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DMSS DUAL MODULATION SPREAD SPECTRUM

JR PROPO

XBus RG712BX

7ch 2.4GHz RECEIVER

DMSS 2.4GHz 7ch Receiver
(Coaxial Diversity Antenna, XBus and Telemetry)

Operation Manual

Thank you for purchasing this JR product. To allow correct and safe use of this product, please read this operation manual.

*The DMSS system is not compatible with DSM-2 nor DSM-J systems.

[About the TL Logo]
This logo is only included on products that support the JR Telemetry System (bi-directional communications).

Features

- With DMSS, cross modulation is restricted. This high sensitivity receiver is not easily affected by inter-modulation interference.
- The telemetry system is capable of feeding back information such as receiver battery voltage.
- Brand new receiver diversity antenna system gives bullet proof signal reception like never before. These antennas are also used for synchronized transmission of telemetry data, providing improved signal back to your transmitter.
- The optional remote antenna adds an even greater layer of security.
- It is possible to confirm receiver operation by way of LED's.
- Supports transmitter setting of fail safe.

Configuration

●RG712BX Receiver Main Unit ●Bind Plug
●Operation Manual (this document)

To allow safe use, be certain to observe the following points

●Basic precautions for safe operation

(1) The 2.4GHz band is not a frequency exclusively for use with RC aircraft. The band is part of the IMS (industry, science, and medical care) frequency allocation, which is widely used for short-distance transmissions such as microwave ovens, wireless LAN, digital cordless phones, gaming devices, etc. Because of signal congestion, the response of any 2.4GHz system may be reduced in urban areas. In the event of any interference, immediately cease operation and attempt to identify the interference source.
(2) At race tracks and airfields minimize the use of devices that operate on the 2.4GHz band. Be sure to perform an adequate range check before commencing operation.
(3) Always maintain line of sight with the aircraft as 2.4GHz signals may be blocked by buildings, trees, etc. Always fly the aircraft where it can be visually observed.

In order to prevent injury to the operator or third parties (or damage to property), please observe the following

⚠ DANGER!

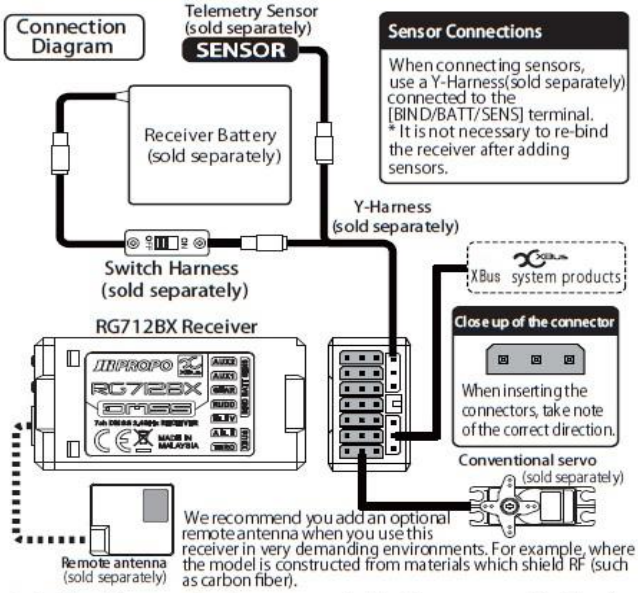
Not following this advice carries high risk of death or serious injury to the user or third parties.

- Do not use this product in the rain as water may cause electronic devices to malfunction.
- This product carries a risk of injury due to heat, fire, and electric shock.
- Never disassemble or modify this product.
- When turning on the receiver, the engine (or motor) can start rotating at high speed, causing injury.
- Before turning on, always set the transmitter throttle stick to the lowest speed position. Turn on the transmitter first then the receiver. To shut down, switch off the receiver first and then the transmitter.

Receiver Specs

Product Number:	RG712BX
Receiving System:	7 Channel DMSS System
Weight:	15g
Dimensions:	14.5×25.5×47.5mm
Operating Voltage:	4.5-8.5V
Remarks:	Coaxial antenna (Antenna/Coaxial) 30/120mm

Connection Diagram



Note: After adding a remote antenna you must re-bind to ensure correct functionality.

⚠ WARNING!

Not following this advice may result in death or serious injury to the user or third parties.

- Do not use this receiver in combination with other manufacturers products such as servos, gyros etc.
- Never allow the receiver to receive a strong impact as the electronic components in the receiver are susceptible to damage.
- If degraded servo movement is detected, stop operating immediately. Identify the source of the problem before further operation (check battery voltage, etc).
- Do not use the product in the following locations, as there will be a risk of an out-of-control condition or accident:
  - Where interference exists. • Where there is traffic passing nearby.
  - Near high-tension electric lines, buildings, or in mountainous areas, etc.
  - Near houses or people. • Near radio or TV transmitters
- If the receiver becomes submerged in water, it may appear to operate normally after being fully dried. However, it may malfunction at a later time. Do not continue to use the product – contact your JR distributor to arrange an inspection.

⚠ CAUTION!

Not following this advice may cause injury to the user or third party (or cause damage to property).

