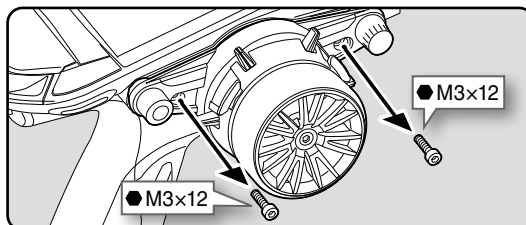


## Installing the accessory APA steering wheel offset adapter

- Obtain hex wrench./ Remove the battery.

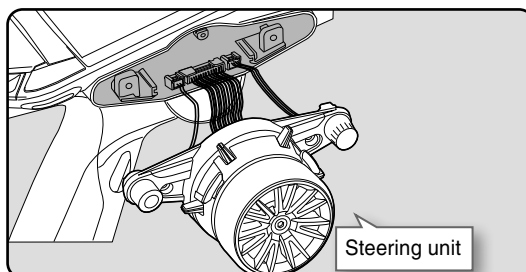
- 1** Remove the 2 steering unit mounting screws (M3x12 screw).  
(Using a hex wrench.)

Remove the 2 mounting screws completely from the transmitter body.



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

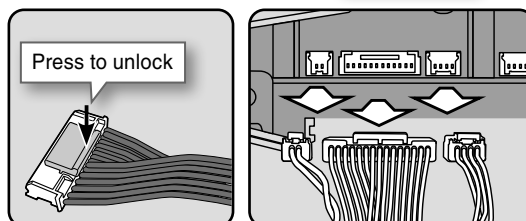
- Remove the steering unit slowly so that the internal wiring is not pulled unreasonably.



- 3** Remove the 3 connectors from the PC board.

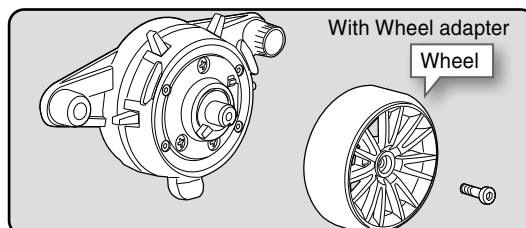
Press the upper side of the connector to release the lock and remove it from the PC board.

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



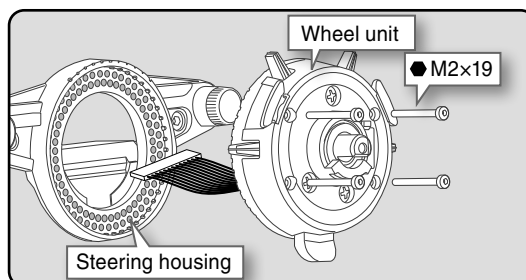
- 4** Hold the wheel and remove the screw.  
(Using a hex wrench.)

- 5** Pull off the wheel and wheel adapter.

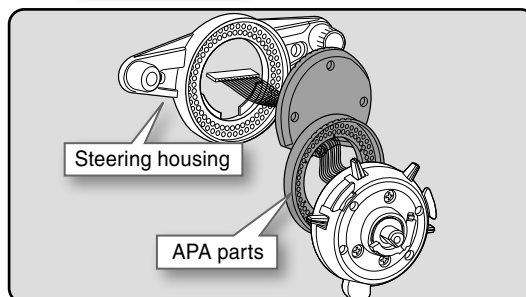
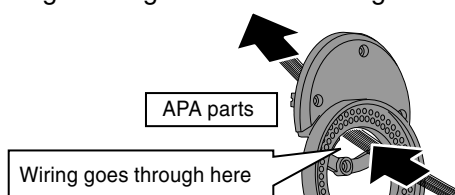


- 6** Using a hex wrench, remove the 4 screws (M2x19) mounting the wheel unit. Remove the wheel unit from the steering housing.

- Do not overtighten these four screws.

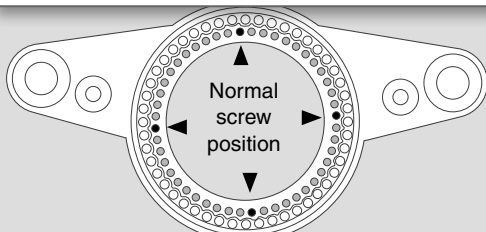


- 7** Pass the wiring from the wheel unit through the hole in the APA parts and steering housing as shown in the figure.



- 8** Fit the rear cover and attach the APA to the steering housing with three M2x10 screws and one M2x6 screw.

APA uses the inside holes. The mounting angle in the direction of rotation can be adjusted.

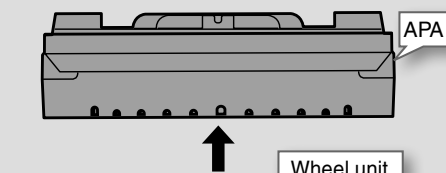


Steering housing

APA

Adjust the angle with the position mark.

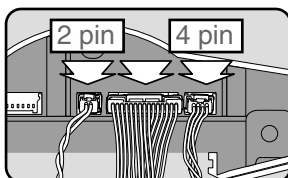
- 9** Attach the wheel unit to the APA with four M2x19 screws.



Adjust the angle with the position mark.

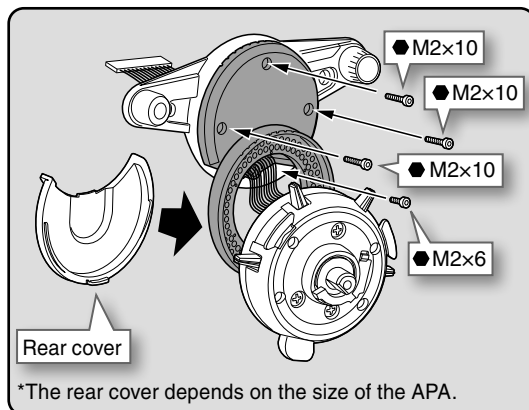
- 10** Install the assembled steering unit to the transmitter body.

- 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.

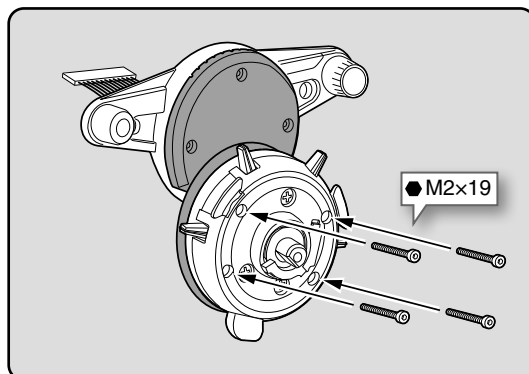


- 11** Attach the assembled steering unit to the body with two M3x12 screws.  
(Using a hex wrench.)

