

TIOPX Software Update Method

Whenever improvements and new functions are available, the software of your T10PX radio transmitter can be updated easily via online free of charge. The updated software file will be shown on our website. You can download it and make a copy on your microSD card. Below is the procedure for the software update.

Required for update (Purchase separately)





Note: Before you update the software, the battery that is connected to the T10PX should be fully charged.

Note: During the software update, the model data that is stored in the T10PX should be kept without any change. (NOT erased and NOT changed.) However, for your safety, making a backup of your model data before the software update is highly recommended.

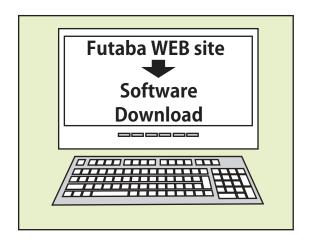
Updating procedure

1. Download the zip file of the update data from our website or your local distributor's website.

https://futabausa.com/

- 2. Extract the zip file on your computer.
- 3. Insert the micro SD card into the PC and copy the FUTABA folder expanded on the PC to the micro SD card.

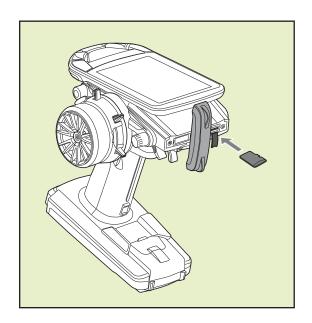
If you already have a microSD card FUTABA folder, overwrite it.



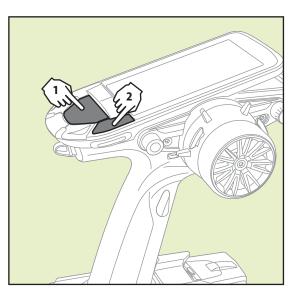


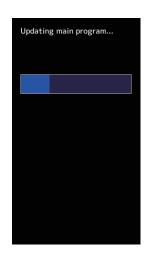


4. Insert the micro SD card with the copied FUTABA folder into the T10PX.

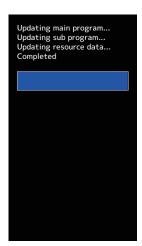


5. Turn on the transmitter power while pressing down the "HOME" button. The update screen appears on the LCD display of your T10PX and the software update is started.





6. When the software update is completed, "Completed" message is shown on the LCD display of your T10PX. (Show below picture.)



7. Turn off the power of T10PX.

Possible Problems

When one of the error messages shown below appears on the LCD screen your T10PX, 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 T10PX cannot find the update file on the microSD card. Check to be sure all the update files have been copied onto the microSD card.

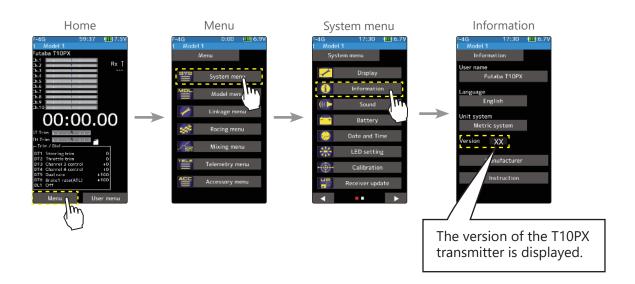
"Broken file."

The T10PX detects the update file error. The update file may be broken or for another transmitter.

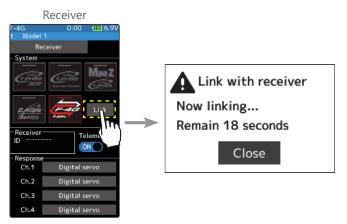
"Write error."

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 T10PX.

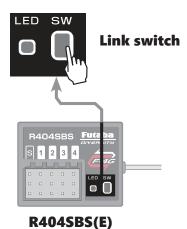
TIOPX Version check



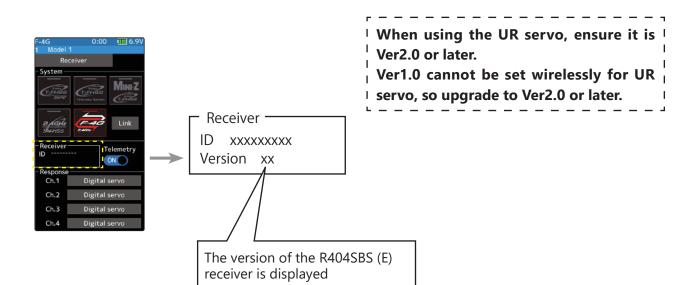
R404SBS(E) Version check



T10PX transmitter in link mode.



Turn on the power of R404SBS (E) and press SW.



Ver. I 0.0

1. Compatible with ESC with firmware updated below

► FUTABA MC971CR Ver.F3.10 [0A.0A.F3.10]
 ► ACUVANCE XarvisXX Ver.C1.10 [0A.0C.C1.10]
 ► ACUVANCE RAD Ver.F3.10 [0A.0A.F3.10]

^{*}When using the above ESC with T10PX Ver10.0, be sure to update the ESC to the above version.

