

6K

6-Channel Digital Proportional R/C System

S.BUS 2™



INSTRUCTION MANUAL

Futaba®

Digital Proportional R/C System

1M23N30302



6 CHANNEL COMPUTER SYSTEM
T6K MANUAL

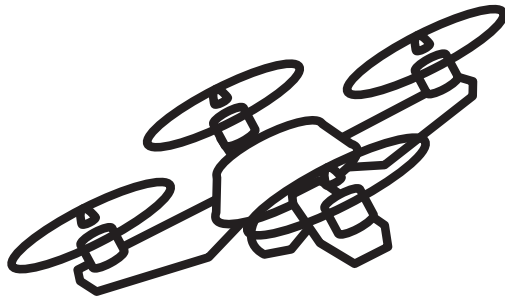


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INTRODUC-
TION

BEFORE USE



COMMON



AIRPLANE



HELICOPTER



GLIDER



MULTICOPTER



TX SETTING

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INTRODUCTION

Thank you for purchasing a Futaba® T-FHSS Air-2.4GHz 6K series 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 fly 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, or the Futaba Service Center.

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

Support and Service: It is recommended to have your Futaba equipment serviced annually during your hobby's "off season" to ensure safe operation.

IN NORTH AMERICA

Please feel free to contact the Futaba Service Center for assistance in operation, use and programming. Please be sure to regularly visit the 6K Frequently Asked Questions web site at www.futaba-rc.com/faq/. This page includes extensive programming, use, set up and safety information on the 6K radio system and is updated regularly. Any technical updates and US manual corrections will be available on this web page. If you do not find the answers to your questions there, please see the end of our F.A.Q. area for information on contacting us via email for the most rapid and convenient response.

Don't have Internet access? Internet access is available at no charge at most public libraries, schools, and other public resources. We find internet support to be a fabulous reference for many modelers as items can be printed and saved for future reference, and can be accessed at any hour of the day, night, weekend or holiday. If you do not wish to access the internet for information, however, don't worry. Our support teams are available Monday through Friday 8-5 Central time to assist you.

FOR SERVICE ONLY:

Futaba Service Center
 3002 N. Apollo Drive, Suite 1
 Champaign, IL 61822
 Phone: 217-398-0007
www.futaba-rc.com/service.html
 Email: futabaservice@hobbico.com

FOR SUPPORT : (PROGRAMMING AND USER QUESTIONS)

Please start here for answers to most questions:
www.futaba-rc.com/faq/
 Fax: 217-398-7721
 Phone: 217-398-8970 option 2

OUTSIDE NORTH AMERICA

Please contact your 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.

Application, Export, and Modification

1. This product may be used for model airplane or surface (boat, car, robot) use. It is not intended for use in any application other than the control of models for hobby and recreational purposes. The product is subject to regulations of the Ministry of Radio/Telecommunications and is restricted under Japanese law to such purposes.

2. Exportation precautions:

(a) When this product is exported from the country of manufacture, its use is to be approved by the laws governing the country of destination which govern devices that emit radio frequencies. If this product is then re-exported to other countries, it may be subject to restrictions on such export. Prior approval of the appropriate government authorities may be required. If you have purchased this product from an exporter outside your country, and not the authorized Futaba distributor in your country, please contact the seller immediately to determine if such export regulations have been met.

(b) Use of this product with other than models may be restricted by Export and Trade Control Regulations, and an application for export approval must be submitted. This equipment must not be utilized to operate equipment other than radio controlled models.

3. Modification, adjustment, and replacement of parts: Futaba is not responsible for unauthorized modification, adjustment, and replacement of parts on this product. Any such changes may void the warranty.

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

This device, trade name Futaba Corporation, complies with part 15 of the FCC Rules. Operation is subject to the following two 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) This module meets the requirements for a mobile device that may be used at separation distances of more than 20cm from human body.

To meet the RF exposure requirements of the FCC this device shall not be co-located with another transmitting device.

The responsible party of this device compliance is:

Futaba Service Center

3002 N Apollo Drive Suite 1, Champaign, IL 61822 U.S.A.

TEL (217)398-8970 or E-mail: support@hobbico.com (Support)

TEL (217)398-0007 or E-mail: futabaservice@hobbico.com (Service)



The RBRC. SEAL on the nickel-cadmium battery contained in Futaba products indicates that Futaba Corporation is voluntarily participating in an industry-wide program to collect and recycle these batteries at the end of their useful lives, when taken out of service within the United States. The RBRC. program provides a convenient alternative to placing used nickel-cadmium batteries into the trash or municipal waste system, which is illegal in some areas.

(for USA)

You may contact your local recycling center for information on where to return the spent battery. Please call 1-800-8BATTERY for information on NiCd battery recycling in your area. Futaba Corporation involvement in this program is part of its commitment to protecting our environment and conserving natural resources.

*RBRC is a trademark of the Rechargeable Battery Recycling Corporation.

Federal Communications Commission Interference Statement (for U.S.A.)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Consult the dealer or your Futaba Service center for help.

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.

Exposure to Radio Frequency Radiation

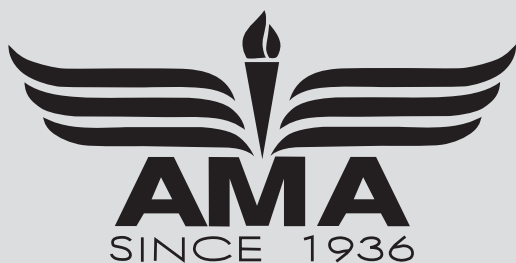
To comply with FCC RF exposure compliance requirements, a separation distance of at least 20cm must be maintained between the antenna of this device and all persons.

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

Where to Fly

We recommend that you fly at a recognized model airplane flying field. You can find model clubs and fields by asking your nearest hobby dealer, or in the US by contacting the Academy of Model Aeronautics.

You can also contact the national Academy of Model Aeronautics (AMA), which has more than 2,500 chartered clubs across the country. Through any one of them, instructor training programs and insured newcomer training are available. Contact the AMA at the address or toll-free phone number below.



Academy of Model Aeronautics

5161 East Memorial Drive

Muncie, IN 47302

Tele. (800) 435-9262

Fax (765) 289-4248

or via the Internet at <http://www.modelaircraft.org>

Always pay particular attention to the flying field's rules, as well as the presence and location of spectators, the wind direction, and any obstacles on the field. Be very careful flying in areas near power lines, tall buildings, or communication facilities as there may be radio interference in their vicinity.

Precautions

Application, Export, and Modification Precautions.

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. Export 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 parts replacement
Futaba is not responsible for unauthorized modification, adjustment, or replacement of parts on this product.

No part of this manual may be reproduced in any form without prior permission.

The contents of this manual are subject to change without prior notice.

The contents of this manual should be complete, but if there are any unclear or missing parts please contact a Futaba Service Center.

Futaba is not responsible for the use of this product by the customer.

Company and product names in this manual are trademarks or registered trademarks of the respective company.

For safe use

Please observe the following precautions to ensure safe use of this product at all times.

Meaning of Special Markings:

The parts of this manual indicated by the following marks require special attention from the standpoint of safety.

- ⚠ DANGER** - Procedures which may lead to dangerous conditions and cause death/serious injury if not carried out properly.
- ⚠ 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.

⊘ = Prohibited ⚠ = Mandatory

WARNING: Always keep electrical components away from small children.

Flying Precautions

⚠ WARNING

⊘ Never grasp the transmitter built-in antenna part while flying.

The transmitter output may drop drastically.

⊘ Always make sure that all transmitter stick movements operate all servos properly in the model prior to flight. Also, make sure that all switches, etc. function properly as well. If there are any difficulties, do not use the system until all inputs are functioning properly.

⊘ Never fly in the range check mode.

In the dedicated range test range check mode, the transmitter output range is reduced and may cause a crash.

⊘ While operating, never touch the transmitter with, or bring the transmitter near, another transmitter, a cellphone, or other wireless devices.

Doing so may cause erroneous operation.

⊘ Never fly on a rainy day, when the wind is strong, and at night.

Water could lead to failure or improper functionality and poor control of the aircraft which could lead to a crash.

⊘ Never turn the power switch on and off during flight or while the engine or motor is running.

Operation will become impossible and the aircraft will crash. Even if the power switch is turned on, operation will not begin until transmitter and receiver internal processing is complete.

⊘ Do not start the engine or motor while wearing the neck strap.

The neck strap may become entangled with the rotating propeller, rotor, etc. and cause a serious injury.

⊘ Do not fly when you are physically impaired as it could pose a safety hazard to yourself or others.

⊘ Do not fly at the following places:

- Near another radio control flying field.
- Near or above people.
- Near homes, schools, hospitals or other places where people congregate.
- Near high voltage lines, high structures, or communication facilities.

⊘ When setting the transmitter on the ground during flight preparations, do not stand it upright.

The transmitter may tip over, the sticks may move and the propeller or rotor may rotate unexpectedly and cause injury.

⊘ Do not touch the engine, motor, or FET amp during and immediately after use.

These items may become hot during use.

⚠ For safety, fly so that the aircraft is visible at all times.

Flying behind buildings or other large structures will not only cause you to lose sight of the aircraft, but also degrade the RF link performance and cause loss of control.

⚠ From the standpoint of safety, always set the fail safe function.

In particular, normally set the throttle channel to idle. For a helicopter, set the throttle channel to maintain a hover.

⚠ When flying, always return the transmitter setup screen to the Home screen.

Erroneous input during flight is extremely dangerous.

⚠ Always check the remaining capacity of the transmitter and receiver batteries before each flying session prior to flight.

Low battery capacity will cause loss of control and a crash.

⚠ Always check operation of each control surface and perform a range test before each flying session. Also, when using the trainer function, check the operation of both the teacher and student transmitter.

Even one transmitter setting or aircraft abnormality cause a crash.

⚠ Before turning on the transmitter:

1. Always move the transmitter throttle stick position to the minimum (idle) position.
2. Turn on the transmitter first and then the receiver.

⚠ When turning off the transmitter's power switch. After the engine or motor has stopped (state in which it will not rotate again):

1. Turn off the receiver power switch.
2. Then turn off the transmitter power switch.

If the power switch is turned on/off in the opposite order, the propeller may rotate unexpectedly and cause a serious injury.

Also always observe the above order when setting the fail safe function.

Maximum low throttle: Direction in which the engine or motor runs at the slowest speed or stops.

⚠ When adjusting the transmitter, stop the engine except when necessary. In the case of a motor, disconnect the wiring and to allow it to continue operation. When doing so, please exercise extreme caution. Ensure that the aircraft is secured and that it will not come into contact with anything or anyone. Ensure that the motor will not rotate prior to making any adjustments.

Unexpected high speed rotation of the engine may cause a serious injury.

Battery and Charger Handling Precautions

⚠ DANGER

- ⊘ Do not recharge a battery that is damaged, deteriorated, leaking electrolyte, or wet.
- ⊘ Do not use the charger in applications other than as intended.
- ⊘ Do not allow the charger or battery to become wet.
Do not use the charger, when it or your hands, are wet. Do not use the charger in humid places.
- ⊘ Do not short circuit the battery.
- ⊘ Do not solder or repair, deform, modify, or disassemble the battery and/or battery charger.
- ⊘ Do not drop the battery into a fire or bring it near a fire.
- ⊘ Do not charge and store the battery in direct sunlight or other hot places.
- ⊘ Do not charge the battery if it is covered with any object as it may become very hot.
- ⊘ Do not use the battery in a combustible environment.
The gas ignites and causes an explosion or fire.
- ⚠ Always charge the battery before each flying session.
If the battery goes dead during flight, the aircraft will crash.

⚠ WARNING

- ⊘ Do not touch the charger and battery for any length of time during charging.
Doing so may result in burns.
- ⊘ Do not use a charger or battery that has been damaged.
- ⊘ Do not touch any of the internal components of the charger.
Doing so may cause electric shock or a burn.
- ⊘ If any abnormalities such as smoke or discoloration are noted with either the charger or the battery, remove the battery from the transmitter or charger and disconnect the power cord plug and do not use the charger.
Continued use may cause fire, combustion, generation of heat, or rupture.
- ⊘ Do not subject the batteries to impact.
Doing so may cause fire, combustion, generation of heat, rupture, or liquid leakage.
- ⊘ Do not repeatedly charge a nickel-hydrogen battery in the shallow discharge state.

- ⚠ Charge the nickel-hydride battery with the dedicated charger supplied with the set.

Charging the battery past the specified value may cause a fire, combustion, rupture, or liquid leakage. When quick charging, do not charge the battery above 1C.

Do not charge the battery while riding in a vehicle. Vibration will prevent normal charging.

- ⚠ When using the optional Li-Fe battery, disconnect the battery from the transmitter and charge it with the special LBC-4E5 Li-Fe Battery Charger sold separately.

- ⊘ When using the optional Li-Fe battery, do not connect the charger to the balance charge connector and the power connector at the same time.

Doing so causes a fire, combustion, generation of heat, rupture, or liquid leakage.

- ⚠ Insert the power cord plug firmly into the receptacle up to its base.

- ⚠ Always use the charger with the specified power supply voltage.

Use the special charger by connecting it to a proper power outlet.

- ⚠ If the battery should get in your eyes, do not rub your eyes, but immediately wash them with tap water or other clean water and get treated by a doctor.

The liquid can cause blindness.

The battery memory effect will substantially shorten the battery life even if it is recharged.

- ⚠ Use and store the battery and battery charger in a secure location away from children.

Doing so may cause electric shock or injury.

- ⚠ If the battery leaks liquid or generates an abnormal odor, immediately move it to a safe place for disposal.

Not doing so may cause combustion.

- ⚠ If the battery liquid gets on your skin or clothing, immediately flush the area with tap water or other clean water.

Consult a doctor. The liquid can cause skin damage.

- ⚠ After the specified charging time has elapsed, end charging and disconnect the charger from the receptacle.

- ⚠ When recycling or disposing of the battery, isolate the terminals by covering them with cellophane tape.

Short circuit of the terminals may cause combustion, generation of heat or rupture.

⚠ CAUTION

⊘ Do not use the nickel-hydrate battery with devices other than the corresponding transmitter.

⊘ Do not place heavy objects on top of the battery or charger. Also, do not place the battery or charger in any location where it fall.

Doing so may cause damage or injury.

⊘ Do not store or use the battery and charger where it is dusty or humid.

Insert the power cord plug into the receptacle only after eliminating the dust.

⊘ After the transmitter has been used for a long time, the battery may become hot. Immediately remove from the transmitter.

Not doing so may cause a burn.

⊘ Do not charge the battery in extreme temperatures.

Doing so will degrade the battery performance. An ambient temperature of 10 to 30 (50F to 86F) is ideal for charging.

❗ Unplug the charger when not in use.

⊘ Do not bend or pull the cord unreasonably and do not place heavy objects on the cord.

The power cord may be damaged and cause combustion, generation of heat, or electric shock.

Storage and Disposal Precautions

⚠ WARNING

⊘ Keep wireless equipment, batteries, aircraft, etc. away from children.

⚠ CAUTION

⊘ Do not store wireless devices in the following places:

- Where it is extremely hot (40 [104F] or higher) or cold (-10 [14F] or lower)
- Where the equipment will be exposed to direct sunlight
- Where the humidity is high
- Where vibration is prevalent
- Where it is very dusty
- Where the device may be exposed to steam and heat

❗ When the device will not be used for a long time, remove the battery from the transmitter and aircraft and store them in a dry place where the temperature is between 0 and 30 [32F and 86F].

Left standing 'as is' may will cause battery deterioration, liquid leakage, etc.

Other Precautions

⚠ CAUTION

⊘ Do not directly expose plastic parts to fuel, oil, exhaust gas, etc.

If left in such an environment, the plastic may be attacked and damaged.

Since the metal parts of the case may corrode, always keep them clean.

❗ Join the Academy of Model Aeronautics.

The Academy of Model Aeronautics (AMA) provides guidelines and liability protection should the need arise.

❗ Always use genuine Futaba products such as transmitter, receiver, servo, FET amplifier, battery, etc.

Futaba is not responsible for damage sustained by combination with other than Futaba Genuine Parts. Use the parts specified in the instruction manual and catalog.

BEFORE USE

FEATURES

- **T-FHSS Air-2.4G multi-function 6-channel transmitter**

The Futaba 2.4GHz T-FHSS Air system is employed.

- **Telemetry system**

A T-FHSS Air bidirectional communication system is used. The voltage of the battery mounted in the fuselage can be displayed at the transmitter during flight. Altitude, temperature and R.P.M data can be displayed at the transmitter by installing various optional telemetry sensors in the fuselage.

- **Speech function**

Telemetry data can be listened to by plugging commercial earphones into the transmitter.

- **Built-in antenna**

Antenna built into the transmitter provides a simple appearance and improves handling ease.

- **S.BUS/S.BUS2 servo setting function**

S.BUS/S.BUS2 servo channel and various functions can be set by connecting the servo to the transmitter.

- **Power-saving type transmitter**

Four AA's alkaline batteries can be used. The optional HT5F1800B (NiMH 6.0V, 1800mA) or FT2F2100BV2 (lithium-ferrite 6.6V, 2100mA) battery can also be used.

- **Vibration**

A function that notifies the operator of various alarms by vibrating the transmitter can be selected.

- **Unique model memory system**

The transmitter body contains a 30 model memory.

- **Mixing type selection**

Fixed wing, helicopter, and glider mixing type can be selected to match the fuselage. In addition, 6 swash plate types can also be selected for helicopters. Multi-copter selection is also possible.

- **Digital trim**

Rapid trimming during flight is possible. The sound changes at the center of trim. The step size can be arbitrarily changed. The trim position is displayed on the LCD.

- **Lever head length adjustment**

The lever head length can be adjusted. Lever head shape that reduces slip during operation has been adopted.

- **Switch/VR position change and AUX channel function change**

Mixing and other switches and VR can be selected. Since the function of the AUX channels (5ch, 6ch) can also be changed, original mixing, in addition to existing mixing, can be created by using the programmable mixing function.

- **Model data transfer function**

Model data can be wirelessly transferred between 6K.

R3006SB receiver

- **T-FHSS Air system S.BUS compatible**

S.BUS output and conventional channel output are provided. S.BUS and conventional system sharing is possible.

- **Battery fail safe function**

CONTENTS AND TECHNICAL SPECIFICATIONS

(Specifications and ratings are subject to change without notice.)

Your 6K includes the following components:

- T6K transmitter for airplanes or helicopters
- R3006SB Receiver
- Switch harness

*The set contents depend on the type of set.

Transmitter T6K

(2-stick, 6-channel, T-FHSS Air-2.4G system)

Transmitting frequency: 2.4GHz band

System: T-FHSS Air, S-FHSS, switchable

Power supply: 6.0V Dry battery

Receiver R3006SB

(T-FHSS Air-2.4G system, dual antenna diversity, S.BUS, S.BUS2 system)

Power requirement: 4.8V~7.4V battery or regulated output from ESC, etc. (*1)

Size: 1.7 x 0.98 x 0.35 in. (43.1 x 25.0 x 8.8 mm)

Weight: 0.3 oz. (8.5g)

Battery F/S Voltage: It sets up with a transmitter

(*1) When using ESC's make sure that the regulated output capacity meets your usage application.

Before use

SYSTEM COMPATIBILITY

The 6K is a 2.4GHz T-FHSS Air system. The transmitter can also be switched to S-FHSS. (However, the telemetry system cannot be used with S-FHSS.) The usable receivers are shown below.

Communications System	Usable Receivers
T-FHSS Air (Default)	R3006SB, R3008SB *R304SB, R304SB-E, T-FHSS surface system receivers do not operate.
S-FHSS (Change is possible)	R2008SB R2006GS R2106GF

NOTE :

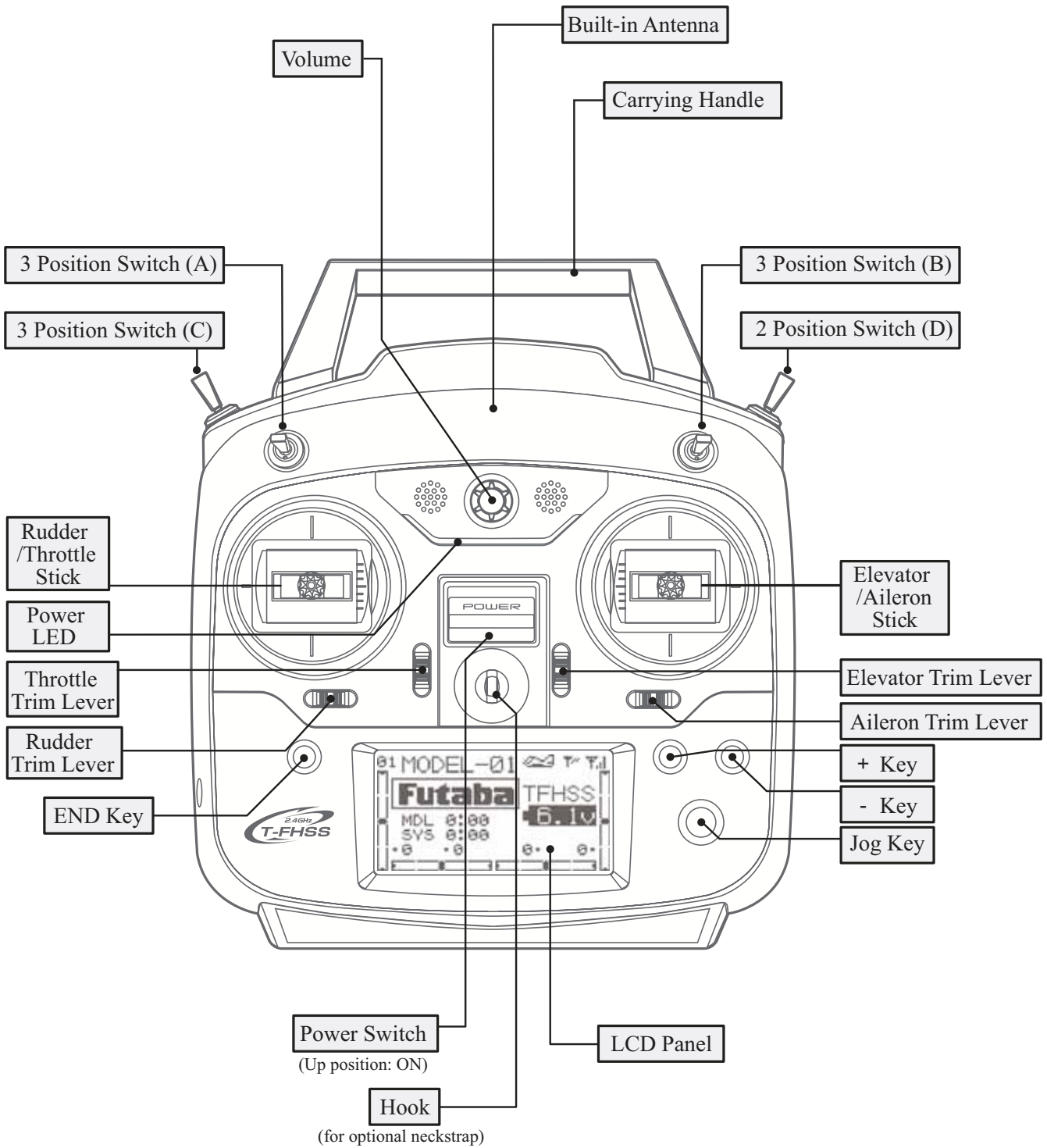
*The Futaba T-FHSS Air system cannot be used with Futaba S-FHSS/FASST/FASSTest systems. Use it with a T-FHSS Air system transmitter and receiver. The T6K is a T-FHSS Air system, but can also be used with an S-FHSS receiver by switching to S-FHSS. However, in this case the telemetry system cannot be used.

*The T-FHSS Air system and T-FHSS surface system are different. The T6K cannot be used with the R304SB, R304SB-E or T-FHSS surface system receivers.

The following additional accessories are available from your dealer. Refer to a Futaba catalog for more information:

- HT5F1800B Transmitter battery pack - the (1800mAh) transmitter NiMH battery pack may be easily exchanged with a fresh one to provide enough capacity for extended flying sessions.
- FT2F2100BV2 Transmitter LiFe battery pack can also be used. However, charge with the charger only for LiFe.
- Trainer cord - the optional training cord may be used to help a beginning pilot learn to fly easily by placing the instructor on a separate transmitter. Note that the T6K transmitter may be connected to another T6K system, as well as to any other models of Futaba transmitters. The T6K transmitter uses one of the three cord plug types according to the transmitter connected. (Refer to the description at the TRAINER function instructions). The part number of this cord is: FUTM4405.
- Servos - there are various kinds of servos. Please choose the Futaba servos best suited for the model and purpose you are using them for. If you utilize a S.BUS system, you should choose a S.BUS servo.
- Telemetry sensor - please purchase an optional sensor, in order to utilize bidirectional communication system and to acquire the information from a model high up in the sky.
[Temperature sensor : SBS-01T/TE] [Altitude sensor : SBS-01A] [RPM sensor magnet type : SBS-01RM][RPM sensor optical type : SBS-01RO] [RPM sensor brushless motor type : SBS-01RB]
- Neckstrap - a neckstrap can be connected to your T6K system to make it easier to handle and improve your flying precision since your hands won't need to support the transmitter's weight.
- Y-harnesses, servo extensions, hub,etc - Genuine Futaba extensions and Y-harnesses, including a heavy-duty version with heavier wire, are available to aid in your larger model and other installations.
- Gyros - a variety of genuine Futaba gyros is available for your aircraft or helicopter needs.
- Receivers - various models of Futaba receivers may be purchased for use in other models. (Receivers for T-FHSS Air, S-FHSS types are available.)

TRANSMITTER CONTROLS - T6K

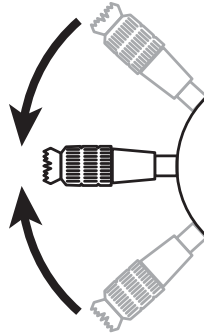


Before use

Throttle stick warning

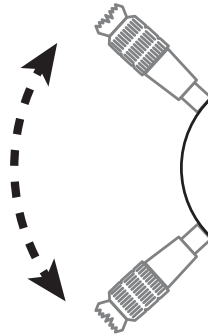
Self neutral type (Multicopter/Robot specification)

A throttle stick returns neutrally by a spring.



Ratchet type (General transmitter)

A throttle stick doesn't return neutrally.



Throttle stick :
Motor or engine
power is controlled.

⚠ WARNING

You cannot use the throttle stick of self-neutral type for RC airplane, RC helicopter, and certain multi-copter.

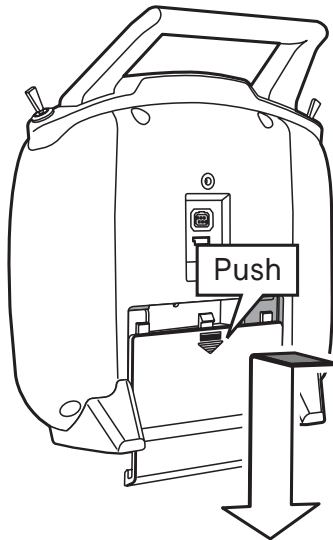
It's very dangerous if Engine / Motor becomes middle-speed by self-return.

It's necessary to change the stick to the ratchet type if using it for RC airplane and RC helicopter.

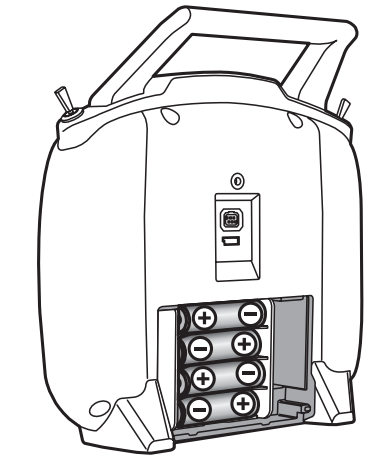
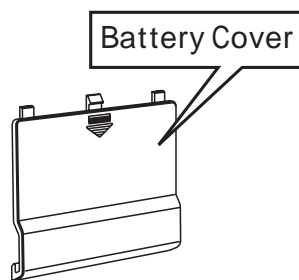
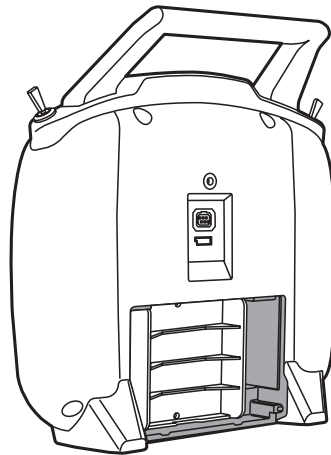
INSTALLATION AND REMOVAL OF THE T6K BATTERY

The T6K transmitter is designed to work with either four (4) AA alkaline dry cell batteries, or HT5F1800B battery pack, both available separately. The transmitter batteries used are a matter of personal preference. AA Alkaline batteries are available at any local hobby shop, grocery store, etc. A battery pack will need to be purchased from a hobby shop.