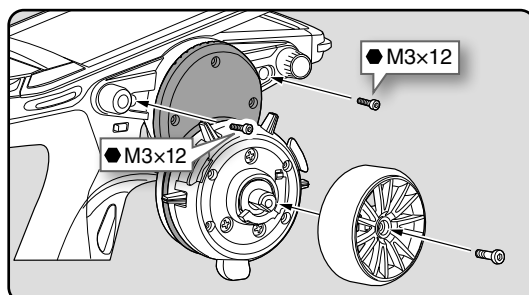
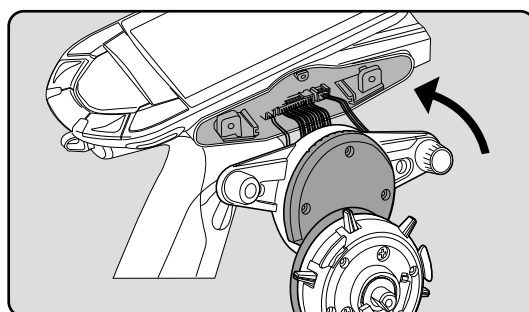
- 12** Insert the wheel and hold the wheel and attach the screw.  
(Using a hex wrench.)



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



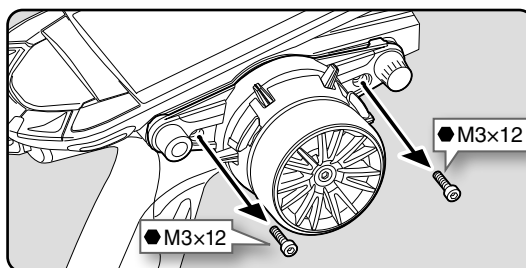
- Do not overtighten these four screws.



## Modifying for left-hand use

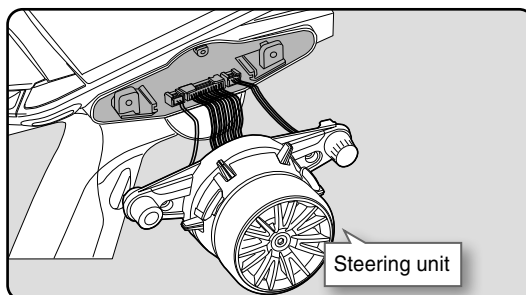
- 1** Remove the 2 steering unit mounting screws (M3x12 screw).  
(Using a hex wrench.)

Remove the 2 mounting screws completely from the transmitter body.



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

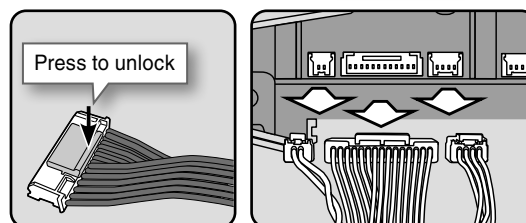
- Remove the steering unit slowly so that the internal wiring is not pulled unreasonably.



- 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.

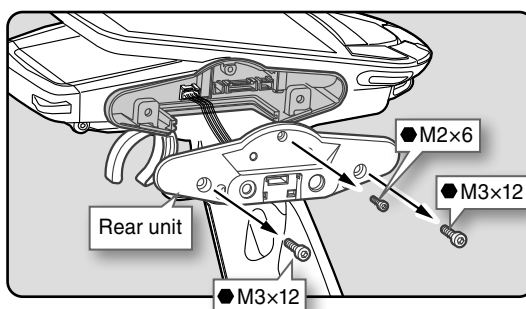
(The 3 connectors each have the same lock type although they are different in size.)



- 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.

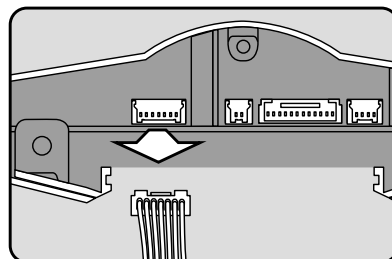
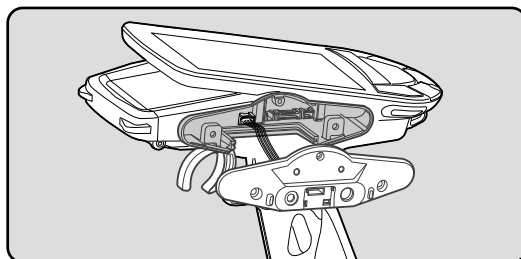
(Using a hex wrench.)

Remove the 3 mounting screws completely from the transmitter body.



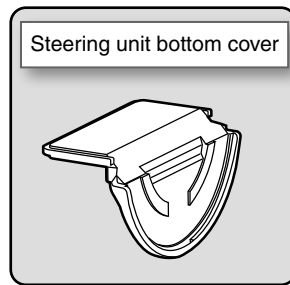
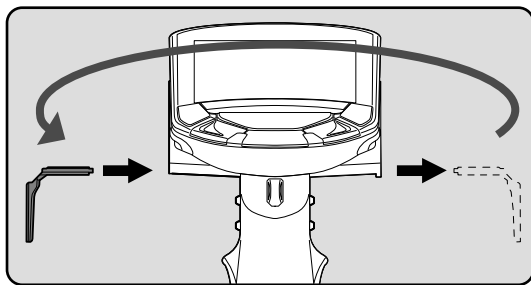
- 5** Gently remove the rear unit, without pulling excessively on the wiring.

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



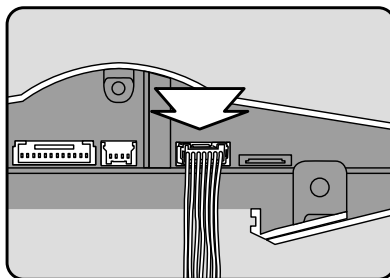
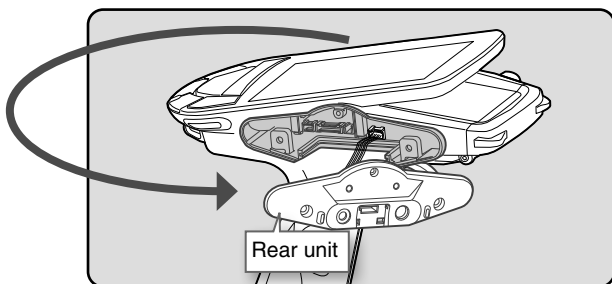
## 6 Replace the steering unit bottom cover.