Ver.9.0

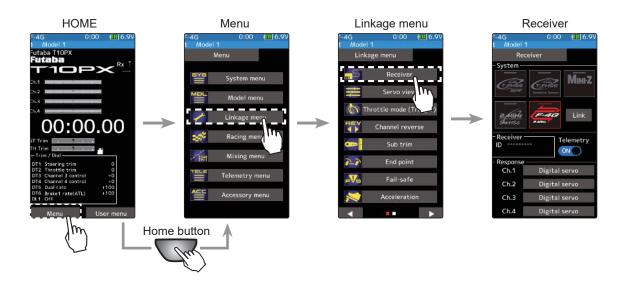
1. Compatible with MINI-Z EVO2

Supported the MINI-Z EVO2 for Kyosho.

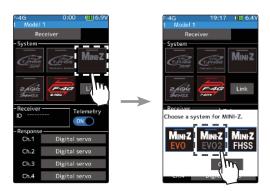
* KYOSHO MINI-Z receiver unit **RA-51** [No.82044] (sold separately) is required.

Receiver system Change

1 Set the transmitter "PWR" side power switch to ON. From the Home screen, press the HOME button or tap [Menu] on the touch panel. Next, select [Receiver] at the Linkage menu and access the setup screen shown below by tapping the screen.



2 In "Receiver," select and tap the MINI-Z. When the MINI-Z system selection screen appears, tap [MINI-Z EVO2].



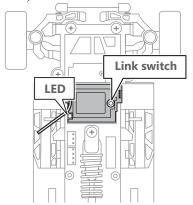
3 System change ends. After changing the system, be sure to link it with the Receiver.



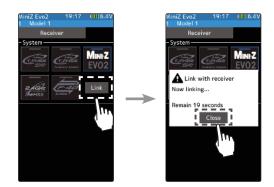
How To Link

With the transmitter T10PX powered on, bring it within 20-inches (half a meter) of the MINI-Z receiver RA-51. (Place the antennas as close together as possible.)

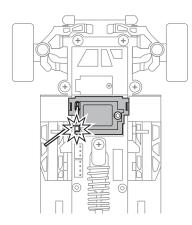
1 Turn on the power of the MINI-Z receiver RA-51.



- 2 Tap [Link] on the "Receiver" screen. The T10PX will enter link mode, Rand a message will be displayed.
- Press and release the link switch on the MINI-Z receiver RA-51 for more than 2 seconds, and when the LED lights up for 2 seconds and then flashes again, cancel the link mode of the T10PX and return it to normal mode.



When the MINI-Z receiver RA-51 LED lights up, the link is complete.



TIOPX Software Update

Ver.8.0

1. Compatible with HPS-CT501

HPS-CT501 have been added to the UR mode / SR compatible servos.

Ver.7.0

1. Compatible with MINI-Z FS-RM005 module

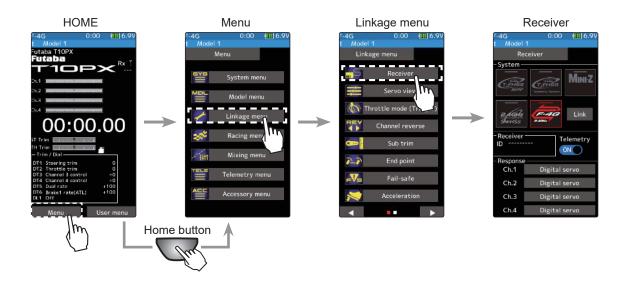
Supported the FS-RM005 module for Kyosho MINI-Z FHSS.

* KYOSHO MINI-Z module conversion adapter (sold separately) is required.

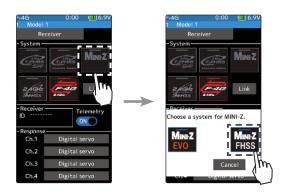
Receiver system Change

Use MINI-Z ADAPTER T10PX to connect FS-RM005 module to T10PX.

1 Set the transmitter "PWR" side power switch to ON. From the Home screen, press the HOME button or tap [Menu] on the touch panel. Next, select [Receiver] at the Linkage menu and access the setup screen shown below by tapping the screen.



2 In "Receiver," select and tap the MINI-Z. When the MINI-Z system selection screen appears, tap [MINI-Z FHSS].



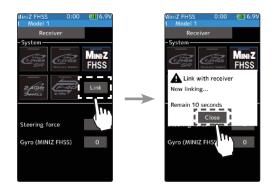
3 System change ends. After changing the system, be sure to link it with the Receiver.



How To Link

With the transmitter T10PX powered on, bring it within 20-inches (half a meter) of the MINI-Z receiver.

- 1 Turn on the power while pressing the link switch of the MINI-Z receiver. Check that the LED on the MINI-Z receiver blinks quickly and releases the link switch.
- 2 Tap [Link] on the "Receiver" screen. The T10PX will enter link mode, Rand a message will be displayed. Confirm that the LED on the MINI-Z receiver has changed to slow blinking, then tap [Close].



3 Linking is complete when the LED on the MINI-Z receiver changes from blinking to lit.

MINI-Z FHSS receiver function setting method

You can set the steering force function and gyro function of the MINI-Z FHSS receiver with T10PX.

1 (Steering force adjustment)

Tap the value button of [Steering force]. Value input buttons appear on the screen, use the [+] and [-] buttons to adjust the steering force amount.

(Gyro gain adjustment)

Tap the value button of [Gyro (MINIZ FHSS)]. Value input buttons appear on the screen, use the [+] and [-] buttons to adjust the gyro gain amount.