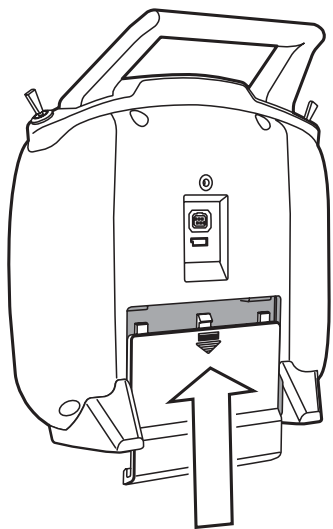
Battery Replacement Method



Slide the battery cover on the transmitter in the direction of the arrow in the figure.



Load the new AA size batteries. Pay very close attention to the polarity markings and reinsert accordingly.



Slide the battery cover back onto the case.

Check:

Turn the power switch on the transmitter to the ON position. Check the battery voltage display on the LCD screen. If the voltage is low, check the batteries for insufficient contact in the case or incorrect battery polarity.

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.

Before use

⚠ CAUTION

! Always be sure you reinsert the batteries in the correct polarity order. If the batteries are loaded incorrectly, the transmitter may be damaged.

! When the transmitter will not be used for any short or long period of time, always remove the batteries. If the batteries do happen to leak, clean the battery case and contacts thoroughly. Make sure the contacts are free of corrosion.

When Using The Optional Battery HT5F1800B

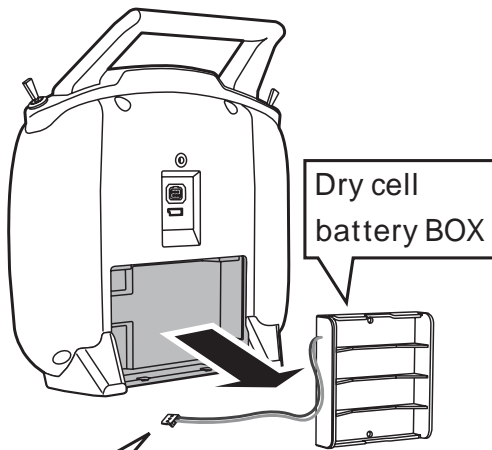
When using an optional rechargeable battery, replace the battery as described below.

-Always use the optional HT5F1800B rechargeable battery.

-The type of power source used must be set by system setting.

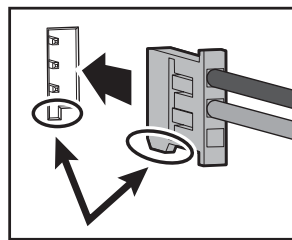
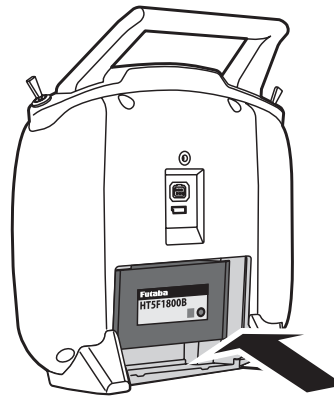
-When the transmitter will not be used for a long time, remove the battery.

Before use

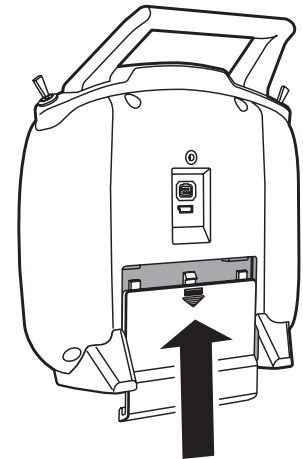


Disconnect the connector

Refer to the previous description and remove the transmitter battery cover. After removing the dry cell battery box from the transmitter, disconnect the connector.



Connect the battery connector.



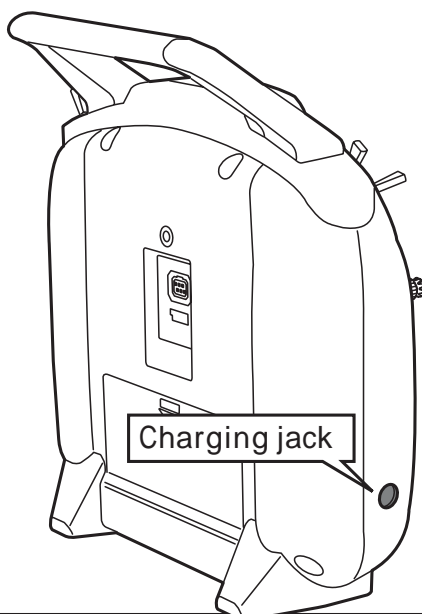
CAUTION



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 the Optional Battery HT5F1800B



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.

NiMH battery HT5F1800B
(not included)



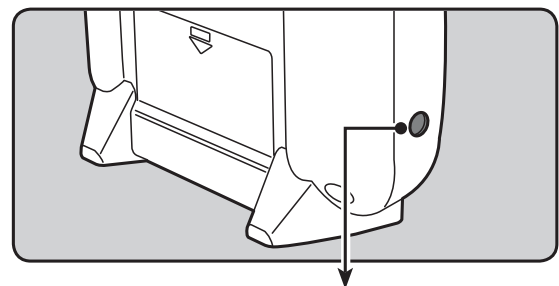
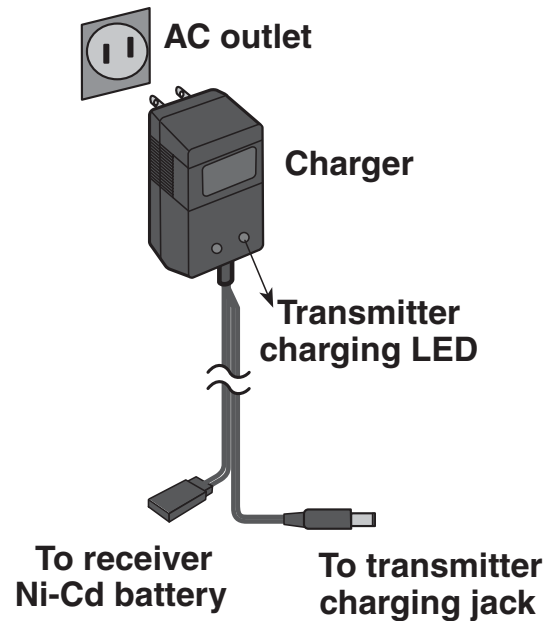
The charging time when charging the HT5F1800B battery with the optional special charger is approximately 15 hours. However, when the battery has not been used for some time, repeat charging 2 or 3 times to activate the battery.

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.

CAUTION

- ⊘ Never try to recharge a dry cell battery.
The transmitter may be damaged or the battery electrolyte may leak or the battery may break.
- ⓘ Insert the batteries in the correct polarity.
If the polarity is incorrect, the transmitter may be damaged.
- ⊘ When the transmitter is not in use, remove the batteries.
If the battery electrolyte leaks, wipe off the case and contacts.
- ⊘ Do not use commercial AA size NiCd and NiMH batteries.
Quick charging may cause the battery contacts to overheat and damage the battery holder.



**Charging jack
Cannot be used for
charge of LiFe.**

Before use

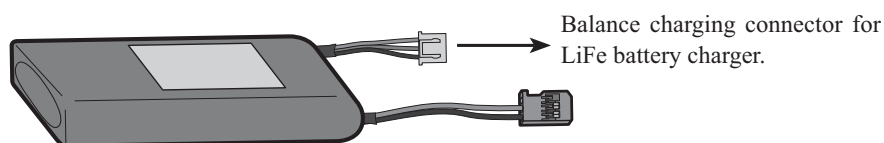
Charging A LiFe Battery

(Example: When using the FT2F1700BV2/2100BV2 with the special charger)

- 1** Remove the battery cover.
- 2** Disconnect the battery from the T6K.
- 3** Balance charging cannot be done through the transmitter, you must remove the LiFe battery to do this charge.

Charge the optional FT2F1700BV2/2100BV2 (LiFe) battery with the special charger in accordance with the instruction manual supplied.

When the 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.

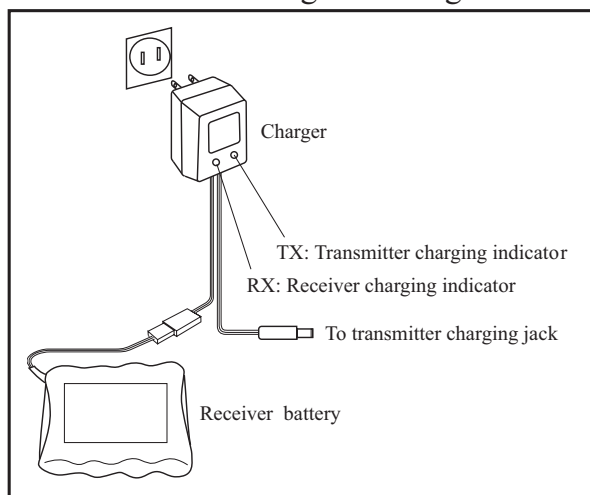


**LiFe battery is removed
from transmitter.**

CHARGING THE BATTERIES (When the rechargeable battery option is used)

Charging Your System's Batteries

1. Connect the transmitter charging jack and batteries to the transmitter and receiver connectors of the charger.
2. Plug the charger into a wall socket.
3. Check that the charger LED lights.



According to the description of the battery to be used and its exclusive charger, please use it after carrying out full charge.

We recommend charging the batteries with the charger supplied with your system. Note that the use of a fast charger may damage the batteries by overheating and dramatically reduce their lifetime.

When HT5F1800B is chosen, HBC-3A (4) is recommended.

When charging FT2F2100BV2, please make sure to remove the battery from the system to charge it. Charger for this battery is recommended to use LBC-4E5.

Before use

Battery Care and Precautions

Below you will find some general rules and guidelines which should be adhered to when charging transmitter and/or receiver battery packs. These are included to serve only as general guidelines, and are not intended to replace or supersede the information provided by the battery and/or charger manufacturer. For complete information, please refer to the instructions that are included with the battery pack(s) and/or chargers that accompany the products purchased.

- Do not allow children to charge battery packs without adult supervision.
- Do not charge battery packs that have been damaged in any way. We strongly suggest frequent inspection of the battery packs to ensure that no damage has occurred.
- Do not allow batteries to overheat! If overheated, disconnect the battery from the charger immediately and allow to cool.
- Do not mix cells- all cells should be of the same material, configuration, etc.
- Do not deep cycle NiMH batteries as permanent damage could result.
- Never charge batteries on a surface that may become hot, or may be impacted by the heat.
- Immediately end the charging procedure if either the batteries or charger itself become overly hot.
- NiMH cells do not exhibit the “memory effect” like NiCd cells, so little cycling is needed. Store NiMH packs with some voltage remaining on the cells (refer to battery supplier).
- NiMH cells have a self-discharge rate of approximately 20-25% (compared to 15% for NiCd batteries). It is important to recharge NiMH batteries immediately prior to use.
- Never connect the battery in reverse. Reverse connection will cause the battery to overheat or will damage the inside of the charger.
- Do not add an additional charge after charging.
- Never charge with a current exceeding the nominal capacity (1C) of the rechargeable battery.
- If a battery is charged with a current exceeding 1C, the battery will overheat and deteriorate.
- Do not connect two battery packs or more to one output terminal.
- Avoid extremely cold and hot places and the direct sunlight when you charge batteries.
- It is recommended to perform charging within the 10 ~ 30°C (50-86°F) range. Otherwise, it may cause abnormal charging and overheat.

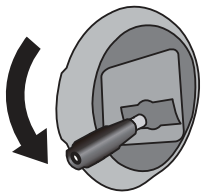
How to turn transmitter power ON/OFF

When turning on the power, the T6K transmitter will begin emitting RF automatically after it confirms the surrounding RF conditions. The status of the transmitter is displayed by LED at the upper part of the front of a T6K.

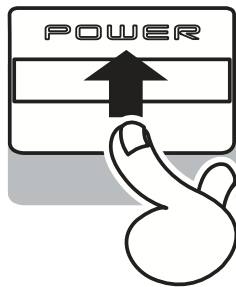
*If THR stick is high, the next WARNING screen will come out. Moreover, if a power supply is switched on while SW set by WARNING setup has been ON, it will be indicated by WARNING. (In the case of Multicopter mode, throttle position alarm does not occur.)

Power ON

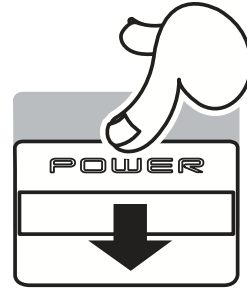
Throttle Stick Slow



Power Switch



Power OFF

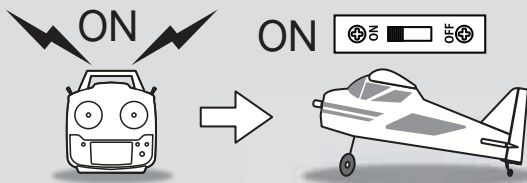


Power Switch

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

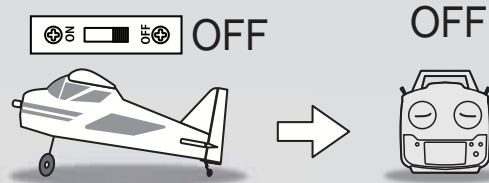
Turning on the power switches

1. Turn on the transmitter power switch.
2. Turn on the receiver or speed control power switch.



Turning off the power switches

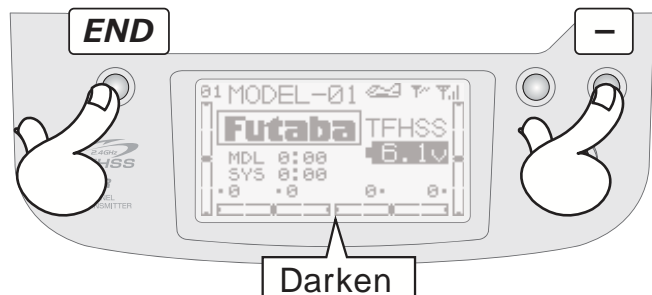
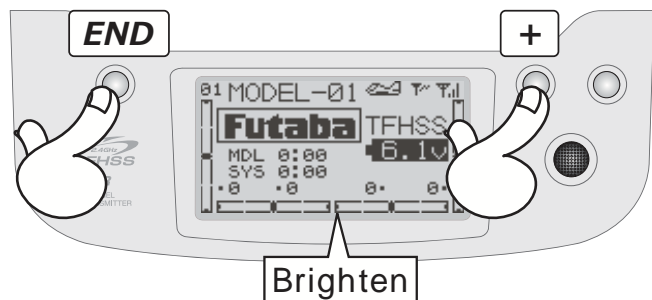
- Always be sure the motor/engine is stopped.
- 1. Turn off the receiver or speed control power switch.
- 2. Then turn off the transmitter power switch.



ADJUSTING DISPLAY CONTRAST

To adjust the display contrast, from the home menu press and hold the **END BUTTON**. Push the **+ - KEY** while still holding the **END BUTTON**:

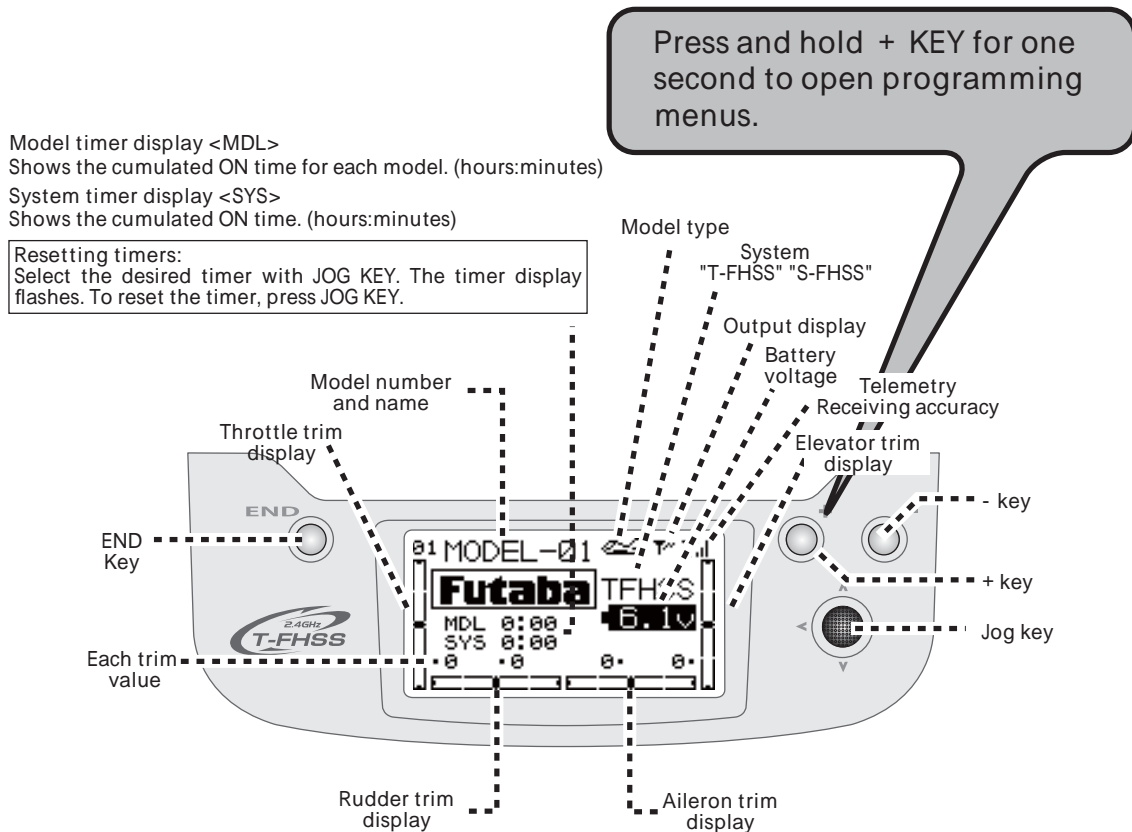
- + **KEY** to brighten
- **KEY** to darken the display



TRANSMITTER DISPLAYS & BUTTONS

When you first turn on your transmitter, a confirmation double beep sounds, and the screen shown below appears. Before flying, or even starting the engine, be sure that the model type and name appearing on the display matches the model that you are about to fly! If you are in the wrong model memory, servos may be reversed, and travels and trims will be wrong, potentially leading to a crash.

Before use



Edit buttons and Start-up Screen (appears when system is first turned on):

JOG KEY:

Control **JOG KEY** to scroll up/scroll down/scroll left/scroll right and select the option to edit within a function. When the menu has multiple pages, move the **JOG KEY** horizontally (left or right).

Press **JOG KEY** to select the actual function you wish to edit from the menu.

Press **JOG KEY** and hold one second to confirm major decisions, such as the decision to: select a different model from memory, copy one model memory over another, trim reset, store channel position in FailSafe, change model type, reset entire model, condition of a helicopter setup is changed. An on screen inquiry will ask if you are sure.

Press **JOG KEY** again to accept the change.

+ KEY:

Press and hold **+ KEY** for one second to open programming menus. It is used for changing a setup, or a numerical increase. Changing the menus pages can also be performed.

- KEY:

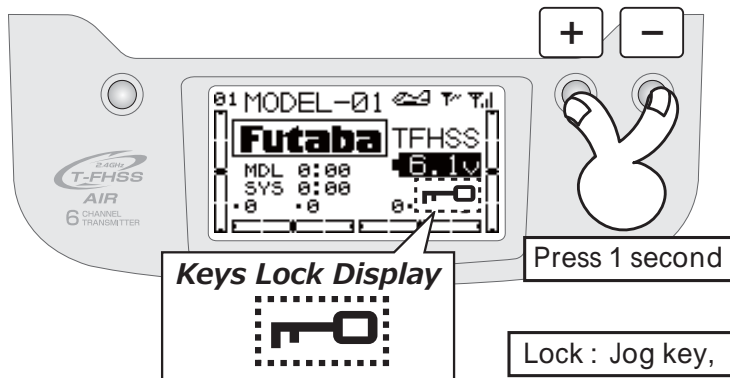
It is used for change of a setup, or reduction of a number. Change of the page of a menu can also be performed.

END KEY:

Press **END KEY** to return to previous screen, close functions back to menus, and close menus to start-up screen.

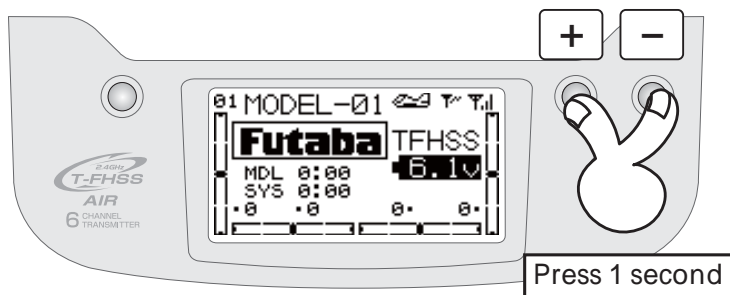
Keys Lock

To prevent the data from being changed by erroneous touching of the keys during flight, a function which makes are keys impossible temporarily.



How to lock

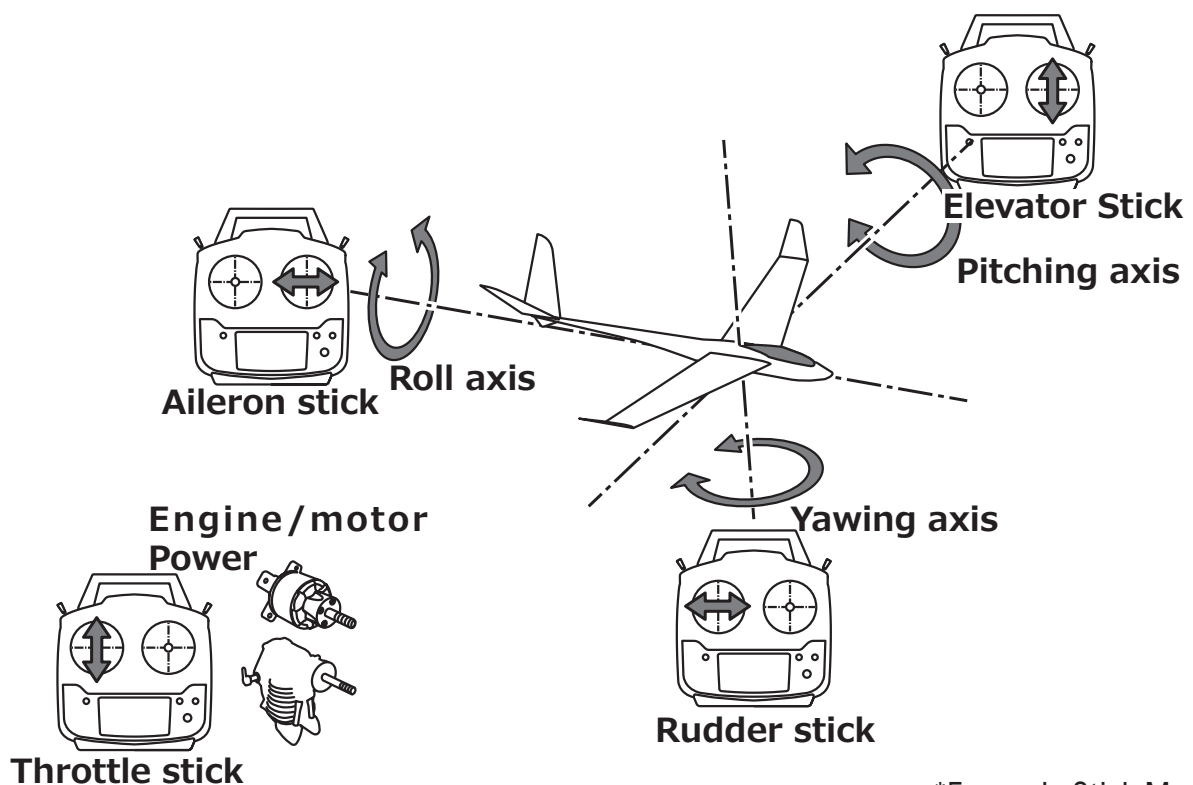
- 1 The home screen is displayed.
- 2 Press the + key and - key simultaneously for about 1 second. "Key mark" is displayed and the keys disabled.



How to unlock

- 1 Press the + key and - key simultaneously for about 1 second in the touch sensor locked state. The keys enabled again.

Stick control



Stick control : Airplane Example

*Example Stick Mode2

A general model example. (There is also a different operational model.)

Before use

Roll axis Control

Right roll
The right aileron is to the up.
The left aileron is in the down.

Aileron stick
↓
To the right

Level flight

Neutral

Left roll
The right aileron is to the down.
The left aileron is in the up.

Aileron stick
↓
To the left

Pitch axis Control

Nose Up

Elevator stick
↓
UP
(moved to the bottom)

Elevator is a up.

Level flight

Neutral

Nose Down

Elevator stick
↓
DOWN
(moved to the top)

Elevator is a down.

Yaw axis Control

Nose Right

Rudder stick
↓
To the right

A rudder is to the right.

Straight

Neutral

Nose Left

Rudder stick
↓
To the left

A rudder is to the left.

Throttle Control

Hight

Throttle stick
↓
HIGHT
(moved to the top)

Middle

Throttle stick
↓
MIDDLE
(neutral)

Slow

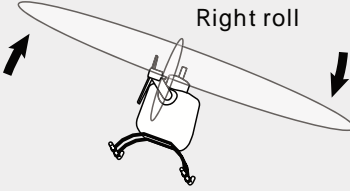
Throttle stick
↓
SLOW
(moved to the bottom)

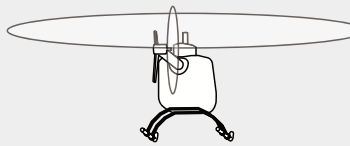
Stick control : Helicopter Example

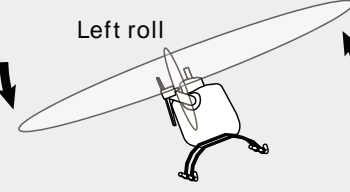
*Example Stick Mode2

A general model example. (There is also a different operational model.)