- Slide it outward and pull it out.

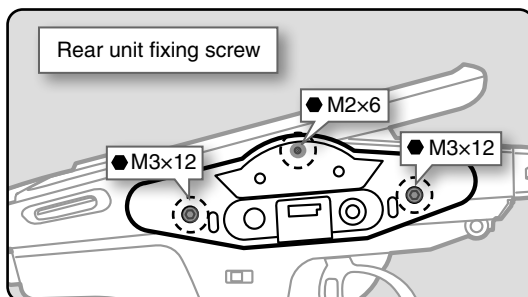


## 7 Install the rear unit to the connector on the opposite side of the transmitter body.

- Install slowly so that the wiring is not pinched.

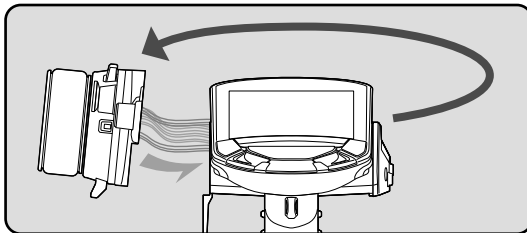
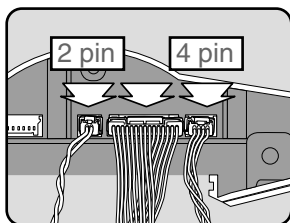


## 8 Fit the rear unit to the transmitter body with two M3x12 screws and one M2x6 screw.



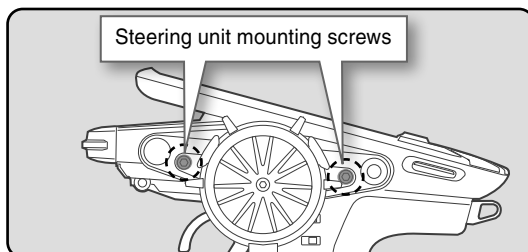
## 9 Install the steering unit to the connector on the opposite side of the transmitter body.

- Install slowly so that the wiring is not pinched.



## 10 Install the steering unit to the transmitter using the two screws (M3x12 screw) supplied.

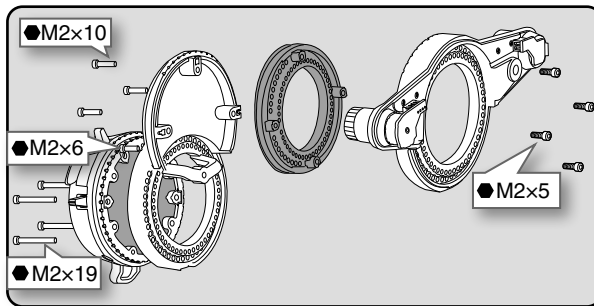
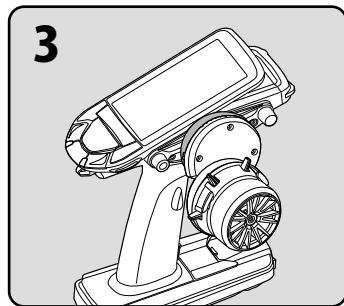
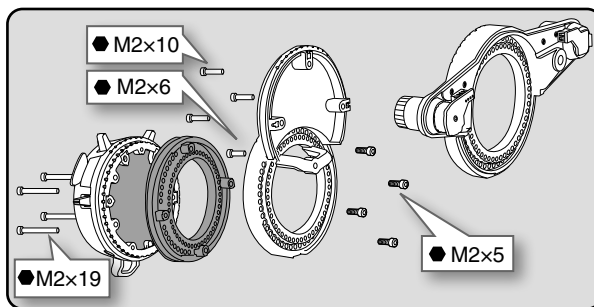
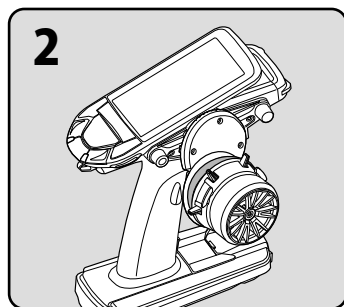
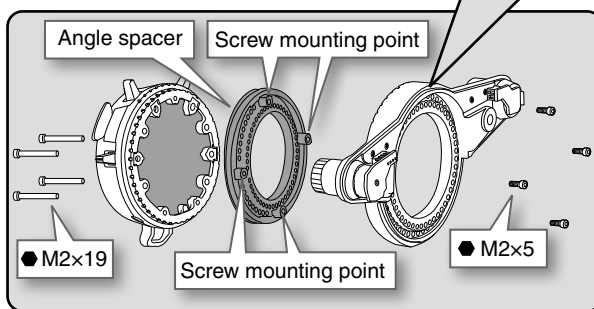
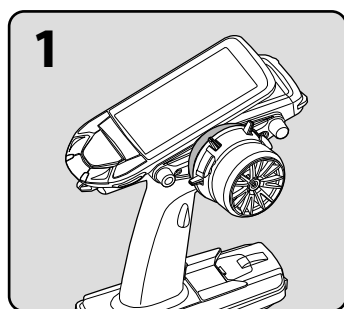
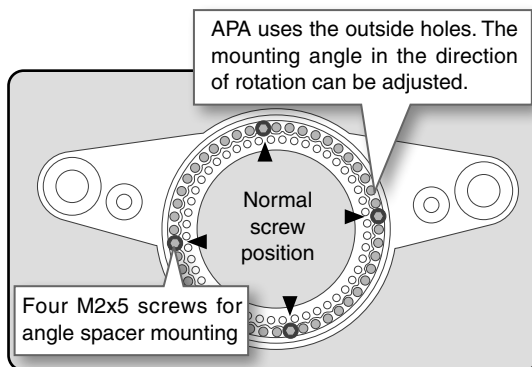
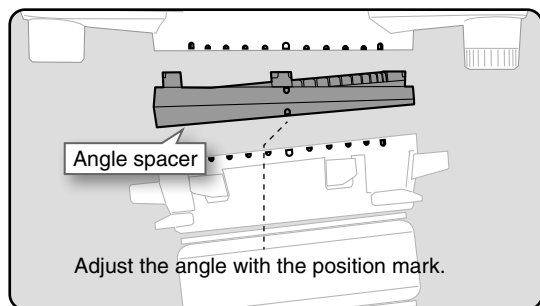
(Using a hex wrench.)



