



SHORT MANUAL

This manual is a simplified version. Detailed of each function are not described. Refer to your countries distributor website for the full manual and update contents download.

http://www.futabausa.com (http://www.rc.futaba.co.jp)



1M23N38002

INTRODUCTION

Thank you for purchasing a Futaba F-4G 2.4GHz 10PX digital proportional R/C system. This system is extremely versatile and may be used by beginners and pros alike. In order for you to make the best use of your system and to drive safely, please read this manual carefully. If you have any difficulties while using your system, please consult the manual, our online Frequently Asked Questions (on the web pages referenced below), your hobby dealer.

Due to unforeseen changes in production procedures, the information contained in this manual is subject to change without notice.

Please note that the illustrations and screen images in this manual may differ from the actual product.

http://www.futabausa.com

(https://www.rc.futaba.co.jp/)

Application, Export, and Modification

1. This product is only designed for use with radio control models. Use of the product described in this instruction manual is limited to radio control models.

2. Exportation precautions:

(a) When this product is exported, it cannot be used where prohibited by the laws governing radio waves of the destination country.

(b) Use of this product with other than models may be restricted by Export and Trade Control Regulations.

3. Modification, adjustment, and replacement of parts: Futaba is not responsible for unauthorized modification, adjustment, or replacement of parts on this product.

OUTSIDE NORTH AMERICA

Please contact the Futaba importer in your region of the world to assist you with any questions, problems or service needs. Please recognize that all information in this manual, and all support availability, is based upon the systems sold in North America only. Products purchased elsewhere may vary. Always contact your region's support center for assistance.

Compliance Information Statement (for U.S.A.)

This device complies with part 15 of the FCC Rules. Operation is subject to the following three conditions:

(1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

(3)RF Radiation Exposure Statement (For T10PX)

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

RF Radiation Exposure Statement (For R404SBS / R404SBS-E)

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radio and your body.

The responsible party for the compliance of this device is:

Futaba Service Center

2681 Wall Triana Hwy Huntsville, AL 35824, U.S.A.

TEL 1-256-461-9399 or E-mail: contactus@futaba.com

CAUTION:

To assure continued FCC compliance:

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

Compliance Information Statement (for Canada)

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

French: Cet appareil radio est conforme au CNR-247 d'Industrie Canada. L'utilisation de ce dispositifest autorisée seulement aux deux conditions suivantes : (1) il ne doit pas produire de brouillage, et (2) l'utilisateur du dispositif doit être prêt à accepter tout brouillage radioélectrique reçu, même sice brouillage est susceptible de compromettre le fonctionnement du dispositif. Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé.

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet émetteur ne doit pas être co-situé ou fonctionner conjointement avec une autre antenne ou émetteur.

Declaration of Conformity (for EU)

Hereby, Futaba Corporation declares that the radio equipment type is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:

http://www.rc.futaba.co.jp/english/dl/declarations.html

Table Of Contents

• For Your Safety As Well As That Of Others4
• Explanation Of Symbols ······4
• Receiver Mode Precautions4
• Operation Precautions ······5
• Battery Handling Precautions 5
• Storage And Disposal Precautions6
• Other Precautions ······6
• Features ·····7
• Set Contents ······8
• Specifications ······8
Transmitter T10PX Nomenclature9
Power & Display Switch
Display When Power Switch Is Turned On 10
 Power Off Forgotten Alarm & Auto Power Off 11
• Steering Wheel And Throttle Trigger Operation
Digital Trim Operation
• microSD port And USB port ····· 12
• Trim/Dial Lock ····· 13
Mechanical ATL Adjustment
Wheel & Trigger Tension Adjustment 14
• Trigger Slide Adjustment
• Removal Of Trigger Unit
• SW: Push switch PD: Paddle switch DL: Dial SSW: Slide switch
• Grip Rubber ····· 16
• Trigger Guard ····· 16
Battery Replacement Method

● Low Battery Alarm
When Using Optional Battery
NiMH LiFe Battery Replacement Method
When Charging For The Optional NiMH/ LiFe Battery
 Lipo Battery LT2F2000B Replacement Method
When Charging For The Optional LiPo Battery
Steering Wheel Arrangement 21
Exchange procedure to wheel adaptor 32 deg and large diameter wheel
 Exchange procedure to wheel tension spring (spring is optional)
 Installing the accessory APA steering wheel offset adapter
Modifying for left-hand use
• Angle Spacer ····· 27
• When Removing The Paddle Switch … 28
• Trigger Brake Lever Replacement 29
Non-telemetry LED (telemetry OFF sign) 29
Handling The Antenna
• Receiver Terminology ······ 30
• Receiver Installation ······ 30
• Receiver and Servo Connections … 31
Installation Safety Precautions 32
● Linking Method For F-4G System 34
Menu Selection ······ 37
● Home/ES1/ES2/ES3 Button Setting …38
Value Of Each Function And Changing The Set Value ······39

10 P X For Your Safety As Well As That Of Others

Use this product in a safe manner. Please observe the following safety precautions at all times.

Explanation Of Symbols

For safety's sake, pay special attention whenever you see the marks shown here.

For safe use

\land Danger	Procedures which may lead to dangerous conditions and cause death/serious injury if not carried out properly.		
\land Warning	Procedures which may lead to a dangerous condition or cause death or serious injury to the user if not carried out properly, or procedures where the probability of superficial injury or physical damage is high.		
▲ Caution	Procedures where the possibility of serious injury to the user is small, but there is a danger of injury, or physical damage, if not carried out properly		
Symbols	s: 🚫 : Prohibited 🚺 : Mandatory		

Symbols:

2.4GHz System Precautions

Warning

 \bigotimes Special attention should be paid before turning on the system while other cars are running or other airplanes are flying because the 2.4GHz RC system could potentially affect them.

Be sure to set the Fail-safe function.

Receiver Servo 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.

