

T7PXR/T7XC Software Update Method

Whenever improvements and new functions are available, the software of your T7PXR/T7PX/T7XC radio transmitter can be updated easily 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.

Procedure for the software update

Caution: Before you update the software, the battery that is connected to the T7PXR/T7PX/T7XC should be fully charged.

Note: During the software update, the model data that is stored in the T7PXR/T7PX/T7XC 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.

- I. 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 onto your microSD card.

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

- Insert the microSD card with "FUTABA" folder that contained the update software into the SD card slot on your T7PXR/T7PX/ T7XC radio transmitter.
- 6. Turn on the transmitter power while



pressing down the "HOME" button. The update screen appears on the LCD display of your T7PXR/T7PX/T7XC and the software update is started.

7. When the software update is completed





"Completed" message is shown on the LCD display of your T7PXR/T7PX/T7XC. (See attached picture.)



8. Turn off the power switch of your T7PXR/ T7PX/T7XC and remove the microSD card from the card slot.

Possible Problems

When one of the error messages shown below appears on the LCD screen of your T7PXR/T7PX/T7XC, 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 T7PXR/T7PX/T7XC 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 T7PXR/T7PX/T7XC 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 T7PXR/T7PX/T7XC. Added support to change SR mode of HPS-CT701.

* UR mode is not supported.

Additional MC971CR (MC (ESC) -Link)

The MC(ESC)-Link function is now compatible with MC971CR.

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

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

Change the limit setting value of the "Gyro Link" function [V8.2]

The setting range of the limit setting value of the "Gyro Link" function has been changed to 10 to 130.

Fixed the Telemetry meter display

Fixed the telemetry meter display on the home screen when [Unit system] is set to "Yard-pound system" in [Information] of the [System] menu.

Other

Fixed the telemetry display when using the external telemetry sensor Castle TL01.

V8.1

The stick setting is added to the throttle mode on the T7XC. If you changed the throttle stick to ratchet type, set "stick" to [ratchet].



The stick type (normal / ratchet) and operation ratio setting

- **1** Tap the [Ratio] on the throttle mode screen. The mode list appears on the Throttle mode menu screen.
- **2** Tap the [Normal] or [Ratchet] to select the type of stick to use.
- **3** When set to [Normal], the operation ratio of the forward side and the brake (reverse) side is selected from "Forward 50: Brake 50" / "Forward 70: Brake 30" / "Forward 100: Brake 0".











Forward 70: Brake 30 F

Forward 100: Brake 0

When set to [Ratchet], select the operation ratio of the forward side and the brake (reverse) side from "50: 0 (ESC)" / "100: 0 (servo)".

- 50: 0 (ESC)
- The throttle stick is in the slowest position, and the throttle channel is in neutral. It is recommended when using ESC for throttle. 100: 0 (servo)
- The throttle stick is at the slowest position, and the throttle channel is at the slowest position It is recommended when using a servo for the throttle.



SR mode compatible servo addition (T7PX(R)/ T7XC)

-Added support to change SR mode of HPS-CB500/ HPS-CT500.

Futaba。Additional function / Wireless Gyro setting (Gyro Link) [V7.0]

The Gyro Link is a function that allows you to set the parameters of the car gyro wirelessly from the transmitter.

- *A gyro compatible with the wireless setting: GYD550 (As of April 2020)
- Up to five presets c an be switched while driving. (Gyro data switching function)
- The S.BUS servo data can be set wirelessly from the transmitter via the gyro.
- *A receiver compatible with the wireless setting function is required. (As of April 2020, R334SBS / R334SBS-E is compatible with wireless setting. Please update the previous receiver to version 4.0 or later.)
- * While using Gyro Link wireless SBUS servo adjustment will not function.
- To be able to control gyro gain, etc. from the transmitter, it is necessary to enable the gyro mixing function of the transmitter.



Using the Gyro Link function

(Preparation)

- Connect the receiver and gyro according to the connection diagram below.
 - * The connection diagram is a reference diagram for selecting the gyro link connection method. Please read the gyro instructions for details or cautions.
- Turn on the power switch PWR of the transmitter to display the Gyro Link screen.

* Note that this cannot be used with the display switch DSP.

Turn on the receiver power switch.

1 (Gyro read)

When you open the Gyro Link screen from the Accessory menu or Custom menu, the connection method selection screen is displayed. Tap the button according to the connection method between the gyro and the receiver.

The Gyro type and currently set contents are read.



2 (Writing to Gyro)

Execute this function to write the setting data to the Gyro.