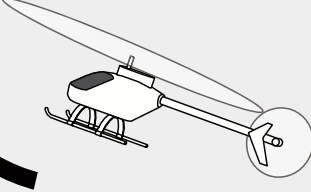
Roll axis Control

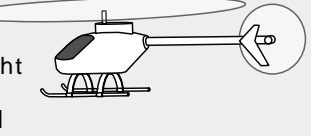
Right roll

 Aileron stick
 ↓
 To the right

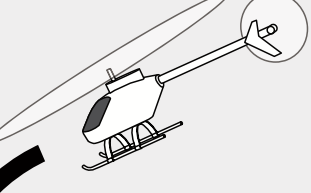
Level flight

 Neutral

Left roll

 Aileron stick
 ↓
 To the left

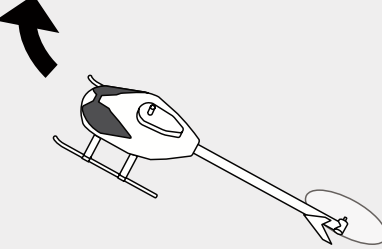
Pitch axis Control

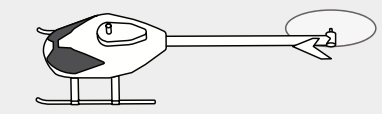
Nose Up

 Elevator stick
 ↓
 UP
 (moved to the bottom)

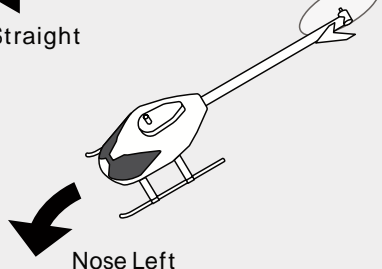
Level flight

 Neutral

Nose Down

 Elevator stick
 ↓
 DOWN
 (moved to the top)

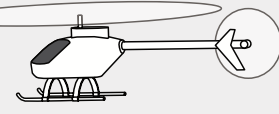
Yaw axis Control

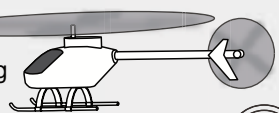
Nose Right

 Rudder stick
 ↓
 To the right


Straight

 Neutral

Nose Left

 Rudder stick
 ↓
 To the left

Throttle /Pitch Control

Rise

 Pitch Up
 High
 Throttle stick
 ↓
 HIGH
 (moved to the top)

Hovering

 Throttle stick
 ↓
 MIDDLE
 (neutral)

Descent

 Pitch Down
 Slow
 Throttle stick
 ↓
 SLOW
 (moved to the bottom)

Before use

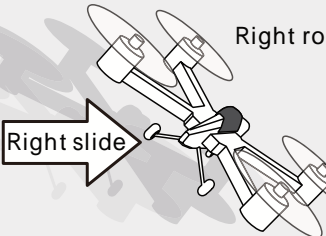
Stick control : Multicopter Example


*Example Stick Mode2

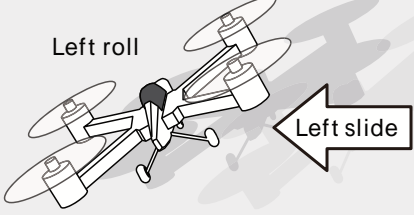
A general model example. (There is also a different operational model.)

Before use

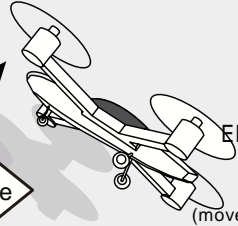
Roll axis Control


Right roll
 Right slide →  Aileron stick ↓ To the right

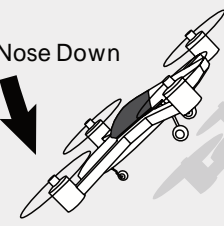
Hovering Level flight
 Neutral

Left roll
 ← Left slide Aileron stick ↓ To the left

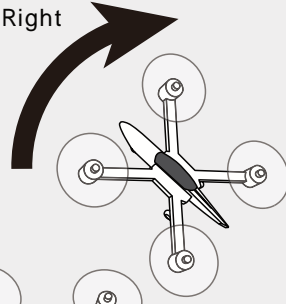
Pitch axis Control

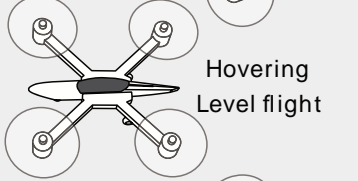
Nose Up
 Back slide →  Elevator stick ↓ UP (moved to the bottom)

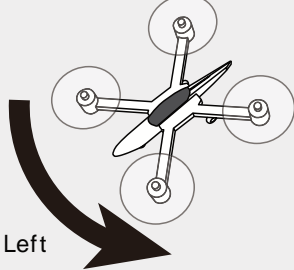
Hovering Level flight
 Neutral

Nose Down
 ← Front slide Elevator stick ↓ DOWN (moved to the top)


Yaw axis Control


Nose Right
 Rudder stick ↓ To the right

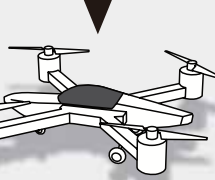
Hovering Level flight
 Neutral

Nose Left
 Rudder stick ↓ To the left

Throttle Control

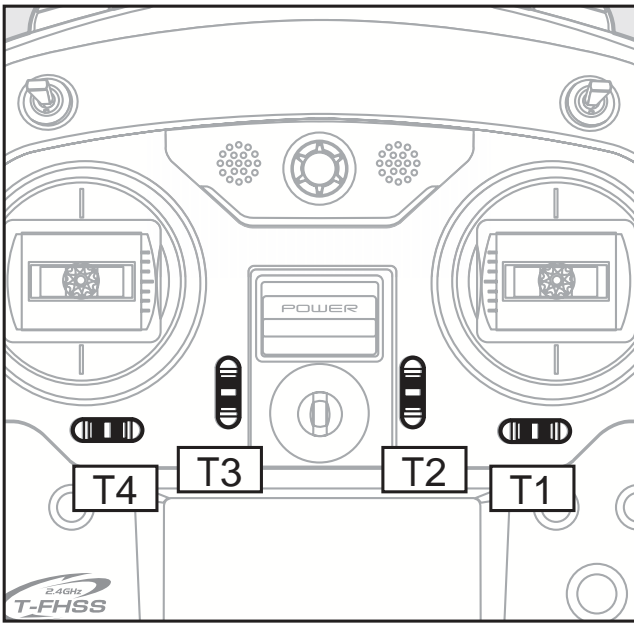
Rise
 ↑ Throttle stick ↓ HIGH (moved to the top)

Hovering
 Throttle stick ↓ MIDDLE (neutral)

Descent
 ↓ Throttle stick ↓ SLOW (moved to the bottom)

Stop

Digital Trims T1-T4



This transmitter is equipped with 4 digital trims. Each time you press a trim button, the trim position moves one step. If you continue pressing it, the trim position starts to move faster. In addition, when the trim position returns to the center, the tone will change. You can always monitor trim positions by referencing the LCD screen.

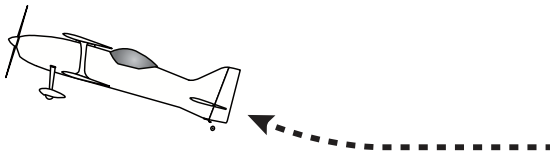
*You can select the trim step amount and the display unit on the home screen on the T1-T4 setting screen within the linkage menu.

Note: The trim positions you have set will be stored in the non-volatile memory and will remain there.

Before use

Digital trim operational example

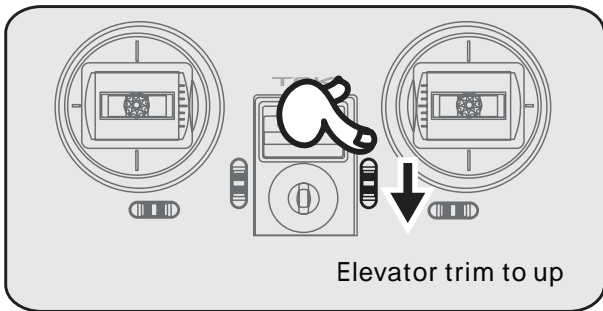
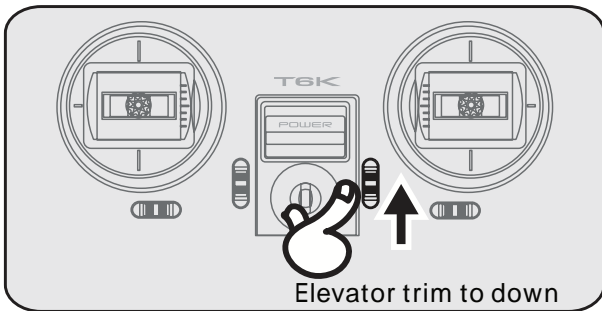
*Example Stick Mode2



When an airplane nose up though an elevator stick is neutral.

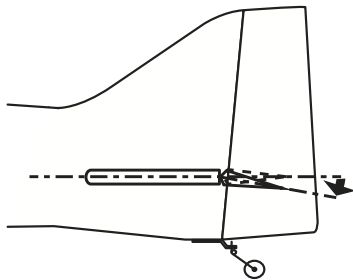


When an airplane nose down though an elevator stick is neutral.



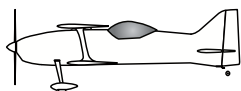
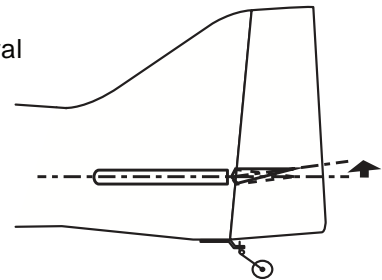
Elevator neutral

Down



Elevator neutral

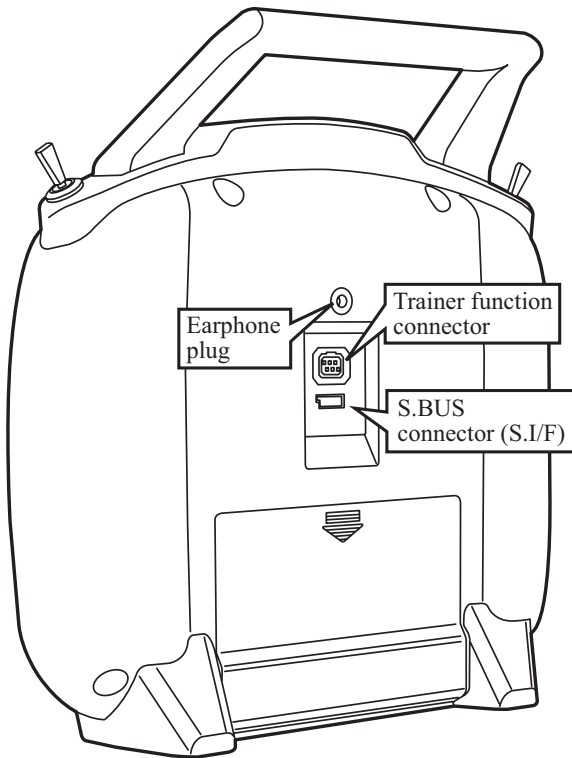
Up



It's adjusted so that it may fly levelly.

CONNECTOR / PLUG

Before use



Earphone plug

The telemetry data can be listened to by plugging in commercial 3.5mm earphones. (See the telemetry item for the detailed setting.)

Trainer function connector

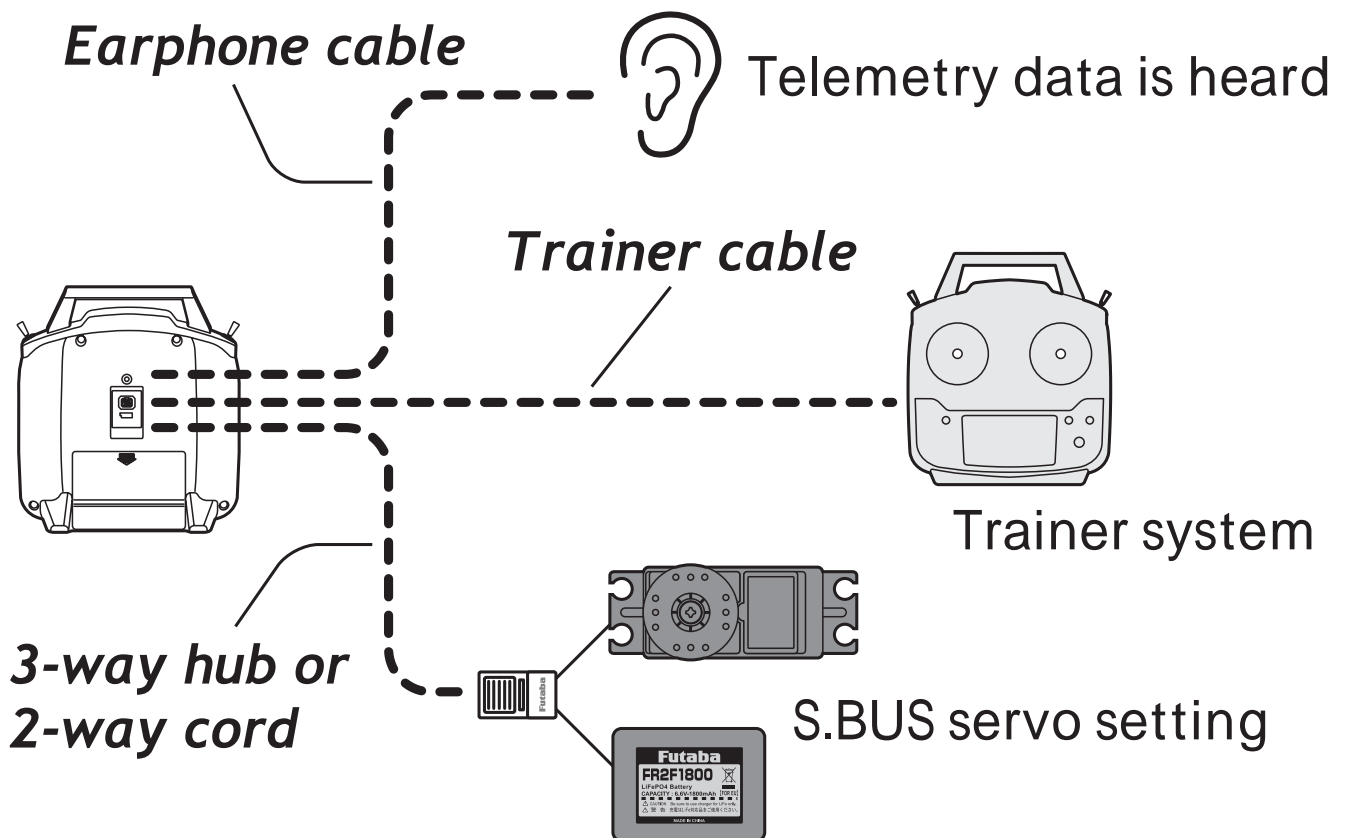
When you use the trainer function, connect the optional trainer cable between the transmitters for teacher and student.

*You can set the trainer function on the Trainer Function screen.

S.BUS connector (S.I/F)

When setting an S.BUS servo and telemetry sensor, connect them both here.

(Supply power by 3-way hub or 2-way cord.)



SWITCH ASSIGNMENT TABLE

- The factory default functions activated by the switches and VR for an 6K transmitter are shown below.
- Most 6K functions may be reassigned to non-default positions quickly and easily.
- Basic control assignments of channels 5-6 are quickly adjustable in AUX-CH.
- Note that most functions need to be activated in the programming to operate.

AIRPLANE

Switch/VR	1AIL	1AIL1FLP	2AIL	2AIL1FLP	ELEVON
Switch A	- - -	- - -	- - -	- - -	- - -
Switch B	CH6	CH6	- - -	- - -	CH6
Switch C	CH5	CH5	CH5	CH5	CH5
Switch D	- - -	- - -	- - -	- - -	- - -
VR	- - -	- - -	- - -	- - -	- - -

GLIDER

Switch/VR	1AIL	1AIL1FLP	2AIL	2AIL1FLP	2AIL2FLP
Switch A	- - -	- - -	- - -	- - -	- - -
Switch B	CH6	- - -	- - -	- - -	- - -
Switch C	- - -	- - -	- - -	- - -	- - -
Switch D	- - -	- - -	- - -	- - -	- - -
VR	CH5	Flap	CH5	Flap	Flap

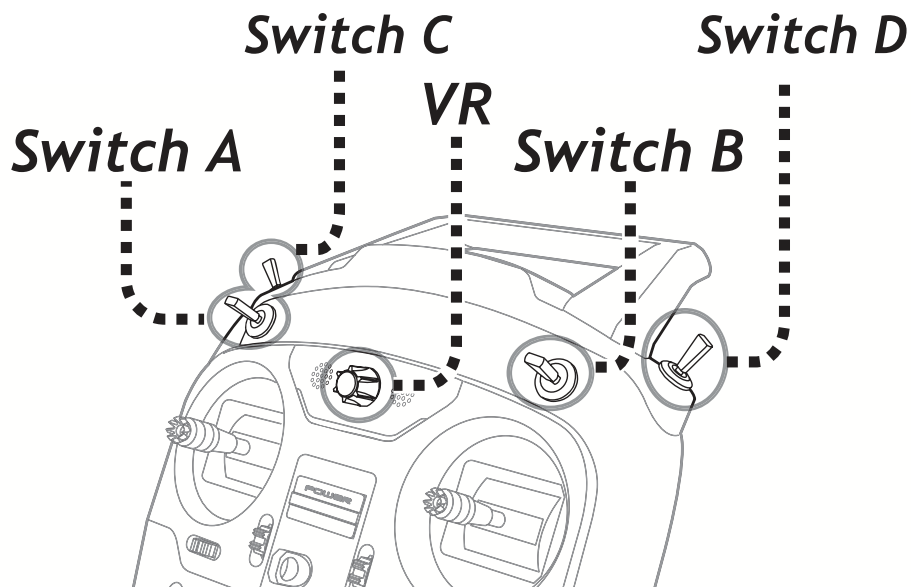
HELICOPTER

Switch/VR	HELICOPTER
Switch A	- - -
Switch B	CH5
Switch C	IDLE-UP1/2
Switch D	THR-HOLD
VR	- - -

*When idle-up 1/2 and a throttle hold were used.

MULTI COPT

Switch/VR	MULTI COPT
Switch A	- - -
Switch B	- - -
Switch C	- - -
Switch D	CH5
VR	- - -

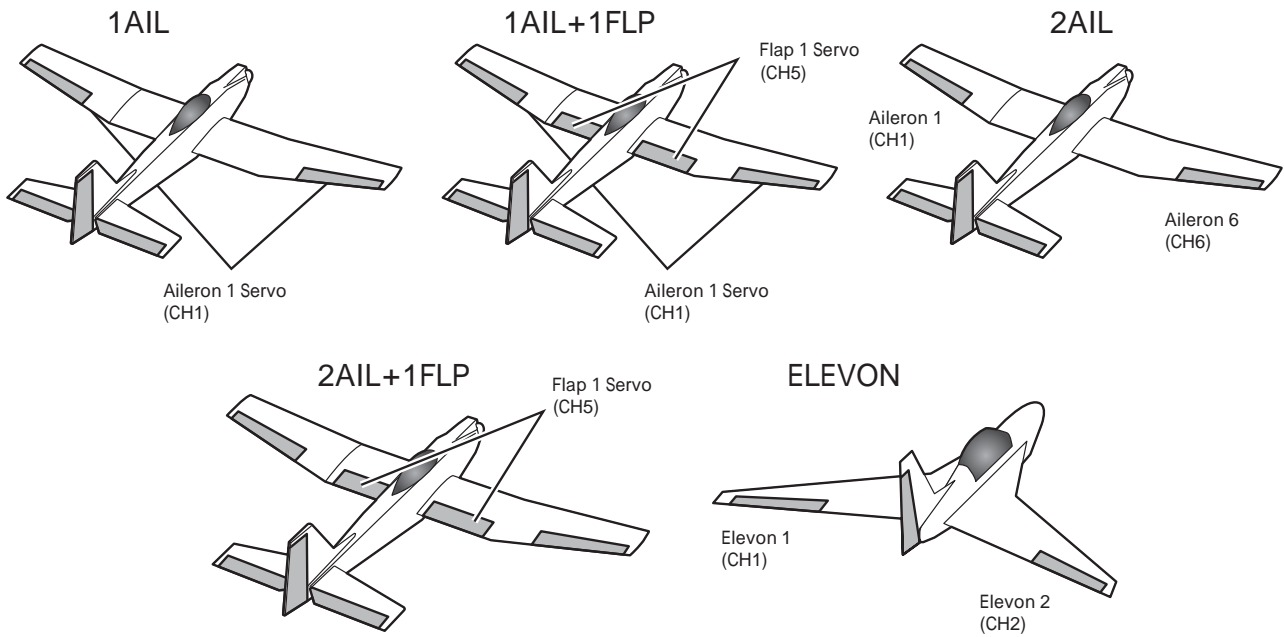


RECEIVER AND SERVO CONNECTIONS

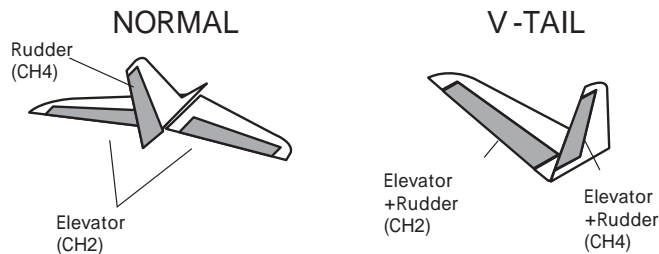
Aircraft

CH	1AIL 1Aileron	1AIL1FLP 1Aileron 1 Flap	2AIL 2Aileron	2AIL1FLP 2Aileron 1 Flap	ELEVON
1	Aileron	Aileron	Aileron1	Aileron	Elevon1
2	Elevator	Elevator	Elevator	Elevator	Elevon2
3	Throttle	Throttle	Throttle	Throttle	Throttle
4	Rudder	Rudder	Rudder	Rudder	Rudder
5	- - -	Flap	- - -	Flap	Flap
6	- - -	- - -	Aileron6	Aileron6	- - -

(WING TYPE)



(TAIL TYPE)

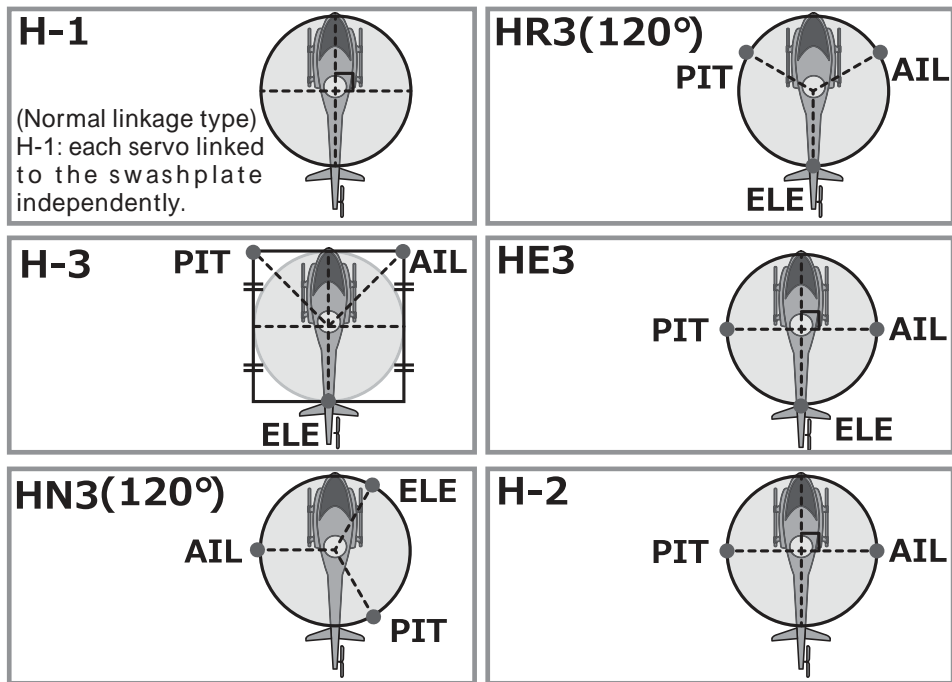


Before use

Helicopter

(Swash Type)

CH	HELICOPTER
1	Aileron (cyclic roll)
2	Elevator (cyclic roll)
3	Throttle
4	Rudder
5	Gyro
6	Pitch (collective pitch)



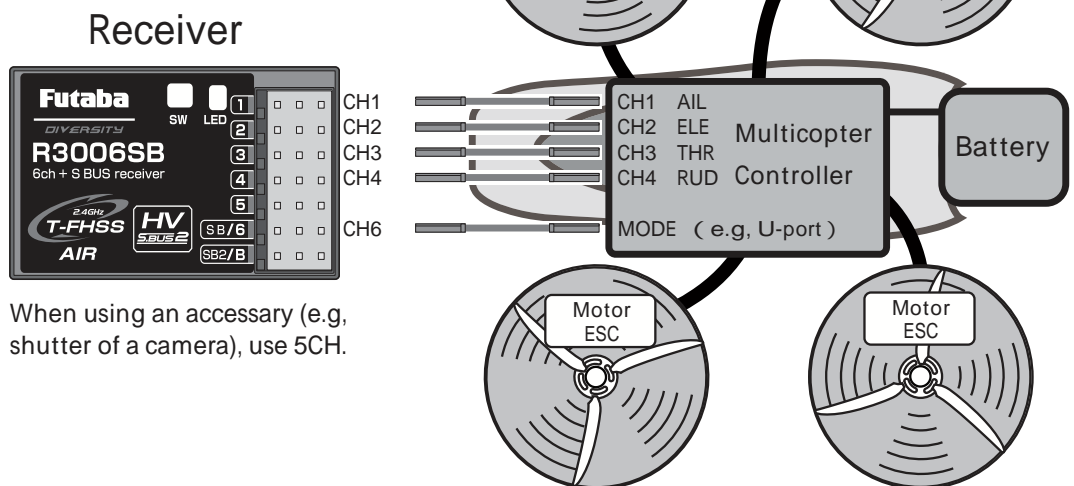
AIL : Aileron Servo
ELE : Elevator Servo
PIT : Pitch Servo

Before use

Multicopter

CH	MULTICOPTER
1	Aileron
2	Elevator
3	Throttle
4	Rudder
5	AUX
6	Mode for Multicopter controller

[Connection example]

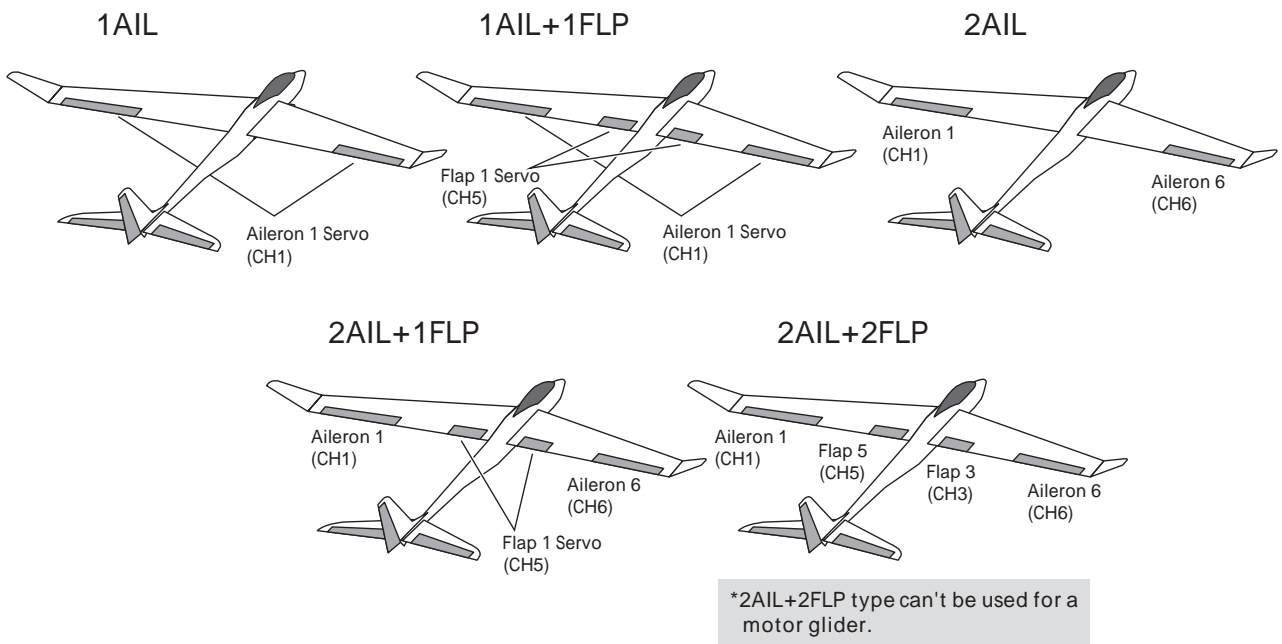


When using an accessory (e.g, shutter of a camera), use 5CH.

