

# WOW-RC 2.4 GHz Radio Systems(V2/V2+)

Thank you for purchasing WOW-RC 2.4GHz V2/V2+ Radio Control System. We are sure you will enjoy it. The following notes will guide you through the simple set up procedures. Model is not toy, we give you a strong reminder that you should reading the contents of this article carefully before using it ,which is the interests of public safety considerations

## Attention :

1. Please use this in the provided venues, juveniles are asked to be accompanied by a guardian to use.
2. Any electronic may lose control, please set up failsafe correctly to avoid or reduce losses.
3. Range is affected by the environment .Please test range in the open away from any obstacles.
4. If the transmitter is too close to the receiver (about 5cm) the receiver may not work. Simply move the transmitter away from the receiver. It will work fine if the transmitter and receiver are more than 1m apart.
5. Please note the positive and negative charges on the voltage protector, don't make mistake
6. Do not fly unless it is safe to do so. Consider the safety of others at all times when flying.

## 2.4GHz V/V2+ radio control system

It works with the standard of Frequency-Hopping Spread Spectrum ( FHSS ), it changes frequency quickly throughout the 2.4Ghz band, utilizing 19 separate frequencies in order to reduce interference from other unwanted signals. This ensures safe, stable operation over a wide range of conditions likely to be encountered at any flying field.

## Features

- ◆Long range, Light weight
- ◆Failsafe. You can set the receiver to default to a pre-set position on all channels in the unlikely event of signal loss.
- ◆Automatic frequency scan when turning on the transmitter and receiver ensures no frequency clash and maximum safety.
- ◆Bind once, use forever!
- ◆Range test. Convenient method to check the performance of the system which means you won't need to walk kilometers away.
- ◆Ultra-low-power design. Low power consumption by Transmitter modules and Receivers.

## Specifications

CE certificate approved

Module V2+ For Transmitter	W24MF Compatible	FUTABA: 3PM, 3PK, 7U, 8U, 8J, 9C, 9Z, T10, 10C and FN series. HITEC: Optic 6, Eclipse 7.
	W24MJ Compatible	JR:347, 388, 783, U8, 10X, PCM10, PCM10S, PCM10SX, PCM10IIS, 8103, J9303, MX-22, MX-24S, PX,9XII Turnigy9X /11X, Graupner:MC16
	Voltage range	6V~18V
	Modulate	FHSS
	Resolution	1024

V2 Receiver	W24R4 (4 channels)	W24R8 (8 channels)
Size(mm)	24×15.1×5.6	36.2×20.1×8.1
Weight	2.2g	8g
Range	400m	1000m
Operating Voltage	3.7V~6.0V	4.8V~6.0V

## Instructions of Setup and Operation

### **1. Installation of the transmitting module**

- 1). Remove the original transmitting module.
- 2). Put the 2.4GHz transmitting module into the module port and install the antenna.

### **2. Installation of receivers**

- 1). Before installing the receiver(s) in your model(s) follow the instructions below to bind the receiver to the transmitter.
- 2). You can set failsafe either in the model or on the bench. It is best to check that the control surface positions for failsafe are what were intended before flying.

Note: When you do install the receiver in the model try to place the tip of the antenna (the silver bit(s) approx 33mm long) away from objects with high conductivity, such as metal parts, servos, ESC's, battery packs, wires, and carbon fiber structures. For receivers with 2 antennas position the tips of the antennas so they are approximately 90 deg to each other. If possible put the tip of the antennas (the 33mm long silver bit) outside of the fuselage for maximum reception.

### 3. Receiver and Transmitter Setup Instructions

By following these steps you will ensure your transmitter and receiver is properly setup and ready to fly.

1. Turn the transmitter on and adjust your transmitter to **PPM / FM** mode (**not** PCM), and then turn the transmitter off.
2. Press and hold the "BIND" button on the TX module and turn on the transmitter. The LED on the module will light green for 0.5s then go off for 1 second. Release the button within this 1 second (light off). the LED on the module will flash between red and green. Then you are ready to bind the receivers.

#### W24R4 Receiver

- 3). Insert the code plug to the 4th channel, then connect the receiver with the battery, the LED on the receiver will light on, at this time remove the code plug (The LED lights 1 second, make sure to pull out the code plug within 1 second). Until the LED flash quickly and flash out, it shows the module and receivers binding successfully, now please cut the power from the receiver, and also turn off the transmitter.

#### W24R8 Receiver

- 3). Remember to press and hold the code button on the receiver and then connect the receiver to the battery, the LED on the receiver will light on, at this time remove your hand from the receiver code button (The LED lights 1 second, make sure to remove your hand from the receiver code button within 1 second). The LED will flash quickly several times and flash out. Now you can turn off the receiver and transmitter.

4. Check system operation.

Turn the transmitter on. The module LED should be green. Connect the receiver to the battery. The red LED on the receiver will flash three times (now it is searching for the frequency) and light red, indicating the receiver is operating properly. The LED on the receiver will not light when there is no signal.

Once the successful binding of Tx module and Receiver, no binding again in the following use.

### Fail-safe set

#### Fail-safe set up for W24R4 Receiver

1. After initial binding, turn on the transmitter.
2. Plug the code plug to the 4th channel, then connect the receiver with the battery, the LED on the receiver will light on and then light off, remove the code plug (The LED will light off 1 second, make sure to get off the code plug within 1 second.) The LED on the receiver turns always bright.
3. Move the transmitter stick to any position you satisfied, and then turn off your transmitter, at this time the receiver will flash several times; it shows the receiver has remembered the position which you have set. Now please cut the power from the receiver. When the system lost control, all channels will return to the position which you have set.

#### Fail-safe set up for W24R8 Receiver

1. After initial binding, turn on the transmitter.
2. Press and hold the code button on the receiver and then connect the receiver to the battery, wait a moment, the LED on the receiver will light on and then light off, at this time remove your hand from the receiver code button (The LED light off 1 second, make sure to remove your hand from the receiver code button within 1 second), then the LED on the receiver always bright.
3. Move the transmitter stick to any position you satisfied. After you have set it, press the receiver code button again. At this time the receiver will flash several times; it shows the receiver has remembered the position which you have set. Now please cut the power from the receiver, and also turn off the transmitter. When the system lost control, all channels will return to the position which you have set.

### Range checking

For safety, we suggest you conduct a range test before each flying session.

- 1). Cut-off the model's power (motor/engine), Make sure the model cannot move under its own power.. Position the model at least two feet (60cm) above non-metal contaminated ground.
- 2). Press and hold on the "RANGE" button on the module and turn on the transmitter. The yellow LED will light for 0.5s then go out for 1 second. Make sure you release the "RANGE" button within this 1 second. The LED on the module will light yellow. The module is now in "RANGE" mode.
- 3). Move joysticks in the transmitter and verify that the model is responding normally. Move away the transmitter from the model up to 10m (W24R8) or 8m (W24R4). If the control surfaces move as expected it shows the Tx module and receiver are working as expected and can be used. If control is lost, or the model behaves abnormally, please check and resolve any problems before conducting another range test. Do not fly if the range test fails and cannot be fixed.
- 4). When range testing is completed, press the "RANGE" button on the Tx module. The LED on the Tx module will light green, indicating that the Tx module has returned to its normal power state. You can now fly.

### Reset the ID

Reset the module ID by pressing both "BIND" and "RANGE" buttons together. (NOT do this unless you want to reset the ID. There is absolutely no need to do this in normal operations.)

## **FCC STATEMENT**

1. 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. (2) This device must accept any interference received, including interference that may cause undesired operation.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

## **RF warning statement:**

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.