## Angle Spacer

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

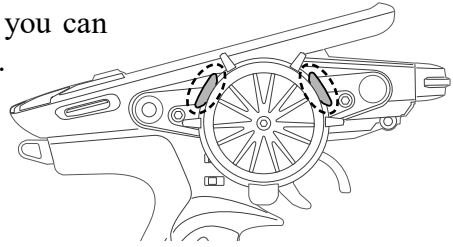
- The angle spacer use the included four M2x5 mm hex screws.
- Obtain hex wrench./ Remove the battery.
- The length of the screws used at each part differs. When reassembling the steering wheel unit, always use the specified screws.



- 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 M2x19 four screws.

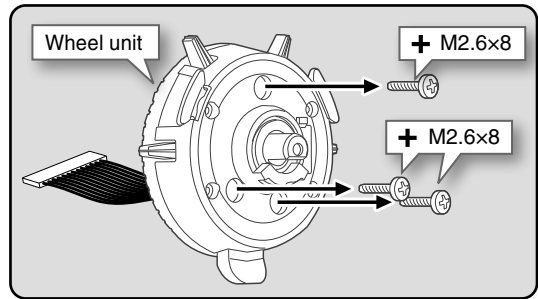
## When Removing The Paddle Switch

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

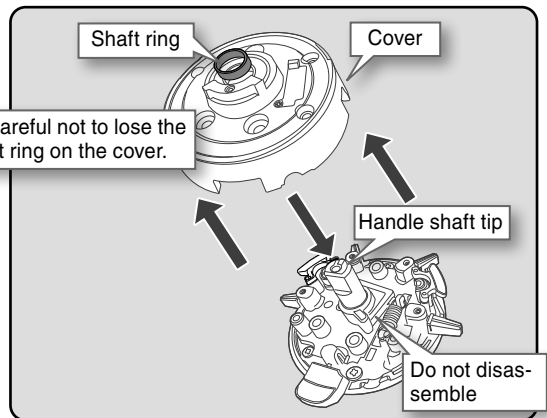
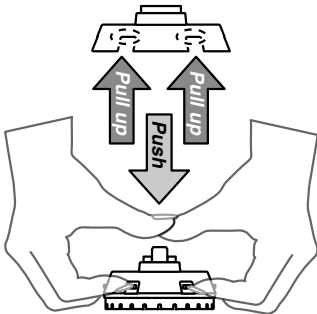


**1** Remove the wheel unit from the transmitter according to "Installing the accessory APA steering wheel offset adapter".

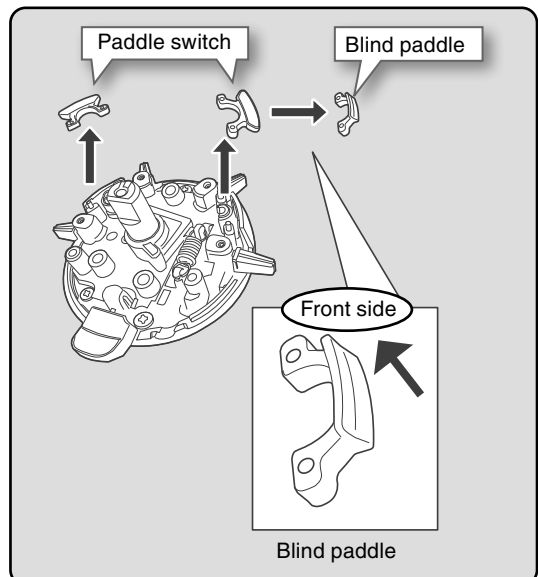
**2** Use a Phillips screwdriver to remove the three M2.6 x 8 screws.



**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.

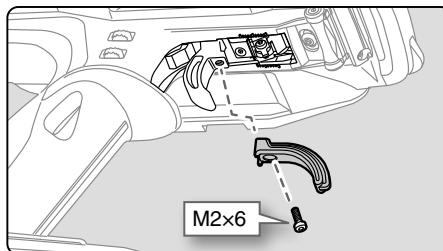
## Trigger Brake Lever Replacement

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

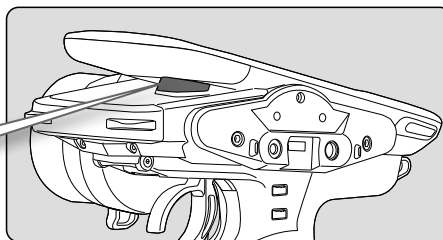
- 1 Hold the trigger, remove the brake lever mounting screw using the hex wrench, and remove the brake lever.
- 2 Using the hex wrench install the brake lever with the brake lever mounting screw.



## 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.

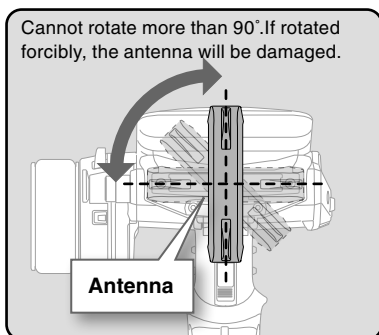
Non-telemetry LED  
(Lit when telemetry function is OFF)



## Handling The Antenna

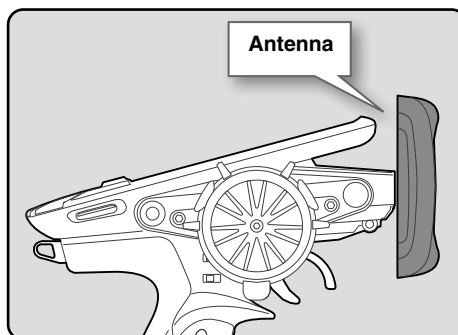
### About The Transmitter Antenna

Cannot rotate more than 90°. If rotated forcibly, the antenna will be damaged.



#### 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)



### ⚠ Caution

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

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

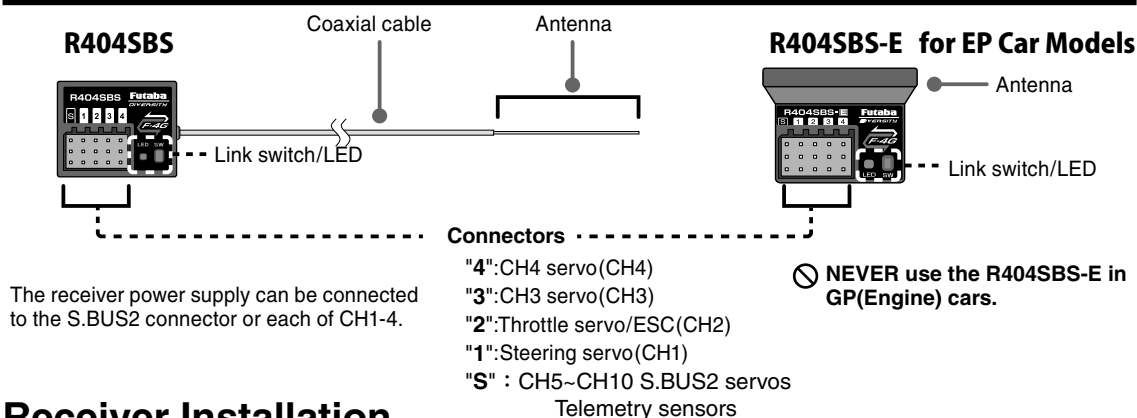
- ⊗ The antenna position can be changed in the direction as shown in figure. However, please do not apply unnecessary force or shock.