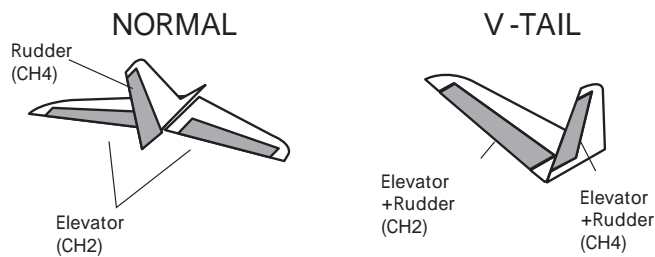
Glider

CH	1AIL 1Aileron	1A+1F 1Aileron 1 Flap	2AIL 2Aileron	2A+1F 2Aileron 1 Flap	2A+2F 2Aileron 2Flap
1	Aileron	Aileron	Aileron1	Aileron1	Aileron1
2	Elevator	Elevator	Elevator	Elevator	Elevator
3	Motor	Motor	Motor	Motor	Flap3
4	Rudder	Rudder	Rudder	Rudder	Rudder
5	- - -	Flap	- - -	Flap	Flap5
6	- - -	- - -	Aileron6	Aileron6	Aileron6

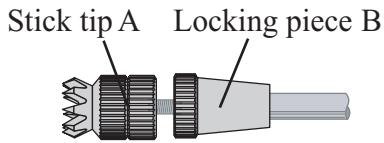
(WING TYPE)



(TAIL TYPE)



ADJUSTING THE LENGTH OF THE CONTROL STICKS

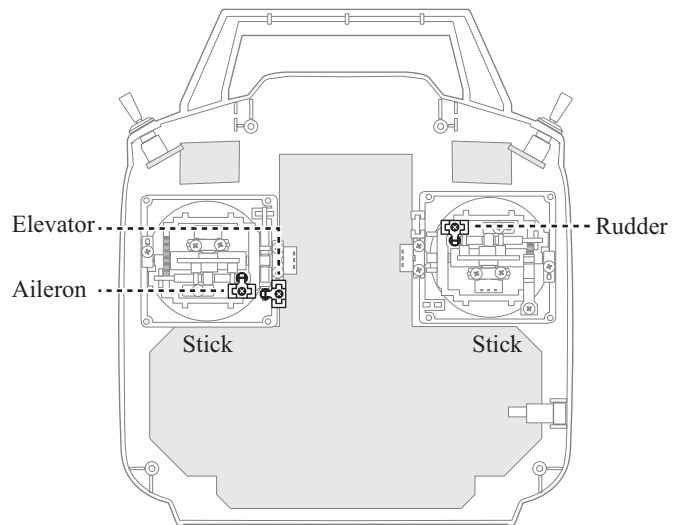
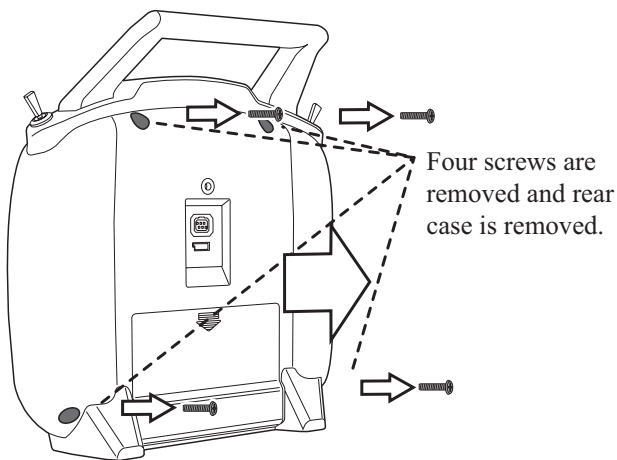


You may change the length of the control sticks to make your transmitter more comfortable to hold and operate. To lengthen or shorten your transmitter's sticks, first unlock the stick tip by holding locking piece B and turning stick tip A counterclockwise. Next, move the locking piece B up or down (to lengthen or shorten). When the length feels comfortable, lock the position by turning locking piece B counterclockwise.

STICK LEVER TENSION ADJUSTMENT

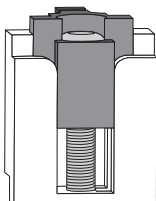
You may adjust the tension of your sticks to provide the feel that you prefer for flying. To adjust your springs, you'll have to remove the rear case of the transmitter. First, remove the battery cover on the rear of the transmitter. Next, unplug the battery wire, and remove the battery from the transmitter. Next, using a screwdriver, remove the four screws that hold the transmitter's rear cover in position, and put them in a safe place. Gently ease off the transmitter's rear cover. Now you'll see the view shown in the figure above.

Using a small Phillips screwdriver, rotate the adjusting screw for each stick for the desired spring tension. The tension increases when the adjusting screw is turned clockwise. When you are satisfied with the spring tensions, reattach the transmitter's rear cover. When the cover is properly in place, reinstall and tighten the four screws. Reinstall the battery and cover.



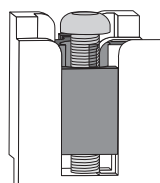
Mode 2 transmitter with rear case removed.

+ screw is clockwise.

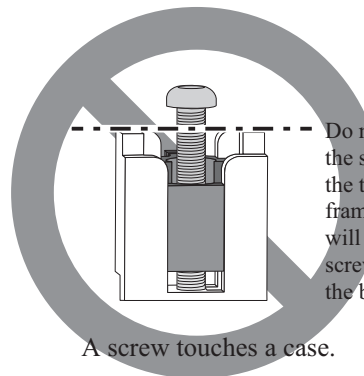


Stick tension maximum

+ screw is counter-clockwise.



Stick tension minimum



Do not loosen the screw past the top of the frame, as this will cause the screw to rub on the back case.

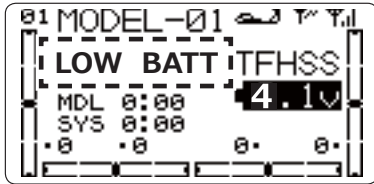
A screw touches a case.

WARNING & ERROR DISPLAYS

An alarm or error indication may appear on the display of your transmitter for a number of reasons, including when the transmitter power switch is turned on, when the battery voltage is low, and several others. Each display has a unique sound associated with it, as described below.

LOW BATTERY ERROR: Warning sound: Continuous beep until transmitter is powered off.

The **LOW BATTERY** warning is displayed when the transmitter battery voltage drops below 4.1V.



Land your model as soon as possible before loss of control due to a dead battery.

MIXING ALARM WARNING: Warning sound: Several beeps repeated until problem resolved or overridden.

** WARNING **

The **MIXING ALARM** warning is displayed to ALARM you whenever you turn on the transmitter with any of the mixing switches active. This warning will disappear when the offending switch or control is deactivated. Switches for which warnings will be issued at power-up are listed below. Throttle cut, idle-down, airbrake, motor SW, flight MD, throttle-stick and condition. If turning a switch OFF does not stop the mixing warning: The functions described previously probably use the same switch and the OFF direction setting is reversed. In short, one of the mixings described above is not in the OFF state. In this case, reset the warning display by pressing both + / - **KEY** at the same time. Next, change one of the switch settings of the duplicated mixings.

*If "ESC mode" is chosen by "THR.CUT", a THR CUT will not start warning.

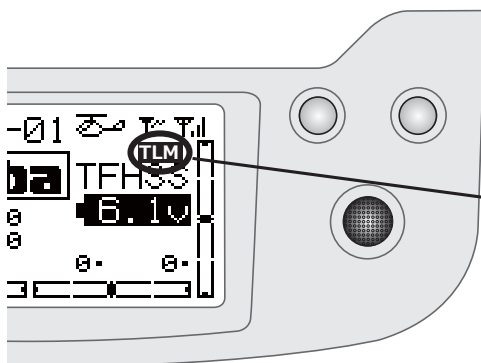
BACKUP ERROR: Warning sound: Several beeps (repeated continuously)

The **BACKUP ERROR** warning occurs when the transmitter memory is lost for any reason. If this occurs, all of the data will be reset when the power is turned on again.

<< BACK UP ERROR >>
MEMORY INITIALIZE
██████████ 49%

Do not fly when this message is displayed: all programming has been erased and is not available. Return your transmitter to Futaba for service.

A setup of warning of each sensor can be performed in **TELEMETRY**.



"TLM" mark is shown about warning of TELEMETRY.

LINK PROCEDURE (T6K/R3006SB)

Each transmitter has an individually assigned, unique ID code. In order to start operation, the receiver must be linked with the ID code of the transmitter with which it is being paired. Once the link is made, the ID code is stored in the receiver and no further linking is necessary unless the receiver is to be used with another transmitter. When you purchase additional R3006SB receivers, this procedure is necessary; otherwise the receiver will not work.

Link procedure

1. Place the transmitter and the receiver close to each other within 20 inches (half meter).



2. Turn on the transmitter.
3. Select **[MDL-SEL]** and access the setup screen shown below by press the **jog key**.
4. Use the **jog key** to select **(NO LINK)** or the **ID number** next to LINK in the **[MDL-SEL]** menu.

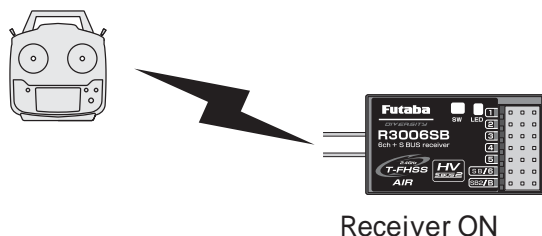
```
MDL SEL 12
SELE 1 MODEL-01
RX  T-FHSS Air
LINK XXXXXXXXX
RES Execute
```

5. Hold down the **jog key** to enter the link mode.
6. A chime from the transmitter notifies the operator that the transmitter has entered the link mode.

"Beep beep beep"

(Enters the link mode for 20 seconds)

In "Link" Mode



7. Immediately **turn on the receiver** power. The receiver will enter the linking state (**LED blinks red**) about 3 seconds after the receiver power is turned on.

8. If the receiver ID is displayed in the transmitter and the LED changed from red blinking to a **steady green light**, linking is complete. (The receiver linking wait state ends in about 3 seconds.)
9. Check system operation. If the transmitter and receiver are not linked, try linking again.

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

*When the linked transmitter power is turned on, communications begins.

*When using 2 receivers, perform the linking operation the same as the 1st receiver. (However, when 2 receivers are used, the telemetry system cannot be used.)

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

⚠ WARNING

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

⊘ Don't perform the linking procedure with motor's main wire connected or with the engine operating as it may result in serious injury.

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

***When telemetry can't be used, try a relink once again.**

RECEIVER NOMENCLATURE

Before using the receiver, be sure to read the precautions listed in the following pages.

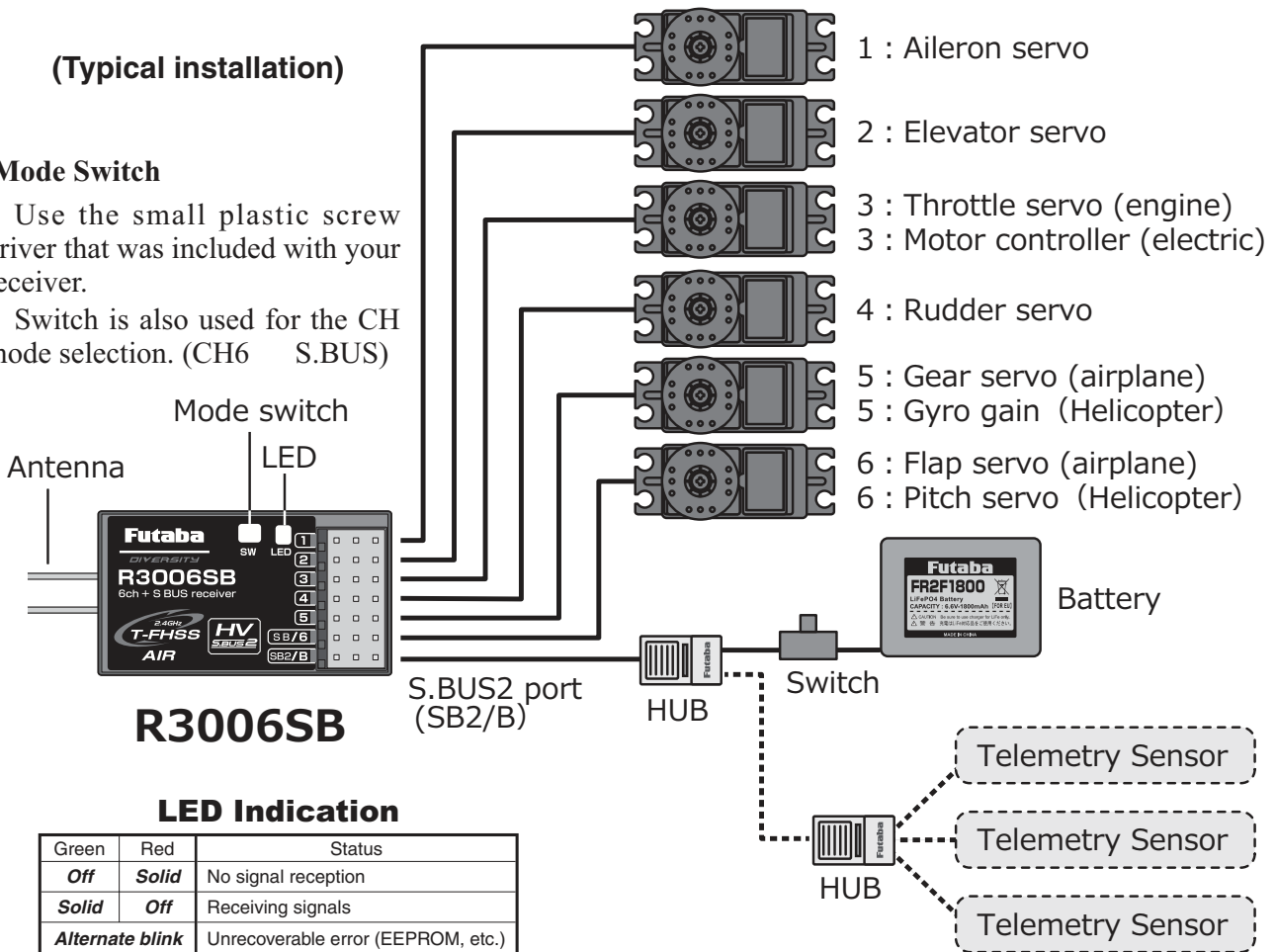
(Typical installation)

Mode Switch

Use the small plastic screw driver that was included with your receiver.

Switch is also used for the CH mode selection. (CH6 S.BUS)

Before use



R3006SB

LED Indication

Green	Red	Status
Off	Solid	No signal reception
Solid	Off	Receiving signals
Alternate blink		Unrecoverable error (EEPROM, etc.)

⚠ DANGER

⊘ Don't connect a connector, as shown in a before figure.

*It will short-circuit, if connected in this way. A short circuit AIRPLANE's the battery terminals may cause abnormal heating, fire and burns.

⊘ Don't connect servo for conventional system to S.BUS2 port.

*Digital servo for conventional system → It does not operate.

*Analog servo → It may cause abnormal heat, fire and burning.

⚠ WARNING

S.BUS2 connectors

⊘ Don't connect an S.BUS servo / gyro to S.BUS2 connector.

⚠ DANGER

Receiver



⊘ Do not insert either a switch or battery in this manner.

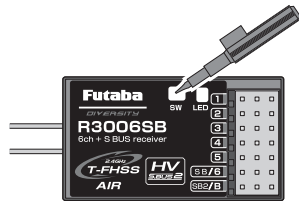
R3006SB CH MODE

The R3006SB receiver is a very versatile unit. It has 6 PWM outputs and S.BUS2 outputs. Additionally the SB/6 outputs can be changed from channels PWM 6 channel to S.BUS.

How to change the R3006SB Channel mode (S.BUS 6CH)

The R3006SB is capable of changing its channel allocations as described in the table below.

- 1 Turn on the receiver. (At this moment, the transmitter should be off.) Then, LED blinks RED in about 3 seconds. Next, wait until it becomes solid RED.
- 2 Press and hold the Mode switch more than 5 seconds.



- 3 Release the button when the LED blinks RED and GREEN simultaneously.
- 4 The receiver is now in the "Operation CH Set" mode. At this moment, the LED indicates current set status through flashing a pattern that corresponds to the CH mode.

*Cannot exit this CH setting mode before the operation mode is fixed.

**See the below table that shows correspondence between "CH mode" and way of flashing LED.

***Default CH mode is "Mode A (6CH)".

- 5 By pressing the Mode switch, the operation CH is switched sequentially as " Mode A" "Mode B" "Mode A"....
- 6 The operation mode will be set by pressing the Mode switch more than 2 seconds at the desired CH mode.
- 7 Release the button when the LED blinks RED and GREEN simultaneously. Then, the operation CH is fixed.
- 6 After confirming the operation CH mode is changed, turn off and back on the receiver power.

*The "Operation CH Set" mode cannot be changed during the receiver communicates to the transmitter.

R3006SB CH Mode table

	Mode A	Mode B
6/SB	6CH	S.BUS
Red LED blink	1 time	2 time

Default CH mode

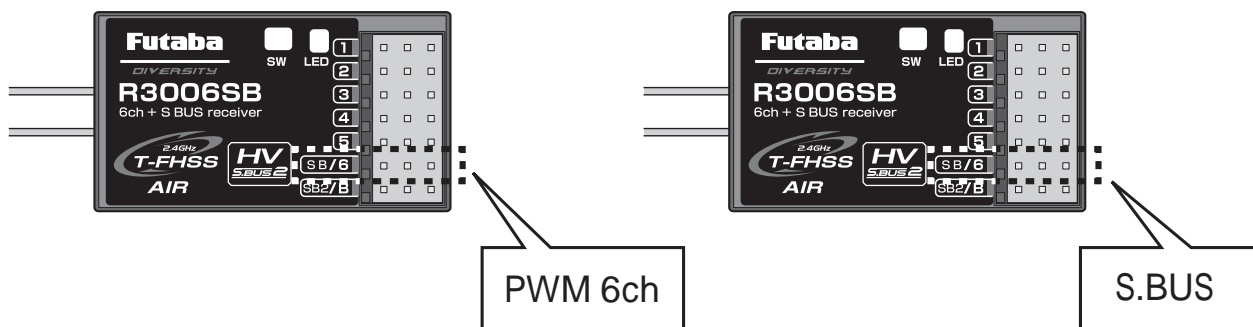
⚠ WARNING

S.BUS2 connectors

- ⊘ Don't connect servo for conventional system to S.BUS port.

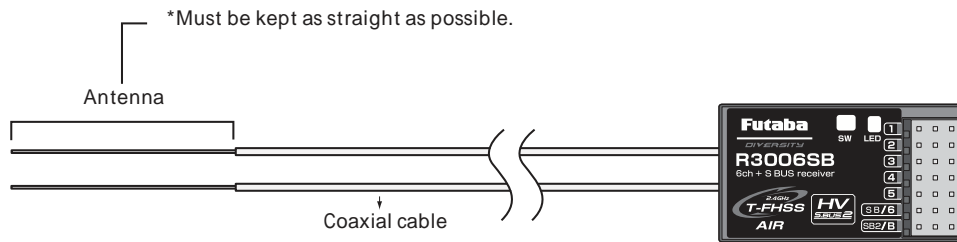
*Digital servo for conventional system → It does not operate.

*Analog servo → It may cause abnormal heat, fire and burning.



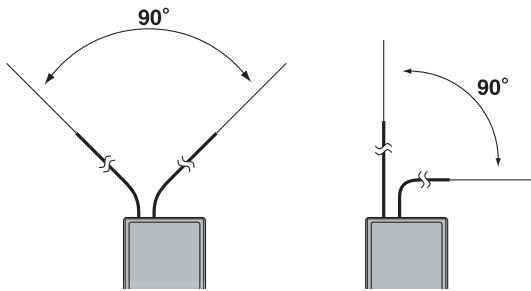
RECEIVER'S ANTENNA INSTALLATION

The R3006SB has two antennas. In order to maximize signal reception and promote safe modeling Futaba has adopted a diversity antenna system. This allows the receiver to obtain RF signals on both antennas and fly problem-free.



To obtain the best results of the diversity function, please refer to the following instructions:

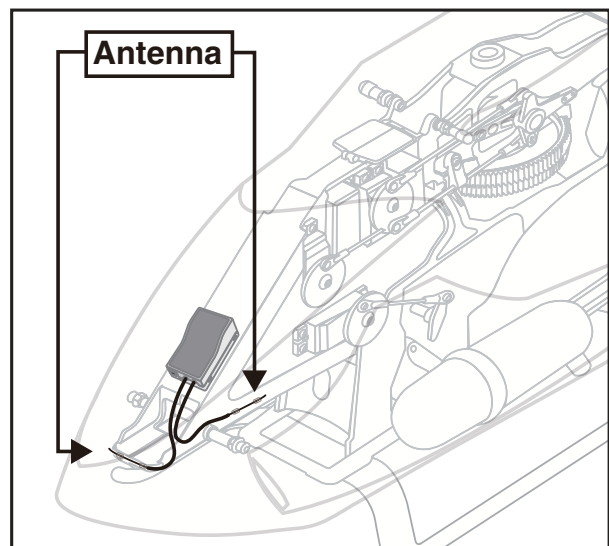
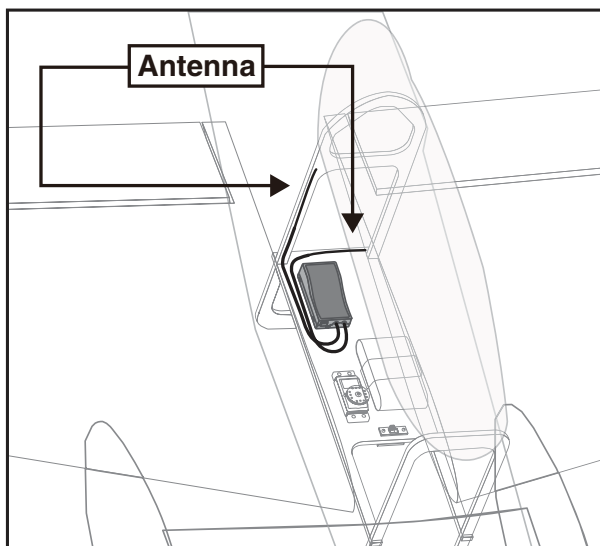
1. The two antennas must be kept as straight as possible. Otherwise it will reduce the effective range.
2. The two antennas should be placed at 90 degrees to each other.



This is not a critical figure, but the most important thing is to keep the antennas away from each other as much as possible.

Larger models can have large metal objects that can attenuate the RF signal. In this case the antennas should be placed at both sides of the model. Then the best RF signal condition is obtained at any flying attitude.

3. The antennas must be kept away from conductive materials, such as metal, carbon and fuel tank by at least a half inch. The coaxial part of the antennas does not need to follow these guidelines, but do not bend it in a tight radius.
4. Keep the antennas away from the motor, ESC, and other noise sources as much as possible.

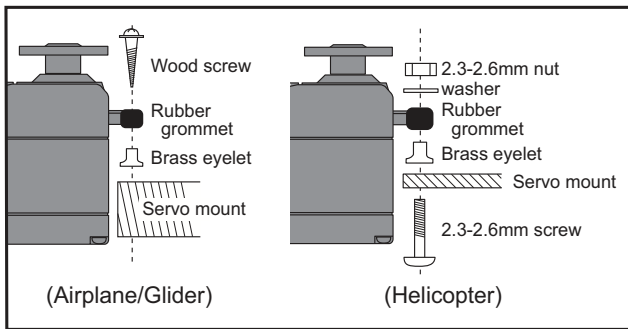


*The two antennas should be placed at 90 degrees to each other.

*The Illustration demonstrates how the antenna should be placed.

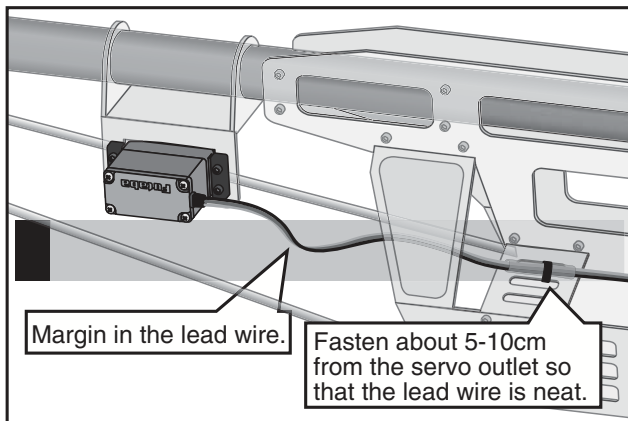
*Receiver Vibration and Waterproofing: The receiver contains precision electronic parts. Be sure to avoid vibration, shock, and temperature extremes. For protection, wrap the receiver in foam rubber or other vibration-absorbing materials. It is also a good idea to waterproof the receiver by placing it in a plastic bag and securing the open end of the bag with a rubber band before wrapping it with foam rubber. If you accidentally get moisture or fuel inside the receiver, you may experience intermittent operation or a crash. If in doubt, return the receiver to our service center for service.

MOUNTING THE SERVO



Servo lead wires

To prevent the servo lead cable from being broken by vibration during flight, provide a little slack in the cable and fasten it at suitable points. Periodically check the cable during daily maintenance.



MOUNTING THE POWER SWITCH

When mounting a power switch to an airframe, make a rectangular hole that is a little larger than the total stroke of the switch so that you can turn the switch ON/OFF without binding.

Avoid mounting the switch where it can be covered by engine oil and dust. In general, it is recommended to mount the power switch on the side of the fuselage that is opposite the muffler.

SAFETY PRECAUTIONS when you install receiver and servos

⚠ WARNING

Connecting connectors

- ⚠ Be sure to insert the connector until it stops at the deepest point.

How to protect the receiver from vibration and water

- ⚠ 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 to avoid water.

Receiver's antenna

- ⊘ Never cut the receiver's antenna. Do not bind the receiver's antenna with the cables for servos.

- ⚠ Locate the receiver's antenna as far as possible from metals or carbon fiber components such as frames, cables, etc.

*Cutting or binding the receiver's antenna will reduce the radio reception sensitivity and range, and may cause a crash.

Servo throw

- ⚠ Adjust your system so that pushrods will not bind or sag when operating the servos to the full extent.

*If excessive force is continuously applied to a servo, the servo could be damaged due to force on the gear train and/or power consumption causing rapid battery drain.

Mounting servos

- ⚠ Use a vibration-proof rubber (such as rubber grommet) under a servo when mounting the servo on a servo mount. And be sure that the servo cases do not touch directly to the metal parts such as servo mount.

*If the servo case contacts the airframe directly, vibration will travel to and possibly damage the servo.

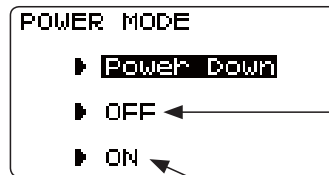
RANGE CHECK THE RADIO

A range check must be performed before the first flight of a new model. It is not necessary to do a range check before every flight (but is not a bad idea to perform a range check before the first flight of each day). A range check is the final opportunity to reveal any radio malfunctions, and to be certain the system has adequate operational range.

We have installed a special "Power Down Mode" in the T6K in order to perform an operational ground range check. During this mode, the RF power is reduced in order to test the operational range of the T6K.

To activate the Power Down Mode and Perform A Range Check:

1) To activate the "Power Down Mode" please hold down the **JOG KEY** and then turn the transmitter switch on. A power mode screen is displayed. Press the **JOG KEY** to select the Power Down function. When this mode is active the red LED on the lighting from of the transmitter will provide users with an audible and visual indication that the transmitter is in the "Power Down Mode". Audibly, the transmitter will beep one time every three seconds. Visually, the LCD screen will display "POWER DOWN MODE". The words "POWER DOWN MODE" will blink as an additional reminder that the transmitter is in the "Power Down Mode".



Select the "OFF" and press the Jog key. A screen opens without outputting power. The receiver does not operate.

Select the "ON" and press the Jog key. Power is usually outputted from power mode.

2) With the "Power Down Mode" activated, walk away from the model while simultaneously operating the controls. Have an assistant stand by the model and signal what the controls are doing to confirm that they operate correctly. You should be able to walk approximately 30-50 paces from the model without losing control.

3) If everything operates correctly, return to the model. Push **END KEY** and complete power down mode. Set the transmitter in a safe yet accessible location so it will be within reach after starting the engine. Be certain the throttle stick is all the way down, and then start the engine. Perform another range check with your assistant holding the model and the engine running at various speeds.

