

1.6 User Manual

About the Fail Safe Function

In the situation where the receiver loses the transmitter radio signal during use, this module set will move all the channel servos to the positions that were set during binding. (All-channel Fail Safe function)

Set the transmitter sticks, levers, and switches to the desired fail safe positions, and carry out the binding while maintaining this condition.

While carrying out the binding, take adequate care particularly regarding the transmitter throttle position.



The throttle channel should always have a Fail Safe set. Particularly in the situation where the Reverse Switch setting has been changed, in some situations the Fail Safe function may be changed to the Full High side, which will be very dangerous. After completing the transmitter settings, carry out the binding once again.

Be certain to carry out confirmation of the Fail Safe operation. (Switch off the transmitter power once, and check whether the servo operation moves to the correct position.)

When using the 11Xzero transmitter

By using the SD card to carry out a version update of the software in the transmitter main unit, serial communications (telemetry communications) will become possible.

Using the 11Xzero in the serial communications mode

This mode uses the pins that are provided with the module set.

The transmitter requires a version update to be carried out of the transmitter main unit system using the SD card.

By setting the modulation to "DMSS" operation will be carried out using the added pins, allowing use of the two-way communication functions (telemetry functions), and also enabling full use to be made of all 11 channels. For details of the telemetry function operation methods, please read the operation manual inside the software file.

Mounting the module

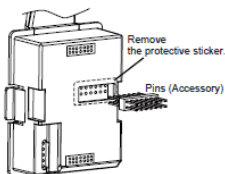
Remove the black-colored protective sticker from the module rear side. Mount the provided pins in the module while referring to the figure at right. Also remove the black-colored protective sticker from the module unit base on the transmitter side, and then mount the module in the transmitter main unit while taking care not to bend the pins.



The provided pins should only be used with the 11Xzero transmitter. In the situation where the pins are mounted in other transmitters, they will not work. In no circumstances should the protective stickers on the connector terminals be removed.

- For further questions or inquiries please contact your local dealer or JR distributor in your country. (The contents of this specifications and manual may be changed or revised without prior notice.)

NEM-066B (2014/03)



TG 2.4XP DMSS CE Operation Manual

PCM9X Series/11Xzero/PCM12X
2.4GHz DMSS Module

- Prior to use, please read this manual throughly
- Keep this manual in a convenient place for quick and easy reference.

General Precautions for Safety

It is very important to ensure that you observe the following precautions.

Please read this explanation first.

This document describes the basic precautions to allow safe use of the 2.4GHz system.

Be certain to read this document before using the product.

Basic Precautions for Safe Use of the 2.4GHz System

- The 2.4GHz band is not a frequency exclusively for use with RC aircrafts. This frequency band is in common use with the ISM (industry, science, and medical care) band which is widely used for short-distance transmission such as microwave ovens, wireless LAN, digital cordless phones, audio games, cellphone Bluetooth, and VICS. Therefore, the steering response of the 2.4GHz system may be degraded in an urban area. Further, as it is also used for ham and local area radio communications for mobile identification, please pay attention to possible influences from these. In the event of any adverse radio wave interference on an existing wireless station, immediately stop emitting radio waves and take interference avoidance measures.
- At a race track/airport, minimize use of a device that can affect the transmitter/receiver and be sure to confirm the safety beforehand. Also, always follow instructions given by the facility staff.
- If an aircraft is allowed to fly behind a building, a pylon, trees, etc. so that the radio-wave range is blocked, the steering response may drop, even resulting in an "out-of-control" situation. Always let the aircraft fly within a range that can be visually observed.

Indications and Symbols relating to Safety

The following symbols stated in this manual indicate the precautions regarding possible danger which may occur due to improper handling. Be sure to strictly observe them, as they contain important safety instructions.



If incorrect operation methods are used, it is possible that there will be a danger of death or serious injury.



If incorrect operation methods are used, it is possible that there will be a possibility of serious injury.



If incorrect operation methods are used, it can be expected that there will be a possibility of problems occurring.



This indicates actions that are forbidden.



This indicates actions that must be implemented.

Before starting use, make sure that all the parts are provided. Then, connect the switch harness and servo to the receiver, and insert batteries into the transmitter/receiver. Turn on the transmitter/receiver and confirm that they operate correctly. If they do not operate, check the batteries. If a rechargeable battery is used for the first time after purchase or is used after being left unused for a long period, be sure to charge it with the battery charger before use. In the event of any missing parts, malfunction, etc., please contact the Service Section of this Company.



Out-of-control and dangerous situations can be caused. DO NOT use the product on rainy days since it may cause malfunction if water gets inside the transmitter/receiver. If it should be used by necessity, make sure to take waterproof measures.

Injury due to heat generation, fire, or electric shock can occur.

Never disassemble or modify this product.

The engine and the motor (in the case of an electrically-driven model) can start rotating at high speed, causing danger.

When turning on the power switch, set the transmitter throttle stick to the lowest speed position (where the engine/motor rotation does not become high) and turn on the transmitter power switch and the receiver power switch in this order.

For turning off power, turn off the receiver and the transmitter in this order.

Injury can be caused.

When adjusting the engine (motor), fully pay attention to the power which comes from the rear side.

DO NOT start the engine with the transmitter throttle in a high speed position. This is very dangerous.