*For T10PX updated to Ver.7.0, as the **Steering force** and **Gyro gain** of each model data will be forced to set to "0", please reset it to the initial value of "62", or set it to an appro-

Trim/Dial Setting

priate value.

The Steering force amount and Gyro gain can be controlled with the digital dial or digital trim using the trim/dial select function. (Linkage menu)

Adjustment buttons

- Adjust with the [+] and [-] buttons.
- Return to the initial value by tapping the [reset] buttons.

Steering force

1~100 Initial value: 62

Gyro gain

1~100 Initial value: 62



2. Compatible with HPS-CT702 /HPS-CD700

HPS-CT702 and HPS-CD700 have been added to the UR mode / SR compatible servos.

3. Gear ratio chart Expanded spur setting range

In the gear ratio chart, we have expanded the range of spur gear settings from 50-130 to 40-130.

4. 4WS Mixing - Memorize 4WS type

It is updated to boot from the last selected 4WS type when powering on T10PX.

Ver.6.0

1. Added Trans-Brake



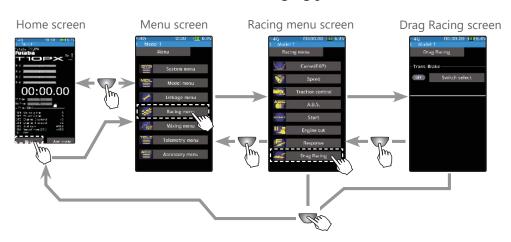
RACING MENU

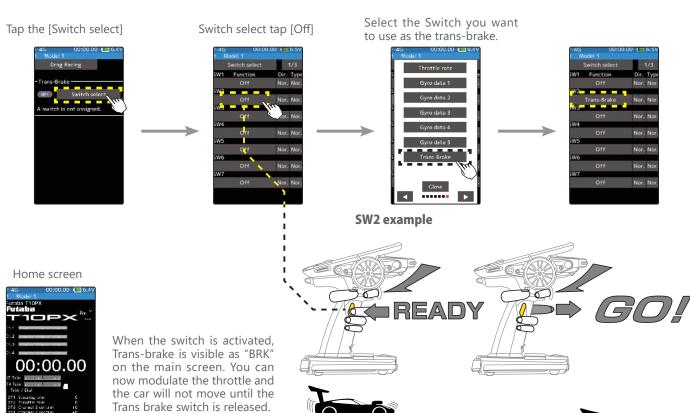


Drag racing

Trans-Brake

The Trans-Brake allows the engine to develop full power without that power being transmitted into the drive-train. This function can be used in a drag racing situation, where the driver can use the trans-brake to assist in the staging process.





Ver.5.0

1. Extended throttle speed function.

Added an alternate speed type for drag cars to the throttle speed function.



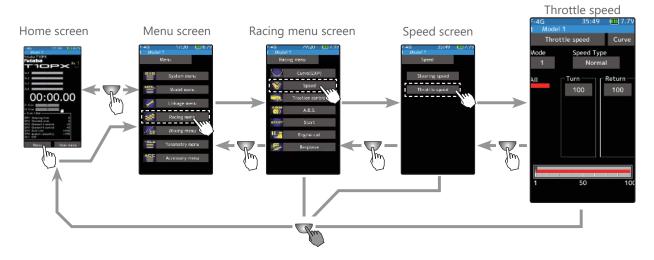
RACING MENU



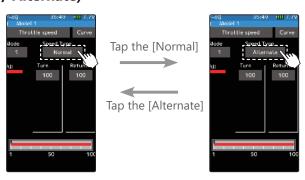
Speed

Throttle speed

Sudden throttle trigger operation on a slippery road only causes the wheels to spin, and the vehicle cannot accelerate smoothly. Setting the throttle speed function reduces wasteful battery consumption while at the same time permitting smooth, enjoyable operation.



Speed Type (Normal / Alternate)





Normal Speed Type

When speed type is set to normal, traditional Speed & curve operation will occur, the throttle curve will not listen to the speed function.



Alternate Speed Type

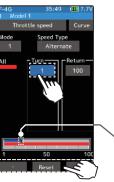
When the speed type is set to alternate, it allows speed to follow and traverse the throttle curve. Additionally a button was also added to the speed menu to quickly navigate to throttle curve regardless of speed type.

Using Alternate Speed Type

("Turn" direction delay adjustment)

Tap the value button on the [Turn]. Value input buttons appear on the screen. Use the [+] and [-] buttons to adjust the turn

speed amount.



Adjustment buttons

- Adjust with the [+] and [-] but-
- Return to the initial value by tapping the [reset] buttons.

Speed range

1~100 Initial value: 100, there is no delay.

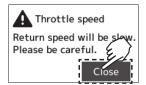
100 Servo operation is delayed.

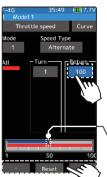
Throttle trigger position

("Return" direction delay adjustment)

Tap the value button on the [Return] .A warning is displayed

saying, "Return speed will be slow. Please be careful.". If you want to use the return, tapped [Close]. Value input buttons appear on the screen. Use the [+] and [-] buttons to adjust the return speed amount.



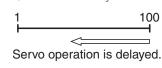


Adjustment buttons

- Adjust with the [+] and [-] but-
- Return to the initial value by tapping the [reset] buttons.

Speed range

1~100 Initial value: 100, there is no delay.



