6 CHANNEL RADIO CONTROL SYSTEM

SKYSPORT 6

6YFK-FM
G

INSTRUCTION MANUAL

1M23N04602

CE

Futaba
Digital Proportional R/C System

CONTENTS

Do not fly in the following places:

-Near other R/C flying fields (within about 3km)

-Near people on the ground, or objects in the air

-Near homes, schools, hospitals, or other places where there are a lot of people

-Near high tension lines, high structures, or communication facilities

Radiowave interference and obstructions may cause a crash. A crash caused by trouble in the R/C set, or the model itself, may cause death or property damage.

Do not fly when you are tired, sick, or intoxicated.

Fatigue, illness, or intoxication will cause a loss of concentration or normal judgment and result in operation errors and a crash.

Extend the antenna to its full length.

If the antenna is shortened, the effective range of the radio signal will be shorter.

Always test the R/C set before use.

Any abnormality in the R/C set, or model, may cause a crash.

Before starting the engine, check that the direction of operation of each servo matches the operation of its control stick. If a servo does not move in the proper direction, or operation is abnormal, do not fly the plane.

Check that the transmitter (Tx) antenna is not loose.

If the transmitter antenna comes off during use, control will be lost and the model will crash.

⚠CAUTION

When placing the transmitter (Tx) on the ground during flight preparations, be sure that the wind cannot knock it over.

If it is knocked over, the throttle stick may be pushed to full throttle, the engine will race and create a very dangerous situation.

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

They are hot and will cause a burn.

⚠CAUTION

Do not use individual commercial nicad penlight batteries.

During quick charging, the battery holder contacts may overheat and damage the equipment, or prevent charging.

Do not short the nicad battery connector terminals.

Shorting the terminals will cause sparking and overheating and result in burns or fire.

Do not drop or apply strong shock to nicad battery.

The battery may short out and cause overheating or breakage and electrolyte leakage and result in burns or damage from chemical contents.

Storage and Disposal Precautions

⚠WARNING

Do not leave the R/C set, battery, model airplane, etc. within the reach of small children.

Touching and operating the R/C set, or licking the battery, may cause injury or damage due to chemical content.

Do not throw the nicad battery into a fire or heat the nicad battery. Also, do not disassemble or rebuild the nicad battery.

Breakage, overheating, and electrolyte leakage may cause injury, burns, or blindness.

When not flying the model, store the R/C set with the nicad battery in a discharged state. Recharge the nicad battery before the next flight.

If a partially discharged nicad battery is recharged many times, its memory effect will reduce the flight time substantially and may cause a crash, even if the battery is recharged.

Nicad Battery Electrolyte

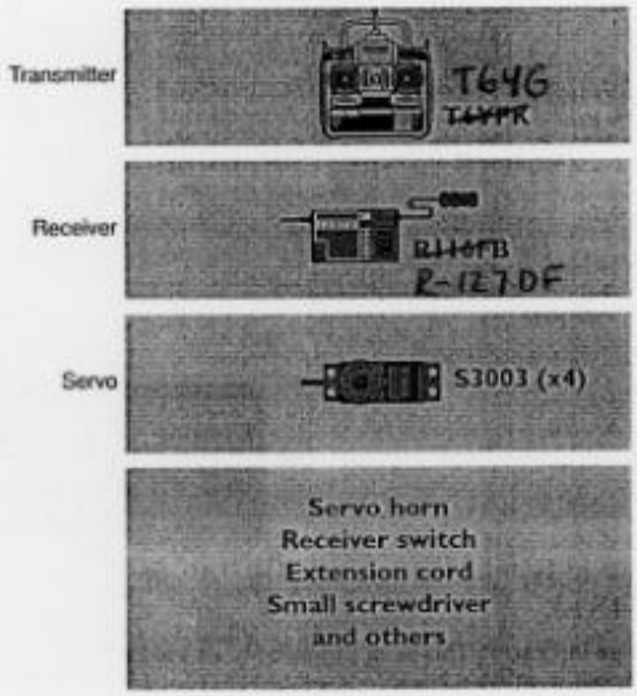
The electrolyte in a nicad battery is a strong alkali and can cause blindness if it gets in the eyes. If you get the electrolyte in your eyes, immediately wash your eyes with water and see a doctor. If you get the electrolyte on your skin or clothes, it may cause a burn. Immediately wash it off with water.