- 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 SR servo for SR mode.
- When the SR mode is ON, it is exclusively for our SR compatible servo. Using a servo other than the SR compatible servo may cause the servo or receiver to malfunction.
- If a normal servo is connected to a CH with SR mode ON, there is a risk of damage.
- Do not connect SR servo (set to SR mode) and analog servo in digital servo mode.
- Do not connect SR servo (set to SR mode) in analog servo mode.
- SR servo can be used digital or analog when set to normal mode.
- Connecting an SR mode compatible servo set to SR mode to the S (S.BUS2 port) may cause malfunction of the servo or receiver.
- Refer to country distributor WEB for detailed the "S. BUS servo menu" and the "SR mode setting" explanation.
- 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.

Operation Precautions

\land Warning

O Do not operate outdoors on rainy days, run through puddles of water or use when visibility is limited.

Should any type of moisture (water or snow) enter any component of the system, erratic operation and loss of control may occur.

○ Do not operate in the following places.

-Near other sites where other radio control activity may occur.

- -Near people or roads.
- -On any pond when passenger boats are present.

-Near high tension power lines or communication broadcasting antennas.

Interference could cause loss of control. Improper installation of your Radio Control System in your model could result in serious injury.

O Do not operate this R/C system when you are tired, not feeling well or under the influence of alcohol or drugs.

Your judgment is impaired and could result in a dangerous situation that may cause serious injury to yourself as well as others.

S Do not touch the engine, motor, speed control or any part of the model that will generate heat while the model is operating or immediately after its use.

These parts may be very hot and can cause serious burns.

Always perform an operating range check prior to use.

Problems with the radio control system as well as improper installation in a model could cause loss of control.

(Simple range test method)

Have a friend hold the model, or clamp it down or place it where the wheels or prop cannot come in contact with any object. Walk away and check to see if the ser-vos follow the movement of the controls on the transmitter. Should you notice any abnormal operation, do not operate the model. Also check to be sure the model memory matches the model in use.

Turning on the power switches.

Always check the throttle trigger on the transmitter to be sure it is at the neutral position.

- 1. Turn on the transmitter power switch.
- 2. Turn on the receiver or speed control power switch.
- Turning off the power switches

Always be sure the engine is not running or the motor is stopped.

1. Turn off the receiver or speed control power switch.

2. Then turn off the transmitter power switch.

If the power switches are turned off in the opposite order, the model may unexpectedly run out of control and cause a very dangerous situation

When making adjustments to the model, do so with the engine not running or the motor disconnected.

You may unexpectedly lose control and create a dangerous situation.

Before running (cruising), check the fail-safe function.

Check Method:

Before starting the engine, check the fail-safe function as follows:

- 1) Turn on the transmitter and receiver power switches
- 2) Wait at least one minute, then turn off the transmitter power switch. (The transmitter automatically transfers the fail-safe data to the receiver every minute.)
- 3) Check if the fail-safe function moves the servos to the preset position when reception fails.

The fail-safe function is a safety feature that minimizes set damage by moving the servos to a preset position when reception fails. However, if set to a dangerous po-sition, it has the opposite effect. When the reverse function was used to change the operating direction of a servo, the fail-safe function must be reset. Setting example: Throttle idle or brake position

Battery Handling Precautions

🛆 Warning

Never plug the charger into an outlet of other than the indicated voltage.

Plugging the charger into the wrong outlet could result in an explosion or fire.

○ Never insert or remove the charger while your hands are wet.

You may get an electric shock.

○ Do not use the T10PX transmitter's battery as the receiver's battery.

Since the transmitter's battery has an overload protection circuit, the output power will be shut down when the high current load is applied. This may result in runaway or fatal crash.

Always check to be sure your batteries have been charged prior to operating the model.

Should the battery go dead while the model is operating, loss of control will occur and create a very dangerous situation.

To recharge the transmitter battery, use the special charger made for this purpose.

Overcharging could cause the battery to overheat, leak or explode. This may lead to fire, burns, loss of sight and many other types of injuries.

∕**∆Caution**

O Do not use commercial AA size NiCd and NiMH batteries.

Quick charging may cause the battery contacts to overheat and damage the battery holder.

⊗ When running (cruising), do not use the dry cell battery box at the transmitter.

The accessory dry cell battery box is for performance checks. Do not use it for other than performance checks. The dry cell batteries will be separated from the battery box contacts by shock and the power may be cut off. There is the danger of collision if the power is cut while running (cruising). The use of Futaba genuine NiMH/LiFe or LiPo batteries is strongly recommended.

○ Do not short circuit the battery terminals.

A short circuit across the battery terminals may cause abnormal heating, fire and burns.

○ Do not drop the battery or expose it to strong shocks or vibrations.

The battery may short circuit and overheat; electrolyte may leak out and cause burns or chemical damage.

• When the model is not being used, always remove or disconnect the battery.

Leaving the battery connected could create a dangerous situation if someone accidentally turns on the receiver power switch. Loss of control could occur.

Always keep the charger disconnected from the outlet while it is not in use.

Storage And Disposal Precautions

🛆 Warning

○ Do not leave the radio system or models within the reach of small children.

A small child may accidentally operate the system. This could cause a dangerous situation and injuries. Batteries can be very dangerous when mishandled and cause chemical damage.

O Do not throw batteries into a fire. Do not expose batteries to extreme heat. Also do not disassemble or modify a battery pack.

Overheating and breakage will cause the electrolyte to leak from the cells and cause skin burns, loss of sight, and other injuries.

When the system will not be used for any length of time, store the system with NiMH batteries in a discharged state. Be sure to recharge the batteries prior to the next time the system is used.

If the batteries are repeatedly recharged in a slightly discharged state, the memory effect of the NiMH battery may considerably reduce the capacity. A reduction in operating time will occur even when the batteries are charged for the recommended time. (After discharge to 1cell E.V.=1 V)

When a LiFe/LiPo battery pack will not be used for a long time, to prevent it from deteriorating we recommend that it be kept in about the half capacity state instead of fully charged. Also be careful that the battery does not enter the over-discharged state due to self-discharge. Periodically (about every 3 months) charge the battery.