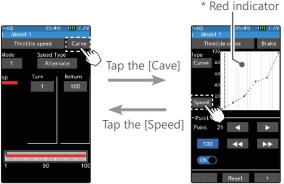
Throttle trigger position



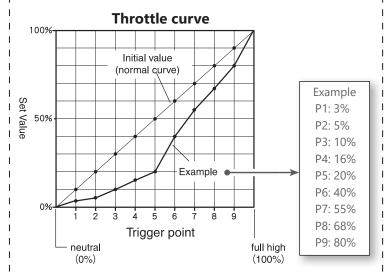
Curve (EXP)

Throttle curve

A button was also added to throttle curve to quickly navigate to speed menu regardless of speed type.



When in Alternate mode, the red indicator on the curve screen represents speed.



Advice

Alternate speed type is great for high power applications where traction can easily be lost. With Drag cars this feature can slow the output power level by fine tuning points on the throttle curve menu with speed set at lower number.

2. Extended winch mixing function.

It added winch mixing that can use on crawlers and others.



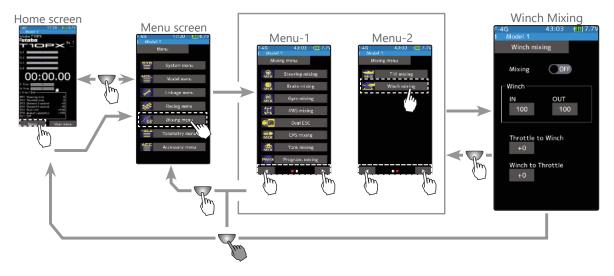
MIXING MENU



Winch Mixing

This mixing function allows any Trim/Dial to control a winch. The Trim/Dial will only move the device forward or reverse when the button is activated or pressed acting in a momentary manner. Movement will stop when the switch is released.

Winch mixing uses a winch and applies bidirectional mixing from the throttle to winch and from the winch to throttle so that the rock crawler and winch can operate simultaneously with one input.



Winch mixing adjustment

(Preparation)

Use the "Trim/Dial select" function to select the winch channel operation dial (Linkage menu)



(Function ON/OFF)
Tap Mixing (ON) or (OFF) to select ON/OFF

"OFF": Mixing function OFF "ON": Mixing function ON

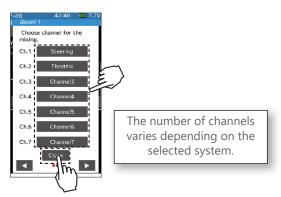


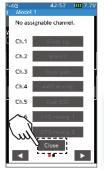
Setting - Tap (ON)/(OFF).

2 (Channel setup)

The channel list screen used for the winch is displayed. Tap the auxiliary channel that connected the winch the winch.

- When all channels are in use, a screen saying "No assignable channel" is displayed, please turn off other mixing and make an unused channel. You can check the mixing used on the channel setting screen (Linkage menu).





If there is no assignable channel, tap [Close]. Turn off other mixing and make assignable channels.

3 (-Set the amount of movement)

Tap the value button on the [IN] or [OUT]. Value input buttons appear on the screen. Use the [+] and [-] buttons to adjust each movement amount.



Adjustment buttons

- Adjust with the [+] and [-] buttons.
- Return to the initial value by tapping the [reset] buttons.

IN/OUT amount

 $0 \sim 100$

Initial value: 100

Mixing from the winch to throttle and throttle to winch can be set.

4 (-Throttle to Winch adjustment)

Tap the value button on the [Throttle to Winch]. Value input buttons appear on the screen. Use the [+] and [-] buttons to adjust the mixing amount.

- The mixing operation from the throttle to the winch does not exceed the range of winch operation set with [IN]/[OUT].



Adjustment buttons

- Adjust with the [+] and [-] buttons.
- Return to the initial value by tapping the [reset] buttons.

Throttle to Winch amount

0~100

Initial value: 0

5 (-Winch to Throttle adjustment)

Tap the value button on the [Winch to Throttle], value input buttons appear on the screen. Use the buttons to adjust the mixing amount.



Adjustment buttons

- Adjust with the [+] and [-] buttons.
- Return to the initial value by tapping the [reset] buttons.

Winch to Throttle amount

0~100

Initial value: 0

Trim/Dial Setting

The mixing rate amount can be controlled with the digital dial or digital trim, using the trim/dial select function. (Linkage menu)

Ver.4.0

1. Compatible with HPS-CB701

HPS-CB701 has been added to the UR mode / SR compatible servos.

2. Change ESC display name (TELEMETRY MENU)

Changed the name of the MC970CR/MC971CR/Acuvance ESC displayed in the telemetry function to "MC/Acuvance".

TI0PX Software Update

Ver.3.1

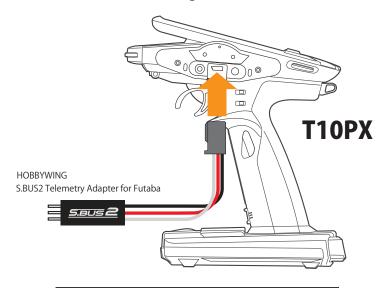
1. Software fix sensor register (TELEMETRY MENU)

Fixed the problem that hobbywing telemetry adapter sensor registration may fail.

