

For cars only

Before using your new 2.4GHz system, please read this manual thoroughly and use the system properly and safely. After reading this manual, store it in a safe place.



Thank you for purchasing a PK-FSM2.4G module and an R603FS receiver. This system is based on the combination of the newly developed 2.4GHz module and its correspondent receiver. The system utilizes the 2.4GHz-SS radio communication and an ultra small antenna. In addition, the system inherits Futaba's unique HRS (High Response System).

Features

- 2.4GHzSS (Spread Spectrum) radio communication system
- Frequency channel setting unnecessary: Sifting the channels within the 2.4GHz band automatically, this system minimizes the interference from other 2.4GHz system.
- Accepts no unwanted signals by using ID code
- The function "Auto-Detect" is utilized to automatically determine which mode is active, HRS or PPM mode. (R603FS)
- Short and small antenna (PK-FSM2.4G)/Diversity antenna (R603FS)

Applicable system; T3PK or T3VC Transmitter

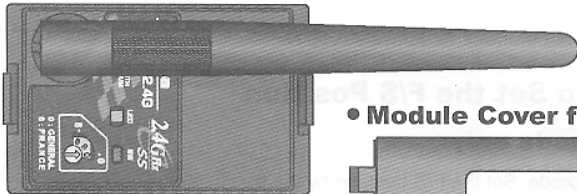
INSTRUCTION MANUAL

- 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.
- This manual has been carefully written. Please write to Futaba if you feel that any corrections or clarifications should be made.

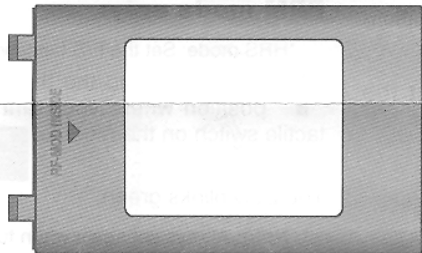
Contents and Technical Specifications

Your 2.4GHz system includes the following components;

• PK-FSM2.4G Module



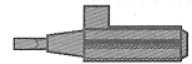
• Module Cover for T3PK



• R603FS Receiver



• Mini screwdriver



[Specification]

- Communication method: One-way operation system
- Mode: PPM, HRS (Auto-detect)
- Maximum operating range: 80m (Optimum condition)
- For safety: F/S, B-F/S, ID (About 4billion ways of pair identifications)

PK-FSM2.4G;

- Transmission antenna: 1/2λ mono-pole

R603FS;

- Reception antenna: Diversity type (Two antennas: internal and external)
- Power requirement: 6V Nicd battery
- DSC function available
- RS232C port: (for factory use only)
- Size: 39x26x14mm (excluding a projection part)
- Weight: 14.1g

Installing the PK-FSM2.4G/R603FS

Install and adjust the PK-FSM2.4G module and R603FS receiver as described below.

Attachment of the module

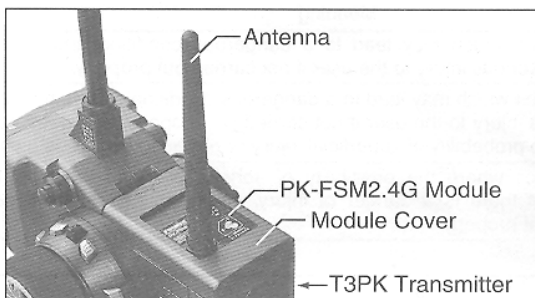
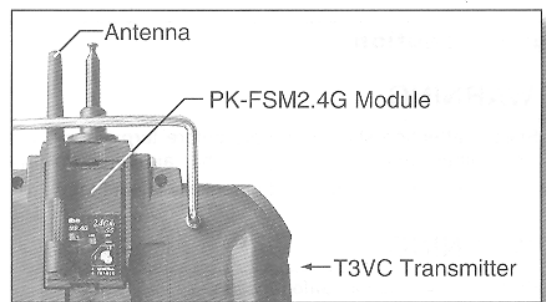
⚠ CAUTION

- Be sure to turn off the power of the transmitter before you attach or detach the module.

