

# R9DS

## (FHSS and DSSS Spread Spectrum)

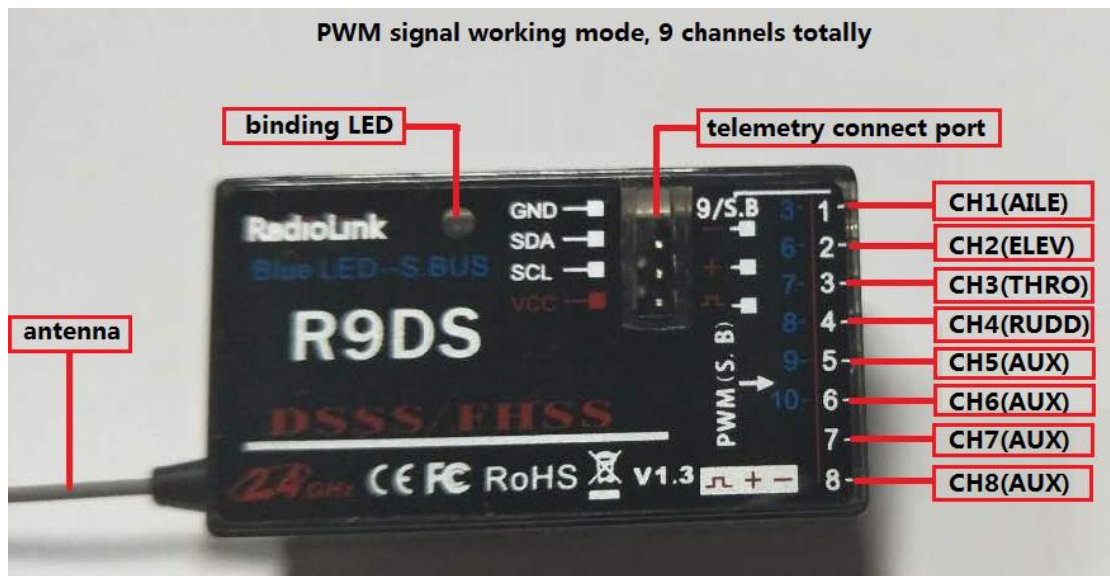
Radiolink R9DS, 2.4G 9 channels receiver, DSSS and FHSS spread spectrum working synchronously, use for Radiolink transmitters AT9, AT9S, AT10 and AT10II. SBUS and PWM signal possible working at the same time.