A Warning

○ Do not store your R/C system in the following places.

- Where it is extremely hot or cold.
- Where the system will be exposed to direct sunlight.
- Where the humidity is high.
- Where vibration is prevalent.
- Where dust is prevalent.
- Where the system would be exposed to steam and condensation.

Storing your R/C system under adverse conditions could cause deformation and numerous problems with operation.

If the system will not be used for a long period of time, remove the batteries from the transmitter and model and store in a cool, dry place.

If the batteries are left in the transmitter, electrolyte may leak and damage the transmitter. This applies to the model also. Remove the batteries from it also to prevent damage.

<NiMH/NiCd Battery Electrolyte>

The electrolyte in NiCd / NiMH batteries is a strong alkali. Should you get even the smallest amount of the electrolyte in your eyes, DO NOT RUB. Wash immediately with water, and seek medical attention at once. The electrolyte can cause blindness. If electrolyte comes in contact with your skin or clothes, wash with water immediately.

<Battery Recycling>

A used battery is a valuable resource. Insulate the battery terminals and dispose of the battery by taking it to a battery recycling center.

Other Precautions

∆Caution

○ Do not expose plastic parts to fuel, motor spray, waste oil or exhaust.

The fuel, motor spray, waste oil and exhaust will penetrate and damage the plastic.

Always use only genuine Futaba transmitters, receivers, servos, ESCs (electronic speed controls), Batteries and other optional accessories.

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.



Before Using

Features

-Full color touch screen LCD

T10PX has an HVGA 4.3 inch, full-color, backlit LCD touch screen. The screen is transflective which enables both indoor and outdoor visibility.

-F-4G system & telemetry

Equipped with an F-4G system that enables telemetry with faster response than the T-FHSS SR system.

-10 channels

Up to 10 channels can be operated by using the S.BUS2 system together.

-T-FHSS MINIZ system

By setting to the MINIZ system in the receiver setting menu, you can use Kyosho Mini - Z Evo dedicated receiver RA-42. Dedicated receiver RA-42 requires purchase separately.

-Updateable software

Software can be updated by microSD card. Model data can also be saved in a microSD card. In addition, telemetry log data can be saved.

-Model memory for 40 models

Model names can use up to 15 letters, numbers, and symbols, so that logical names may be used. A model memory with different setups can be created by using the model copy function.

-Paddle switch + bottom switch + 3 position switch

A paddle switch near the wheel, a 3-position switch on the grip, and a bottom switch on the bottom are equipped to support multiple channels and functions.

-Lipo battery can be used

The optional LT2F2000B Lipo battery can be used as the transmitter power supply. The running time is extended.

-Brake mixing for large cars

Brake mixing of the front and rear wheels of 1/5GP and other large cars can be adjusted independently.

-Steering mixing

Smooth cornering is possible by the independent left and right steering servo setting.

-4WS mixing for crawlers and other 4WS type

This function can be used with crawlers and other 4-wheel steering type vehicles.

-Dual ESCs mixing for crawlers

ESC at the front and rear are controlled independently.

-Gyro mixing

The sensitivity of Futaba car rate gyros can be adjusted from the T10PX.

-Tank mixing

This function is intended for vehicles such as tanks.

-CPS mixing

LED lighting and flashing control using our CPS-1 channel power switch can be matched to steering and throttle operation by switch only.

-S.BUS servo

This is a special function that allows setting of the parameters of our S.BUS servo whose settings are changed by using PC Link software.

-MC-Link

This is a dedicated function which allows setting of the contents of the Link software which makes possible Futaba speed controller (ESC), MC960CR, MC950CR, MC850C, MC851C, MC602C, MC402CR, etc. variable frequency and other data changes by PC at the T10PX.

-Throttle speed

Sudden trigger operation on a slippery road surface will only cause the tires to spin and the model to not accelerate smoothly. By setting the throttle speed function, operation can be performed smoothly and easily. It also suppresses battery consumption.

-Steering speed

When you sense that the steering servo is too fast, etc., the servo operating speed (direction that suppresses the maximum speed) can be adjusted.

-Non-telemetry LED

When the telemetry function is OFF to confirm that the telemetry function is not operating.

-Dial select function

This function assigns functions to dials (digital trim, grip dial, knob). The step amount and operating direction can also be adjusted. Trim positioning at each model call is unnecessary because all the dials are digital.

-Switch select function

This function assigns functions to 10 switches. The operating direction can also be set.

-Wheel & Trigger position can be changed

The wheel position can be offset by using an accessory APA wheel position offset adapter. The wheel angle can also be adjusted.

The position of the throttle trigger can be moved forward and backward.

-Rubber Grip

It is possible to convert to a narrow grip type by exchanging the rubber grip.

-Trim/dial lock functions

Lock functions which prohibit setting and operation by transmitter trim, and dials are provided.

-Left-handed support

The left and right installation direction of the wheel section can be reversed.

-Vibrator built into the grip

The vibrator can be operated at racing timer lap navigation, time-up, and low battery, telemetry alarm. It sets it on each function screen.

-USB port

The transmitter can be used as a game controller by connecting it to a computer with a USB cable. (Some games cannot be used.)

Set Contents

After opening the box, first check if the contents conform to the following. The contents depend on the set as shown below.

Transmitter / Receiver	T10PX / R404SBS or R404SBS-E
	*Some sets do not have a receiver/servo. Contents by set is different. Also, the contents of the set will change.
Miscellaneous	Dry battery holder *Installed in transmitter. *Some sets do not have a Dry battery holder. Contents by set is differ- ent. Also, the contents of the set will change.
	Wheel offset adapter two size (APA)
	APA Mounting screws *Spare screws are also included
	Wheel adapter 32 deg
	Wheel Angle spacer 5 deg
	Large diameter steering wheel
	Trigger guard (Lx1 / Rx1)
	Grip rubber x1
	Blind paddle x2
	Hex wrench
	Short manual

- If any of the set contents are missing, or you have any questions, please contact your dealer.