Ver.3.0

1. HOBBYWING ESC telemetry compatible

♦ HOBBYWING ESC Register with T10PX

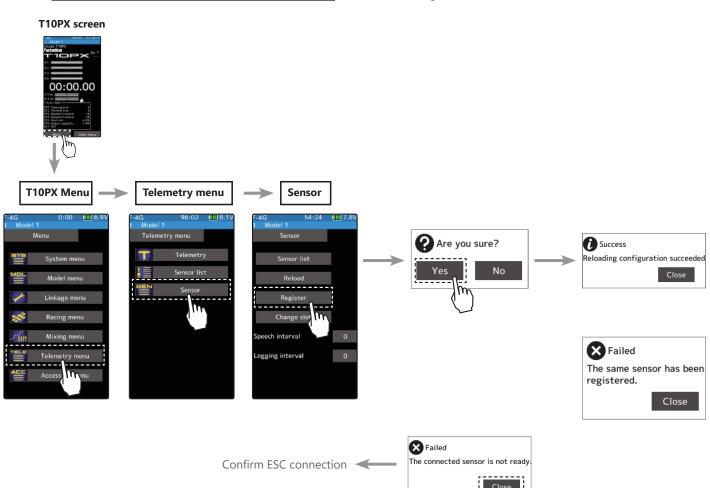


Check the HOBBYWING website for compatible ESCs

Telemetry items vary by ESC. (Some ESCs do not display the telemetry items described in this manual.) Please contact Hobbywing for details.

Connect the Hobbywing S.BUS2 Telemetry Adapter for Futaba to the COM port on the back of the T10PX.

*Please note that the proper default slot for this accessory is number 8. 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.

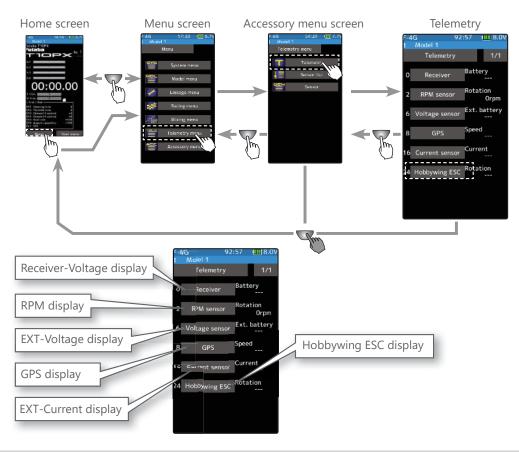


◆ The registered ESC will be displayed as "Hobbywing ESC".



Telemetry

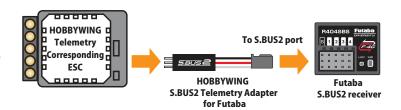
This screen displays and sets the various information from the receiver. The telemetry can be used in the F-4G and THFSS system, but not in the THFSS-SR mode. An alarm and vibration can be generated depending on the information. Each information screen sets the alarm and the vibration. For example, a drop in the voltage of the receiver battery housed in the model car can be reported by an alarm. The telemetry data received last is memorized. Therefore, even if the receiver power is turned off, information display, audio guide, and alarms remain until the transmitter power is turned off. The speech function can be turned on and off with the specified switch.



Using Telemetry function

(Preparation)

Hobbywing ESC + S.BUS2 Telemetry Adapter for Futaba used is connected with the receiver.



(Function ON/OFF)

Tap telemetry (ON) or (OFF) to select ON/OFF.

"OFF": Telemetry function OFF "ON": Telemetry function ON

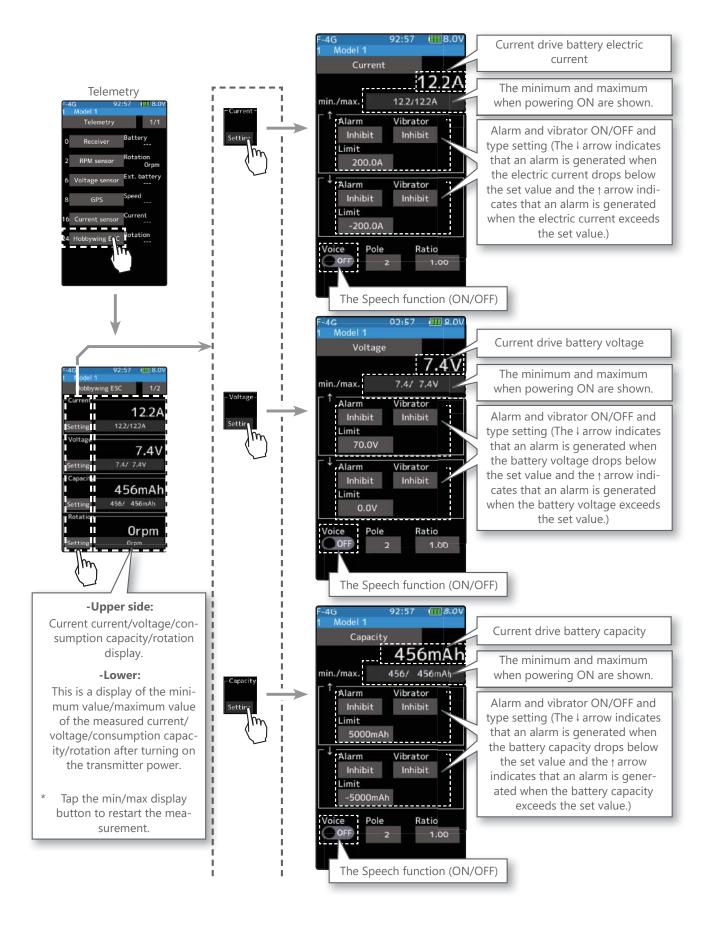
When finished, return to the Linkage menu screen by pressing the HOME button.