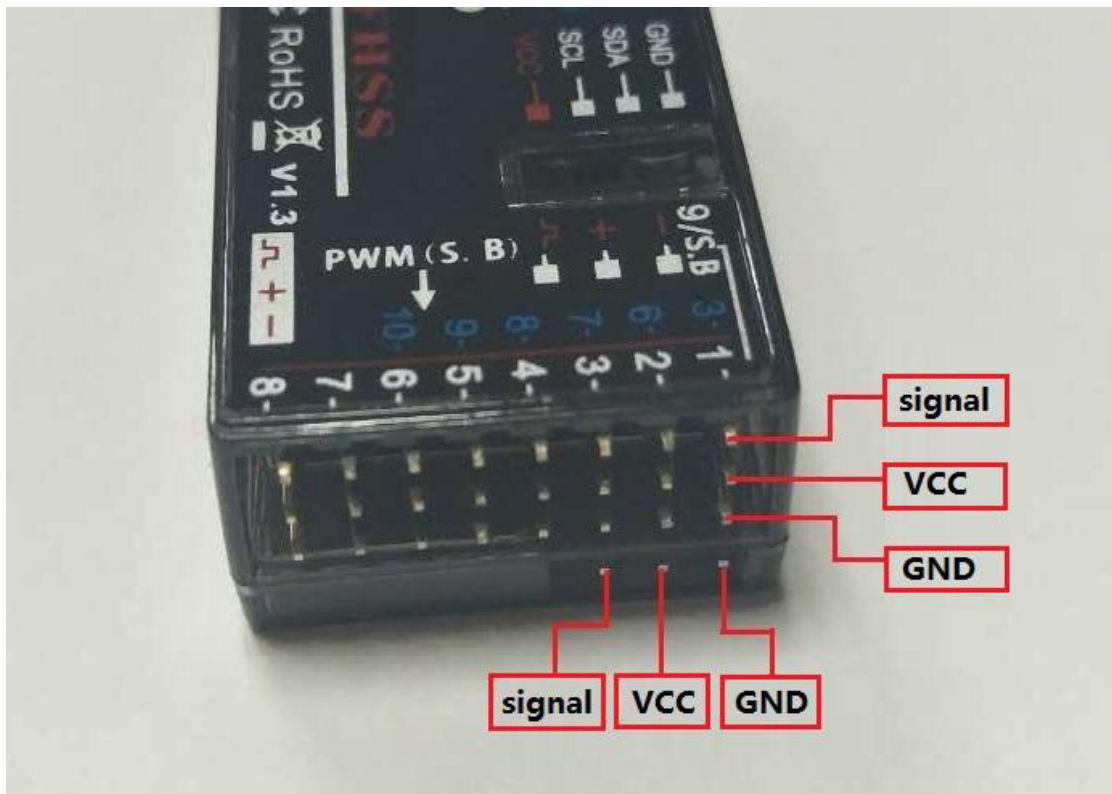


**Two signal working mode:**

**1. PWM signal working mode:**

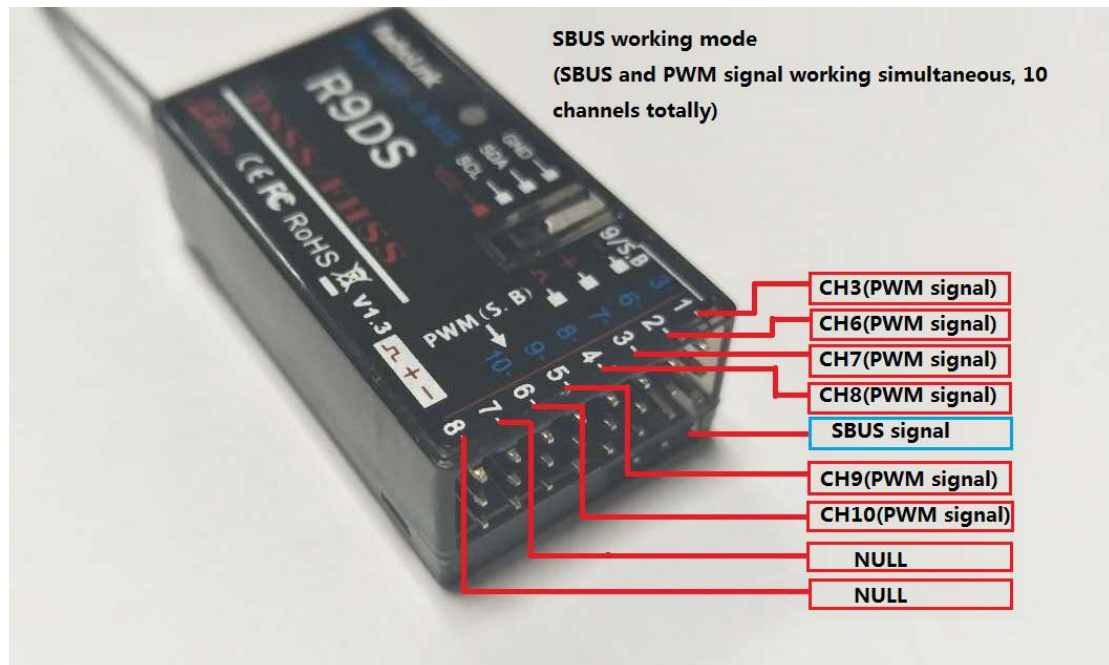
PWM signal output working mode : red LED indicates PWM signal output, 9 channels totally.





## 2. SBUS signal working mode:

SBUS signal output working mode: blue/purple LED indicates SBUS signal output, 10 channels totally. SBUS and PWM signal possible working at the same time with SBUS signal output working mode. CH9 output SBUS signal, the original CH1 output CH3 and original CH2 to CH6 output CH6 to CH10 PWM signal at the same time.



### SBUS and PWM signal change :

Short press the ID SET switch twice within 1 second, the signal is changed from normal PWM to SBUS. The red LED indicates the normal PWM and blue/purple LED indicates SBUS signal.

### How to match code with transmitter:

1. Place the transmitter and the receiver close to each other within 1 meter.
2. Turn on the transmitter, then power on the R9DS.
3. Connect CH3 of R9DS to ESC.
4. There is a black button on the R9DS, use a thin stick/pen press the binding button in one second until the receiver light starts blinking and release, after about 8 times blinking, match code success when receiver signal LED always on.

### Installment of receiver antenna :

1. The antenna must be kept as straight as possible. Otherwise it will reduce the effective range.
2. Large model aircraft may of some metal part interfering signal, in this case the antenna should be placed at side of the model. Then the best RF signal condition is obtained at any flying attitude.

3. The antenna must be kept away from conductive materials, such as metal and carbon by at least a half inch. The coaxial part of the antenna does not need to follow these guidelines, but do not bend it in a small radius.
4. Keep the antenna away from the motor, ESC, and other noise sources as much as possible.
5. The receiver can be packed by sponge or foam for shocking proof when it is installed to the model.

After all of the above steps finished, now the program functions to assure it under control of transmitter with a right connection.

**Specification:**

1. Channels:
  - 9 channels: output 9 channels PWM signal, with red LED.
  - 10 channels: output 10 channels signal, support SBUS and PWM signal output synchronously, with blue LED.
2. Working voltage: 4.8-10V
3. Working current: 38-45mA ( input voltage: 5V )
4. Size: 43\*24\*15mm
5. Weight: 9g
6. Receiver integrate telemetry sensor including signal strength and voltage. Support extended engine voltage telemetry module PRM-01 and module PRM-02 can feedback GPS information, Speed, voltage etc. on AT9/AT9S/AT10/AT10II display when work with flight controller APM or PIX.
7. 4096 section precision, 0.25us per section, servo anti-shake rudder.
8. MINI receiver, just need one cable if use SBUS signal.