BEFORE USE

Set Contents

After opening the carton, first check if the following items are provided.

The set contents depend on the type of set, and these are the standard.



If the set contents are incomplete, or if you have any questions, please contact the dealer.

Landing gear switch: Controls the raising and lowering of retractable landing gear. Not all models will use this function.

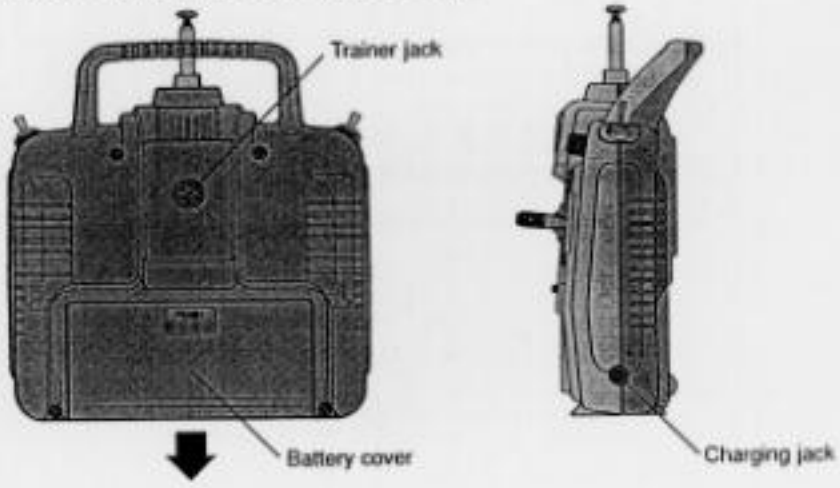
Flap knob: Controls the flap servo(CH6).

Dual Rate switch (AIL. D/R/ELV. D/R):
Dual Rate trimmers (AIL./ELV.):
Used to set to reduce the servo travel by flipping each Dual Rate switch. The travel reduction for the aileron and elevator may be set by each trimmer. See page 18 for the aileron/elevator dual rate function operation instructions.

Trainer switch: Controls the link between the instructor and student transmitters when using the trainer function. The student transmitter can only be operated when this switch is being activated.

T6YG

Transmitter ~~T6YFK~~ (Rear Panel/Side Panel)

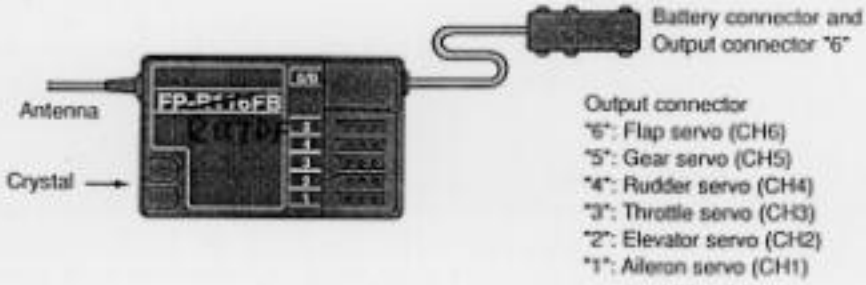


Trainer jack: Connects the trainer cord when using the trainer function. The trainer cord is sold separately. See page 19 for the trainer function operation instructions.

Battery cover: Use when replacing the battery. Slide the cover downward while pressing the part marked "PUSH".

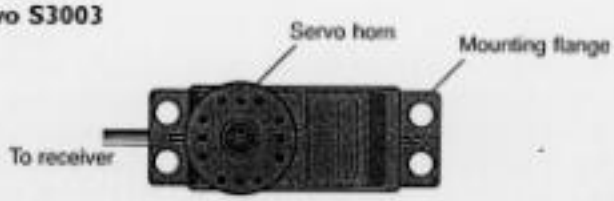
Charging jack: Charging jack used when charging the transmitter nicad battery.