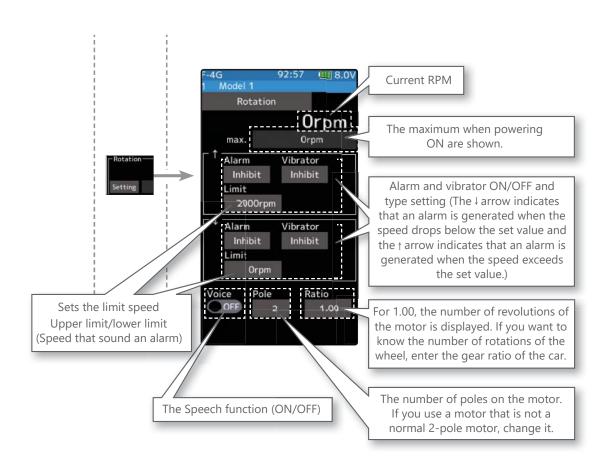


Telemetry function ON

Telemetry: Current · Voltage · Capacity · Rotation

The current, voltage, and capacity consumption of the power battery connected to the ESC can be monitored by the transmitter. In addition, the rotation speed of the motor can be monitored. If it becomes higher (lower) than the set value, you can be notified by an alarm or vibration.

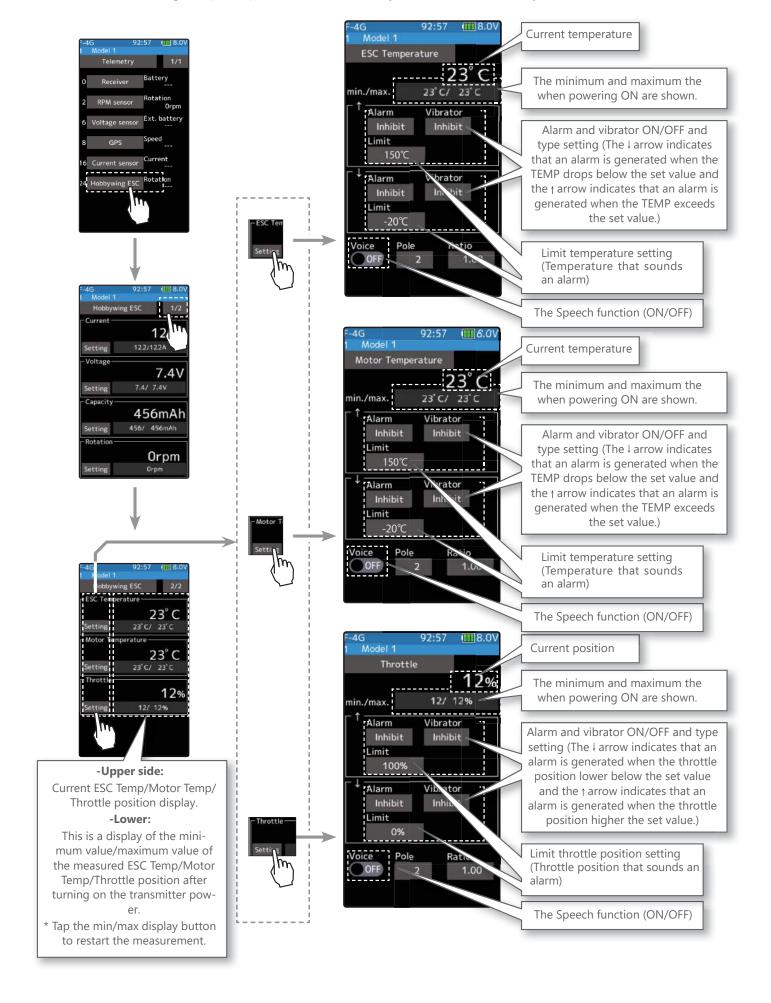




Telemetry items vary by ESC. (Some ESCs do not display the telemetry items described in this manual.) Please contact Hobbywing for details.

Telemetry: ESC Temp · Motor Temp · Throttle position

The ESC Temp, Motor Temp, and throttle position can be monitored by the transmitter. If it becomes higher (lower) than the set value, you can be notified by an alarm or vibration.



Alarm and Vibrator function setup

(Limit adjustment)

Tap the [Limit]. Value input buttons appear on the screen. Use the [+] or [-] button to adjust the limit value.

2 (Alarm function setup)

Tap the [Alarm] type and select [Inhibit], [Buzzer]or [Voice].

"Inhibit": No audible alarm
"Buzzer": Audible alarm
"Voice": Voice alarm

3 (Vibrator function setup)

Tap the [Vibrator] type and select [Inhibit], [Type 1], [Type 2], or [Type 3].

"Inhibit": No active vibration
"Type 1": Continuous vibration

"Type 2": Intermittent vibration for a long time "Type 3": Intermittent vibration for a short time

4 (Speech function setup)

Tap the "Voice" (ON) or (OFF) to select ON/OFF.

"OFF": No voice guide

"ON": Information loaded by voice

Adjustment buttons

- Adjust with the [+] and [-] buttons.
- Return to the initial value by tapping the [reset] buttons.