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



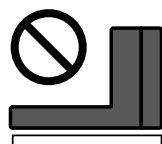
## Receiver Installation

Install the receiver on the car as follows:

**NOTE:** The operating range may reduced, depending on where the receiver and the antenna are mounted.

**NOTE:** Put the antenna in the antenna tube to protect it. Do not let the tip go outside. (R404SBS)

**NOTE:** It is a receiver of diversity type with both external and internal antennas. Do not place wiring or other objects on the plate. The receiving range may be affected.



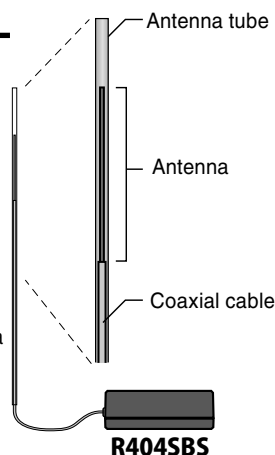
⊘ Do not install the receiver as shown on the left.

⊘ Do not put decals or double-sided tape on the antenna.

Antenna

**R404SBS-E**

**R404SBS**



### Warning

- ❗ 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)
- ❗ Keep the antenna as far away from the motor, ESC and other noise sources as you possibly can.
- ❗ 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.

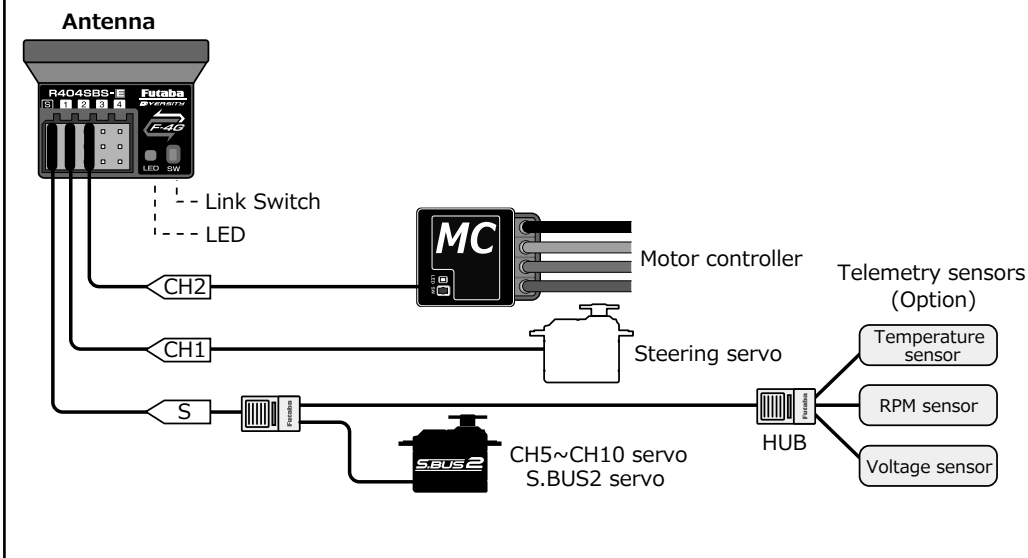


## Receiver And Servo Connections

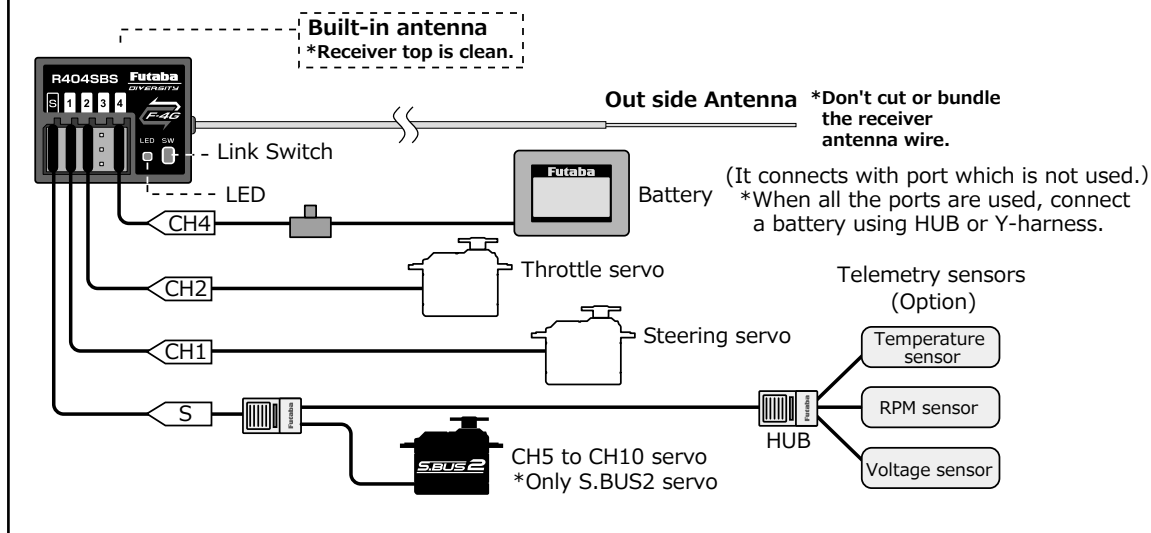
Connect the receiver and servos as shown below. Connect and install the receiver and servos in accordance with "Installation Safety Precautions" on the next page.

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 When An Electronic Speed Control Is Used



## Installation For Gas Powered Models

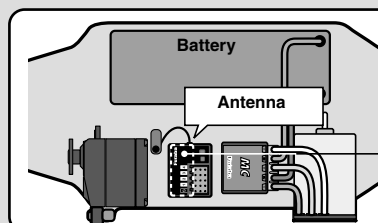


# Installation Safety Precautions

## ⚠ Warning

### Receiver (receiver antenna)

- ⊗ 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)
- ⊗ Keep the receiver antenna at least 1 cm away from motor, battery, and other wiring carrying heavy current.
- ⊗ 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.