Receiver ~~R116FB~~ R127DF



Crystal: The crystal is installed at the antenna end of the receiver.

Servo S3003



Accessories: The following items are supplied with the set:

-Spare servo horn: Use to match the application.

-Servo mounting parts: Rubber grommet, etc.

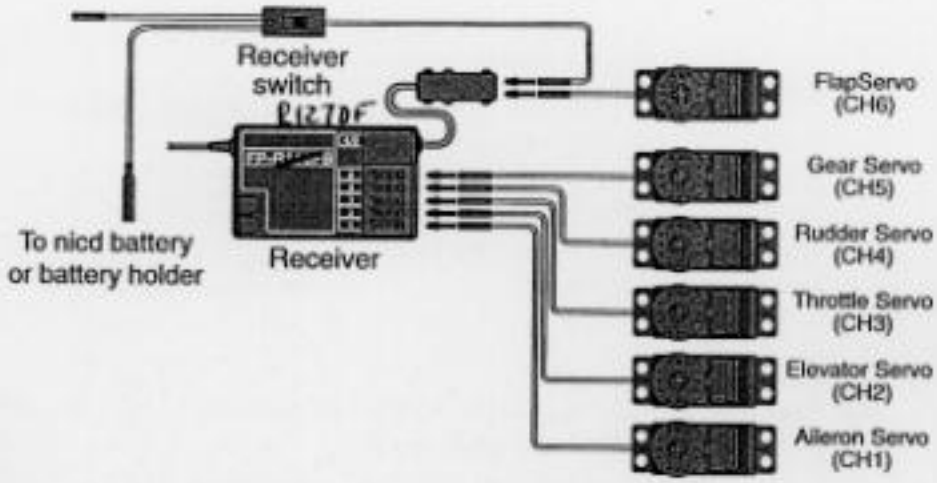
INSTALLATION AND ADJUSTMENT

This section describes the installation and adjustment of the receiver, servos, etc. to the plane.

Connections

Connection examples are shown below.

Connection Example



•Four servos are supplied as standard.

Adjustments

The operating direction, neutral position, and steering angle of each servo are adjustable.

⚠CAUTION

The basic linkage and adjustments, control layout, and servo, Rx and Nicad installation should conform to the fuselage design drawings and kit instruction manual. Be sure that the center of gravity is at the prescribed position.

Adjustment Procedure

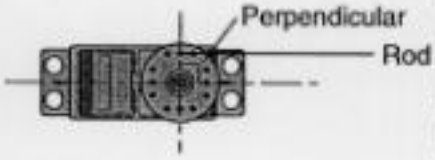
Before making any adjustments, set all the SERVO REVERSING switches on the front of the transmitter to the lower(NOR) position and set the both Dual Rate trimmers(AIL./ELV.) to the maximum ("10") point. (Set the switches and the trimmers with a small screwdriver, etc.)

Turn on the transmitter and receiver power switches and make the following adjustments:

1. Check the direction of operation of each servo.

If a servo operates in the wrong direction, switch its SERVO REVERSING switch. (The direction of operation can be changed without changing the linkage.) Pay special attention to the direction of the aileron. (See page 14 for a transmitter operation instruction.)

2. Check the aileron, elevator, and rudder neutral adjustment and left-right (up-down) throw.



Check that when the Tx trim lever is in the center, the linkage connection point to the perpendicular to the servo. In this position the control surfaces (aileron, elevator, rudder, etc.) must be neutral. If the neutral position of the control surface has changed, reset it by adjusting the length of the rod with the linkage rod adjuster.

When the throw is unsuitable (different from the deflection angle specified by the kit instruction manual), adjust it by either changing the servo horn, the position of the linkage on the servo horn or the linkage position on the control surface horn.

3. Check the engine throttle (speed adjustment) linkage.

Change the servo horn installation position and hole position so that the throttle is opened fully when the throttle stick is set to HIGH (forward) and is closed fully when the throttle stick and throttle trim are set for maximum slow (backward position and lower position, respectively).