\bigotimes The R404SBS-E receiver is for electric. Do not use for the gas powered models.

Always use only genuine Futaba transmitters, receivers, servos, ESCs (electronic speed controls), batteries and other optional accessories.

Futaba will not be responsible for problems caused by the use of other than Futaba genuine parts. Use the parts specified in the instruction manual and catalog.

In addition, the Fail-safe Unit cannot be used because the system is different. Use the fail-safe function of the transmitter.

Specifications

Transmitter T10PX

*Specifications and ratings are subject to change without prior notice.

Wheel system, 10 channels (F-4G System), 7 channels (SFHSS System), 4 channels (TFHSS-SR, T-FHSS systems) -Transmitting frequencies 2.4GHz band /- Transmitting RF power output: 100 mW EIRP

-Futaba F-4G/T-FHSS SR/T-FHSS/MINI-Z T-FHSS/S-FHSS

-Transmitting antenna $1/2\lambda$ dipole

-4.3 inch backlighted color TFT liquid crystal touch panel.

*When you turn on your 10PX, bright dots may appear on your screen display. Your display contains an extremely large number of TFT and is manufactured using high-precision technology. Any bright dots that may appear on your display are intrinsic of the TFT manufacturing technology.

Receiver R404SBS / R404SBS-E

-Receiving frequency: 2.4GHz band /- Telemetry Receiver RF power output: 2.2 mW EIRP

-Power requirement: 3.7 V~7.4 V battery (Dry cell battery cannot be used.)

-System: F-4G system/S.BUS2 system

-Size: R404SBS---1.00x0.81x0.42" 25.5x20.7x10.6 mm

R404SBS-E---1.00x0.81x0.42"(include antenna 1.20") 25.5x20.7x10.6 mm(include antenna 30.5 mm) -Weight : R404SBS---0.2 oz. (5.7 g) / R404SBS-E---0.25 oz. (7.2 g)

Transmitter T10PX

Nomenclature

*The switches, dial, and trimmers in the figure are shown in the initial setting position. *Please be careful not to push the switch too strongly.



Power & Display Switch

The power switch and display switch are push switches. When the power switch (PWR) is held down, operation starts by transmitting radio waves. When the display switch (DSP) is held down, the transmitter side data can be checked and set. When the power is turned off, if the power switch or display switch is held down, the power is turned off. If both switches are pressed simultaneously, the power is turned off quickly.





Display When Power Switch Is Turned On



*The figure above is partly processed for explanation, so it is different from the actual screen display.

Power Off Forgotten Alarm & Auto Power Off

At T10PX initialization, if steering wheel, throttle trigger, push switch, edit button, or other operation is not performed within 10 minutes, an audible alarm will sound and the message "Warning: Auto power off" will appear.

If steering wheel, throttle trigger, push switch, edit button or other operation is performed, the alarm is reset. Also turn off the power when the transmitter is not in use. If the alarm is not reset, the auto power off function will automatically turn off the power after 5 minutes. If you do not want to use this alarm and the auto power off function, they can be disabled by System menu--Battery setting. (Refer to country distributor WEB for detailed explanation.)

Low Battery Alarm

If the transmitter battery voltage drops below the usable range, an audible alarm will sound and "Low battery" will be displayed. Since the usable range of NiMH/ LiFe and LiPo batteries is different, the power supply used must be set by System menu--Battery. (Refer to country distributor WEB for detailed explanation.)

\land Warning

• When a low battery alarm is generated, cease operation immediately and retrieve the model. Always replace with a new dry battery before running next.

If the battery goes dead while in operation, you will lose control of the model.

Steering Wheel And Throttle Trigger Operation

(CH1: Steering wheel, CH2: Throttle trigger)

Steering Wheel Function: Turns the model right or left.

Throttle Trigger Function: Controls the speed of the model as well as the direction of travel - forward or reverse.



Digital Trim Operation

(Initial settings: DT1: Steering trim, DT2: Throttle trim, DT3: Channel 3, DT4: Channel 4, DT5: Steering D/R, DT6: ATL-Brake rate)

Operating by the trim: Push the trim lever to the left or right (up or down). The current position is displayed on the LCD screen.





- Each step is indicated by a tone.
- When the trim exceeds the maximum trim adjustment range, the beep will change and the servo will not move any farther.
- When the steering wheel is neutral, adjust the steering trim so that the car goes straight without curving left and right.
- Adjust the throttle trim so that the car stops when the throttle trigger is in neutral so that the brake will not be applied when the throttle trigger is released during operation.
- Steering D/R : The steering left and right servo travels are adjusted simultaneously.
- ATL: Decreases the set value when the braking effect is strong and increases the set value when the braking effect is weak.

• DT1-DT4 returns to neutral with long press



- 1/3-DT1 (Steering trim display)
- 2/4-DT2 (Throttle trim display)
- 5-DT3 (Channel. 3 display)
- 6-DT4 (Channel. 4 display)
- 7-DT5 (Steering D/R display)
- 8-DT6 (ATL display)



Steering And Throttle Trim Operation

With the center trim feature, trim adjustments have no effect on the maximum servo travel. This prevents the linkages from binding when adjustments are made.

microSD port And USB port

microSD port

T10PX model data and telemetry log data can be saved by using a commercial microSD card. When T10PX software updates are released, the microSD card can also be used to make the update.

USB port

The transmitter can be used as a game controller by connecting it to a computer with a USB cable. (Some games cannot be used.)



Trim/Dial Lock

T10PX setup and operation by digital trim DT1, DT2, DT3, DT4, DT5 and DT6 and dials DL1 can be prohibited.

Setting

1 When the HOME button is pressed for about 1 second at the initial screen, a confirmation beep is generated and the trim/dial lock display mark appears on the screen.

Clearing

Edit button lock and trim/dial lock can be cleared in the initial screen state by the same method as the setting described above. (The trim/dial lock display disappears from the screen.)