Install the receiver as far away as possible from the battery, motor controller, motor, silicon cord and other noise sources. Keep it away from the antenna wire, in particular. The example in the figure is for R404SBS.

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

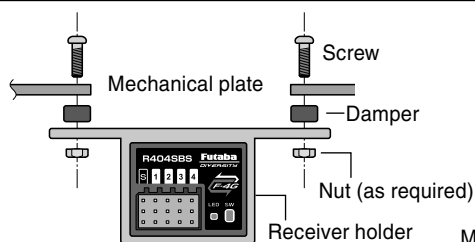
#### (Car)

- ❗ 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 crusing it in a plastic bag.

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



When using the receiver holder supplied with the kit, install the receiver through a rubber grommet.

Foam rubber, etc.



Wrap the receiver in foam rubber or other vibration-absorbing material. Do not use hard material. Hard material does not have a vibration-proofing effect.



When mounting the receiver with double-sided tape, do not use a stiff tape. Stiff tape does not have a vibration-proofing effect.

## Connector Connections

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

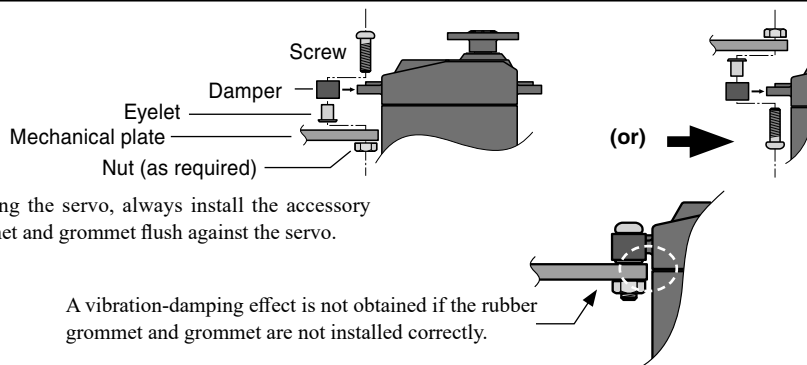
If vibration from the model causes a connector to work loose while the model is in operation, you may lose control.

## 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.

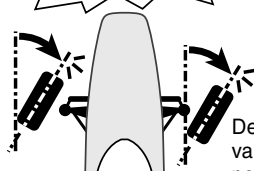
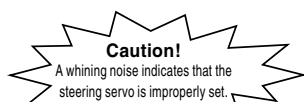


## ⚠ Warning

### 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.

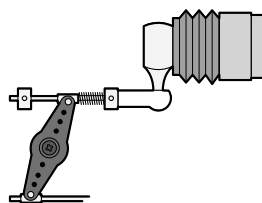


Adjust the steering servo so that unreasonable force is not applied to the servo by the chassis at maximum servo travel.

Decide the End point value at the contact point.

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

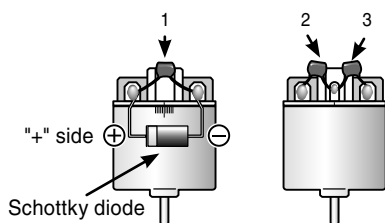
- ❗ **Install the heat sinks where they will not come in contact with aluminum, carbon fiber or other parts that conduct electricity.**

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

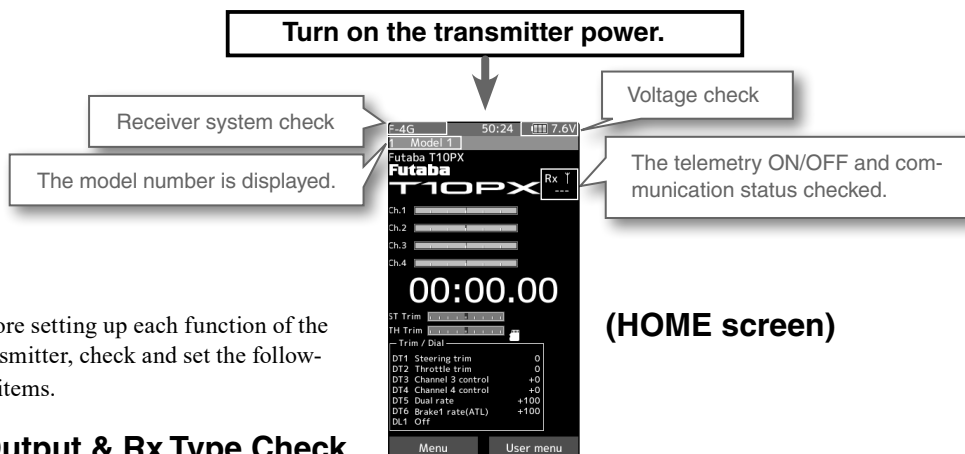
- ❗ **Be sure there are no metal parts in your model which under vibration can come in contact with other metal parts.**

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.



Before setting up each function of the transmitter, check and set the following items.

### RF Output & Rx Type Check

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.

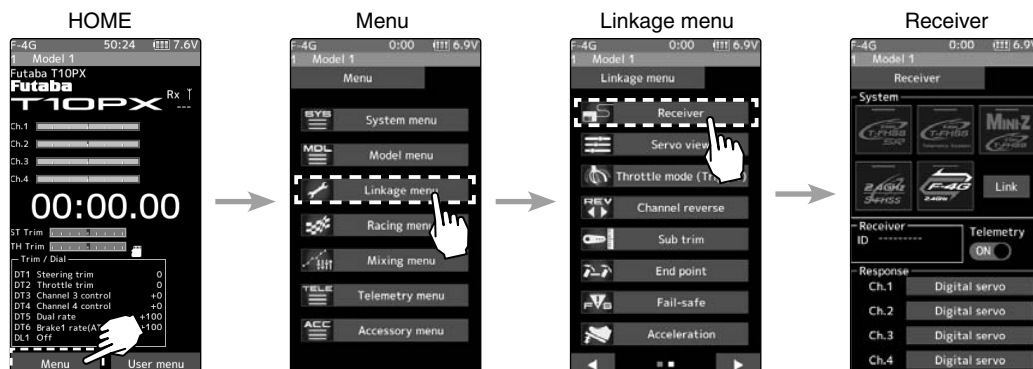
\*Since the R404SBS(E) receiver supplied with the T10PX set uses the F-4G system, T10PX receiver setup must be set to F-4G.