If the servos jitter or move inadvertently, there may be a problem. Do NOT fly the aircraft! Look for loose servo connections or binding pushrods. Also be certain that the battery has been fully charged.

4) NEVER start flying when the "Power Down Mode" is active.

Servo test operation at the time of Power Down Mode:

During Power Down mode, you can use automatic servo testing to check the range of a specified servo (it moves to right and left slowly).

1) A "SERVO" is chosen from a menu.

2) **JOG KEY** is moved to a side and 2 pages is called. Next, **JOG KEY** is moved down and CH is displayed.

3) CH of the servo which wants to operate is chosen. Then, the + **KEY** is pressed and it is made ACT.

The servo selected during Power Down Mode operates alone, allowing you to check its operation.

It is during Power Down Mode starting, and if "SERVO TEST" is turned ON, it will move.

*In the Power Down Mode, the throttle servo does not operate.

*Helicopter mode, condition is fixed to NOR.

⚠ DANGER

⊘ NEVER start flying when the "Power Down Mode" is active.

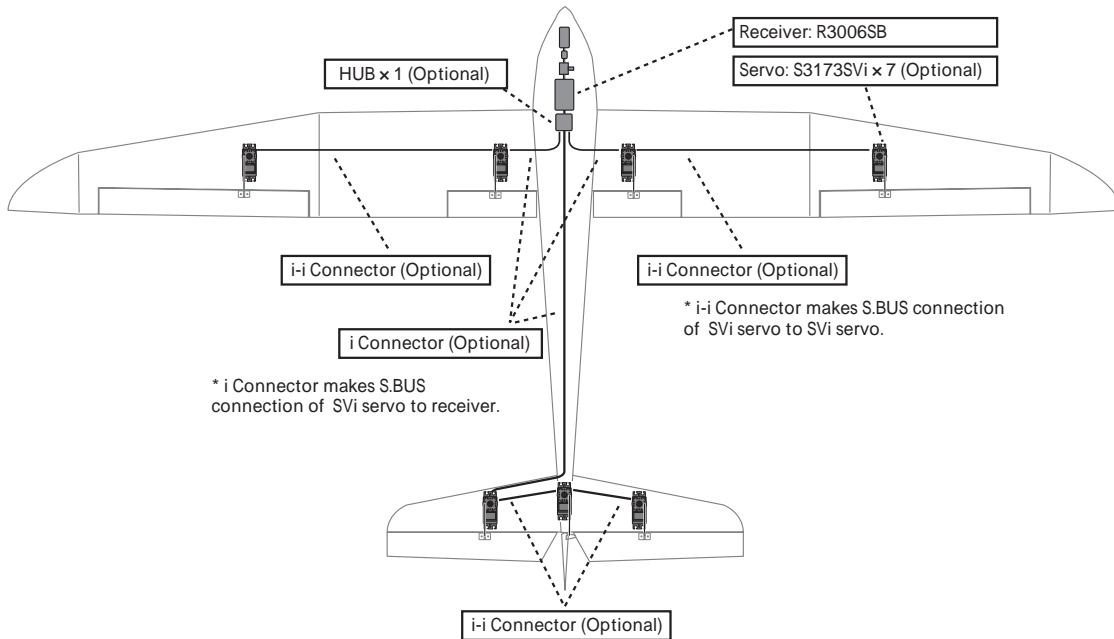
*Control is impossible and your model crashes.

S.BUS/S.BUS2 INSTALLATION

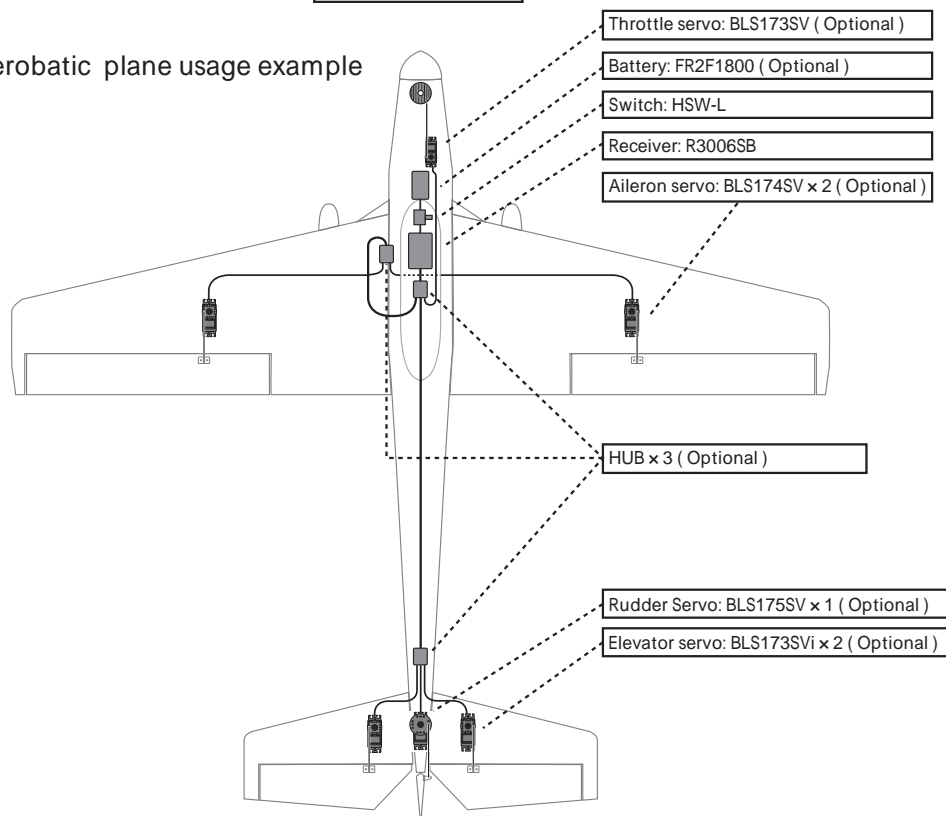
This set uses the S.BUS/S.BUS2 system. The wiring is as simplified and clean mounting as possible, even with models that use a large number of servos. In addition, the wings can be quickly installed to the fuselage without any extraneous wiring by the use of only one simple wire, even when there are a large number of servos used.

- When using S.BUS/S.BUS2, special settings and mixes in your transmitter may be unnecessary.
- The S.BUS/S.BUS2 servos memorize the number of channels themselves. (Settable with the T6K)
- The S.BUS/S.BUS2 system and conventional system (receiver conventional CH used) can be mixed.

S.BUS Glider usage example

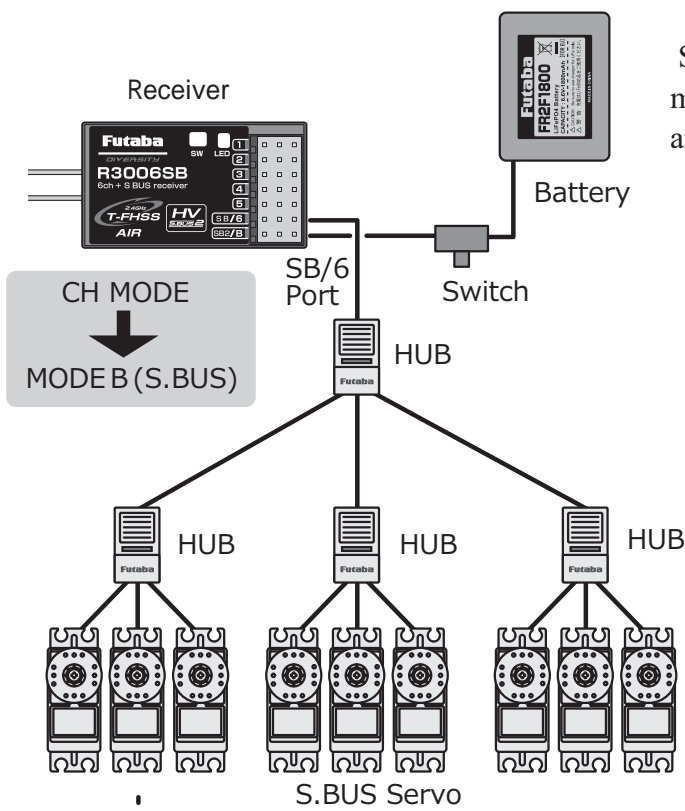


S.BUS Aerobatic plane usage example



S.BUS WIRING EXAMPLE

Before use




S.BUS Servo

Since the channel number is memorized by the S.BUS itself, any connector can be used.

Optional Parts

Terminal box

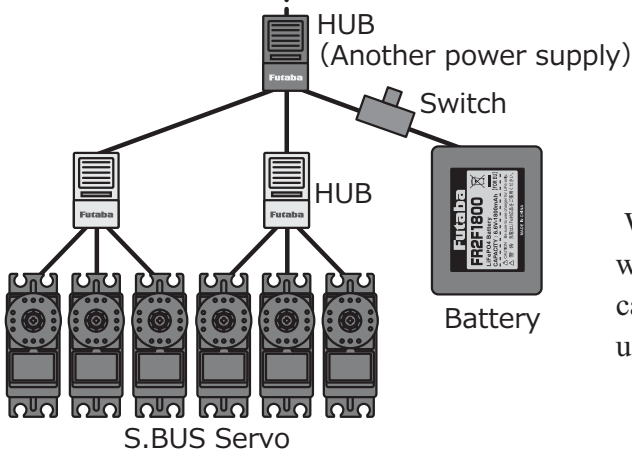


Four connectors can be inserted

⚠ WARNING

Power supply

! Please make sure that you use a battery that can deliver enough capacity for the number and kind of servos used. Alkaline batteries cannot be used.

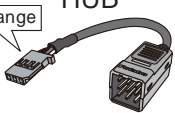


When separate power supply used

When a large number of servos are used or when high current servos are used, the servos can be driven by a separate power supply by using a separate Power Supply 3-way Hub.

Optional Parts

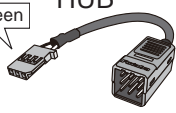
Orange HUB



Three connectors can be inserted.

Optional Parts

Green HUB



Used when using a separate power supply battery.

S.BUS2 SYSTEM

When using the S.BUS2 port, an impressive array of telemetry sensors may be utilized.

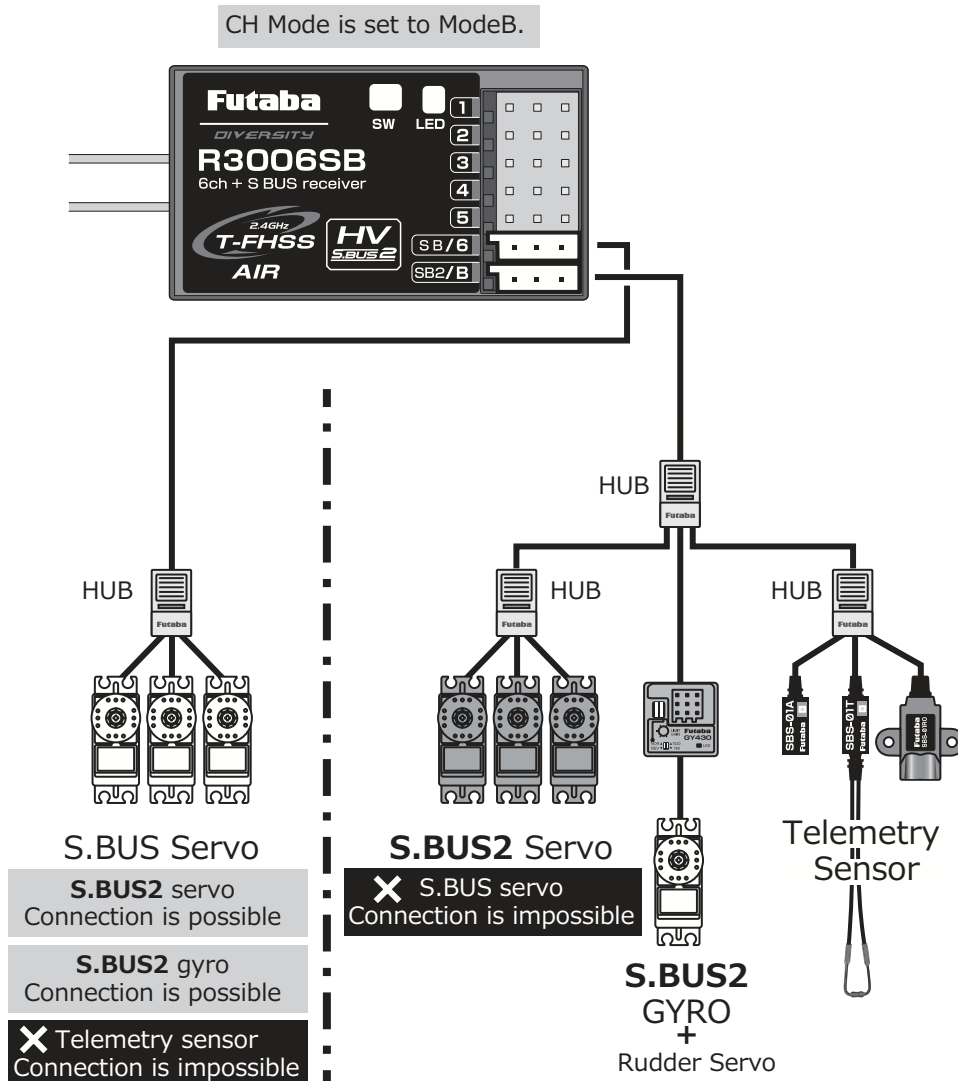
S.BUS2 TABLE

Receiver port	S.BUS Servo S.BUS Gyro	S.BUS2 Servo S.BUS2 Gyro	Telemetry sensor
S.BUS			×
S.BUS2	× ()		

() Don't connect S.BUS Servo,
S.BUS Gyro to S.BUS2 connector.

S.BUS servos and gyros and S.BUS2 servos and gyros must be used in the correct receiver ports. Please refer to the instruction manual to make sure you connect to the correct one.

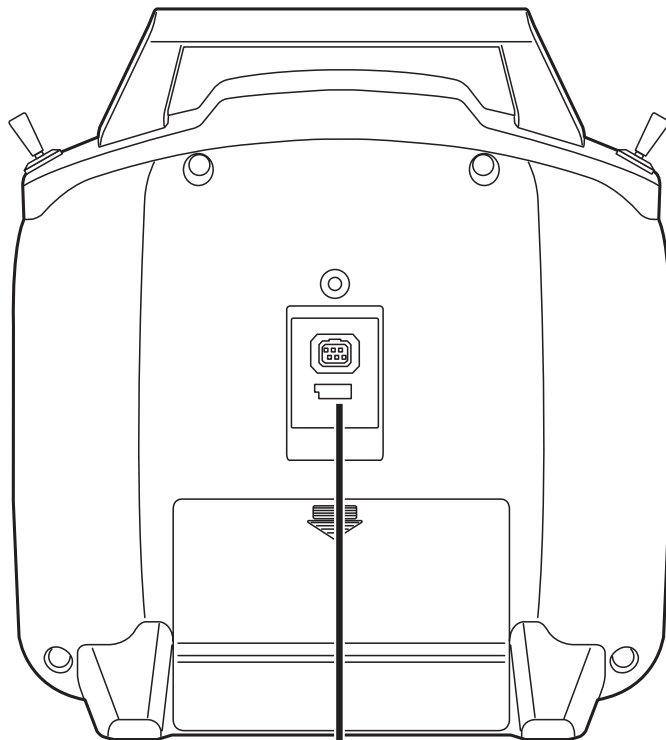
Before use



S.BUS/S.BUS2 DEVICE SETTING

S.BUS/S.BUS2 servos or a telemetry sensor can be connected directly to the T6K. Channel setting and other data can be entered for the S.BUS/S.BUS2 servos or sensors.

Back of T6K



3-way hub
or Y-harnesses



S.BUS/S.BUS2
device
(S.BUS/S.BUS2
Servo)
(Telemetry sensor)



Receivers
Battery

1. Turn on the transmitter power.
2. Call the setup screen.
Servo: S.BUS
3. Connect the S.BUS device and battery you want to set with a 3-way hub or Y-harnesses as shown in the figure.
4. Perform setting in accordance with each screen.
5. This sets the channel and other data for each S.BUS servo, or telemetry device to be used with the S.BUS device or receiver.

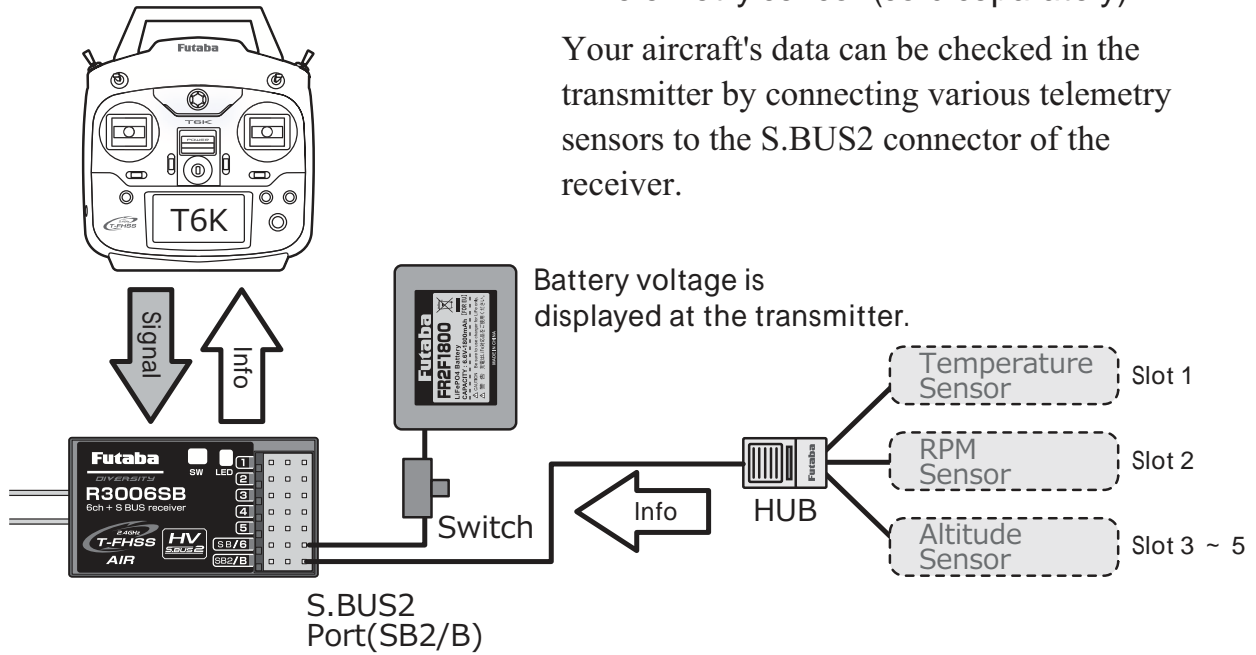
TELEMETRY SYSTEM

The R3006SB receiver features bi-directional communication with a T-FHSS Air Futaba transmitter using the S.BUS2 port. Using the S.BUS2 port an impressive array of telemetry sensors may be utilized. It also includes both standard PWM output ports and S.BUS output ports.

- *Telemetry is available only in the T-FHSS Air mode.
- *The telemetry function requires the corresponding receiver (R3006SB).
- *The T6K will enter and keep the ID number of the R3006SB that it is linked to.
- *When you use two or more R3006SB, set telemetry mode to INH.

Telemetry sensor (sold separately)

Your aircraft's data can be checked in the transmitter by connecting various telemetry sensors to the S.BUS2 connector of the receiver.

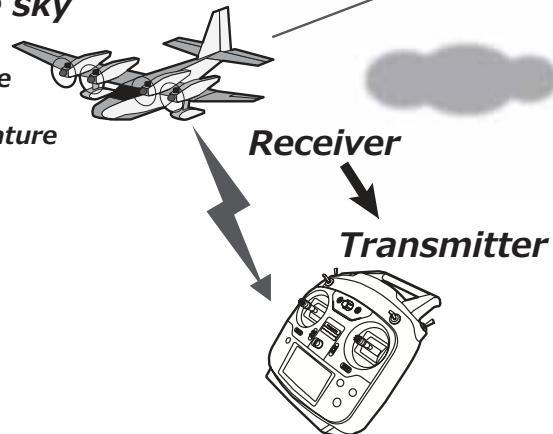


Slot Number

Servos are classified by channel, but sensors are classified by "slot". Since the initial slot number of the T6K is preset at each sensor, the sensors can be used as is by connecting them. There are 1~31 slots.

Airplane in the sky

- Receiver Voltage
- Altitude
- Engine Temperature
- Propeller R.R.M

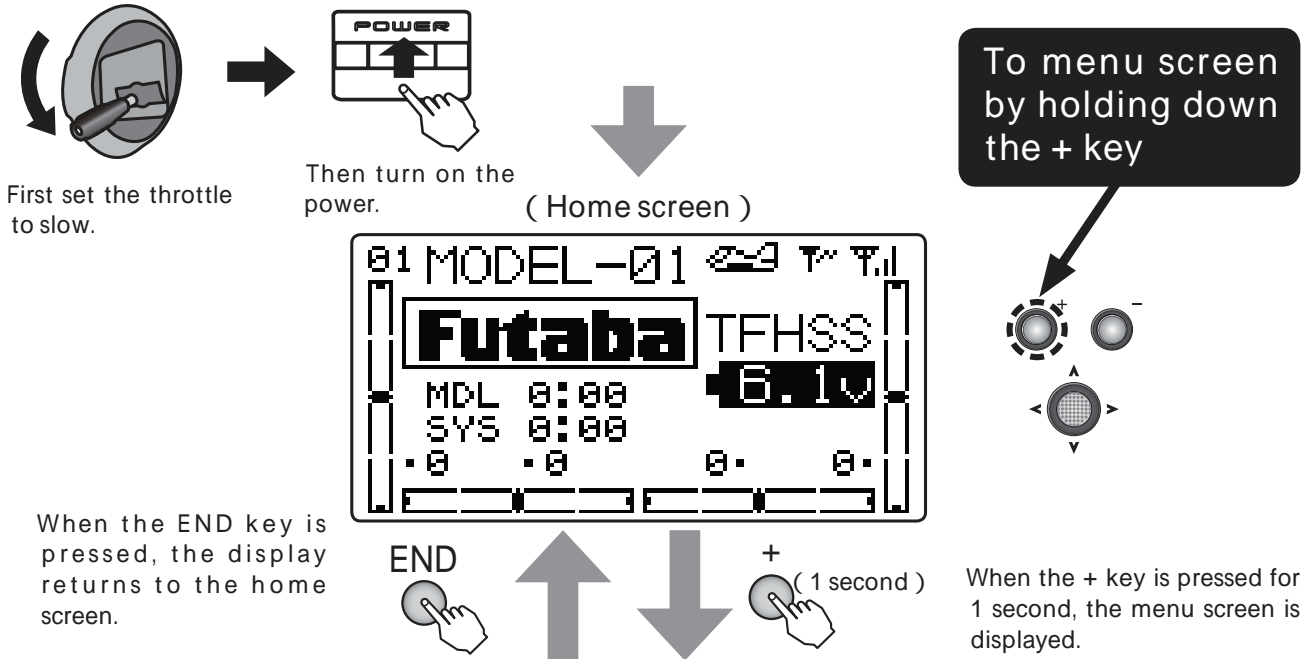


Displayed at the transmitter

Common function



The setting screens are called from the following menu. All the functions common to airplane, helicopter, glider, and multicopter model types are shown here.



Common function

MENU

MENU 1/4

MENU 2/4

MENU 3/4

MENU	1 2 3 4				
▶MDL SEL	▶E POINT				
▶MDL TYP	▶TRIM				
▶MDL NAM	▶SUB TRM				
▶F/S	▶REVERS				

MENU	A-1 1 2 3 4				
▶ARMTR	▶TLMTRY				
▶P.MIX	▶SENSOR				
▶AUX CH	▶S.BUS				
▶SERVO	▶M TRANS				

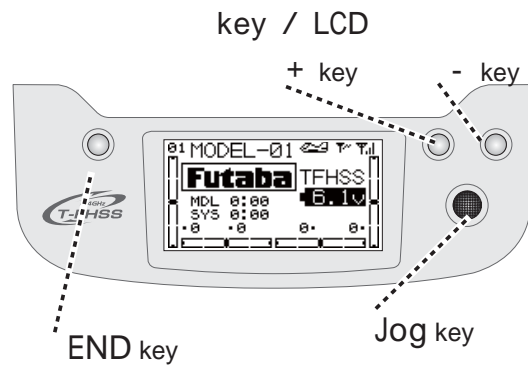
MENU	1 2 3 4				
▶TIMER	▶DR EXP				
▶TRAINR	▶THR CRV				
	▶IDL DWN				
▶THR CUT					

(Selection)

Move the cursor (highlighted) up and down and to the left and right with the Jog key and select the function. The cursor can be moved over several pages.

(Calling the setting screen)

Press the Jog key to open the setting screen.



Function

MENU 1/3

MDL SEL	P.50
MDL TYP	P.53
MDL NAM	P.55
F/S	P.57
E POINT	P.59
TRIM	P.60
SUB TRM	P.61
REVERS	P.62

MENU 2/3

PRMTR	P.63
P.MIX	P.68
AUX CH	P.71
SERVO	P.72
TLMTRY	P.73
SENSOR	P.86
S.BUS	P.88
M TRANS	P.91

MENU 3/3

TIMER	P.92
TRAINR	P.94

Common function



MDL SEL Model select (Select / RX type / Link / Reset / Copy) (Common)

Function

This function is used when calling and copying model data stored in the transmitter. The selected model data can also be reset. System changes (T-FHSS Air, S-FHSS) matched to the receiver type and linking with the receiver are also done here.

Model select (SELE)

The model data of up to 30 models can be stored in the transmitter. This function is used when calling saved model data.

Receiver selection (RX)

The R3006SB supplied with the transmitter, employs the T-FHSS Air system. When you want to use an S-FHSS receiver, switch to S-FHSS here. However, the telemetry function cannot be used with the S-FHSS system.

Link (LINK)

When linking with the receiver, the transmitter is set to the link mode here. The ID number of the currently linked receiver is displayed.

Data reset(RES)

The model data currently in use can be reset to its initial value. However, it does not Reset other than the following of a parameter.

[The function reset in a parameter : TELEMETRY mode, STK POSI ALRM]

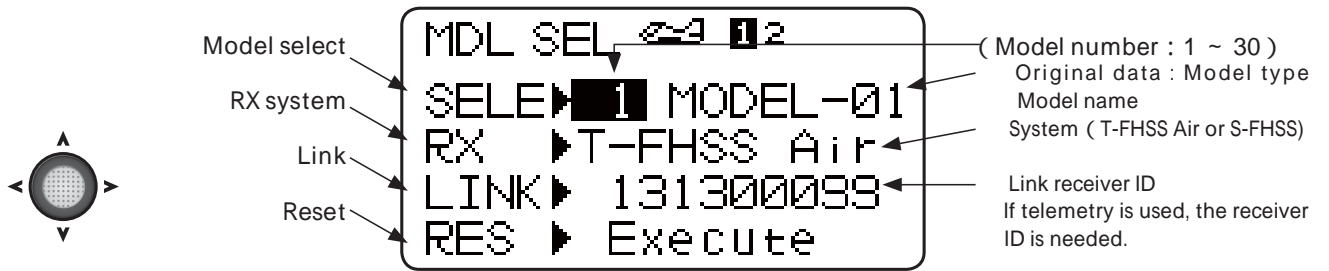
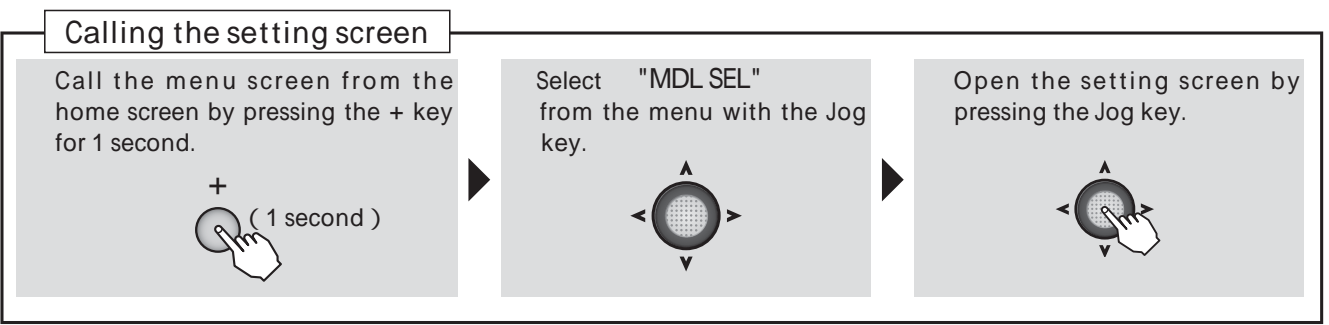
Model copy (COPY)

This is the model data copy function. It is convenient when you want to store model data as backup or build a number of models with the same data settings.