Mechanical ATL Adjustment

Make this adjustment when you want to decrease the stroke of the brake (back) side of the throttle trigger for operation feel.

Adjustment

- Using a hex wrench, adjust the trigger brake (reverse) stroke. (The screw moves the throttle trigger stopper.)
 - Adjust the stroke while watching the screw.



Note:

Once you have changed the mechanical stroke on the brake side, be sure to adjust the scale of the throttle channel accordingly by using the "Calibration Function (System menu)". (Refer to country distributor WEB for detailed explanation.)

Due to this change, you also need to adjust in most cases the travel of the throttle servo by using "Data Setting."

Wheel & Trigger Tension Adjustment

Make this adjustment when you want to change the wheel or trigger spring's tension.

Adjustment

1 Using hex wrench, adjust the wheel spring tension by turning the screw inside the adjusting hole.

- The spring is set to the weakest tension at the factory.
- When the adjusting screw is turned clockwise, the spring tension increases.



Note:

The adjustment range is up to 7 to 8 turns from the fully tightened (strongest) position. If turned farther than this, the adjusting screw may fall out.

Trigger Slide Adjustment

The throttle trigger position can be moved forward and backward. Furthermore, the angle of the throttle trigger operating direction can be changed in 3 steps. **Adjustment**

Using a hex wrench, loosen the trigger slide mounting screw by turning it slightly counterclockwise.

Always loosen this screw.

Note:

If the trigger slide screw is turned too much, the screw may fall out.

2 Adjust the trigger slide position within the marked range.

3 Retighten the mounting screw loosened at step 1 and fasten the trigger slide.





Removal Of Trigger Unit

The trigger can be removed to replace the trigger spring.

How to remove

1 Remove the fixing screw shown in the figure with a hex wrench.

Be careful not to lose the screws. Note:

Be careful not to damage the case or wiring as the trigger unit is difficult to remove.

Be careful not to pinch the wiring when assembling.

2 Remove the 2 steering unit mounting screws (M3x12 screw).

Remove the 2 mounting screws completely from the transmitter body.

3 Next, Remove the two M3x12 screws and one M2x6 screw on the rear unit.

Remove the 3 mounting screws completely from the transmitter body.

4 Pull out the trigger unit in the direction of the black arrow while opening the case slightly in the direction of the white arrow.

Be careful not to cut the wiring.













SW: Push switch PD: Paddle switch DL: Dial SSW: Slide switch

The position of various switches. The assignment of each function can be changed for T10PX.



Grip Rubber

It is possible to make the narrow grip by replacing it with the attached grip rubber.

Trigger Guard

Change the shape by replacing it with the attached trigger guard.



Battery Replacement Method

Load the four batteries in accordance with the polarity markings on the battery holder.

Battery Replacement Method

1 Remove the battery cover from the transmitter by sliding it in the direction of the arrow in the figure.

2 Remove the used batteries.

∆Caution

- If you remove the dry cell battery box from the transmitter, replace it carefully with the wiring on the same side as before. Reinstalling the battery box in the opposite direction could cause the wires to be disconnected.
- **3** Load the new AA size batteries. Pay very close attention to the polarity markings and reinsert accordingly.
- **4** Slide the battery cover back onto the case.



Slide battery cover while pressing here.



Disposal of the Dry Cell Batteries:

The method to dispose of used dry cell batteries depends on the area in which you reside. Dispose of the batteries in accordance with the regulations for your area.

∆Caution

\bigotimes When running (cruising), do not use the dry cell battery box at the transmitter.

The accessory dry cell battery box is for performance checks. Do not use it for other than performance checks. The dry cell batteries will be separated from the battery box contacts by shock and the power may be cut off. There is the danger of collision if the power is cut while running (cruising). The use of Futaba genuine NiMH/LiFe or LiPo batteries is strongly recommended.

Low Battery Alarm

If the transmitter battery voltage drops below the usable range, an audible alarm will sound and "Low battery" will be displayed. Since the usable range of NiMH/LiFe batteries and LiPo batteries is different, the power supply used must be set by system setting. If the battery goes dead while running (cruising), since there is the danger of collision, immediately recover the vehicle (boat) and stop running (cruising).

▲Warning

When a low battery alarm is generated, cease operation immediately and retrieve the model.
If the battery goes dead while in operation, you will lose control of the model.

When Using The Optional Battery

When using an optional rechargeable battery, replace the battery as described below. -Always use the optional FT2F1100B, FT2F1700B, FT2F2100B, HT5F1800 or LT-2F2000B rechargeable battery. *Products for Europe cannot use NiMH / LiFe batteries. -The type of power source used must be selected through the system setting. -When the transmitter will not be used for a long time, remove the battery.

NiMH LiFe Battery Replacement Method

1 Refer to the previous description and remove the transmitter battery cover.



2 After removing the dry cell battery box from the transmitter, disconnect the connector.

Caution

If you remove the dry cell battery box from the transmitter, replace it carefully with the wiring on the same side as before. Reinstalling the battery box in the opposite direction could cause the wires to be disconnected.

3 Insert the connector of the new battery and load the new battery into the transmitter.



4 Finish by installing the battery cover.





∆Caution

When closing the battery cover, be careful that the battery cover does not pinch the battery lead wires.

Shorting of the battery lead wires may lead to fire and abnormal heating and cause burns or fire disaster.

When Charging For The Optional NiMH/LiFe Battery

Charging A NiMH Battery

(Example: When using the HT5F1800B with the special charger)

- **1** Plug the transmitter cord of the special charger into the charging jack on the rear of the transmitter.
- **2** Plug the charger into an AC outlet.
- **3** Check that the charging LED lights.

Charging A LiFe Battery

(Example: When using the LiFe the special charger)

- Plug the transmitter cord of the special charger into the charging jack on the rear of the transmitter.
- **2** Plug the charger into an AC outlet.
- **3** Check that the charging LED lights red.
- **4** When charging is completed, the charging LED lights green. Disconnect the charge plug and disconnect the AC plug of the charger.