### 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.

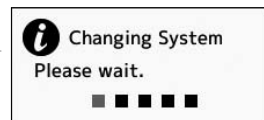
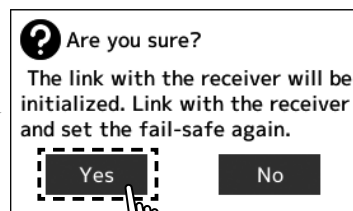
The method of setting up the receiver system and the method of linking the transmitter and receiver are described.

- 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.

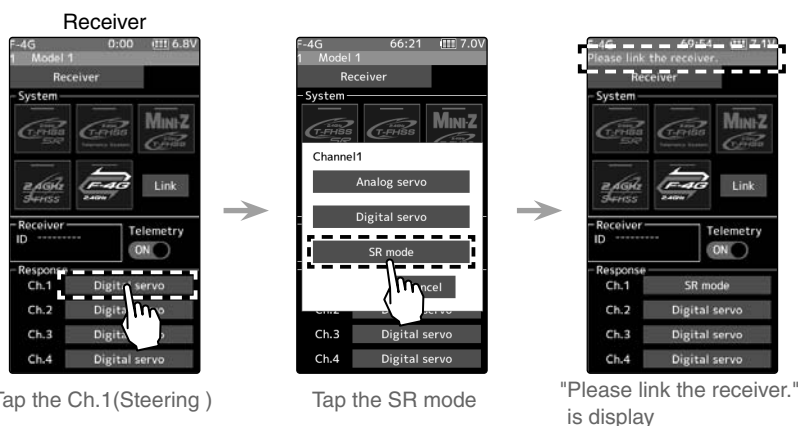
The confirmation screen will be displayed. To execute, tap [Yes] to hear an electronic sound and finish setting. To cancel, select [No] and touch it. If you change the system, be sure to link it with the receiver and turn the power on again.



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.



When using SR servo for steering

Tap the Ch.1(Steering )

Tap the SR mode

"Please link the receiver."  
is display

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

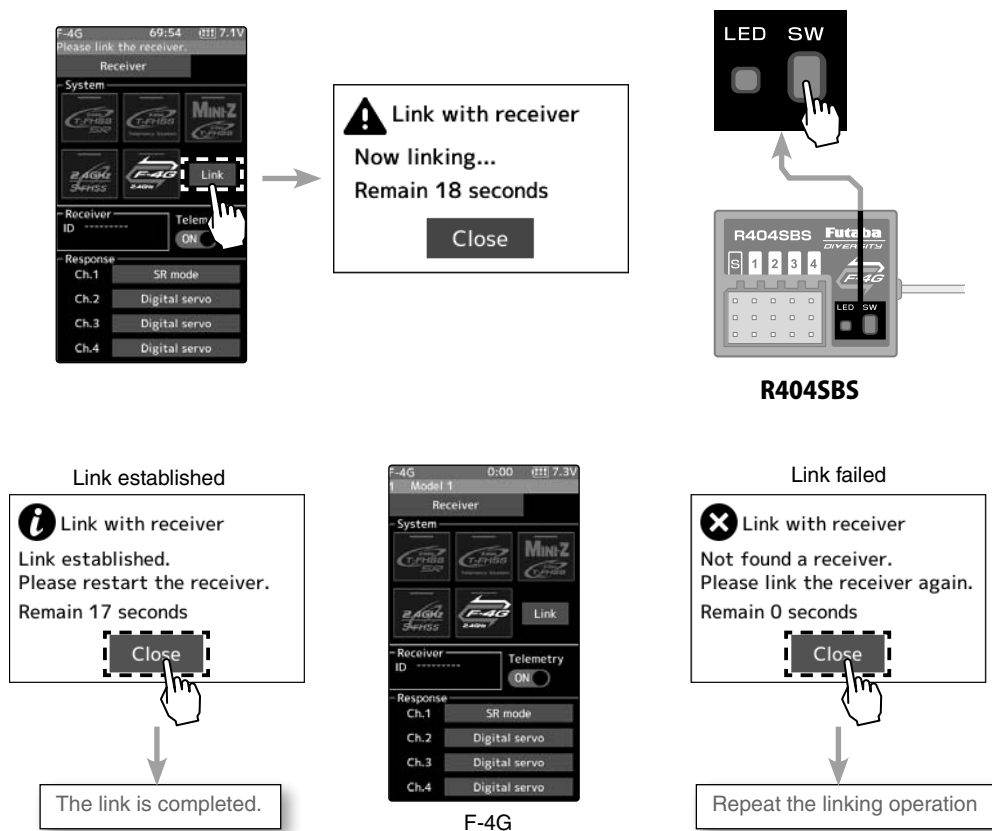
**4** Bring the transmitter and receiver within 50 cm of each other (antennas do not touch) and turn on the receiver power.

**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 "Fail-safe" 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.

#### Link notice

##### ⚠ WARNING

⊘ Do not perform the linking procedure with motor's main wire connected as it may result in serious injury.

❗ After the linking is done, please cycle receiver power and check if the receiver to be linked is really under the control of the transmitter to be linked.

■ The settings will not be reflected unless restart.

# 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.

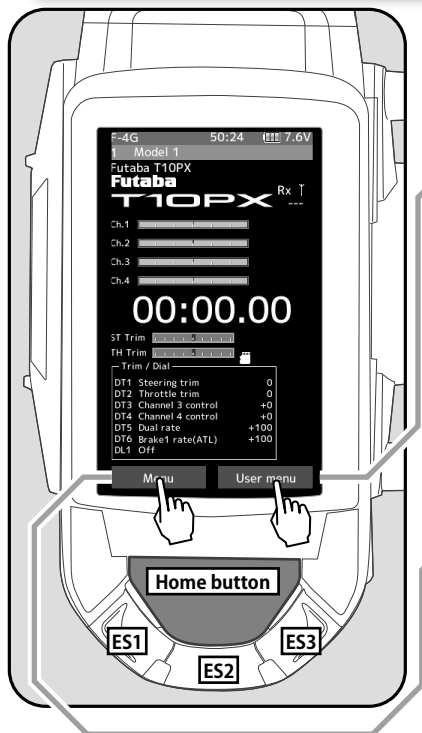
## Display Menu Screen



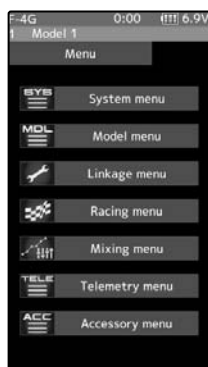
Push the HOME button  
or tap the touch panel.



Press and hold the HOME  
button.



Tap [User Menu] on the  
home screen to display  
the "User menu" screen.