WARNING

- ⊘ Failure can be caused. DO NOT use this module set in combination with a competitor's product (servo, gyroscope, etc.).
- ⊘ Malfunction can be caused. As the electronic parts mounted on the transmitter/receiver are susceptible to impact, DO NOT apply strong impact or drop them.
- ⊘ Out-of-control and dangerous situations can be caused. When degraded servo movement is detected, immediately stop operating and check the battery power remaining, servos, etc.
- ⊘ DO NOT use the product in the following places, as there is a risk of an out-of-control state or an accident occurring:
 - Transceiver interference exists.
 - Passing near to traffic consisting of cars and motorbikes.
 - Near a high-tension electric line, building, bank, or in a mountainous area etc.
 - Near an FM/TV station, or a radio transmitting station for ship radios.
 - Near residences and buildings, and near people.
- ⊘ A sudden malfunction may occur and will be dangerous. If the receiver, servo etc. goes under water and operates normally after it is fully dried, the equipment may still malfunction. In such case, DO NOT continue to use the product, and contact this company for inspection regardless of normal operation.

CAUTION

- ⚠ Prior to flying, check the following items for safety:
 - Is there enough battery remaining in the transmitter/receiver? (Is the rechargeable battery fully charged?)
 - Is there any fuel spillage on the receiver, servo, etc. which was caused by leakage from the fuel tank? Is there enough fuel? Check that no linkage is in contact with the airplane body. It may cause vibration noise of the airplane. Also, conduct a vibration test by setting the engine (motor) to high while holding the body and confirm that each control surface moves correctly.
- ⚠ In the case of the initial flight, avoid flying at great distances, choose a safe place, and perform flying practice in the vicinity for several minutes.
- ⚠ If possible, avoid using televisions or radios close to this product. Noise may be caused in the sound or images produced by the television or radio due to the influence of the electromagnetic waves emitted by this product.

About this module

This product is designed as a radio-controlled device for use in hobby activities. Do not use it for any other applications. Please understand that this company cannot be responsible for any accident or failure that may occur from the modification of this product, use of non-genuine parts, natural disaster, or nonobservance of the precautions described in this manual. Further, as for damages caused by an accident or failure, please understand that items (such as airplanes, competitors' products, fuel, etc.) excepting this product and this Company's genuine parts will not be covered under the warranty. The use of radio waves required in this product is defined as follows in the Radio Law of Japan.

- When this product is used overseas, authorization by the law of the country will be required.
- When this product is used overseas for a purpose other than as a model, it may be subject to the restrictions in accordance with the Export Trade Control Order. In such a case, an export permit under the Order is required.

Precautions when operating 2.4GHz transmitters

- ① Due to the structure of the transmitter antenna, there are directions where the power of the radio waves is weak. Avoid pointing the antenna tip in the direction of the aircraft.
- ② The transmitter antenna has a delicate structure. Handle it carefully without gripping it strongly.
- ③ Due to the transmitter antenna characteristics, do not attach objects such as metal clips to the antenna.

Configuration and standards of the module set

Configuration and features

Confirm the contents of this module set according to the label affixed to the box.

TX module TG2.4XP DMSS

- Because this module uses the 2.4GHz band, band setting will not be necessary.
- The module can be used with previous transmitters (in the PPM mode).
- For the 11Xzero transmitter, carrying out a software version update will allow use of the telemetry functions.

Standards

Product No.: TG2.4XP
 Operation System: DMSS system (PPM/serial signal input)
 Transmission Frequency: 2.4GHz band
 Communication System: FH-SS (Frequency hopping system)

Dual Modulation Spectrum System (DMSS)

The DMSS system of this module is JR's unique communications system that allows two-way communications. Note in addition that it is not compatible with JR's former "DSM" system.

Caution

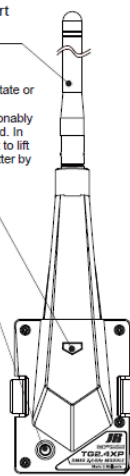
Although this module will allow operation by transmitters using PPM signals, the number of transmitter channels will be limited as described below due to restrictions in the main unit.

- PCM9X Series: 9ch (Telemetry not possible)
- PCM10X: 9ch (Telemetry not possible)
- PCM12X: 8ch (Telemetry not possible)
- 11Xzero: 9ch (Telemetry not possible) Also read the prior explanation)

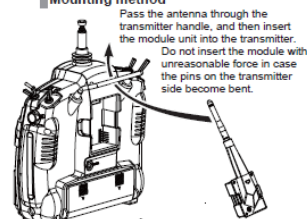
About the TX module

Names of each part

- Antenna**
This bends through 90 degrees. Do not unreasonably rotate or twist the antenna. If the antenna is bent unreasonably it may become damaged. In addition, do not attempt to lift up or move the transmitter by holding the antenna.
- Binding lamp (LED)**
This indicates the operation condition.
- Bind button**
When carrying out binding, the transmitter power should be switched ON while pressing and holding this button. Do not press this button during operation. If the button is pressed during operation, the transmitter will change to the Range Checking mode, and the output will be reduced. Check before flight that the module is not in Range Checking mode.



Mounting method



Caution

When using this module, set the modulation to "PPM". Even when the model is changed, it will not be necessary to carry out re-binding.

Bind setting method

Correctly mount the module in the transmitter, and set the modulation to "PPM". Prepare the receiver in the binding mode as described in the receiver manual. Move the throttle stick to the slowest position, then switch on the transmitter power while pressing and holding the Bind button on the lower part of the module. Confirm that the LED of the transmitter binding lamp is also flashing, and wait for a short period. Confirm that the lamps on the transmitter and receiver both light, and that the servos move. For further operation of the transmitter, please read the transmitter manual.

Front

FCC Information

This device 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.
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NEM-029A
(2014.3)

Rear

IC Information

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:
(1) this device may not cause interference, and
(2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.