

# RX-391W WATERPROOF

# 2.4GHz FHSS-2 3-Channel Micro Receiver Operating Instructions

# SANWA

Thank you for purchasing the SANWA RX-391W 2.4GHz FHSS-E 3-Channel Micro receiver. This receiver can be used with SANWA 2.4GHz FHSS-E surface transmitter, such as the MX-6 FHSS-E. Please read through these Operating Instructions entirely before installing and using your new receiver.

**!** Due to differences in the implementation of 2.4GHz technology among different manufacturers, this receiver is compatible only with SANWA brand 2.4GHz surface transmitters.

Model: RX-391W

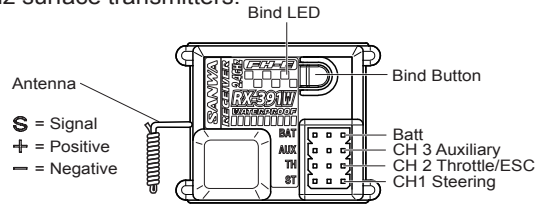
Frequency: 2.4GHz FHSS-E

Input Voltage: 4.8v ~ 7.4v

Weight: 12.4g

Dimensions: 24.0 x 37.0 x 18.2 mm

Fail Safe Support: Yes - Throttle



## 2.4GHz FREQUENCY BAND PRECAUTIONS

- This receiver operates on the 2.4GHz frequency band. The 2.4GHz connection is determined by the transmitter and receiver pair. Unlike ordinary crystal-based systems, your model can be used without frequency control.
- The 2.4GHz frequency band may be used by other devices, or other devices in the immediate area may cause interference on the same frequency band. Always before use, conduct a bench test to ensure that the servos operate properly. Also, conduct checks with the transmitter as distant as possible from your model.
- The response speed of the receiver can be affected if used where multiple 2.4GHz radio controllers are being used, therefore, carefully check the area before use. Also, if response seems slow during use, stop your model immediately and discontinue use.
- If the 2.4GHz frequency band is saturated (too many radio controllers on at once), as a safety precaution, the radio control system may not bind. This ensures that your radio control system does not get hit by interference. Once the frequencies have been cleared, or the saturation level has dropped, your radio control system should be able to bind without any problems.

## RECEIVER CONNECTIONS AND MOUNTING

Use the diagram below to make the connections to the RX-391W 3-Channel 2.4GHz FHSS-E receiver included with your MX-6 3Channel 2.4GHz FHSS-E radio control system.

**!** The receiver's Nominal Input Voltage is 4.8~7.4 volts. A2 cell Li-Po or 2 cell Li-Fe battery pack can be used to power the receiver without the use of a voltage regulator. In addition, this allows you to take advantage of the higher torque and speed provided by using 7.4 volt digital servos.

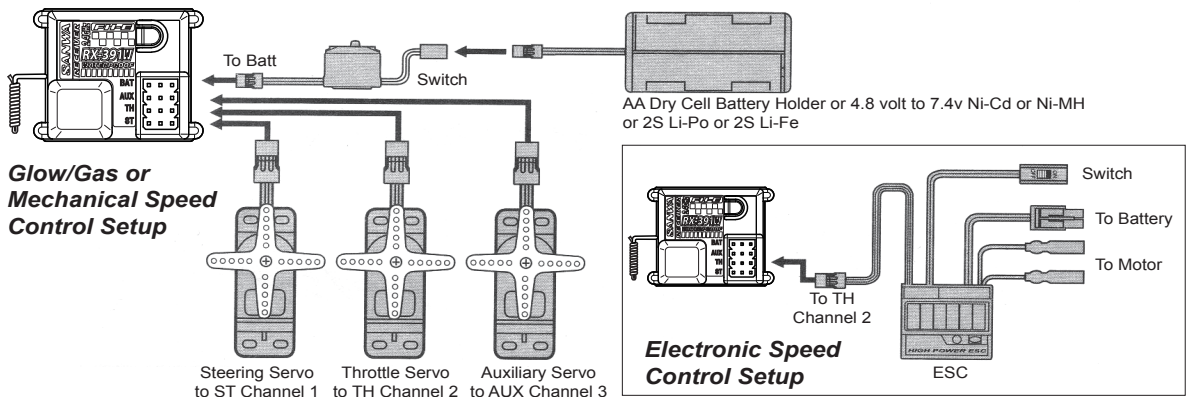
**Use a 2 cell Li-Po or 2 cell Li-Fe battery pack ONLY if your servos are rated to handle the higher voltage.**