Tap the setting item [Write] on both the Basic setting screen and the Gyro data screen. After "Read Please wait" is displayed, an electronic sounds and writing ends. Be sure to write after changing the settings.

- If "Failed" is displayed on the screen, communication with the gyro has not been performed normally. Check receiver, gyro and battery connections, transmitter and receiver power switches, and repeat [Write].

- Refer to "Setting method of each item" for the contents of the setting data.

4 (Initialization)

Write the factory set Gyro setting data to the connected the Gyro. Tap [Reset] on the gyro reading screen; the confirmation screen will be displayed. To execute, tap [Yes] to hear an electronic sound and finish setting. To cancel, select [No] and tap it.

- If "Failed" is displayed on the screen, communication with the gyro has not been performed normally. Check receiver, gyro and battery connections, transmitter and receiver power switches, and repeat [Reset].



Gyro reading screen



Example:

Basic setting screen

1 9:42 (IIIII 6.6

40%

Display data list

The gyro setting data is divided into the Basic setting and Gyro data (1 to 5) screens and displayed by the method shown on the right.

- When the S.BUS connection is not used, the gyro data switching function cannot be used, so only [Gyro data 1] is displayed.



Data settings

Tap the [Value], the setting value will be displayed in blue, and [-] and [+] will be displayed at the bottom of the screen. Touch [+] and [-] to set the data. In the case of selection type, touch the item to switch the data.

Basic setting

*In the T-FHSS SR mode, the servo position will not adjust until [Write], even if the "Limit" and "Neutral offset" functions are adjusted with [+] and [-].

asicsetting

Standard

Basic setting screen

Response mode

Gyro sensor response setting.

* Low → Middle → High speeds up response.
 * In high mode, using the dead band angle is too small, the servo will work continuously, but there is no problem in running. However, if strong the

servo will work continuously occurs, set to middle or low mode.

Limit

Adjustment function of maximum steering angle.

- * Operate the steering and adjust the left and right separately so that the maximum steering angle is obtained as long as the tires do not interfere with the arms.
- * If the adjustment value of the limit is small (the maximum steering angle is not adjusted), it becomes easier to spin.
- * During limit adjustment, the steering angle is amplified by 1.5 times, but this is not a malfunction. However, perform drive after completing the limit adjustment.

SR mode setting

Set to SR mode.

* Set the SR compatible servo to SR only when using SR mode.

Neutral offset

Neutral adjustment function of the steering servo.

Do not use transmitter trim and sub trim. Make the neutral setting with a gyro.

Reverse



* If the car is turned to the left by hand steering goes out on the right.



Gain mode

Gyro internal control gain switching.

- * High gain is 1.5 times more sensitive than standard gain. * Normally set to standard.
- Set to high gain if increasing the sensitivity setting of the transmitter to the maximum value is not enough.

Gyro data 1/2 2/2

The gyro data setting screen has two pages, and the page can be a switch with the page switching button on the upper right. Also, data can be set independently in each gyro operation mode (normal / AVCS).



Additional function / Gyro data switching function

Gyro data can be switched with the push switch or trim lever/dial of the transmitter. (Up to 5 gyro data) Also, it is possible to change gyro data according to the condition of the transmitter. (Up to 4 gyro data)

- Connect the gyro to the S.BUS2 terminal of the receiver.
- The gyro mixing function must be enabled.

When switching with the push switch

- On the Gyro mixing 1/2 screen, set the function to ON.
- **2** On the Switch select screen, select the switch you want to use for data switching.
- **3** On the function selection screen, assign the gyro data to be used from [Gyro data 1] to [Gyro data 5].



Gyro mixing screen 1/2



Switch select screen

When switching with the push switch

- On the Gyro mixing 1/2 screen, set the function to ON.
- **2** On the Trim/Dial select screen, select the switch you want to use for data switching.
- **3** On the function selection screen, assign the [Gyro data].

When switching with the push switch

- **1** On the Gyro mixing 1/2 screen, set the function to ON.
- **2** Display 2/2 of the gyro mixing screen. A list of conditions and gyro data is displayed. Tap the condition to be set.
- **3** Select the gyro data to be assigned to the condition.



Gyro mixing screen 1/2



Trim/Dial select select screen





Additional / Gyro mixing status on the home screen

Added an indicate the gyro mixing status on the home screen. Displays the current operation mode (Normal/AVCS) and the selected gyro data.



Additional / Acuvance Xarvis / XarvisXX compatible (MC (ESC) -Link)

The MC(ESC)-Link function is now compatible with Acuvance ESC Xarvis/XarvisXX.



* For Futaba ESC MC960CR, MC950CR, MC851C, MC602C, MC402CR, etc., please choose Other.