The data of the model memory currently in use can be copied to another model memory.

Common function

Method

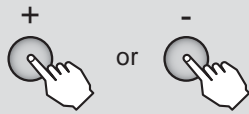


Select the setting item with the Jog key.



Model select

Select the SELECT item and then select the model number by pressing the + key or - key.



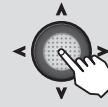
Selection range : 1 ~ 30

Press the Jog key for 1 second.



Confirmation message "sure?" blinks.

Select the model by pressing the Jog key.

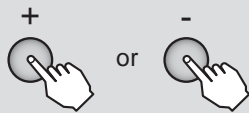


A confirmation "beep beep" sounds to show that selection is complete.

For safety, a double setting system is used. When a change is cancelled after the confirmation message is displayed, the change is not made when moved to another setting item by Jog key.

RX type

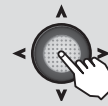
Select the RX item and then select T-FHSS Air or S-FHSS by pressing the + key or - key.



Selection range : T-FHSS Air, S-FHSS

Confirmation message "sure?" blinks.

RX type change by pressing the Jog key.



A confirmation "beep" sounds is complete.

For safety, a double setting system is used. When a change is cancelled after the confirmation message is displayed, the change is not made when moved to another setting item by Jog key.

Link

Select the LINK item and then press the Jog key for 1 second.



T-FHSS Air only. S-FHSS does not enter the link mode. Use the receiver link button to link the receiver.

Enters the link mode for about 20 seconds. During this time, bring the receiver near the transmitter and turn on the receiver power. When linking, the receiver ID is displayed.

In the link mode, a confirmation "beep beep beep" sounds and the time remaining is displayed on the screen. When 20 seconds have elapsed, a continuous beep sounds and the link mode is exited.

For safety, linking must not be performed while the drive motor or engine is running. When linking is complete, turn the power off and on and check operation.

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



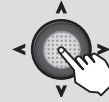
Date reset

Select the REST item and then press the Jog key for 1 second.



Confirmation message "sure?" blinks.

Date reset by pressing the Jog key.



A confirmation "beep" sounds and "COMPLETE" is displayed on the screen is complete.

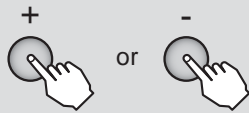
For safety, a double setting system is used. When a change is cancelled after the confirmation message is displayed, the change is not made when moved to another setting item by Jog key.

⚠ CAUTION

Only the throttle channel (CH3) initial setting is REV (reverse). Thoroughly check the Hi and Low directions of the engine or motor used and be careful that they do not suddenly run at full speed. Even after data reset, CH3 is reversed.

Model copy

Select the COPY item and the select the model number of the copy destination by pressing the + key or - key.



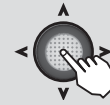
Selection range : 1 ~ 30

Press the Jog key for 1 second.



Confirmation message "sure?" blinks.

Copy the model by pressing the Jog key.

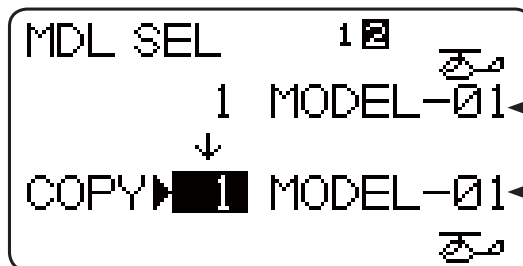


A confirmation "beep" sounds and "COMPLETE" is displayed on the screen to show that copying is complete.

For safety, a double setting system is used. When a change is cancelled after the confirmation message is displayed, the change is not made when moved to another setting item by Jog key.



MDL SEL PAGE 2



Original data : Model type
Model name

Copy place : Model type
Model name



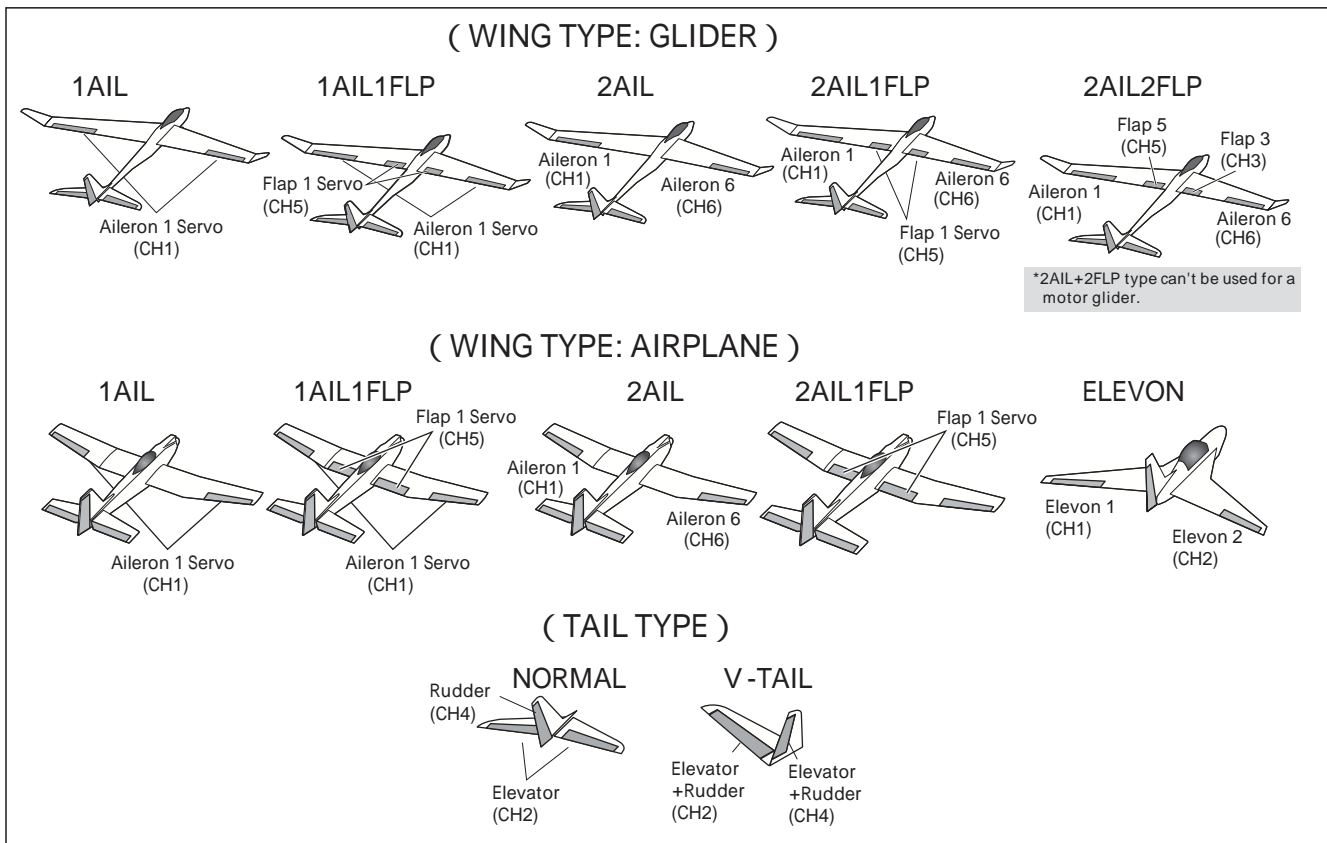
MDL TYP Model type (Common)

Function

Six swash types are available for helicopters. Five types of main wings and two types of tail wings are available for airplanes and gliders. Functions and mixing functions necessary for each model type are set in advance at the factory.

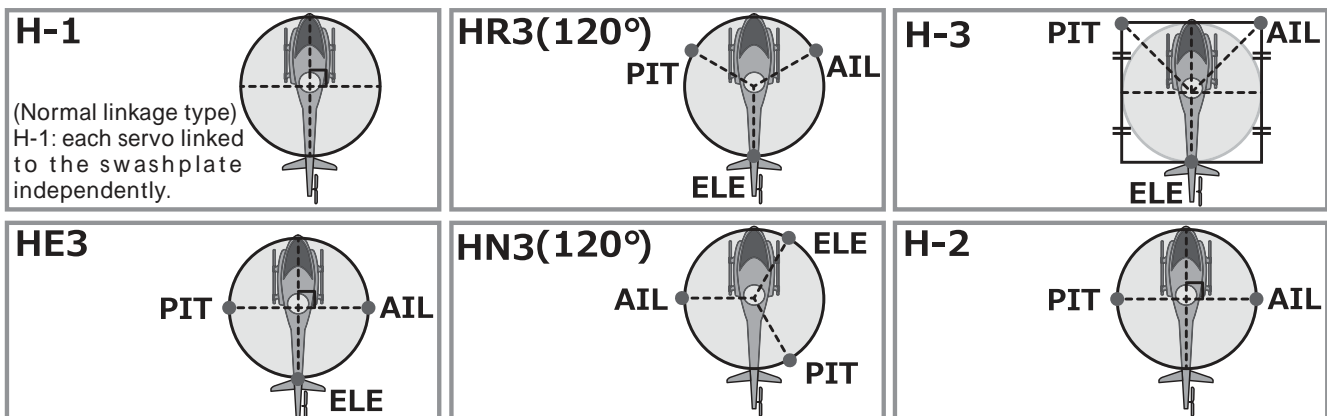
Note: The Model Type function automatically selects the appropriate output channels, control functions, and mixing functions for the chosen model type.

When the Model Type selection command is accessed, all of the data in the active memory is cleared (except the following swash type.) Be sure that you don't mind losing this data, or back it up to another memory using the copying functions.



Common function

(SWSH TYPE: HELICOPTER)

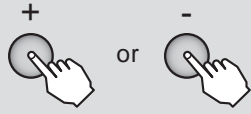


AIL : Aileron Servo
ELE : Elevator Servo
PIT : Pitch Servo



Model type

Select the "TYPE" item and then select the model type by pressing the + key or - key.



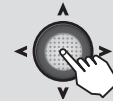
The new model type is displayed on the screen.

Press the Jog key for 1 second.



Confirmation message "sure?" blinks.

Model type change by pressing the Jog key.



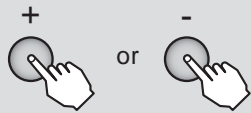
A confirmation "beep" sounds is complete.

For safety, a double setting system is used. You need to confirm your setting changes by pressing the jog key. If you fail to press the jog key and see "COMPLETE" on your screen, your changed are not saved.

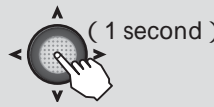
Selection range :
AIRPLANE, HELICOPTER, GLIDER,
MULTI COPT

Wing type (for Airplane /Glider)

Select the "WING" item and then select the swash type by pressing the + key or - key.

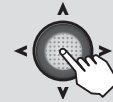


Press the Jog key for 1 second.



Confirmation message "sure?" blinks.

Swash type change by pressing the Jog key.



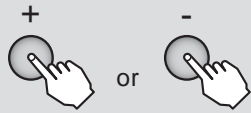
A confirmation "beep" sounds is complete.

For safety, a double setting system is used. When a change is cancelled after the confirmation message is displayed, the change is not made when moved to another setting item by Jog key.

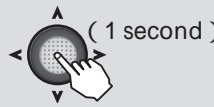
Selection range : 1AIL, 1AIL1FLP,
2AIL, 2AIL1FLP, ELEVON(Airplane),
2AIL2FLP(Glider)

Tail type (for Airplane /Glider)

Select the "TAIL" item and then select the swash type by pressing the + key or - key.

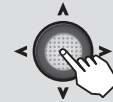


Press the Jog key for 1 second.



Confirmation message "sure?" blinks.

Swash type change by pressing the Jog key.



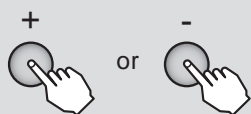
A confirmation "beep" sounds is complete.

For safety, a double setting system is used. When a change is cancelled after the confirmation message is displayed, the change is not made when moved to another setting item by Jog key.

Selection range : NORMAL,
V-TAIL

Swash type (for Heli)

Select the "SWASH" item and then select the swash type by pressing the + key or - key.



Press the Jog key for 1 second.



Confirmation message "sure?" blinks.

Swash type change by pressing the Jog key.



A confirmation "beep" sounds is complete.

For safety, a double setting system is used. You need to confirm your setting changes by pressing the jog key. If you fail to press the jog key and see "COMPLETE" on your screen, your changed are not saved.

Selection range : H-1, HR3,
H-3, HE3, HN3, H-2



MDL NAM Model name / User name (Common)

Function

A model name is inputted into each model in T6K.

User name is inputted into T6K.

Model name setting (MDL NAME)

This function assigns a name to the model data. The model name is displayed on the top row of the home screen. This serves to prevent model memory mistakes if the current aircraft name or other name is entered.

Up to 8 characters can be set.

User name setting (USR NAME)

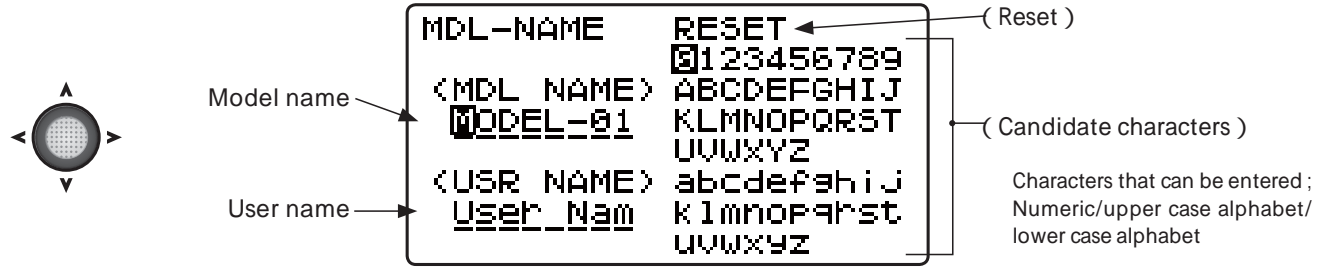
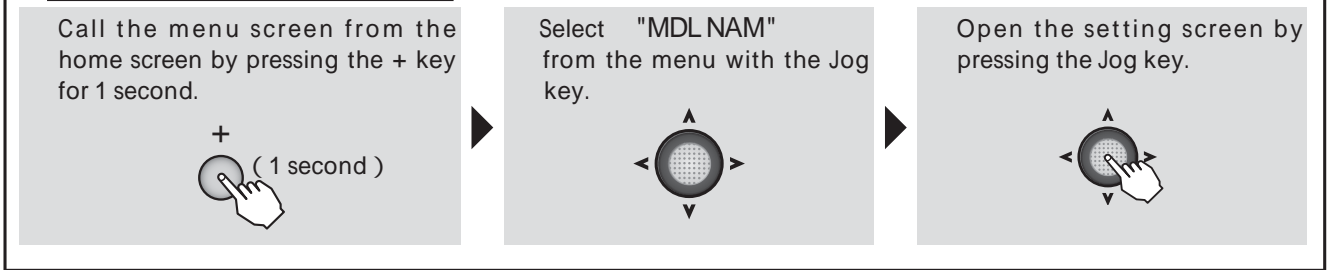
The user name displayed on the home screen can be set. (When a user name is not set, the Futaba logo is displayed) When the home screen display is changed to USR-NAME by PARAMETER, the set user name is displayed on the home screen.

Up to 8 characters can be set.

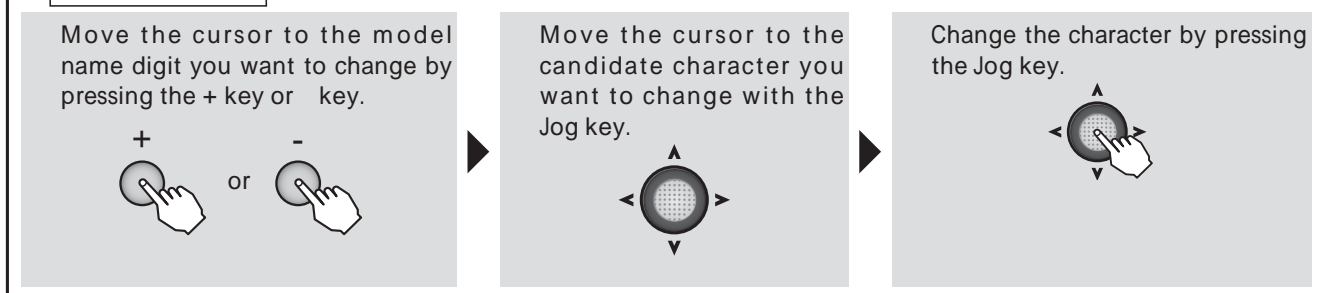
Method

Common function

Calling the setting screen



Model name



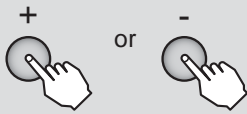
Set the model name by repeating steps to above.

Reset method : When the cursor is moved to any digit of the model name by + key or - key and the Jog key is pressed in the state in which the cursor was moved to RESET by Jog key, the model name returns to its initial setting.

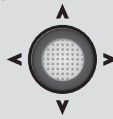


User name

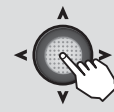
Move the cursor to the user name digit you want to change by pressing the + key or - key.



Move the cursor to the candidate character you want to change with the Jog key.



Change the character by pressing the Jog key.



Set the user name by repeating steps to above.

Reset method: When the cursor is moved to any digit of the user name by + key or - key and the Jog key is pressed in the state in which the cursor was moved to RESET by Jog key, the user name returns to its initial setting (Futaba logo).

Displaying the user name on the home screen

The set user name can be displayed on the home screen. (When a user name is not set, the Futaba logo is displayed.) When the home screen display is changed to USR-NAME by PARAMETER, the set user name is displayed.

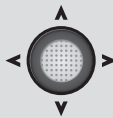
Common function

Calling the setting screen

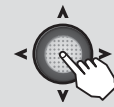
Call the menu screen from the home screen by pressing the + key for 1 second.



Select "PRMTR" from the menu with the Jog key.

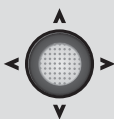


Open the setting screen by pressing the Jog key.



Parameter

Select "HOME-DSP" from the parameter 2 page with the Jog key.



Select "U-NAME" by pressing the + key or - key.



End setting by pressing the END key.





F/S

Fail safe

(Common)

Function

When normal radiowaves cannot be received due to noise and interference, the NOR mode, which holds the servo of each channel in its position immediately before reception was lost, or F/S (Fail Safe) mode, which moves the servo of each channel to a preset position, can be selected. When T-FHSS Air is selected, the battery fail safe voltage can be set.

- When the throttle channel was reversed by servo reverse function, the F/S data is also reversed. (Throttle channel only) If the receiver battery voltage drops below the set value when the fail safe mode was selected, the battery fail safe function moves the servo to a preset position.
- The S-FHSS fail safe voltage is 3.8V.
- Only the throttle channel battery fail safe function can be turned on and off.

- When this function was performed reset the battery fail safe function by the following method and immediately land.

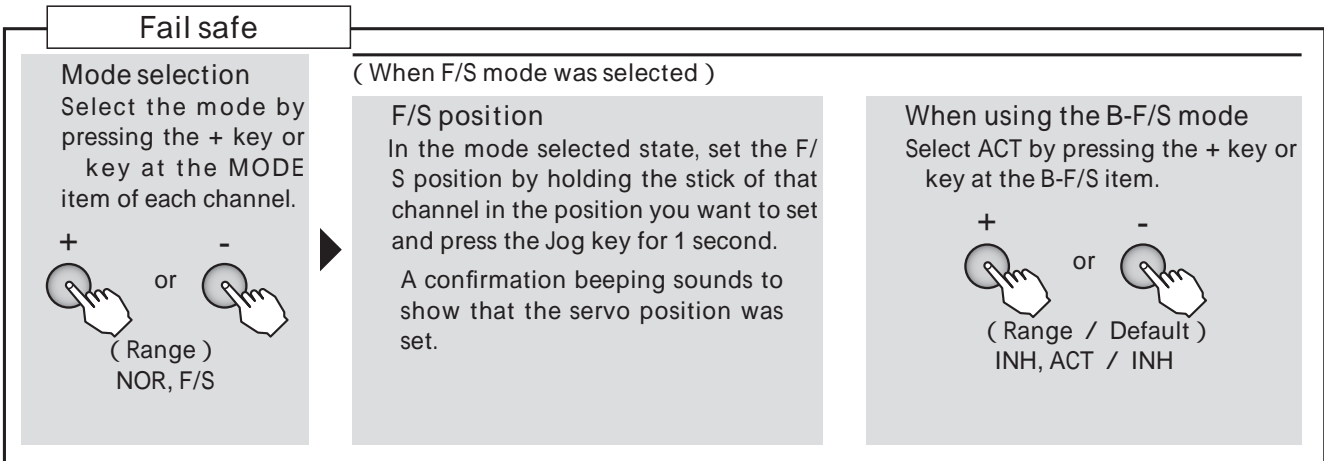
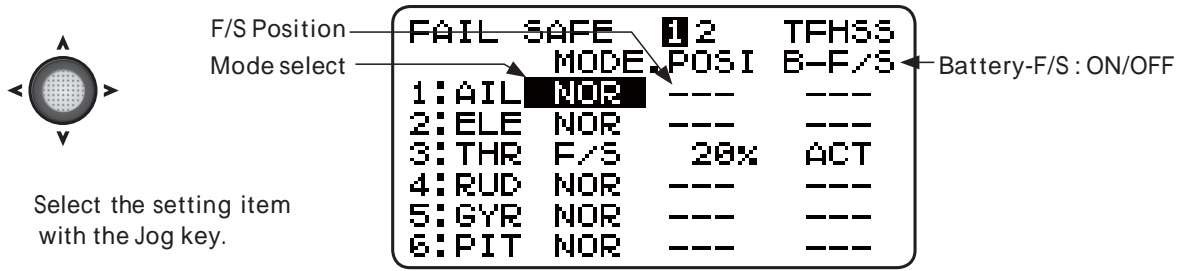
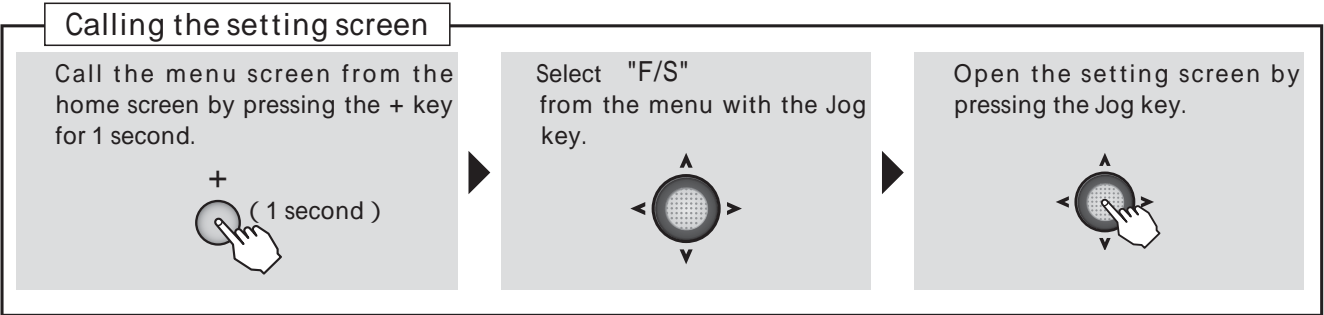
Reset method : The battery fail safe function can be temporarily disabled by moving the throttle stick to the slowest side. However, after 30 seconds the battery fail safe function will return to the battery fail safe state.

⚠ WARNING

For safety, always set the fail safe functions.

- Remember to set the throttle channel fail safe function so that the servo moves to the maximum slow side for airplanes and to the slow side from the hovering position for helicopters. Crashing of the model at full high when normal radio waves cannot be received due to interference, etc., is very dangerous.
- If the battery fail safe is reset by the throttle stick, it may be mistaken for an engine malfunction and will be reset at throttle slow and the model will continue to fly. If you have any doubts, immediately land.

Method



Common function



Battery fail safe voltage setting

Select BATTERY F/S VOLTAGE on page 2 of the fail safe screen with the Jog key.



Set the voltage by pressing the + key or - key.



(Set up range)

3.8V 4.0V 4.2V 4.4V 4.6V 4.8V
5.0V 5.3V 5.6V 5.9V 6.2V 6.5V
6.8V 7.1V 7.4V

End setting by pressing the END key.



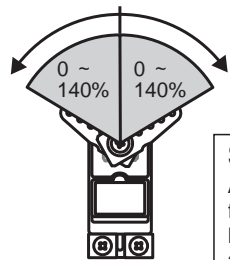


E POINT End point (Common)

Function

The End Point function adjusts the left and right servo throws, generates differential throws, and will correct improper linkage settings.

- The servo travel can be adjusted individually at the left and right sides.

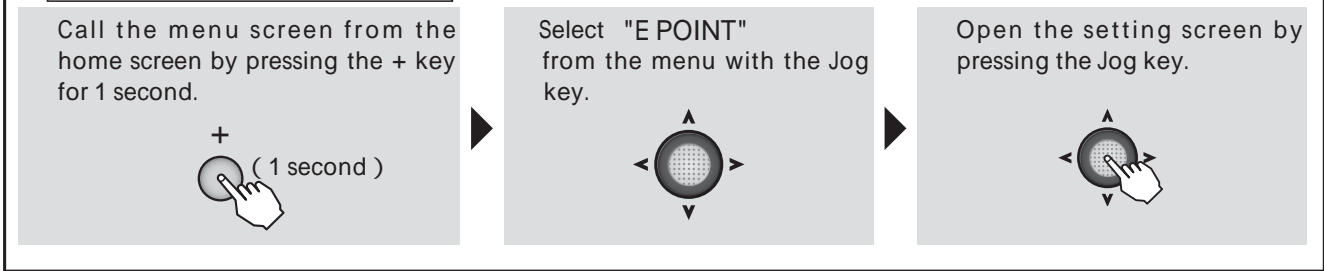


Servo throw

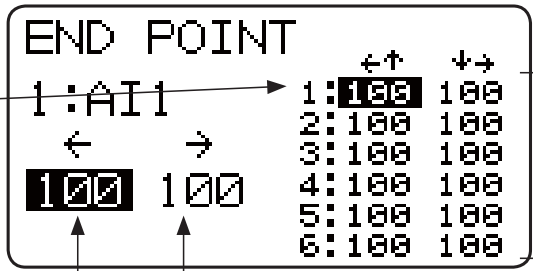
At 100% setting the servo throw of each channel is about 40° for channels 1 to 4 and about 55° for channels 5 and 6. However, the maximum servo travel for channels 5 and 6 is about 110%.
 *When channels 5 to 6 were mixed by 2 AIL etc, the throw becomes the same (about 40°) as channels 1 to 4.

Method

Calling the setting screen



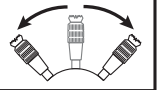
Select the channel with the Jog key.



The setting rate of each channel

(Left / Down) rate display (Right / Up) rate display

Select the Left/Right (Down/Up) with the stick (SW,VR).