**!** If you're using an Electronic Speed Control with BEC circuitry, verify that it reduces the voltage to between 4.8 and 7.4 volts before making your connections and turning your radio control system ON.

- We suggest binding the transmitter and receiver and making all receiver connections to check for correct operation prior to mounting the receiver in your model.
- The receiver should be mounted as far away from any electrical components as possible.
- Route the receiver antenna up through a plastic tube so that it is in the vertical position.
- To protect the receiver from vibration and other damage, we recommend wrapping the receiver in shock absorbing foam or using double-sided foam tape when installing it in your model.

**!** As a safety precaution, set your model on a stand so the wheels are off the ground before turning on your radio control system or connecting your motor for the first time.

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**!** Do not use servos rated for 4.8 or 6.0 volts with a 2S Li-Po or Li-Fe receiver battery pack or damage to the servos could result.

## BINDING THE RECEIVER TO YOUR TRANSMITTER

It is necessary to pair the transmitter and receiver to prevent interference from radio controllers operated by other users. This operation is referred to as 'binding'. Once the binding process is complete, the setting is remembered even when the transmitter and receiver are turned OFF, therefore, this procedure usually only needs to be done once for each separate receiver you're using.

- 1) Turn your transmitter ON.
- 2) Push and HOLD the receiver's Bind Button.
- 3) Turn the receiver ON while continuing to hold the Bind Button. The receiver's Bind LED will flash slowly.
- 4) After 2 to 3 seconds, release the Bind Button.
- 5) Push and HOLD your transmitter's Bind Button until the receiver's Bind LED begins to flash rapidly. The binding process is successful when the receiver's Bind LED is solid.
- 6) Move the controls to confirm the transmitter and receiver are operating correctly.

## SETTING THE THROTTLE FAIL SAFE

Your receiver features a Throttle Fail Safe function. The Throttle Fail Safe function automatically sets the throttle to a predetermined position in the event that the signal between the transmitter and the receiver is interrupted, whether due to signal degradation or to low battery. The Throttle Fail Safe function can be programmed after the Binding process is complete.

- 1) Turn your transmitter ON, then turn your receiver ON.
- 2) Move the controls to confirm that the transmitter and receiver are operating correctly.
- 3) Move the throttle lever to your desired Throttle Fail Safe position and hold it in that position.
- 4) Push and HOLD the receiver's Bind Button for 4 seconds. The receiver's Bind LED will flash slowly.
- 5) Release the throttle lever AFTER the receiver's Bind LED begins to flash rapidly, then release the Bind Button.
- 6) Confirm the desired operation of the Throttle Fail Safe by turning the transmitter OFF. The throttle should move to the position you set. Turn the transmitter back ON to resume normal control.



If the throttle lever is left in the Neutral position, the Throttle Fail Safe will be set in that position.

**IMPORTANT** FHSS-E receivers support Throttle Fail Safe only.

## SERVICE AND SUPPORT

Your SANWA RX-391W receiver is warranted against manufacturer defects in materials and workmanship, at the original date of purchase. Any modifications or abuse of the product will void any warranty. Crash damage will not be covered by any warranty. For warranty and service information, please visit <http://www.sanwa-denshi.com/rc/distributors.html>.

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Product features and specifications can vary by region. Not all products are legal for use in all regions.



Please note that products purchased outside of North America cannot be serviced under warranty by Serpent America. In some cases, we can make repairs for products purchased outside of North America, however, applicable repair costs and shipping charges will be applicable. For warranty claims outside North America, please contact the service center in your region.