* MC970CR is available only in the Japanese market. (As of April 2020)

Additional function / Throttle rate

The throttle rate functions set on the "D/R, ATL" screen.

With the throttle rate function, you can adjust the amount of throttle movement so that it does not reach full power even when the throttle trigger pulls to the high side.

- By assigning the throttle rate function to the switch with the switch select function, the task can be switched on / off with the switch, and the throttle operation amount can change to full throttle according to the situation.
- The throttle rate amount can be controlled with the digital dial or digital trim, using the trim/dial select function.

Throttle rate adjustment

(Preparation) Display the "D/R, ATL" screen from the linkage menu or custom menu. (Function ON/OFF) ket rate(ATL) Tap "Throttle rate" (ON) or (OFF) to select ON/OFF. "OFF": Throttle rate function OFF "ON": Throttle rate function ON When the ON / OFF switch is set with the switch select function, the operation state of the throttle rate function can be displayed as ON or OFF. 2 (Throttle rate adjustment) Tap the value button of the "Throttle rate", value input buttons appear on the screen and use the [+] and [-] buttons to adjust the throttle rate amount. ON CN

Change of throttle speed screen

The display position of point 1/2 on the throttle speed screen has changed.

- "Point 2": Display between high rate and middle rate
- "Point 1": Display between middle rate and low rate



Change of steering mixing rate

Change of steering mixing rates software versions Ver.5.0 to 5.1, the steering mix rate of the steering mixing function was lower than Ver.4.0 or earlier, so it has returned to the same amount as Ver.4.0 or earlier. If you used the steering mixing function in Ver.5.0 to 5.1, please readjust the movement amount.

A menu for home screen setting has been added. The display method of the meter displayed on the home screen and the display content have been changed. The steering and throttle operation can also be displayed on the meter.



How to set the home screen display

(Change home screen display)

Tap **[Normal]** or **[Instrument panel]** on the home screen display to select.

In the meter displayed on the home screen, the white pointer indicates the maximum value, and the red arrow indicates the current value.





Meter selection method

(Meter type setting)

Select **[Instrument panel]** in the home screen display settings. Tap the meter to be set on the home screen to select it. Use the following procedure to select the data to be displayed.



Other

-Added support to change SR mode of HPS-CT700.

Additional function / KYDSHD MINHZ Evo (Receiver)

V4.0

It corresponds to the Kyosho Mini-Z EVO dedicated receiver RA-42. For futher instruction, Please also read the instruction manual of RA-42.

How to Link

Display "Receiver setting" screen from "Linkage menu" or "User menu". Set the system to "Mini-Z T-FHSS". Bring the transmitter and the receiver close to each other, within 20 inches (half meter). Turn on the receiver.



2 Touch [Link] on the transmitter T7PX / T7XC screen, you will hear a chime sound and T7PX / T7XC will enter the link mode for 20 seconds.



3 Push the receiver side push switch for about 2 seconds or more.





5 Completed with LED solid the receiver.

- If there are many T-FHSS Mini-Z systems turned on in close proximity, your receiver might have difficulty establishing a link to your transmitter. This is a rare occurrence. However, should another T-FHSS Mini-Z transmitter/receiver be linking at the same time, your receiver could link to the wrong transmitter. This is very dangerous if you do not notice this situation. In order to avoid the problem,we strongly recommend you to double check whether your receiver is really under control by your transmitter.using and confirm the operation.



Additional function / Condition function update

The condition function has been enhanced.

- * Up to 4 conditions can be used.
- * It is possible to name the condition.
- * Switching or condition can be switched by switch or trim / dial.

Condition function ON/OFF

Display "Condition" screen from "Linkage menu" or "User menu".

(Function ON/OFF) Tap mode (ON) or (OFF) to select ON / OFF. "OFF" :Function OFF "ON" :Function ON



Tap the [Condition] button to change the number of available conditions.A list of condition numbers is displayed in the "Condition name" group box. Up to 4 conditions can be used.



Condition name

This function allows you to assign a fifteen character name to each condition.

- From the "Condition Name" list, tap the condition button whose name you want to change.
- **2** Since the condition name setting screen is displayed, edit the name.
- **3** Tap the title button [Condition name] to return to the condition screen.

1 Gradition Model 1 Condition Model Condition Condition Model Condition Condition Condition name Condition 1 Condition name 2 Condition 1 3 Condition 3 4 Condition 4 V V Switch select T Trim / Dial select Aacount

Condition copy

This function copies condition data to other conditions.

Tap the [copy condition] button. The condition copy screen will be displayed.