(Menu screen)



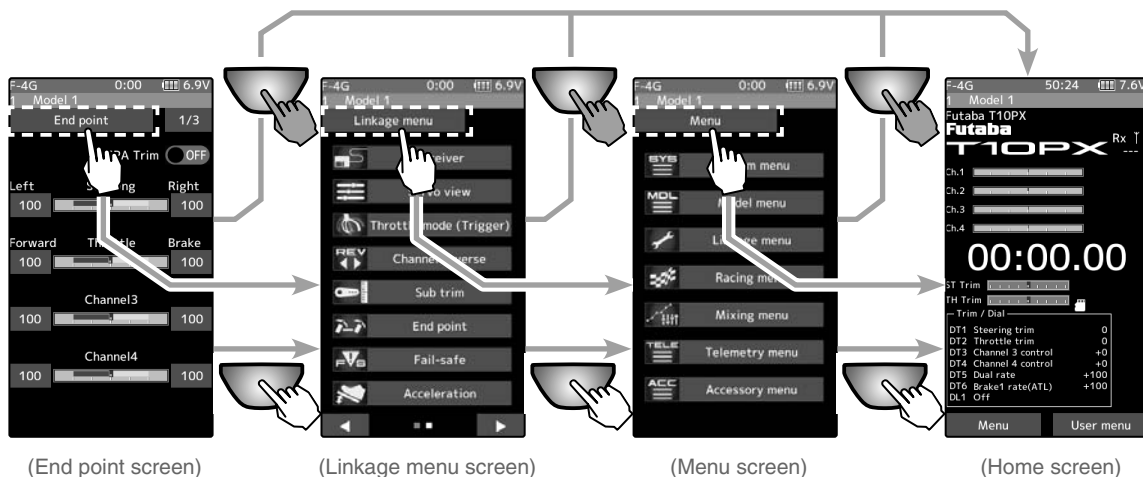
(User menu screen)

Tap the [Menu] on the  
home screen to display  
the menu screen.

\* You can select the screen to display when you press the HOME button on the Home screen, menu or user menu. ("Home button setting" of "Accessory menu")

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.



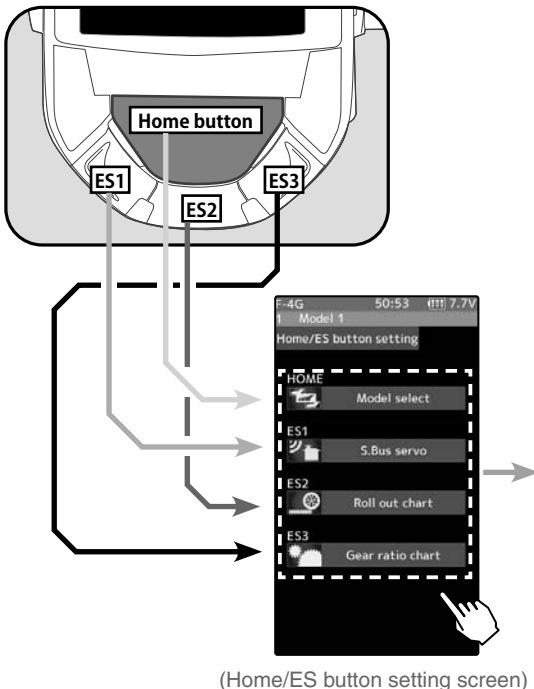
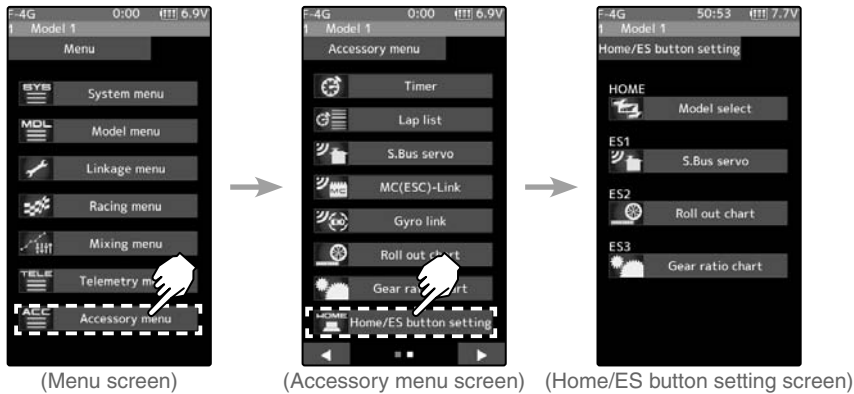
# Home/ES1/ES2/ES3 Button Setting

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"



Select a screen to display by pressing ES1 - ES3 button.

You can select the display of a specific function screen. Tap from the function list and select it.

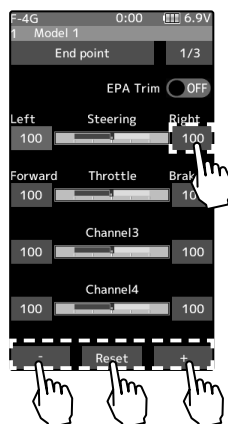
Since there are multiple pages, tap the ◀ ▶ mark and move the page.

When you are done, tap [Close] to finish.

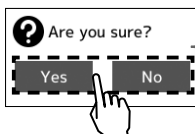


## Value Of Each Function And Changing The Set Value

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].

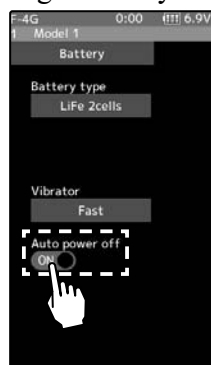


Example: To change the right-hand side steering amount on the End point screen, tap the right of the steering wheel, and when [-] [reset] [+] is displayed at the bottom of the screen, press + To decrease, tap [-] to change the numerical value. If you leave it tapped, the value changes continuously. Tap [Reset] to return to the initial value.



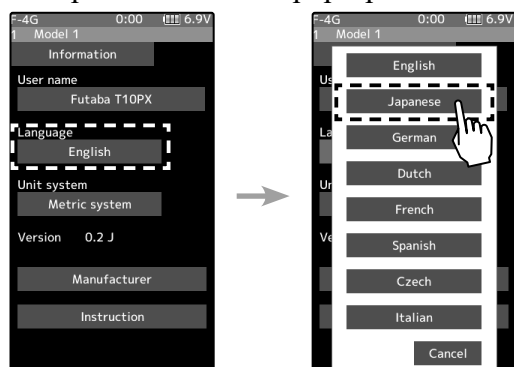
When resetting is executed, a confirmation screen is displayed. To reset, tap [Yes], otherwise tap [No].

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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