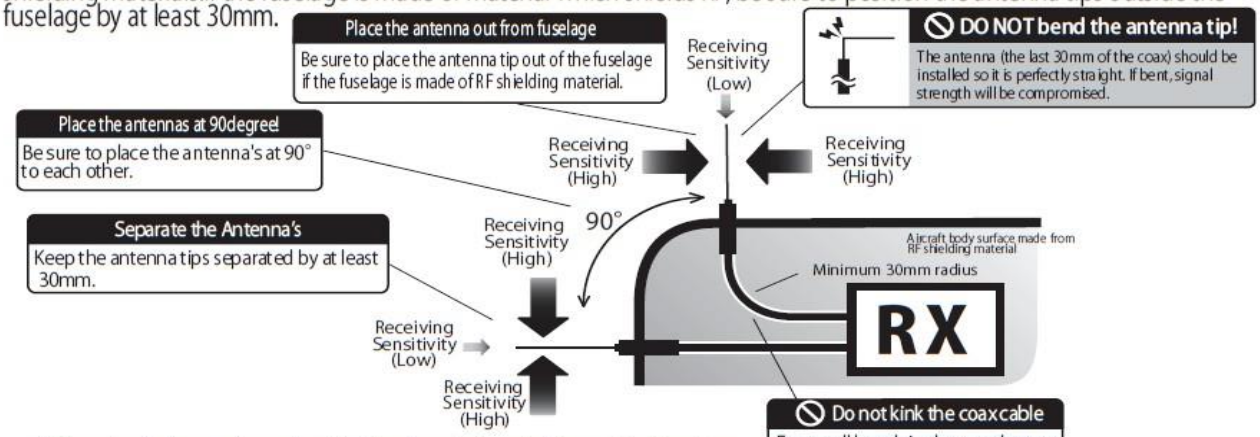
Before use, check the following:

- Is there enough battery voltage for both the transmitter and receiver?
- Is there any fuel spillage on the receiver, servos, etc. that was caused by leakage from the fuel tank? Is there enough fuel?
- Check that no linkage interferes with the aircraft body. Conduct a vibration test by restraining the model and setting the engine (or motor) to full power whilst keeping your hands well clear of the propeller. Check that each control surface moves correctly. For the initial flights of a new model always fly in a safe place, avoid flying at great distance, and keep the model close to the landing area for several minutes until you are fully confident that the receiver is operating correctly.

■**If you have further questions, please contact your local dealer or JR distributor in your country.**

Installation of the receiver antennas

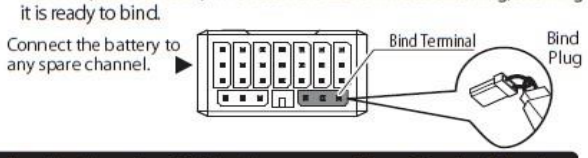
The antenna tip should always be fixed in a straight position. The antenna tip should never be bent or cut. Be sure to position the antenna as far from carbon materials or metal pieces as practical. Please note that carbon, metal, battery, fuel tank and etc, may block RF signals Therefore, it is recommended to place the antenna least 10mm away from these shielding materials.If the fuselage is made of material which shields RF, be sure to position the antenna tips outside the fuselage by at least 30mm.



This receiver features antenna diversity. It is extremely important to position the antenna correctly. Be sure to read the above explanation and follow these instructions.

Binding

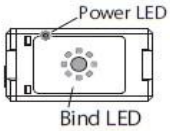
1 Refer to you transmitter manual for binding instructions. Insert the bind plug into the receiver's "bind port" and plug the battery into a spare channel (such as AUX1). The receiver's LED's will start flashing, showing it is ready to bind.



In the situation where binding is unsuccessful, confirm the following

- Is the remaining battery power of the transmitter and receiver adequate?
- Is the distance between the transmitter and receiver too close?
- When the procedure is carried out on the top of a desk or bench that is made from metal, binding may not be successful.

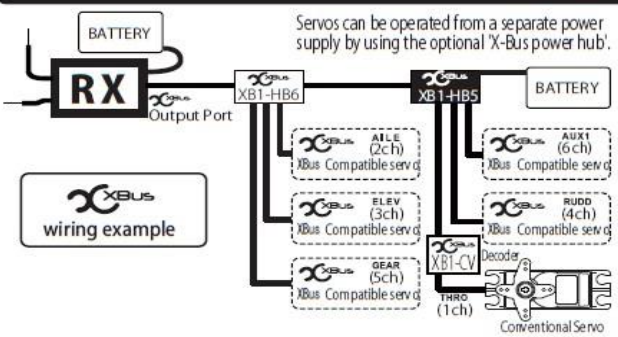
2 When the LEDs of the receiver stop blinking, the bind process is complete. After removing the bind plug, switch off the power for the transmitter and receiver.



* In the case where the LEDs continue to flash instead of changing to continuous lighting, repeat the procedure over again from the beginning.

If you add an optional remote antenna, please be sure to re-bind the receiver to ensure correct operation. After binding, confirm that the remote antenna's LED will changes from flashing to steady lit.

X-Bus system



The all new X-Bus system uses JR's own serial bus data instead of PWM (Pulse Wide Modulation) to communicate with X-Bus products such as servos. Control signals are sent in a serial manner to all channels, with individual servos recognizing their own data from receiver. Non X-Bus servos can still be used in conjunction with a channel decoder (e.g. XB1-CPR), or plugged directly into the receiver (avoiding the X-Bus port). Never plug any non X-Bus device into the X-Bus system as a failure is sure to occur. On large models, our optional X-Bus power hub allows servos to receive a separate power supply.
Our new X-Bus receiver is also able to be plugged directly into compatible helicopter FBL units, allowing a single connection between the receiver and FBL unit.

Information

Information

Insertion (ship to U.S.A. & Canada)

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.

This device must be installed and used in a manner that ensures that a minimum separation distance of 20 cm is maintained between the antennas and the user during normal operation.

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 conditionssuivantes :
(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.

Insertion (ship to U.S.A. only)

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.
Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device must be installed and used in a manner that ensures that a minimum separation distance of 20 cm is maintained between the antennas and the user during normal operation.