2 Tap the "Copy from" [Condition name], select the sondition list so it will tap. The source condition is selected and the list is closed. In the same way, use the "Copy to" condition button to select the copy destination condition. **3** Tap the [Copy], The confirmation message "Are you sure" appears. To execute copy, tap [Yes] and to cancel copy, select [No]. When the copy destination condition name becomes the same name as the copy source, copying is complete.



Condition change switch setting

This function sets the switch to change the condition. There are two kinds of change methods as follows.

With one switch, change the Condition 1 and Condition 2.Assign a condition to each switch, and operate the switch to change the condition.

- Tap the [Switch select] button to display a "Switch select" screen. (The "Switch select" screen can also be displayed from the "Linkage menu" or the "User menu".)
- 2 Tap the switch you want to use to display the function selection screen. By selecting [Condition 1 *⇒*2] from the function list, you can change Condition 1 and Condition 2 by operating the switch. If you select [Condition 1] to [Condition 4] for each switch, you can change to the condition assigned by each switch operation.



Condition change trim / dial setting

This function can change the condition by trim or dial. By operating Trim or Dial, you can change the condition as Condition $1 \rightarrow 2 \rightarrow 3 \rightarrow 4$ or $4 \rightarrow 3 \rightarrow 2 \rightarrow 1$.

- **1** Tap the [Trim / Dial select] button to display the "Trim / Dial select" screen. (The "Trim / Dial select" screen can also be displayed from the "Linkage menu" or the "User menu".)
- **2** Tap the trim or dial you want to use to display the function selection screen. Since the function selection screen is displayed, select [Condition] from the function list.



SR mode compatible servo addition

The following servos support SR mode setting. S3470SV / S9370SV / S9470SV / S9570SV / S9571SV / S9670SV * Only "SR type 1" can be selected for SR type.

Function / MC (ESC) Link (MC970CR)

V3.1

Modification of MC970CR setting function.

Additional function / Display of the trim/dial operation **V3.0**

When the trim or the dial is operated, the value of the function is displayed for a few seconds at the top of the screen.

Example: The trim/dial is assigned to the gyro mixing function.



Additional function / MC (ESC) Link (MC970CR)

The MC970CR has been added to the "MC (ESC) link" function of Futaba ESC parameter change. *MC970CR is available only in the Japanese market. (As of Sep 2018)



Improvement in SR mode setting

Even if a servo that is not compatible with SR mode is connected to a T7PX/T7XC with softwareV2.0 to V2.2, the transmitter can switch the servo to SR mode, but the incompatible servo will not work and the servo program is damaged when you forcibly switch the servo to SR mode. Thus, the servo does not work. So, please never switch when you connect an incompatible servo to SR mode.

The software has been improved so that a transmitter prohibits you from switching an incompatible servo to SR mode.

Before the improvement

"S.Bus servo" screen of version V2.0 to V2.2

Even if a servo that is not compatible with SR mode is connected, you can switch the servo to SR mode, but the servo will not work and damaged if you switch it to SR mode



Please never select the SR mode setting when you see "Unsupported" on the display.

After the improvement

"S.Bus servo" screen of version V2.3 or later and V1.0 to V1.4.

If you connect a servo that is not compatible with SR mode, the screen forbids you switching it to SR mode.



When connecting a servo that is not compatible with SR mode, you cannot operate the SR mode switching button.

Futaba.

T7PX Additional function

V2.2

Added support to change SR mode of HPS-CB700.

V2.0

Futaba S.BUS / S.BUS 2 The "S. BUS servo" function (Instruction manual page 135) that allows you to change the servo parameters can now be set up wirelessly by connecting to the receiver.

*A receiver compatible with the wireless setting function is required. (As of April 2018, R334SBS / R334SBS-E is compatible with wireless setting. Please update the previous receiver to version 2.0 or later.)

•In the wireless setting, there is a danger that a car (boat) can become unexpectedly uncontrollable, because the servo temporarily stops working during communication. For safety, in case of electric car (boat), please set with driving wheel (boat propeller) not touching the road surface (water surface). Also, in the case of an internal combustion engine car (boat), be sure to stop the engine before entering wireless set-up mode.

NOTE:

- For safety reasons, it is not possible to change between normal mode and SR mode with wireless setting. To change the mode, connect the servo to the communication port and switch. However, for servos set to SR mode, SR1 / SR2 / SR3 can be switched by wireless setting.
- Wireless setting cannot be used if a device that converts signals such as gyro and FSU (Failsafe Unit) etc. are connected between the receiver and the servo.