< ChannelDisplay >

AIRPLANE (2AIL1FLP)	HELICOPTER	GLIDER (2AIL2FLP)	MULTICOPTER
1: AI1 (Aileron1)	1: AIL (Aileron)	1: AI1 (Aileron1)	1: AIL (Aileron)
2: ELE (Elevator)	2: ELE (Elevator)	2: ELE (Elevator)	2: ELE (Elevator)
3: THR (Throttle)	3: THR (Throttle)	3: FL3 (Flap3)	3: THR (Throttle)
4: RUD (Rudder)	4: RUD (Rudder)	4: RUD (Rudder)	4: RUD (Rudder)
5: FLP (Flap)	5: GYR (GYRO)	5: FL5 (Flap5)	5: AUX
6: AI6 (Aileron6)	6: PIT (Pitch)	6: AI6 (Aileron6)	6: MOD (Mode)

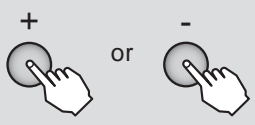
End point

A channel is chosen by Jog key.



Selection range : 1 ~ 6ch

Operate the stick or knob of the selected channel fully to the left (down) or right (up) and adjust the rate by pressing the + key or key.



Range : 0 ~ 140%
 Default : 100%

When you want to return the set value to the initial value, press the + key and key simultaneously.

Adjust the rate of each direction of the stick and VR by repeating step .

Common function



TRIM Trim reset / Trim step (Common)

Function

Trim Step

The amount of trim change per step can be changed between 1 and 40 according to the aircraft capacity and trim application.

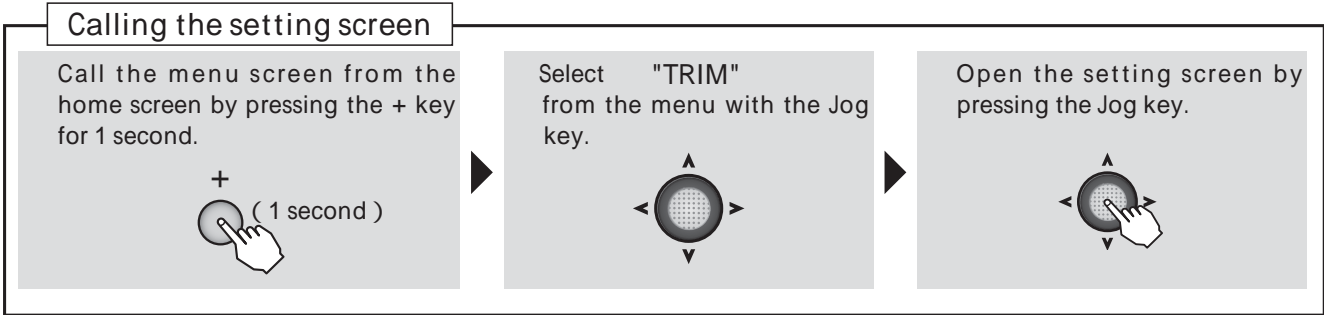
Set it to match the application. With ordinary

aircraft, a setting of about 2 to 10 should be fine. (Initial value: 4)

Trim Type

The amount of trim change trim type can be changed between NOR (normal), ATL and CNT (center) according to the trim application.

Method



Common function

TRIM	STEP	TYPE
1: AIL	4	NOR
2: ELE	4	NOR
3: THR	4	ATL
4: RUD	4	NOR

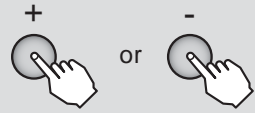
TRIM (Besides THR) NOR CNT
 CNT : With the center trim feature, trim adjustments have no effect on the maximum servo travel. This prevents the linkages from binding when adjustments are made.

THR TRIM ATL NOR
 ATL : With the ATL trim feature, trim adjustments have no effect on the high throttle. This prevents the linkages from binding when adjustments are made.

For example, when the step size is the initial value (4), trim movement from center to end is 30 steps. If the step size is made 40, the trim moves 3 steps.

Trim step

Select the trim you want to set from the STEP item and set the step size by pressing the + key or - key.

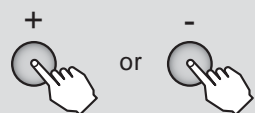


Range : 1 ~ 40
 Default : 4

When you want to return the set value to the initial value, press the + key and - key simultaneously.

Trim type

Select the trim you want to set from the TYPE item and set the trim type by pressing the + key or - key.



Range : NOR, CNT, ATL (THR)



SUB TRM

Sub trim

(Common)

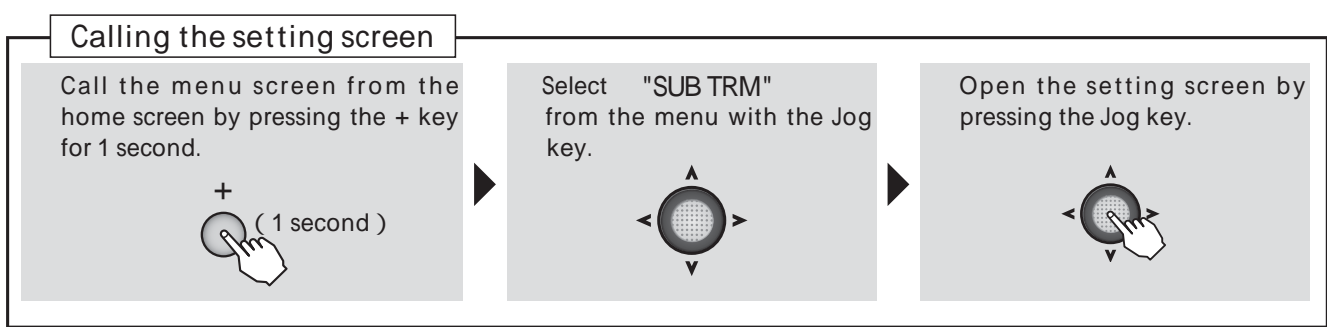
Function

The Sub-Trim function is used to set the servo neutral position, and may be used to make fine adjustments to the control surface after linkages and pushrods are hooked up. When you begin to set up a model, be sure that the digital trims are set to their center position.

Setting precautions

If sub trim is too large, the servo operating range may be exceeded at maximum control surface angle and generate a dead band in which the servo does not operate. First connect the linkage so that the amount of sub trim used is held to a minimum.

Method



Select the channel with the Jog key.



SUB TRM

1: AIL	1: AIL	0	
	2: ELE	0	
	3: THR	0	
	4: RUD	0	
	5: GER	0	
	6: AUX	0	

SUB trim rate of each channel.

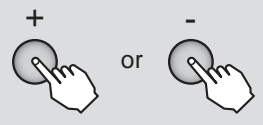
SUB trim rate of the selected channel.

< ChannelDisplay >

AIRPLANE (2AIL1FLP)	HELICOPTER	GLIDER (2AIL2FLP)	MULTICOPTER
1: AI1 (Aileron1)	1: AIL (Aileron)	1: AI1 (Aileron1)	1: AIL (Aileron)
2: ELE (Elevator)	2: ELE (Elevator)	2: ELE (Elevator)	2: ELE (Elevator)
3: THR (Throttle)	3: THR (Throttle)	3: FL3 (Flap3)	3: THR (Throttle)
4: RUD (Rudder)	4: RUD (Rudder)	4: RUD (Rudder)	4: RUD (Rudder)
5: FLP (Flap)	5: GYR (GYRO)	5: FL5 (Flap5)	5: AUX
6: AI6 (Aileron6)	6: PIT (Pitch)	6: AI6 (Aileron6)	6: MOD (Mode)

Sub trim

Select the SUB trim you want to set from channel item and set the rate by pressing the + key or key.



Range :
-120 ~ +120%
Default : 0%

When you want to return the set value to the initial value, press the + key and key simultaneously.

Common function

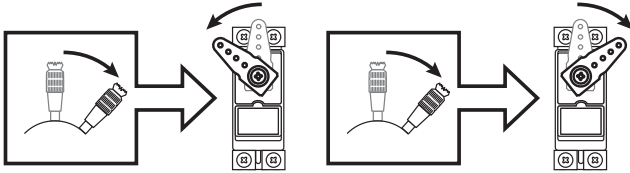


REVERS (Servo reverse)

(Common)

Function

Servo reversing (REVERSE): changes the direction an individual servo responds to a CONTROL STICK motion.



For CCPM helicopters, be sure to read the section on SWASH AFR before reversing any servos.

With the exception of CCPM helicopters, always complete your servo reversing prior to any other programming.

When using AIRPLANE/GLIDER functions that control multiple servos, such as 2AIL or V-TAIL, it may be confusing to determine whether the servo needs to be reversed or a setting in the function needs to be reversed. Refer to the instructions for each specialized function for further details.

CAUTION

- ❗ Only the throttle channel (CH3) initial setting is REV (reverse). Thoroughly check the Hi and Low directions of the engine or motor used and be careful that they do not suddenly run at full speed.
- ❗ Since the direction of the ailerons of an airplane can be easily mistaken, be very careful.

Method

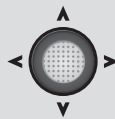
Common function

Calling the setting screen

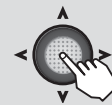
Call the menu screen from the home screen by pressing the + key for 1 second.



Select "REVERS" from the menu with the Jog key.



Open the setting screen by pressing the Jog key.



To prevent erroneous setting, after the servo reverse screen was called as described above, the channel will not be selected if the Jog key is not pressed at the left and right.

Channel select

Select the channel with the Jog key.

REVERSE

	A I L	E L E	T H R	R U D	R E R	A U X
REV	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NOR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	1	2	3	4	5	6

The currently selected channel is highlighted.

Display Reverse/Normal
REV : Reverse
NOR : Normal
(Channel number)

Servo Reverse

Channel is Select by Jog key.



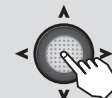
Selection range :
1 ~ 6ch

NOR or REV is chosen by Jog key.



The confirmation message "sure?" blinks on the screen. (Not displayed if the same as before.)

Reverse the servo by pressing the Jog key.



A confirmation beeping sounds and the direction of operation is reversed.

For safety, a double setting system is used. When a change is cancelled after the confirmation message is displayed, the change is not made when moved to another setting item by Jog key.

**Function**

PARAMETER submenu: sets those parameters you would likely set once, and then not disturb again.

Once you have selected the correct model you wish to work with, the next step is setting up the proper parameters for this specific model:

LCD contrast (CONTRAST)

Contrast adjustment LCD screen.

You adjust to legible contrast. set up range -10 ~ +10

Back light (BACK-LIT)

Back light mode of a LCD screen can be chosen.

ALWAYS / KEY-ON (Shines for a definite period of time after key operation.) / OFF

Light time (LIT-TIME)

Sets the length of time the backlight will stay on.

Set up range 1 ~ 30

Light adjustment (LIT-ADJS)

Light volume adjustment of a back light.

Set up range 1 ~ 30

Battery alarm (BATT ALM)

Select the battery alarm voltage according to the battery to be used.

4 dry cell batteries 4.2V DR

HT5F1800B (NiMH battery) 5.0V Ni

FT2F2100BV2 (Lithium ferrite battery) 5.8V Fe

Battery alarm vibration (BATT VIB)

Battery alarm is told with vibration.

Buzzer tone(BUZ-TONE)

The tone of buzzer sound when a key is pressed.

Set up range : OFF,1(low) ~ 100(high)

Home display(HOME-DSP)

Item selection displayed on a home screen

Futaba logo (Default), TIMER, U-NAME, RX BAT (Case of T-FHSS mode.)

Telemetry mode setting (TLM MODE)

Sets whether or not telemetry is activated. When using 2 receivers with 1 transmitter, select INH.

Range : ACT / INH

Telemetry display units setting (UNIT)

Sets whether the telemetry display is in meters or yards/pounds.

Range : METER / YARD (/)

Speech language setting (SPEECH)

Sets the speech language when listening to telemetry information through earphones.

Range : Japanese (ニホンゴ J), English (Englis)

Speech volume setting (VOLUME)

Sets the volume when listening to telemetry information through earphones.

Range : LOW / HIGH

Stick position alarm setting (STK ALRM)

Can be set so that an audible alarm sounds once when the throttle stick reaches the set position.



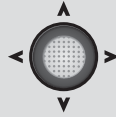
Method

Calling the setting screen

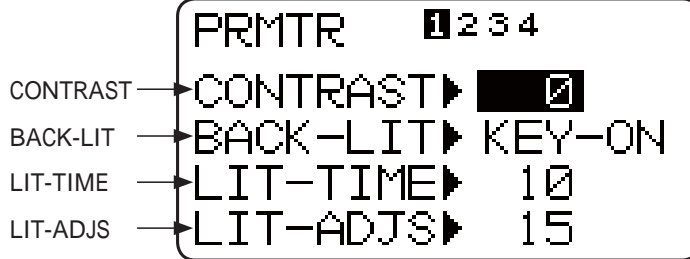
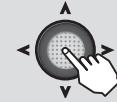
Call the menu screen from the home screen by pressing the + key for 1 second.



Select "PRMTR" from the menu with the Jog key.



Open the setting screen by pressing the Jog key.



----- page 1

Next page 2 ~ 4



- Battery alarm (BATT ALM)
- Battery alarm vibration (BATT VIB)
- Buzzer tone(BUZ-TONE)
- Home display(HOME-DSP)
- Telemetry mode (TLM MODE)
- Telemetry unit (UNIT)
- Speech language (SPEECH)
- Speech volume (VOLUME)
- Stick position alarm (STK ALRM)

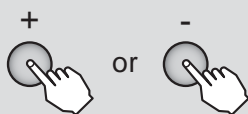
----- page 2

----- page 3

----- page 4

LCD contrast

Select the "CONTRAST" item and change numerical value (contrast) by pressing the + key or key.



Selection range : -10 ~ +10

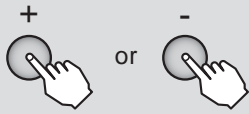
Default : 0



Back-light / Light-time / Light-adjustment

Back-light mode

Select the "BACK-LIT" item and change the mode by pressing the + key or key.



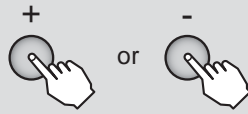
"ALWAYS" : always ON
 "OFF" : always OFF
 "KEY-ON" : It light on after Key operation.

Selection range :
 ALWAYS, OFF, KEY-ON

Default : ALWAYS

Light-time

Select the "LIT-TIME" item and change numerical value (time) by pressing the + key or key.



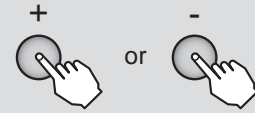
It is only a case in "KEY-ON" mode here.

Selection range : 1 ~ 30(s)
 Default : 10(s)

When you want to return the set value to the initial value, press the + key and key simultaneously.

Light-adjustment

Select the "LIT-ADJ" item and change numerical value (brightness) by pressing the + key or key.



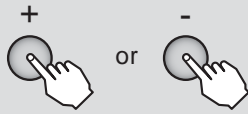
It is the brightest at 30.

Selection range : 1 ~ 30
 Default : 15

When you want to return the set value to the initial value, press the + key and key simultaneously.

Battery alarm voltage

Select the "BATT ALM" item and change the numerical value (voltage) by pressing the + key or key.



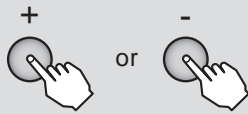
AA alkaline batteries 4.2V DR
 Futaba HT5F1800B 5.0V Ni
 Futaba FT2F2100BV2 5.8V Fe

Selection range :
 4.2V 4.6V 5.0V 5.4V 5.8V
 6.2V 6.6V 7.0V 7.4V

*The voltage drop of a rechargeable battery and a dry cell battery is different. When using a rechargeable battery, always change the voltage.

Battery alarm voltage vibration

Select the "BATT VIB" item and change the ON or OFF by pressing the + key or key.

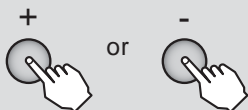


ON The battery alarm of a transmitter is told with vibration.

Selection range :
 ON, OFF

Buzzer tone

Select the "BUZ-TONE" item and change the numerical value (tone) by pressing the + key or key. The higher the numerical value the higher the tone.



Selection range :
 OFF, 1 ~ 100

When you want to return the set value to the initial value, press the + key and key simultaneously.



Home display

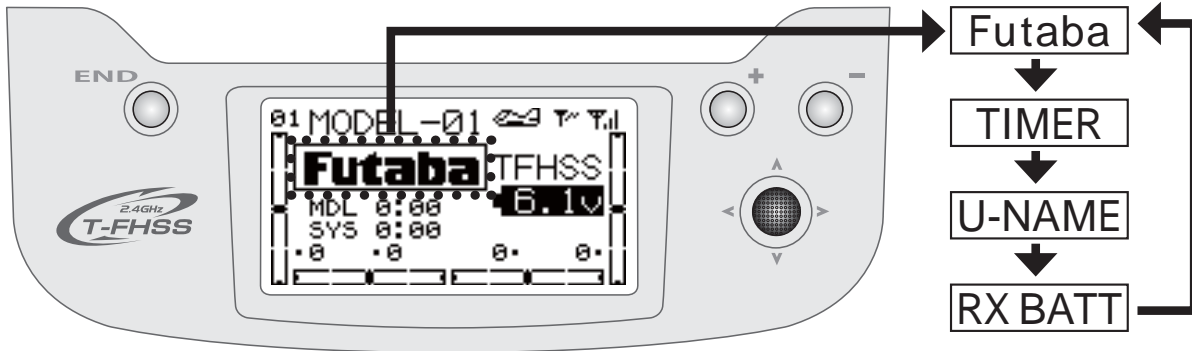
Select the "HOME-DSP" item and change the mode by pressing the + key or - key.



- "Futaba" : Display about a Futaba logo.
- "TIMER" : Display about the timer.
- "U-NAME" : Display about a user name.
- "RX BATT" : Display about the receiver battery voltage. (Only T-FHSS mode)

Selection range :
Futaba, TIMER, U-NAME,
RX BATT

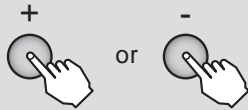
Default : Futaba



Common function

Telemetry mode

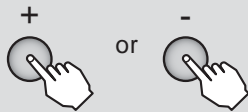
Select the "TLM MODE" item and change the mode by pressing the + key or - key.



Selection range :
ACT, INH

Telemetry unit

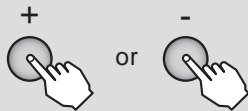
Select the "UNIT" item and change the mode by pressing the + key or - key.



Selection range :
METER, YARD

Speech language

Select the "SPEECH" item and change the language by pressing the + key or - key.

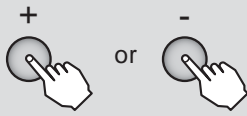


Selection range :
Japanese, English



Speech volume

Select the "SPEECH-VOLUME" item and change the volume by pressing the + key or - key.

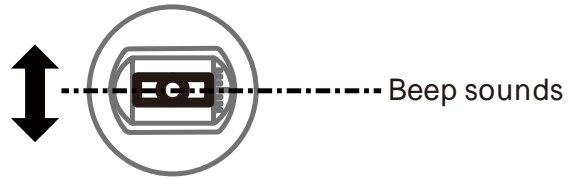


Selection range :
HIGH, LOW

Stick position alarm

An alarm (single beep) can be sounded at the specified throttle stick position.

Alarm function ON/OFF can be set by switch.



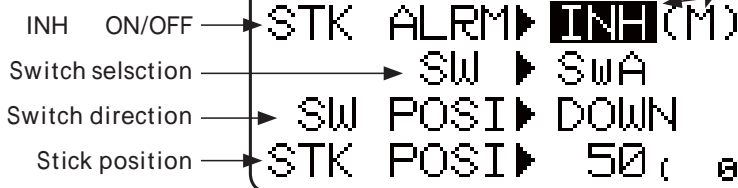
When the THR stick is set to the specified position.

Select "Parameter"

Press the Jog key to the side and select page 4.

Select the item with the Jog key.

(STK POSI ALRM)



Parameter setting is not reset. However, **STK POSI ALRM**, and the **Telemetry mode** on which (M) was displayed are resettable.

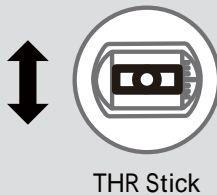
When INH is selected, the function cannot be used. When ON or OFF is selected, the function is activated. ON and OFF changes are linked to the switch.

The number in parenthesis is the current throttle stick position.

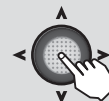
Stick position is chosen by Jog key.



Set the throttle stick to the position at which you want to generate the alarm.



When the Jog key is held down the alarm sounds at that position.



Memorize the position at which the beep is to sound.



P.MIX

Program mixing

(Common)

Function

Mixing that can independently customize 4 functions can be used. Programmable mixing is used to remove bad tendencies of the aircraft and make operation pleasant. In addition to mixing between arbitrary channels, this function includes

linking (linking with another mix), trim addition, offset, and switch setting functions.

P.MIX 1 ~ 3 (normal type)

The following functions can be set for programmable mixing 1 to 3:

【Mixing Channel】

Use this function by changing the channel because the master channel and slave channels initial setting is a temporary combination.

When OFS was selected as the master channel, the mixing rate setting applies to slave only. When a mixing rate is set, slave servo operation is offset by that amount.

A knob (VR) as well as a channel, can be selected as the master channel.

【Trim selection】

Whether or not mixing includes master channel trim operation can be selected.

【Mixing reference point change】

The master channel mixing reference point can be shifted.

【Switch selection】

The programmable mixing ON/OFF switch can be selected. The switches that can be selected are switches A to H and the throttle stick.

The switch operating direction can be set. When a 2 position switch was selected, up /down can be set, and when a 3 position switch was selected, up/up and down /up / and center/center/center and down /down can be selected. When the throttle stick was selected, the ON/OFF position and operation direction can be set. When "NULL" is selected, mixing is always ON.

P. MIX 4 (curve type)

Programmable mix 4 allows setting of the mixing rate by 5 point curve.

OFS and knob use and trim selection by normal type master channel setting described above are impossible, but switch selection is possible.

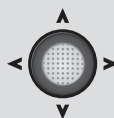
Method

Calling the setting screen

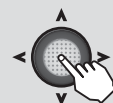
Call the menu screen from the home screen by pressing the + key for 1 second.



Select "P.MIX" from the menu with the Jog key.



Open the setting screen by pressing the Jog key.



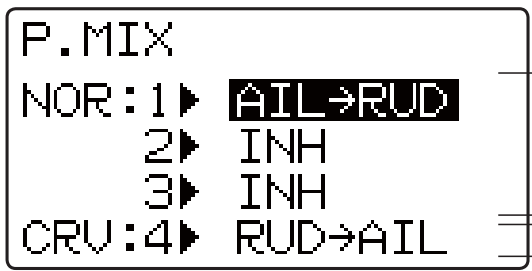


P.MIX Selection

Calling the setting screen
 Use the Jog key to select the P.MIX number you want to use.
 Call the setting screen by pressing the Jog key.
 P.MIX 1 ~ 3 (normal type)
 P.MIX 4 (curve type)



(P.MIX 1-3)



to P.MIX 1-3 set up screen
 to P.MIX 4 set up screen

(P.MIX1-3 set up screen)

Mixing rate adjustment

Function activation

When INH is selected, the function cannot be used. When ON or OFF is selected, the function is activated. ON and OFF changes are linked to the switch.

Trim ON/OFF

Switch selection

Switch direction

0 set

Master CH selection

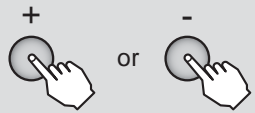
Slave CH selection

Select the item with the Jog key.

(Master CH Current position)

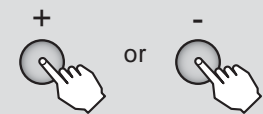
P.MIX1-3

Function activation
 Select the MIX item and select ON or OFF by pressing the + key or - key.



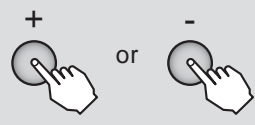
When you do not want to use the function select INH.

Master/slave channel selection
 Select the MASTR channel you want to use by pressing the + key or - key.
 Select the Slave channel you want to us by pressing the + key or - key.



A knob VR as well as channels 1 to 6, can be specified as the master channel. In addition, when OFS was selected as the master channel, slave servo operation is 0 set.

Mixing rate adjustment
 Select the RATE item and adjust the mixing rate by pressing the + key or - key for each direction of the stick, etc. selected at the master channel.

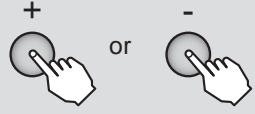


Range : -100 ~ +100%
 Default : 0%

When you want to return the set value to the initial value, press the + key and - key simultaneously.

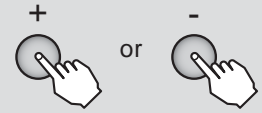
(Changing the ON/OFF Switch)

ON/OFF Switch selection
 Select the "SW" item and then select the switch by pressing the + key or - key.



Selection range : SwA ~ SwD, THR

Switch ON direction setting
 Select the "POSI" item and select the switch ON direction by pressing the + key or - key.



2P SW : NULL(always ON), UP, DOWN
 3P SW : NULL(always ON), UP, UP&DN, UP&CT, CENTR, CT&DN, DOWN

THR stick: Hold the stick at the ON/OFF point and set the ON/OFF position by pressing the Jog key for 1 second. (If the Jog key is pressed for 1 second when the position was set, it returns to the NULL state.) The switch ON direction can also be selected by pressing the + key or - key.



Common function



(Changing the mixing reference point)

Mixing reference point setting

Select the "OFFST" item and hold the master side stick or knob in the position you want to set and set the new reference point by pressing the Jog key.



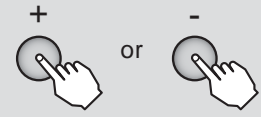
Range : -100 ~ +100%
(THR only 0 ~ 100%)

Default : 0%

(Including trim operation)

Trim ON/OFF setting

Select the "TRM" item and select ON or OFF by pressing the + key or - key.



Range : OFF, ON

Default : OFF

When you do not want to include trim in mixing select OFF.

CAUTION

At the end of setting, check that the mixing function is performed normally.

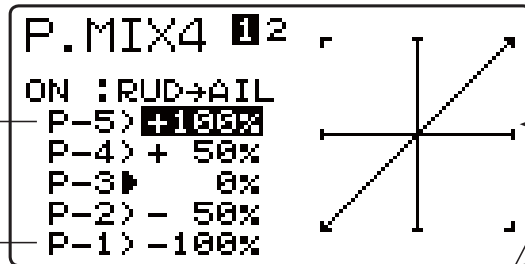
Common function

(P.MIX4 set up screen)

Select the item with the Jog key.

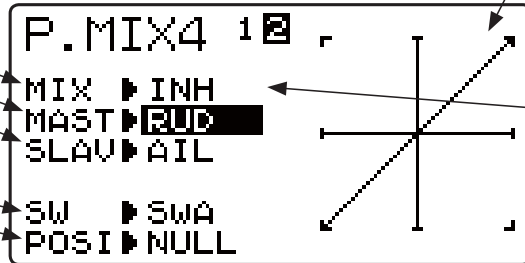


5Point curve setting



The set curve is displayed on a graph.

Function activation
Master CH select
Slave CH select



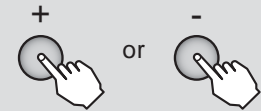
When INH is selected, the function cannot be used. When ON or OFF is selected, the function is activated. ON and OFF changes are linked to the switch.

P.MIX4

Refer to the P.MIX1 ~ 3 setting method described previously for settings other than the 5 point curve setting described below.

5point curve setting

Select the setting item (P-1 ~ P-5) of each point with the Jog key and set the amount of movement of each point by pressing the + key or - key.



Range : -100 ~ +100%

Default : 0%

CAUTION

At the end of setting, check that the mixing function is performed normally.