With Balance Charger

(Example: When using the LiFe with an optional charger)

- Remove the battery cover.
- **2** Disconnect the battery from the T10PX.
- **3** Balance charging cannot be done through the transmitter. You must remove the LiFe battery to do this charge.



The charging time when charging the HT5F1800B battery with the optional special charger is approximately 15 hours. However, when the battery has not been used for some time, repeat charging 2 or 3 times to activate the battery.

Over current protection

The transmitter charging circuit is equipped with an over current protection circuit (1.0A). If the battery is charged with a quick charger for other than digital proportional R/C sets, it may not be fully charged.



For Europe

Products for Europe cannot use NiMH / LiFe batteries. This charge jack cannot be used.

The charging time when charging the FT2F-2100BV2 battery with the optional special charger is approximately 3 hours.

When the LiFe battery will not be used for a long time, to prevent it from deteriorating we recommend that it be kept in about the half capacity state instead of fully charged. Also be careful that the battery does not enter the over discharged state due to self-discharge. Periodically (about every 3 months) charge the battery. In addition, always remove the battery from the model and store it in a dry, cool place (15°C to 25°C).

Balance charging connector for LiFe battery charger. Follow the directions of the optional LiFe chargers in use.

LiFe battery is removed from the transmitter.

▲Warning

S Make sure not to peel off the battery film, or make any scratch by a cutter knife or the sharp edges of metal components.

 \bigotimes Make sure not to soak or get the battery wet with water or seawater.

Solve the sure not to use a deformed or swollen battery.

There is a risk of explosion or fire, which is very dangerous.

Lipo Battery LT2F2000B Replacement Method



When Charging For The Optional LiPo Battery

To charge the battery, connect a type C USB cable to the Futaba optional USB AC adapter or a commercially available USB AC adapter (USB-A type 5 V-2 A) from the Lipo dedicated charging port.



Steering Wheel Arrangement



• Changing the wheel position

The wheel position can be offset by using the accessory APA wheel position offset adapter. (Two lengths)



Modifying for left-hand use

The wheel section left and right installation direction can be reversed.



Angle spacer

The wheel mounting angle can be changed by using the optional angle spacer 5° .



Angle can be adjusted

The angle can be finely adjusted by adjusting the steering wheel unit installation. [7.5 $^{\circ}$ 48 steps]

The operating angle of the wheel can be adjusted

The operating angle of the wheel can be changed from 34 deg to 32 deg by installing the 32 deg wheel adjuster.

If you install the 32 deg wheel adapter, be sure to adjust the scale of the steering channel accordingly by using the "Calibration Function (System menu)".

Exchange procedure to wheel adaptor 32 deg and large diameter wheel

- Obtain hex wrench./ Remove the battery.

1 Hold the wheel and remove the screw. (Using a hex wrench.)

2 Pull off the wheel and wheel adapter.

3 Install the standard or large diameter steering wheel and the 32 degree wheel adapter using the screw.

(Using a hex wrench.)

- Adjust the scale of the steering channel accordingly by using the "Calibration Function (System menu)".





Exchange procedure to wheel tension spring (spring is optional)

- Obtain hex wrench / phillips screwdriver / tweezers / Remove the battery.
- **1** Hold the wheel and remove the screw. (Using a hex wrench.)
- **2** Pull off the wheel and wheel adapter.

3 Remove the wheel spring cover mounting screw. (Using a screwdriver.)

4 Replace the wheel springs with tweezers. (Using a tweezers.)



Installing the accessory APA steering wheel offset adapter

- Obtain hex wrench./ Remove the battery.

1 Remove the 2 steering unit mounting screws (M3x12 screw).

(Using a hex wrench.)

Remove the 2 mounting screws completely from the transmitter body.

2 Gently remove the steering unit, without pulling excessively on the wiring.

- Remove the steering unit slowly so that the internal wiring is not pulled unreasonably.

3 Remove the 3 connectors from the PC board.

Press the upper side of the connector to release the lock and remove it from the PC board.

(The 3 connectors each have the same lock type although they are different in size.)

4 Hold the wheel and remove the screw.

(Using a hex wrench.)

- 5 Pull off the wheel and wheel adapter.
- **6** Using a hex wrench, remove the 4 screws (M2×19) mounting the wheel unit. Remove the wheel unit from the steering housing.
 - Do not overtighten these four screws.
- **7** Pass the wiring from the wheel unit through the hole in the APA parts and steering housing as shown in the figure.

















9 Attach the wheel unit to the APA with four M2×19 screws.



1 0 Install the assembled steering unit to the transmitter body.

- From left to right, the order is 2 pin connector, 15 pin connector, 4 pin connector.
- Install slowly so that the wiring is not pinched.



1 Attach the assembled steering unit to the body with two M3x12 screws.

(Using a hex wrench.)

1 2 Insert the wheel and hold the wheel and attach the screw. (Using a hex wrench.)



- Use the accessory screws and the transmitter screws.
- -There are extra screws in the accessories.



- Do not overtighten these four screws.





1 Remove the 2 steering unit mounting screws (M3x12 screw).

(Using a hex wrench.)

Remove the 2 mounting screws completely from the transmitter body.

2 Gently remove the steering unit, without pulling excessively on the wiring.

- Remove the steering unit slowly so that the internal wiring is not pulled unreasonably.
- **3** Remove the 3 connectors from the PC board.

Press the upper side of the connector to release the lock and remove it from the PC board.

(The 3 connectors each have the same lock type although they are different in size.)

4 Next, remove the rear unit on the opposite side. With a hex wrench, remove the two M3x12 screws and one M2x6 screw on the rear unit.

(Using a hex wrench.) Remove the 3 mounting screws completely from the transmitter body.









5 Gently remove the rear unit, without pulling excessively on the wiring.

- Remove the rear unit slowly so that the internal wiring is not pulled unreasonably.