Setting

Tap alarm type.
 Inhibit/Buzzer/Voice

Setting

- Tap Vibrator type. Inhibit/Type 1/Type 2/Type 3

Setting

- Tap (ON)/(OFF).

*The voice guide loading interval is set by sensor menu.

5 When finished, return to the Telemetry screen by pressing the HOME button.

Ver.2.1

1. Software fix S.BUS servo screen (ACCESSORY MENU)

Fixed a problem that occurs when using SR servo on the S.BUS servo screen.

Ver.2.0

1. About Ultra Response UR Mode

ULTRA RESPONSE

The T10PX F-4G system provides the fastest Futaba response (as of 2022/5) when used in combination with the Futaba New UR Servo. Follow the steps below to switch the settings. UR mode can only be used with F-4G systems. It can be used with T10PX / R404SBS (E) Ver.2 or later. Futaba WEB site https://futabausa.com/ Alternatively, download the data from the WEB site of the local distributor and update the T10PX / R404SBS (E) to use it.

Procedure for changing T10PX settings

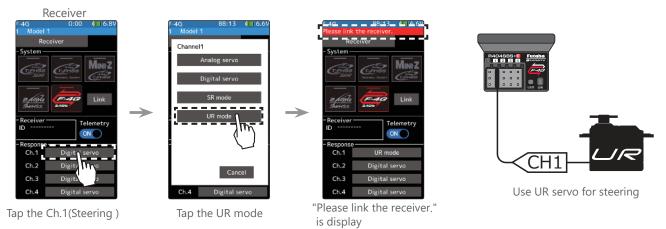
It is necessary to relink and restart the receiver power supply after changing the settings.

1 Set the transmitter "PWR" side power switch to ON. From the Home screen, press the HOME button or tapped [Menu] on the touch panel. Next, select [Receiver] at the Linkage menu and access the setup screen shown below by tapping the screen.



- In the case of F-4G, 4 types of response settings can be set for each channel according to the servo used. Select UR mode when using the UR servo set to UR mode.
 - •UR mode: UR servo (Set to UR mode)
 - Digital servo

- SR mode: UR/SR servo (Set to SR mode)
- Analog servo



Note: In UR mode ON, normal servo, ESC, and standard gyro will not operate.

3 When using battery fail-safe, set the Battery Fail-safe Voltage in the "Fail-safe" in the "Linkage menu".

*In the F-4G system, the Battery Fail-safe voltage is set at the time of linking. Relink when changing Battery Fail-safe voltage.

- **4** Bring the transmitter and receiver within 50 cm of each other (antennas do not touch) and turn on the receiver power.
- **5** Touch [Link] on the transmitter T10PX screen, you will hear a chime sound and T10PX will enter the link mode for 20 seconds.
- During the 20 seconds link mode, press the receiver for at least 2 seconds. The LED blinks red and then changes to a greenish red → green steady light. When the T10PX makes a beeping sound and the message "Link with receiver" appears on the screen, release the receiver push switch. This ends reading of mutual ID and displays the memorized receiver ID number on the T10PX screen. Power cycle the receiver. If the "Receiver not found" error screen is displayed, linking failed. Check the set contents and repeat the linking operation.
- **7** Once the settings are complete, turn the receiver off and then on again. The response and battery fail-safe voltage settings will take effect after the receiver is restarted.

Receiver Mode Precautions

△ Caution

Be sure to use the T10PX receiver setting and the servo to be used under predetermined conditions.

Under other conditions, the set will not operate, or the specified performance will not be displayed even if it operates. In addition, it may cause servo trouble. Futaba will not be responsible for problems caused by the use of other than genuine Futaba parts. Use the parts specified in the instruction manual and catalog.

System	Receiver	Response	Usable servo
E-46 2.4GHz Futabs 4th Generation System	R404SBS R404SBS-E	UR mode	• Futaba UR servo
		SR mode	• Futaba SR servo
		Digital servo	• Futaba Digital servo
		Analog servo	Futaba Digital servo/Analog servo
T-FHSS SR	R334SBS R334SBS-E	SR mode channel ON	Futaba SR servo
		SR mode channel OFF	• Futaba Digital servo
7-FHSS Telemetry System	R314SB-E R304SB-E R304SB-E R202GF R203GF R204GF-E	Digital servo	Futaba Digital servo
2.4GHz FHSS		Analog servo	Futaba Digital servo/Analog servo

- For servos for which the operation mode can be set, change the servo operation mode according to the system to be used. If the operating modes of the system and servo are different, it will fail.
- Use UR servo (Set to UR mode) for UR mode. Use SR/UR servo (Set to SR mode) for SR mode.
- When the UR(SR) mode is ON, it is exclusively for our UR(SR) compatible servo. Using a servo other than the UR(SR) compatible servo may cause the servo or receiver to malfunction.
- If a normal servo is connected to a CH with UR/SR mode ON, there is a risk of damage.
- Do not connect UR/SR servo (set to UR/SR mode) and analog servo in digital servo mode.
- Do not connect UR/SR servo (set to UR/SR mode) in analog servo mode.
- UR/SR servo can be used digital or analog when set to normal mode.
- Connecting an UR/SR mode compatible servo set to UR/SR mode to the S (S.BUS2 port) may cause malfunction of the servo or receiver.
- Receiver battery: Matched to the ratings of the receiver and connected servo (dry cell battery cannot be used).
- Fail-safe Unit cannot be used because the system is different. Use the fail-safe function of the transmitter.