How to check the receiver software version

Set the RF type to T-FHSS system type and link transmitter and receiver. (Refer to instruction manual pages 37 to 38)



When the link is completed, power cycle the receiver.
 You can check the software version on the receiver screen.
 After confirmation, reconfigure the system to be used as per normal and link again.
 Please update the receiver to below version 2.0.

Receiver software version

Connection channel of servo to make wireless setting

Connect the S. BUS / S. BUS 2 servo as shown in the figure and the receiver battery to the channel of the receiver.

- Reference

When using "S.BUS / S.BUS2" servo with steering mixing (Instruction manual page 103) with a twin servo specification car such as 1/5 GP car, in the channel setting function (Instruction manual page 75), 1st channel and 2nd channel are set to steering, both servos can be wirelessly set.



How to use wireless settings

The transmitter's power switch turns on the PWR side and outputs radio waves. Wireless setting are not be used on the DISP side. Turn on the battery switch of the receiver and confirm that the servos can operate. The S.BUS servo screen is displayed in the following way.



Tap the [Read] button. The notes on wireless setting are displayed. Tap the [Close] button.

Once this screen is displayed, it will not be displayed again until you turn the power back on.



Warning Since a servo does not operate during wireless setting, set fail-safe for sofety. In case of a EP car, adjust it with its wheel not touching the road surface. In case of a GP car, stop the engine. To change the SR mode, use the communication port.

Close

2 Touch the channel in which the servo to be set is connected and read the setting data from the servo.

- Communication port
- :T7PX communication port (conventional wired setting).
- Wireless 1 (Rx Ch1) - Wireless 2 (Rx Ch2)
- :Receiver channel 1 :Receiver channel 2
- -"Reading succeeded" is displayed on the screen and the servo's ID cord and currently set contents are read.
- If "Failed" is displayed on the screen, communication with the servo is not being performed normally.
- Check the T7PX and servo connection to servo and repeat $\left[\textbf{Read} \right]$. (Check receiver power supply etc.)



Other changes and additions

- Operation change in the "Acceleration" range (instruction manual page 60) within EPA setting range.
- Added poll number setting and gear ratio setting on Telemetry Link setting screen of non-Futaba sensor (Castle TL 0).
- Added support to change SR mode of BLS373SV.





Futaba

Additional function / Receiver update

V1.2

Futaba has added a function to program your Futaba R334SBS / R334SBS-E receiver from the T7PX.

To update the receiver, you need a PC that can be connected to the Internet, a mini driver (to push the switch of the receiver), a micro SD card (commercial product), and a cord for CGY750 / GY701 / GY520 (optional) or DSC cord (optional).

Preparing for update

- Download the zip file of the update data from our website or your local distributor's website.
- Extract the zip file on your computer. A folder named "FUTABA" is created.
- Insert the micro SD card that contains the "FUTABA" folder into the T7PX (see page 31 of the manual).

Connection between T7PX and receiver

Turn on the DSP or PWR switch of T7PX and display the receiver update screen.



Update method

Hold down the Link switch first, and turn ON the receiver.
After the LED flashes red once, release the Link switch and then press it again.
As you continue holding down the Link switch, the LED starts flashing red and green. (Once flashing Red and Green, the initial process is complete.)
If red and green do not turn on at the same time, please start over from the beginning.

- 2 Tap the "Update" button on the screen. The update will start. A progress bar will be displayed indicating the progress. The LED of the receiver turns green, and it blinks green for a moment every time it accepts data from the T7PX.
 - Do not turn off the power of T7PX while updating.
- **3** When the update is completed, a message is displayed on the screen, and the LED of the receiver stays flashing green. Please turn off the power of the receiver.

Please check the operation before running (cruising).

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

Error

If an error display appeared, reinstall the update from the beginning.

- The receiver is not in the update wait state.
- The cable is disconnected.
- The power has been turned off
- The micro SD card is not inserted in the T7PX.
- There is no data on micro SD card.

Forced initialization

In the unlikely event that the model data is damaged and the T7PX stops working properly, it is possible to initialize the current model data in the following way.

Note:

This operation completely initializes the model data. Please do not use it except when data is broken.

How to Initialize

While pressing the PS6 switch, turn on the transmitter power.



- 2 A confirmation screen, "Caution!! The current model data will be initialized. Sure?", will be displayed.
- **3** Touch [Yes] to carry out initialization and turn off the power. Since the current model data will be initialized, please re-set the data and check the operation carefully before use. To cancel the operation, touch [No]. The power is turned off without initializing the data.

- After initialization, the current model data will be initialized, so please set the data again before using and confirm the operation.