4. After all the linkages have been connected, recheck the operating direction, throw, etc.

Before flight, adjust the aircraft in accordance with the kit and engine instruction manuals.

5. Fly the plane and trim each servo.

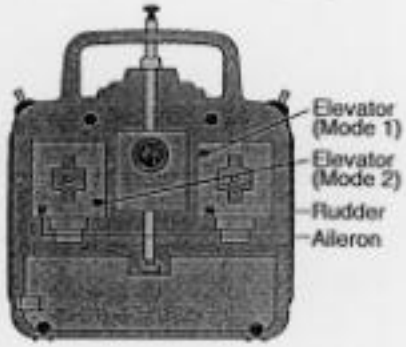
Stick Lever Spring Tension Adjustment

The operating feel of the aileron, elevator, and rudder sticks can be individually adjusted by adjusting the stick spring tension.

1. Remove the four transmitter rear case screws and carefully remove the rear case.

2. Adjust the spring tension by turning the screw of the channel you want to adjust.

3. Close the rear case and tighten the four screws.



Trainer Function

The trainer function is a very effective way for training students. To use it, the special trainer cord (sold separately) is necessary.

The special trainer cord can be connected to SKYSPORT4, SKYSPORT6, 7U series, 8U series, and PCM1024Z series transmitters.

⚠WARNING

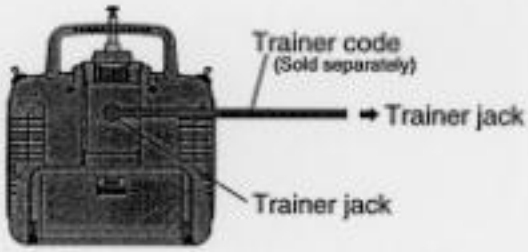
Never turn on the student transmitter power switch.
Turning on the power switch will cause interference and a crash.

Set the student and instructor transmitter functions to the same settings.
For example, if the direction of operation is reversed, control will be lost and the plane will crash.

Both transmitters must have the modulation type that is FM type.
If the modulation type is different, control is impossible.

Connection

Connect the student and instructor transmitters with the trainer cord.



Operating Instructions

Instructor side: Turn "on" the power switch and extend the antenna to its full length. When the trainer switch is not activated, the instructor has control. When the trainer switch is activated, control is transferred to the student. Release the switch to retain control.

Student side: Never turn on the power switch.

Troubleshooting

If your R/C set does not operate, its range is short, it intermittently stops operating, or it operates erroneously, take the action shown in the table below. If this does not correct the trouble, please contact a Futaba dealer.

Check point	Check item	Action
Transmitter/receiver battery	Dead battery.	Replace the battery. Charge the nicad battery.
	Incorrect loading.	Reload the batteries in the correct polarity.
	Faulty contact connection.	If the contact spring is deformed, correct it.
	Dirty contacts.	Wipe with a dry cloth.
Transmitter antenna	Loose.	Screw in.
	Not extended to full length.	Extend fully.
Crystal	Disconnected.	Push in.
	Wrong band.	Match transmitter/receiver band.
	Different from specification.	Replace with specified crystal.
Connector connection	Incorrect wiring.	Reinsert.
	Disconnection.	Push in.
Receiver antenna	Close to other wiring.	Separate from other wiring.
	Not cut?	Request repair.
	Not bundled?	Install in accordance with instruction manual.
Servo linkage	Binding or looseness	Adjust at the fuselage side.
Motor (electric motor plane)	Noise countermeasures.	Install a noise absorbing capacitor.

Repair Service

Before requesting repair, read this instruction manual again and recheck your system. Should the problem continue, request repair service as follows:

Describe the problem in as much detail as possible and send it with a detailed packing list together with the parts that require service.

- Symptom (Including when the problem occurred)
- System(Transmitter, Receiver, Servos and model numbers)
- Model (Model name)
- Model Numbers and Quantity
- Your Name, Address, and Telephone Number.

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