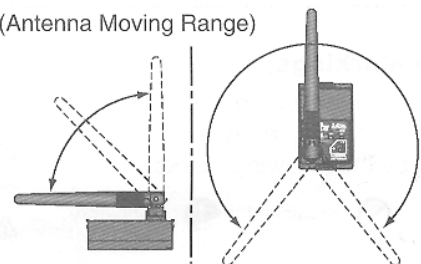
- 1 Insert the module with care so that the connector pins of the transmitter won't be bent.

⚠ WARNING

- Adjust the antenna vertically to the ground. Otherwise, the operating range may become shorter.



(Antenna Moving Range)



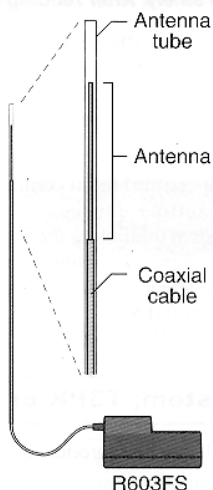
Receiver installation

- 1 Install the R603FS receiver on the car as follow;

Note: The operating range may become shorter, although depending on where the receiver and the antenna are mounted.

⚠ WARNING

- ❗ Install the antenna in the higher place as shown in the figure.
- 🚫 Do not cut the antenna.
- ❗ Keep the antenna away from the motor, ESC and other noise sources as possible as you can.
- ❗ Put the antenna in the antenna tube to protect it.
- 🚫 Do not bend the coaxial cable. It causes damage.
- ❗ 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.



⚠ CAUTION

- ❗ Always use R603FS under the following conditions;
 - Power supply; 6V Nicd battery (PPM/HRS mode)
 - Servo; 6V type Futaba Digital Servo (HRS mode)
- * If the conditions are different, control is impossible or the servo may be damaged.

Frequency Range Setting

The frequency range of 2.4GHz system differs according to regulations of the country that it is used in.

- 1 Use the rotary switches of the module to select the frequency range mode.



0: GENERAL
(2405.376MHz - 2477.056MHz)
8: FRANCE
(2407.424MHz - 2450.432MHz)

⚠ WARNING

- ❗ If using this system in France, always use it to set the rotary switch to "8".

* In other countries, both "0:GENERAL" and "8:FRANCE" are available.

Usage Precaution

⚠ WARNING

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

⚠ WARNING

- ❗ Be sure to set the Fail Safe function.

Special Markings;

Pay special attention to the safety at the parts of this manual that are indicated by the following marks.

[Symbol] 🚫 : Prohibited ❗ : Mandatory

Mark	Meaning
⚠ DANGER	Procedures which may lead to a dangerous condition and cause death or serious injury to the user 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.

How to turn on the power

A certain ID number is given to the receiver automatically. Identifying this ID number, the system will minimize the interference from other transmitters.

- 1 Bring the transmitter and the receiver close to each other within one meter.
- 2 Turn on the transmitter.

Note: Check the LED on the module.

Parameter check for 0.5 seconds after power-on	Red: On
Transmitting signals	Green: On
F/S is activated by the tactile switch of the module. (PPM mode)	Green: Blink
Unrecoverable failure (EEPROM, etc.)	Red and Green turn on alternatively.
PCM is improperly selected.	Red: Blink

- 3 Turn on the receiver.

- 4 Push the tactile switch of the receiver.



Note: Check the LED of the receiver.

No signal reception	Red : On
Receiving signals	Green: On
Receiving signals, but ID is unmatched.	Green: Blink
Unrecoverable failure (EEPROM, etc.)	Red and Green turn on alternatively.

How to Set the F/S Position

PPM mode only:

*HRS mode: Set the F/S function by the transmitter.

- 1 Move and hold the throttle trigger (stick) to the F/S servo position where you want to set (slow side) then push the tactile switch on the module.



The LED blinks green.

Note: Always set again when turning on the power.

Battery F/S function

The Battery F/S function becomes active when the voltage of the receiver becomes 4.75V or less. The throttle servo move to the preset position.

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, Servo's and model numbers)
- Model (Model name)
- Model Numbers and Quantity
- Your Name, Address, and Telephone Number.

If you have any questions regarding this product, please consult your local hobby dealer or contact the Futaba Service Center.