UR servo setting change procedure

The initial setting of the **UR servo is normal mode**.

To use it in UR mode, you need to switch to UR mode by following the steps below.



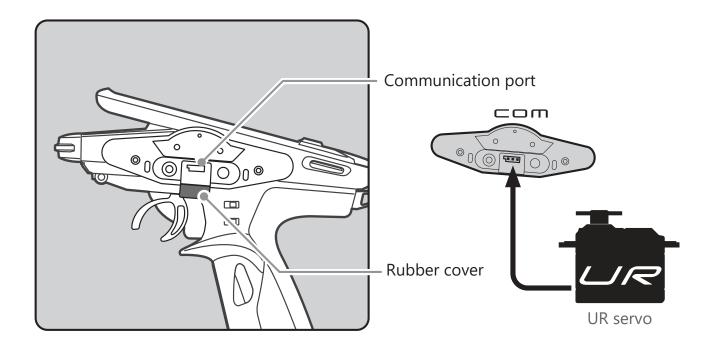
The following modes can be selected for the UR servo.

Normal

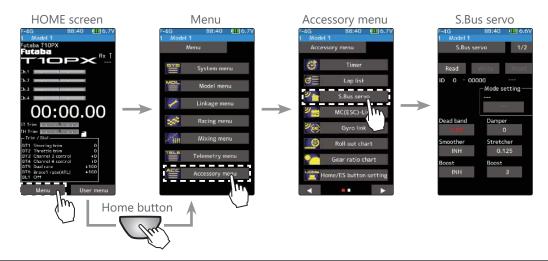
SR type 1 SR type 2 SR type 3

UR type 1 UR type 2 UR type 3 UR type 4

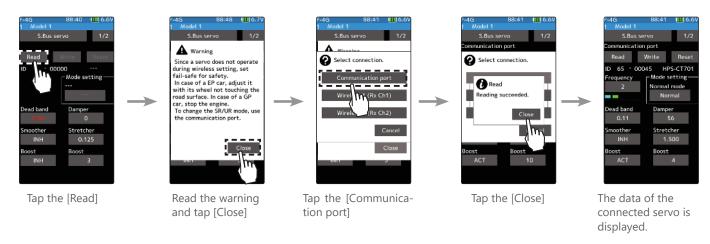
1 Connect the UR servo as shown.



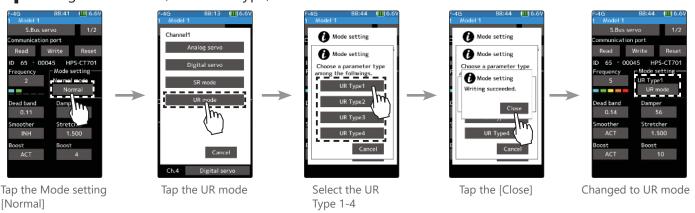
 When changing the UR / SR mode settings, be sure to use the wired method. Cannot change the servo between normal mode and UR / SR mode in the wireless setting. Once set to UR mode, switching between UR1 / UR2 / UR3 / UR4 can be done wirelessly. **2** Turn on T10PX and call Menu → Accessories Menu → S.Bus servo screen.



3 Read the connected UR servo data into the T10PX.



4 Change to UR mode, select UR type, and write data to the connected UR servo.



5 Remove the UR servo from the transmitter. It can be used as a servo in UR mode.





2. Compatible with HPS-CT701

HPS-CT701 has been added to the UR mode / SR compatible servos.

3. Compatible with MC971CR

It corresponds to MC971CR. MC971CR is added to the selection screen of the MC (ESC)-Link function.

*[Important] "Torque level" and "Torque end point" function can operate only when using ACUVANCE brushless motor "LUXON AGILE" and "FLEDGE".

When using a motor of ACUVANCE "LUXON BS" and "LUXON", or a motor of other than ACUVANCE, setting isn't possible or it doesn't operate properly.

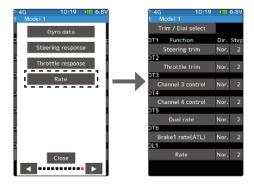
4. A function to change the data on the setting screen has been added to the trim / dial function of the linkage menu.

Instead of operating the [-] [+] buttons on the touch panel, you can change the value by trimming / dialing.

1 Open the Trim / Dial Settings screen and select the trim / dial to assign to the operation to change the setting data.



2 From the list, select Rate.



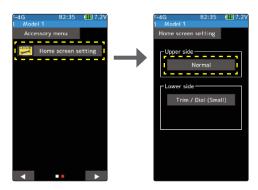
3 Open the screen of the function to make adjustments, and touch and select the item for which you want to change the setting data. The data will be changed by operating the trim / dial assigned earlier.



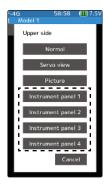
*If the item whose data you want to change is not selected and the [-] [+] buttons are not displayed on the screen, the data will not be changed even if you operate the trim / dial.

5. The brake display can now be selected for the instrument panel displayed on the home screen.

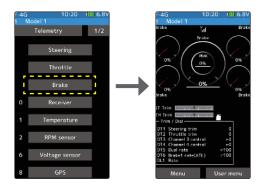
1 Touch [Normal] on the Upper side in the Home screen settings of the Accessories menu.



2 Touch the Instrument panel to be set on the home screen to select it.



3 Select [Brake].



6. Fixed an issue where the current time might be initialized at startup in rare cases.