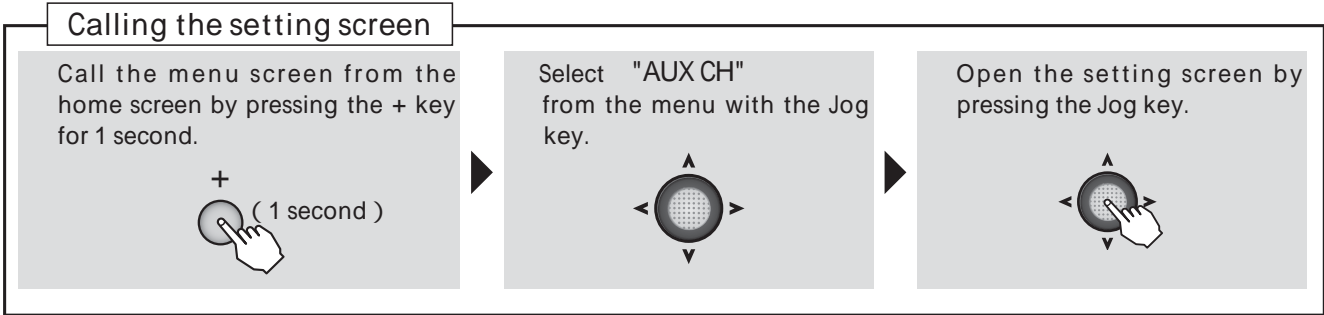
AUX CH **AUX Channel** (Common)

Function

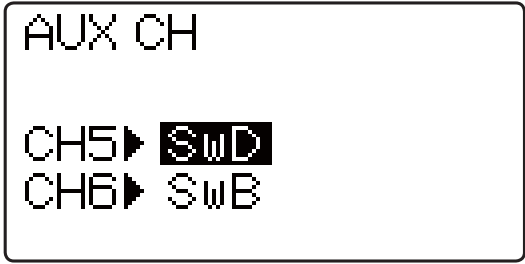
Auxiliary channel function (AUX CH): defines the relationship between the transmitter controls and the receiver output for channels 5-6.

⚠ Remember that if you assign primary control of a channel to a switch which you later use for other functions (like dual/triple rates or airbrakes), every time you use that other function you will also be moving the auxiliary channel.

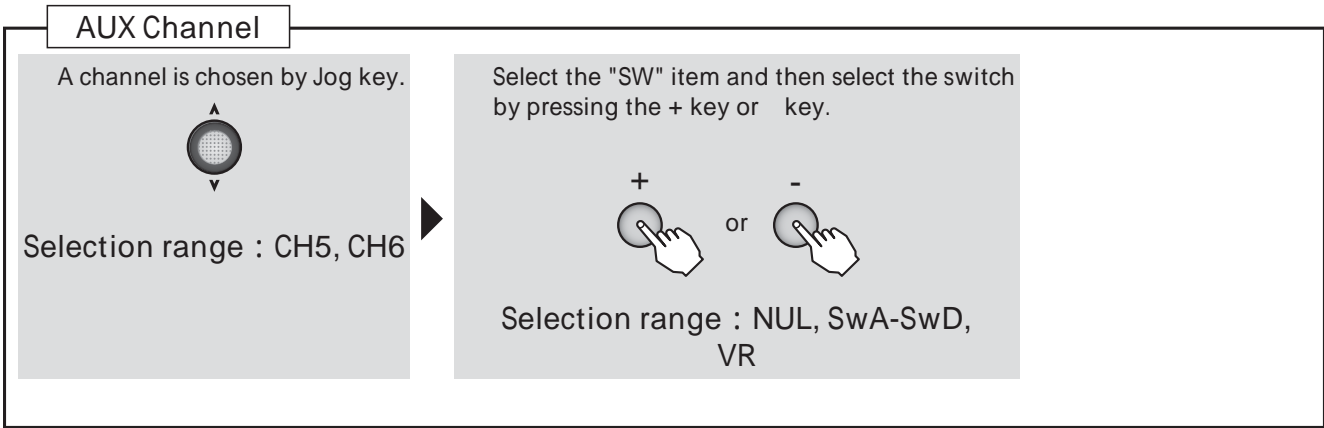
Method



Select the item with the Jog key.



Common function





SERVO Servo monitor / Servo test (Common)

Function

The servo display/servo test function displays the CH1 to CH6 servo output bar graph and tests servo operation.

- The servo display function can be used for a simple operation check of such functions as the mixing function.
- When the servo test function is turned on, the servo moves to the left and right at the set period. A

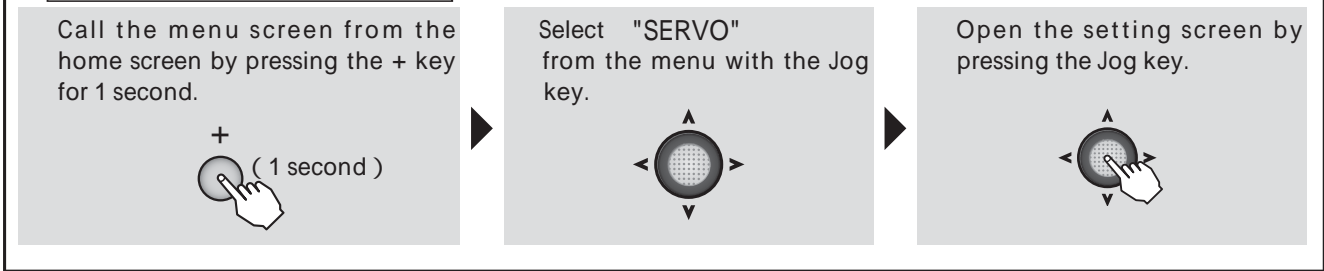
variable speed LNR (linear) mode or fixed speed JMP (jump) mode can be selected. This can be used to check the servo, etc. Operation ON/OFF can also be selected for each channel.

CAUTION

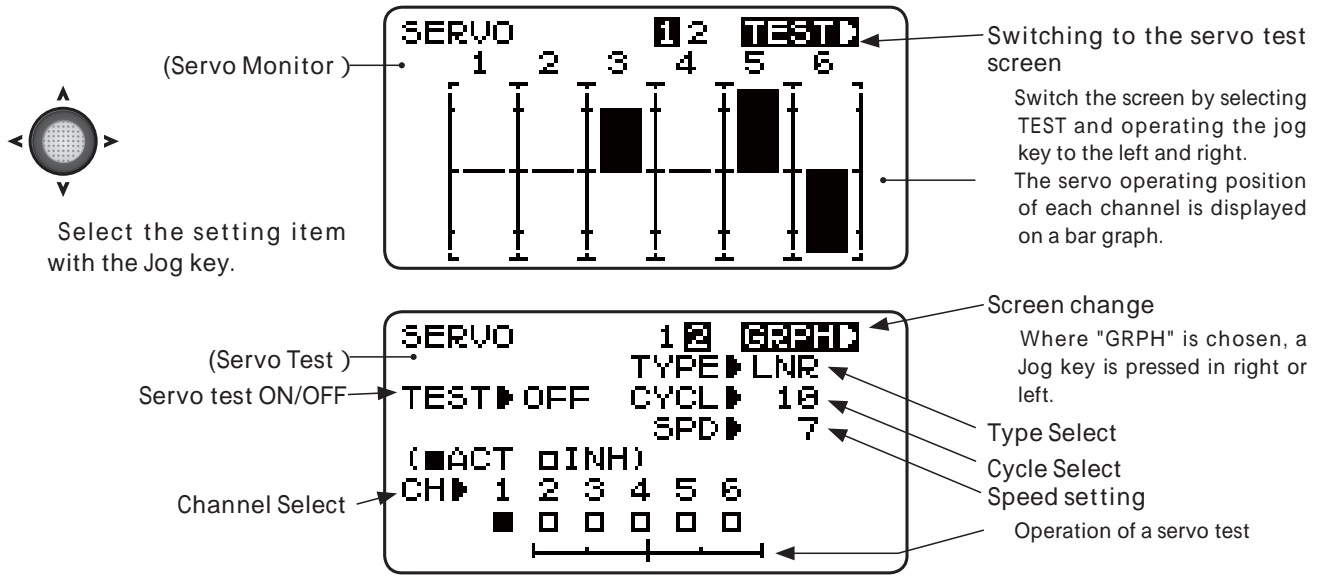
⊗ Using the servo test will move the servos to their full throw. Do not use this with linkages installed. Using it may damage the servo and linkage.

Method

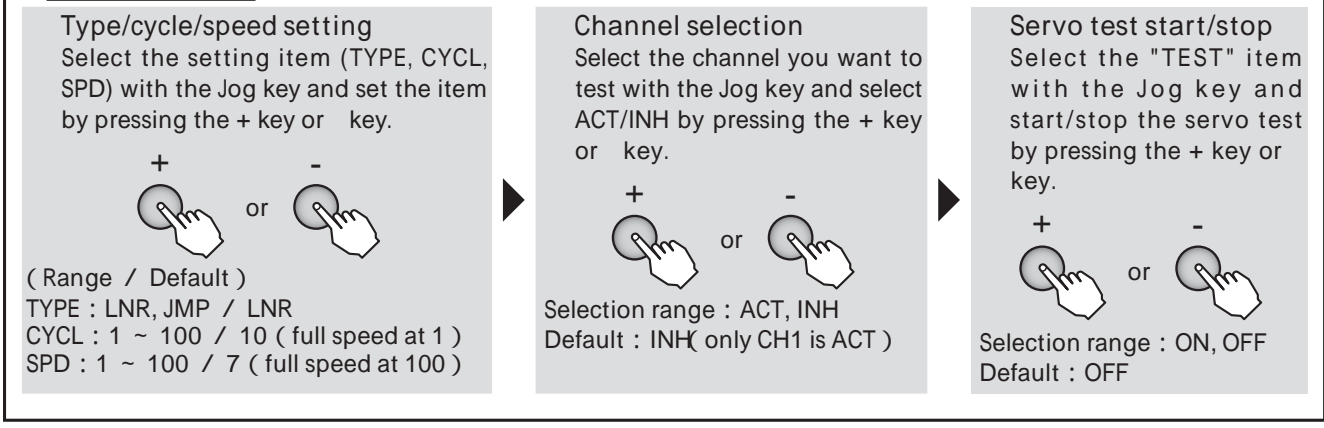
Calling the setting screen



Common function



Servo test



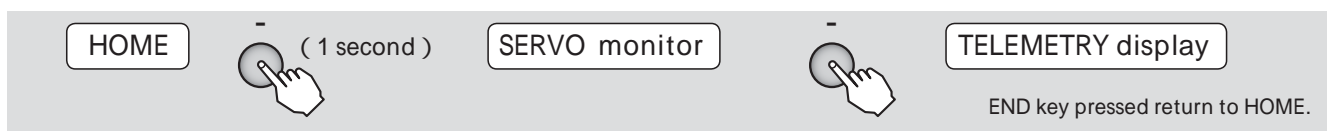
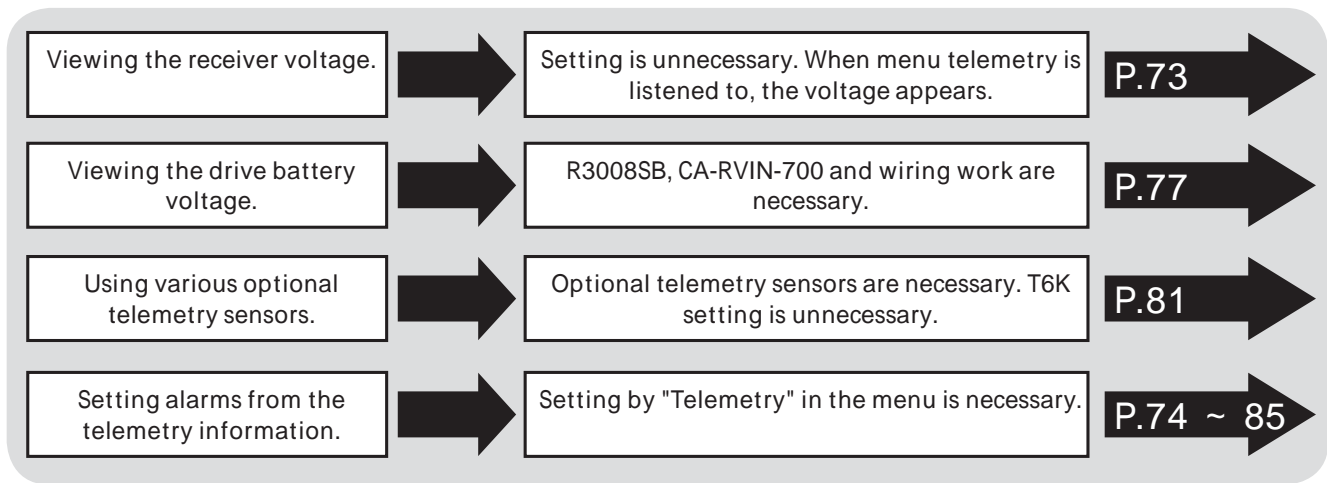


TLMTRY Telemetry (Common)

Function

This screen displays and sets the various information from the receiver. An alarm and vibration can be generated depending on the information. For example, a drop in the voltage of the receiver battery housed in the aircraft can be reported by an alarm.

This function can only be used in the T-FHSS Air mode. The S-FHSS system cannot use telemetry.
 Telemetry sensors sold separately can be mounted in the aircraft to display a variety of information. (Receiver voltage does not require a sensor.)
 The telemetry function cannot be used if the telemetry mode of the parameters is not ACT.
 When 2 receivers are used with 1 transmitter, the telemetry function cannot be used.

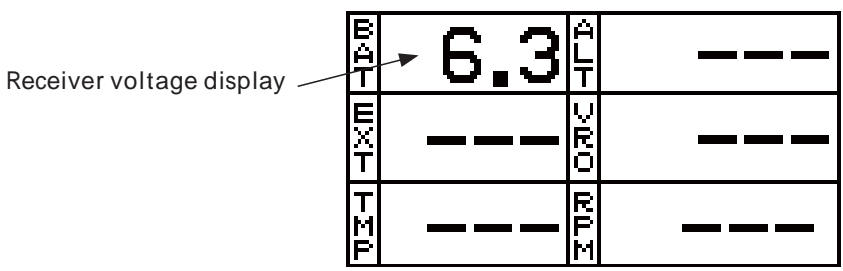
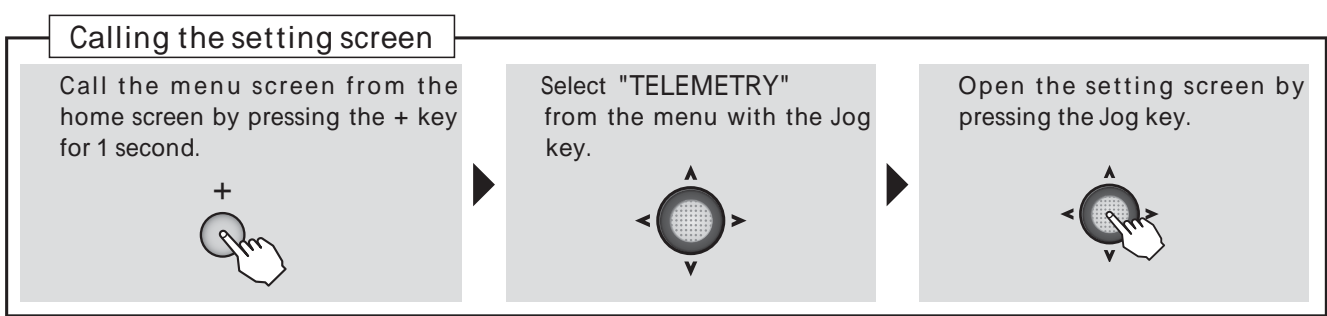


Common function

RX-BATT

Viewing the receiver voltage.
 In the initial state, the receiver voltage is displayed at the transmitter.

Display



How to display receiver voltage on a home screen.
 PARAMETER
 ↓
 HOME-DSP
 ↓
 "RX BATT" is chosen by + key or - key.



Viewing the receiver voltage maximum and minimum values.

In the initial state, the receiver voltage maximum and minimum values are displayed in the transmitter. (Value until reset)

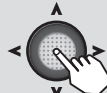
Display

Calling the setting screen

Select "RX-BATT" from the telemetry screen with the Jog key.



Open the setting screen by pressing the Jog key.



Receiver voltage MIN

Receiver voltage display

Receiver voltage MAX

```

RX-BATT
MIN/MAX= 6.3V / 6.3V
(ALARM) (VIB) (LIMIT)
DN INH OFF 5.0V
SPEECH INH SW NULL
    
```

MIN/MAX reset

Select "MIN/MAX" from the RX-BATT screen with the Jog key.

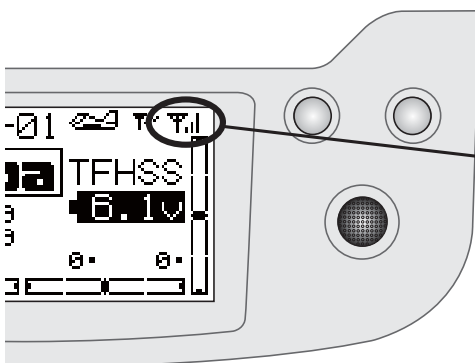


Date reset by pressing the Jog key for 1 second.



A confirmation "beep" sounds when complete.

Common function



- Receiver Transmitter. The reception of the signal from the receiver to the transmitter is shown. This does not affect flight.

⚠ WARNING



Do not stare at or set the transmitter setting screen while flying.

■ Losing sight of the aircraft during flight is very dangerous.

■ When you want to check the information during flight, call the telemetry screen before flight and have the screen checked by someone other than the operator.



Setting receiver voltage alarm.

Use this setting to sound an alarm when the receiver battery voltage drops dangerously low. VIB (vibration) that vibrates the transmitter at the same time can also be set.

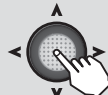
Method

Calling the setting screen

Select "RX-BATT" from the telemetry screen with the Jog key.



Open the setting screen by pressing the Jog key.



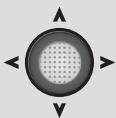
DN (down) shows that an alarm is generated when the voltage drops below the set voltage.

```

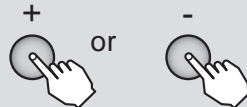
RX-BATT                               6.3V T.l
MIN/MAX= 6.3V / 6.3V
(ALARM) (VIB) (LIMIT)
DN▶ INH ▶OFF ▶ 5.0V
SPEECH▶ INH SW▶ NULL
    
```

Alarm set

In the RX-BATT screen state, select (ALARM) from the menu with the Jog key.

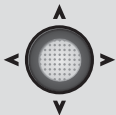


Select the "ACT" by pressing the + key or - key.

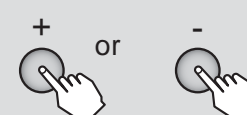


Vibration set

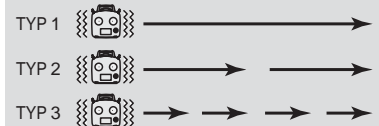
In the RX-BATT screen state, select (VIB) from the menu with the Jog key.



Select the "TYP1 ~ TYP3" by pressing the + key or - key.

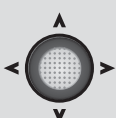


"VIB" types

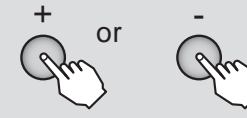


Alarm voltage set

In the RX-BATT screen state, select (LIMIT) 0.0V from the menu with the Jog key.



Select the voltage by pressing the + key or - key.



Selection range :
3.5V ~ 8.4V

When you want to set 5.0V, press the + key and - key simultaneously.



Listening to the receiver voltage by speech.

The receiver voltage can be heard verbally from the transmitter with a commercial earphone (3.5 plug). The speech function can be turned on and off with the specified switch.

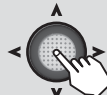
Method

Calling the setting screen

Select "RX-BATT" from the telemetry screen with the Jog key.



Open the setting screen by pressing the Jog key.



```

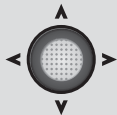
RX-BATT                               Y:1
                                6.3V
MIN/MAX= 6.3V / 6.3V
(ALARM) (VIB) (LIMIT)
DN▶ INH ▶OFF ▶ 5.8V
SPEECH▶ INH SW▶ NULL◀
    
```

Speech
ACT / INH

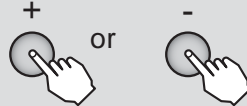
Selects the switch that turns the speech function on and off.

Speech

In the RX-BATT screen state, select (SPEECH) from the menu with the Jog key.

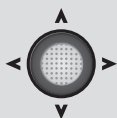


Select the "ACT" by pressing the + key or - key.



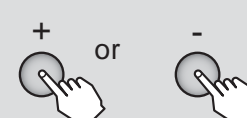
Switch

In the RX-BATT screen state, select (SW) from the menu with the Jog key.

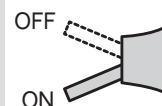


In "NULL", a speech always turns on.

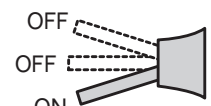
Select the switch by pressing the + key or - key.



Selection range :
NULL, SWA ~ SWH



2 Position



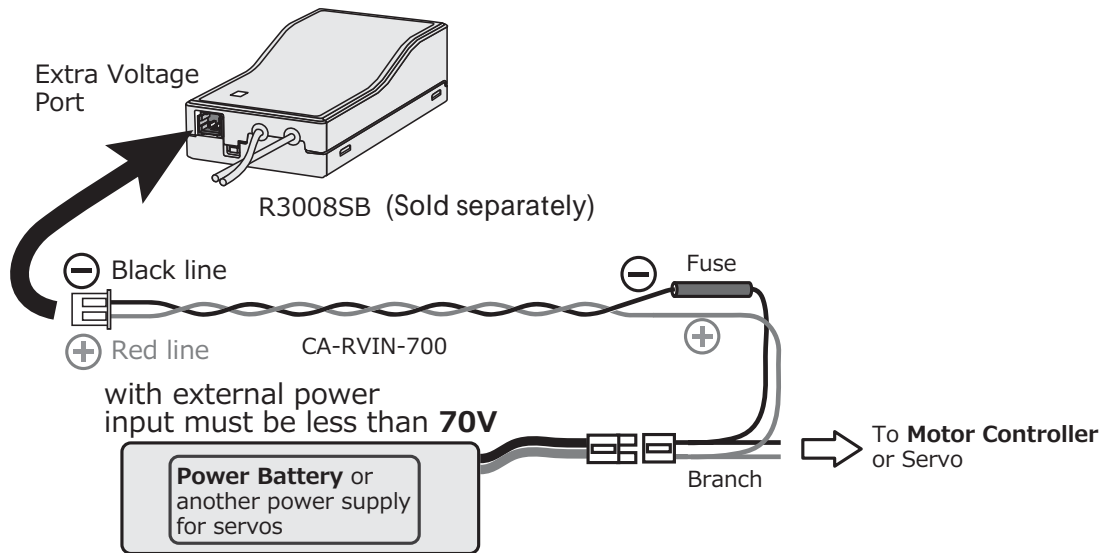
3 Position



EXT-VOLT

When connected as shown in the figure, the voltage of the drive battery in the aircraft and another power supply battery can be displayed at the T6K.

R3008SB Receiver, CA-RVIN-700 (external voltage input cable sold separately) is necessary.
Soldered wiring work is necessary.



EXT-Voltage display

When connected as shown in the figure, the drive battery voltage is displayed at the transmitter.

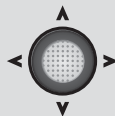
Method

Calling the SENSOR screen

Call the menu screen from the home screen by pressing the + key for 1 second.



Select "SENSOR" from the menu with the Jog key.

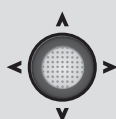


Open the setting screen by pressing the Jog key.

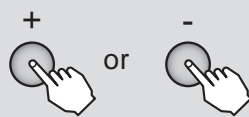


EXT start

In the SENSOR screen state, select "EXT OFF" from the menu with the Jog key.



Select the "R3008SB" by pressing the + key or - key.



SENSOR Screen

```

SENSOR 12
TEMP▶ SBS-01T*
RPM▶ SBS-01R*
ALTI▶ SBS-01A
EXT▶ [R3008SB]
    
```

Common function



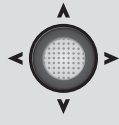
Display

Calling the setting screen

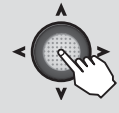
Call the menu screen from the home screen by pressing the + key for 1 second.



Select "TELEMETRY" from the menu with the Jog key.



Open the setting screen by pressing the Jog key.



EXT-VOLT	6.3	EXT-VOLT	---
EXT-VOLT	0.0	EXT-VOLT	---
EXT-VOLT	---	EXT-VOLT	---

EXT-Voltage display

EXT-Voltage MIN/MAX

In the initial state, the EXT-voltage maximum and minimum values are displayed at the transmitter. (Value until reset)

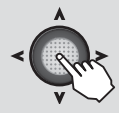
Common function

Calling the setting screen

Select "EXT-VOLT" from the telemetry screen with the Jog key.



Open the setting screen by pressing the Jog key.



EXT-VOLT	0.0V	7.1
MIN/MAX=	0.0V	0.0V
(ALARM)	(VIB)	(LIMIT)
DN	INH	OFF
		5.0V
SPEECH	INH	SW
		NULL

EXT-Voltage MIN

EXT-Voltage display

EXT-Voltage MAX

MIN/MAX reset

In the EXT-VOLT screen state, select (MIN/MAX) from the menu with the Jog key.



Date reset by pressing the Jog key for 1 second.



A confirmation "beep" sounds is complete.



EXT-Voltage alarm set up

This setting will sound an alarm when the EXT-voltage drops dangerously low. VIB (vibration) that vibrates the transmitter at the same time can also be set.

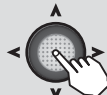
Method

Calling the setting screen

Select "EXT-VOLT" from the telemetry screen with the Jog key.



Open the setting screen by pressing the Jog key.



```

EXT-VOLT                               7.1l
                                0.0V
MIN/MAX= 0.0V/ 0.0V

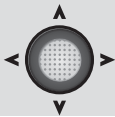
(ALARM) (VIB) (LIMIT)
DN▶ INH ▶OFF ▶ 5.0V

SPEECH▶ INH SW▶ NULL
    
```

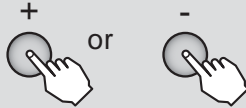
DN (down) shows that an alarm is generated when the voltage drops below the set voltage.

Alarm set

In the EXT-VOLT screen state, select (ALARM) from the menu with the Jog key.

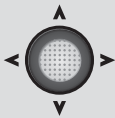


Select the "ACT" by pressing the + key or - key.

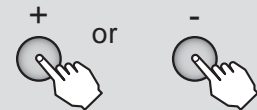


Vibration set

In the EXT-VOLT screen state, select (VIB) from the menu with the Jog key.

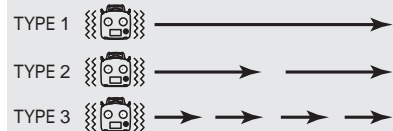


Select the "TYP1 ~ TYP3" by pressing the + key or - key.



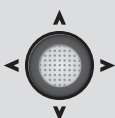
"VIB" types

If the following types are selected, the transmitter will vibrate during the warning.



Alarm voltage set

In the EXT-VOLT screen state, select (LIMIT) from the menu with the Jog key.



Select the voltage by pressing the + key or - key.



Selection range :

0.0V ~ 70.0V

When you want to set 5.0V, press the + key and - key simultaneously.



Listening to the EXT-voltage by speech.

The EXT- voltage can be heard verbally from the transmitter with a commercial earphone (3.5mm plug). The speech function can be turned on and off with the specified switch.

Method

Calling the setting screen

Select "EXT-VOLT" from the telemetry screen with the Jog key.



Open the setting screen by pressing the Jog key.



```

EXT-VOLT                               T.V
                                0.0V
MIN/MAX= 0.0V/ 0.0V
(ALARM) (VIB) (LIMIT)
DN▶ INH ▶OFF ▶ 5.0V
    
```

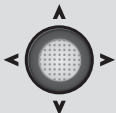
Speech
ACT / INH

SPEECH▶ INH SW▶ NULL

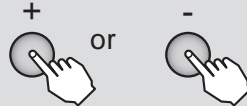
Speech ON/OFF Switch
selection

Speech

In the EXT-VOLT screen state, select (SPEECH) from the menu with the Jog key.

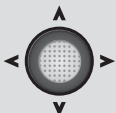


Select the "ACT" by pressing the + key or - key.



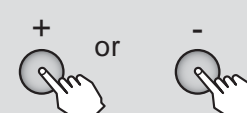
Switch set

In the EXT-VOLT screen state, select (SW) from the menu with the Jog key.



In "NULL", a speech always turns on.

Select the switch by pressing the + key or - key.



Selection range :
NULL, SWA ~ SWH

