made not to display Elevator setting.

6. Butterfly mixing mode (Glider)

The operation of Butterfly mixing was changed.



Mode A, mode B selection added.

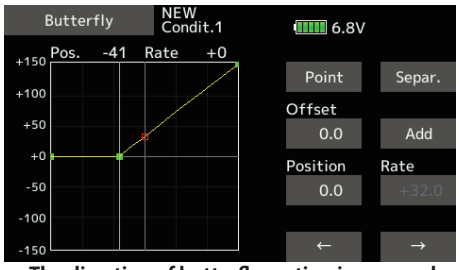
- **Mode A**

  (Normal)

- The butterfly operation direction is reversed at the neutral position (50%) of the throttle stick.

At offset 20

At offset 70



The direction of butterfly motion is reversed.

- **Mode B**

  (Throttle stick full stroke MODE)

- It does not reverse at the neutral position, so you can set the butterfly operation start point with the full stroke of the throttle stick.

At offset 20

At offset 70

The direction of butterfly motion is not reversed.

7. Butterfly Differential rate (Glider)

The operation of Butterfly Differential rate was changed.

◆ When Butterfly Differential rate is "+", Up rate is decrease and DOWN rate is increase.

◆ When Butterfly Differential rate is "-", the calculation method of UP/DOWN and a direction become reverse.

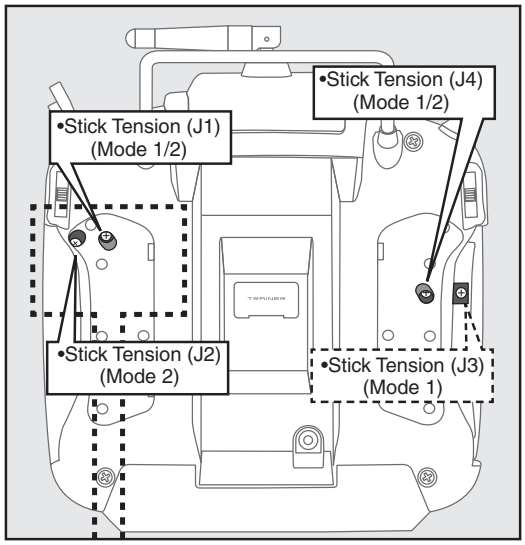
8. Error correction for Failsafe screen

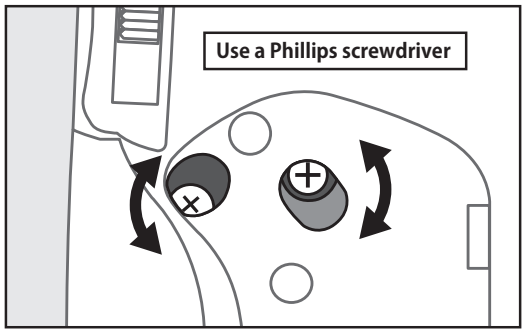
A fault that a fail-safe position indicator is not shown on the Failsafe screen in FASST-7ch mode has been fixed.

9. Manual change page 30

This supplement contains information for correcting manual errors. Refer to the following corrected items.

Remove the transmitter's rear rubber grips. (When using Mode 1, you will need to remove the side cover.)





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