6 Replace the steering unit bottom cover.

• Slide it outward and pull it out.



7 Install the rear unit to the connector on the opposite side of the transmitter body.

• Install slowly so that the wiring is not pinched.



8 Fit the rear unit to the transmitter body with two M3x12 screws and one M2x6 screw.



 ${\bm 9}$ Install the steering unit to the connector on the opposite side of the transmitter body.

• Install slowly so that the wiring is not pinched.



1 0 Install the steering unit to the transmitter using the two screws (M3x12 screw) supplied.

(Using a hex wrench.)





Angle Spacer

The wheel mounting angle can be changed by using the optional angle spacer 5°.

- The angle spacer use the included four M2x5 mm hex screws.
- Obtain hex wrench./ Remove the battery.
- The length of the screws used at each part differs. When reassembling the steering wheel unit, always use the specified screws.



- Use the accessory screws and the transmitter screws.
- There are extra screws in the accessories.
- M2 x 5 screws are special size so be careful not to lose them.
- Do not overtighten M2×19 four screws.



When Removing The Paddle Switch

If the paddle switch interferes with operation, you can remove the paddle switch in the following ways.

- **1** Remove the wheel unit from the transmitter according to "Installing the accessory APA steering wheel offset adapter".
- **2** Use a Phillips screwdriver to remove the three M2.6 x 8 screws.





3 Remove the cover while pressing the tip of the handle shaft. Be careful not to lose the shaft ring on the cover.



4 Replace the paddle switch by inserting the attached Blind paddle from above.





5 Carefully assemble in the reverse order.

- Be careful not to forget to attach each part.

Trigger Brake Lever Replacement

The trigger brake lever can be replaced with the optional trigger brake lever for 7PXR / 7PX / 4PM.

*When the brake lever is changed, perform throttle side correction by adjuster function.

Brake lever replacement

- **1** Hold the trigger, remove the brake lever mounting screw using the hex wrench, and remove the brake lever.
- **2** Using the hex wrench install the brake lever with the brake lever mounting screw.



Non-Telemetry LED (telemetry OFF sign)

When the telemetry function is inhibited by race regulations, a special LED lights when the telemetry function is OFF to confirm that the telemetry function is not operating.

Non-telemetry LED (Lit when telemetry function is OFF)

Handling The Antenna

About The Transmitter Antenna



Antenna Moving Range

If the antenna is set to the 45° and 90° vertical position, the range of the radio waves may be greater than in the horizontal position. (Different depending on the conditions)



◎ Please do not grasp the transmitter's antenna while driving.

Doing so may degrade the quality of the RF transmission to the model.

◎ The antenna position can be changed in the direction as shown in figure. However, please do not apply unnecessary force or shock.

The internal cable may be damaged; thus transmitting distance decreases and it may cause malfunction.

There might be a small glitch when the antenna of the transmitter is brought close to servos, ESCs or other peripheral devices.

This is not an issue but please keep this symptom in mind, especially when setting-up.

Receiver Terminology



- Install the antenna in the higher place as shown in the figure.
- ◎ Do not cut or bundle the receiver antenna wire. (R404SBS)
- ◊ Do not bend the coaxial cable. It causes damage. (R404SBS)
- ◊ Do not pull the receiver antenna or coaxial cable by force. (R404SBS)
- If the set of the s
- Wrap the receiver with something soft, such as foam rubber, to avoid vibration. If there is a chance of getting wet, put the receiver in a waterproof bag or balloon.

≜Caution

Always use R404SBS	(-E) under the following conditions:
--------------------	--------------------------------------

- Battery :Power requirement Rated voltage 3.7 to 7.4 V (dry cell battery cannot be used)
 - Matched to the ratings of the receiver and connected servo.

• Transmitter's receiver system > F-4G

• Use the servo that matches the servo type of each receiver response.

```
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 trouble with servos and other equipment. Futaba will not be responsible for damage, etc. caused by combination with the products of other companies.
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Receiver And Servo Connections

Connect the receiver and servos as shown below. Connect and install the receiver and servos in accordance with "Installation Safety Precautions" on the next page.

The figure shown below is an example. The method of connecting the motor controller to the motor and battery depends on the motor controller used. Purchase the motor controller and servos separately. The receiver also depends on the set.





Installation Safety Precautions

∆Warning

Receiver (receiver antenna)

- O Do not cut or bundle the receiver antenna wire. (R404SBS)
- ◊ Do not bundle the receiver antenna wire together with the motor controller lead wire. (R404SBS)
- Skeep the receiver antenna at least 1 cm away from motor, battery, and other wiring carrying heavy current.
- S Do not use a metal receiver antenna holder on a plate made of metal, carbon, or other conductive material.
- Since the antenna of built-in antenna receivers is installed under this, do not place wiring or other objects on it.



∆Warning

Receiver Vibration-proofing / Waterproofing

(Car)

Vibration-proof the receiver by wrapping it in foam rubber or other vibration-absorbing material and mount it with thick double-sided tape.

When using the receiver holder supplied with the model kit, mount the holder to the chassis through a rubber grommet.

(Boat)

Vibration-proof the receiver by wrapping it in foam rubber or other vibration-absorbing material. Also waterproof the receiver by cruising it in a plastic bag.

If the receiver is exposed to strong vibration and shock, or the ingression of water, it may not operate correctly and you may lose control of the model.



Connector Connections

Be sure the receiver, servo, battery and connectors are fully and firmly connected.

If vibration from the model causes a connector to work loose while the model is in operation, you may lose control.

Servo Installation

When you install the servos, always use the rubber grommets provided in servo hardware bags. Mount the servos so they do not directly come in contact with the mount.

If the servo case comes in direct contact with the mount, vibration will be directly transmitted to the servo.

If this condition continues for a long time, the servo may be damaged and control will be lost.



∆Warning Servo Throw

Operate each servo over its full stroke and be sure the linkage does not bind or come loose.

The continuous application of unreasonable force to a servo may cause damage and excessive battery drain.



Adjust the throttle servo so that unreasonable force is not applied when the engine carburetor is fully open, fully closed, and the brakes are applied fully.



If the brakes overheat while running, their ability to function properly decreases. Before running, adjust the suitable maximum servo travel so that unreasonable force is not applied even when the servo travel is increased while running.

▲Warning Electronic Speed Control

maximum servo travel.

Install the heat sinks where they will not come in contact with aluminum, carbon fiber or other parts that conduct electricity.

If the ESC (Electronic speed control) heat sinks touch other materials that conduct electricity a short circuit could occur. This could result in loss of control and damage to the system.

Motor Noise Suppression

Always install capacitors to suppress noise when electric motors are used.

If capacitors are not properly installed you could experience erratic operation and reduced range as well as loss of control.



Motors with no suppressor capacitors, or inadequate suppression, may cause the receiver to malfunction. Always solder the capacitors supplied to your motor.

The Schottky diode improves the efficiency of the speed control / motor combination and provides extra protection to the brake FETs. The white ring must always face the positive side.

Other Noise Suppression Methods

Be sure there are no metal parts in your model which under vibration can come in contact with other metal parts.

Metal to metal contacts under vibration will emit a high frequency noise that will affect the receiver's performance. You could experience erratic operation and reduced range as well as loss of control.



Linking Method For F-4G System

(Display when power switch turned on)

When the power switch is turned on, the currently selected model number is displayed. Check if this number is the model number you want to set-up. To change the model number, use the Model Select function.



Check if the receiver system is set to the type of receiver used.

- *When the "PWR" side power switch is set to ON and radio waves are output normally, "F-4G", "T-FHSS SR", "T-FHSS", "Mini-Z"or "S-FHSS" is displayed. If not displayed, there is probably an abnormality or trouble so contact a Futaba Service Center. When a screen is displayed at the "DSP" side, "Display" is displayed.
- *Since the R404SBS(E) receiver supplied with the T10PX set uses the F-4G system, T10PX receiver setup must be set to F-4G.

Receiver system Change & How To Link

First set up the receiver. Setting changes are immediately reflected. Next, the transmitter and receiver are linked and the receiver memorizes the transmitter ID number so that signals from other transmitters will not be received. In addition, with the Telemetry system, the transmitter simultaneously memorizes the receiver ID numbers so that data from other receivers will not be received.

The method of setting up the receiver system and the method of linking the transmitter and receiver are described.

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.



2 In "Receiver", select and tap the system to be set from systems.

The confirmation screen will be displayed. To execute, tap [Yes] to hear an electronic sound and finish setting. To cancel, select [No] and touch it. If you change the system, be sure to link it with the receiver and turn the power on again.





Tap the system to be set from F-4G, T-FHSS SR, T-FHSS, S-FHSS or Mini-Z.

> * Even with the same receiver, if you change the system, be sure to link with the receiver and power cycle the receiver.

3 For the F-4G system, tapped [Analog Servo] [Digital Servo] [SR mode] in the receiver setting "Response" and make changes. SR mode require their own dedicated servos. The display changes when the mode is changed.

When using normal servo or ESC, set the Digital servo or Analog servo.



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

- **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.

When using battery fail-safe, set the Battery Fail-safe Voltage in the "Failsafe" in the "Linkage menu". And link again.



6 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.

- *The T10PX and F-4G receiver (R404SBS/R404SBS-E)/T-FHSS receiver memorize the IDs linked last at each model memory. Since only one receiver ID is memorized at each model memory, multiple F-4G/T-FHSS receivers cannot be used with the same model memory. When a receiver at the same model memory is changed, re-linking is necessary even if the receiver is already linked with the transmitter.
- *When using multiple F-4G/T-FHSS receivers, link each receiver with each T10PX model memory. However, one receiver can be linked with multiple model memories.
- *The telemetry function communication status can be checked at the T10PX home screen.
- *For other than F-4G system, the link procedure is different. Refer to the WEB full manual.



Menu Selection

Use the HOME button and the LCD screen touch panel to operate the screen. In this operation manual, the HOME button is indicated by the following symbols.

Display Menu Screen



It returns to the "Home screen" from the function screen in the following method.



* An example is to return from the "End point" screen to the "Home" screen.

Home/ES1/ES2/ES3 Button Setting

When you push the HOME button from the home screen, it moves to the Model select screen at the factory shipping the HOME button. Pushing the HOME button on the menu screen or each setting screen will return you to the previous screen. Press and hold the HOME button on the menu screen or each setting screen to return to the Home screen. The setting screen moved from the User menu also moves in the same way and returns to the home screen. Also, if you hold down the [HOME] button on the home screen for two seconds or longer, the trim lock function that disables the digital trim DT1 to DT6 and DL1 dial operations will work.

You can select the screen to display when you push the HOME button on the Home screen, menu, or user menu. You cannot change the screen to show by the push and holding the HOME button from the menu screen or each function screen.

- Push-----Model select screen.
- Long press-----Trim lock.

"Home/ES button setting" of "Accessory menu"



Value Of Each Function And Changing The Set Value

On the setting screen of each function, if you tap the item to be set, [-] [reset] [+] will be displayed at the bottom of the screen, tap the [-] [+] on the panel Set. Tap[Reset] to return to the initial value. There are items with no [reset].



The setting of ON/OFF changes when you tap (ON) or (OFF).



Example: When turning off the auto power-off function on the battery setting screen, tap (ON) of auto power off to display (OFF), and the function will be invalid.

To select a function form multiple items such as language, tap the function on the screen. Then, choose/tap the item from a pop-up screen that is coming to show the item selection.



Example: tap the [System Menu] button and [Information] button for the systems information. Within this group, you can select different languages. If you do not wish to change from the default, press cancel.

This manual is a simplified version. Detailed of each function are not described. Refer to your countries distributor website for the full manual and update contents download. http://www.futabausa.com (http://www.rc.futaba.co.jp)

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