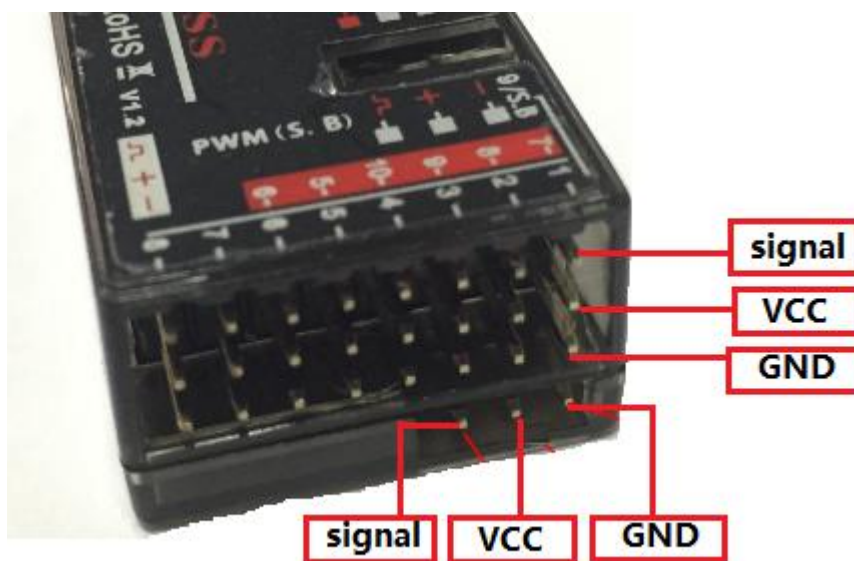


# R9DS

## (FHSS and DSSS spread spectrum)

Radiolink R9DS, 2.4G 10 channels receiver, DSSS and FHSS spread spectrum working synchronously, use for Radiolink transmitters AT9, AT9S and AT10.

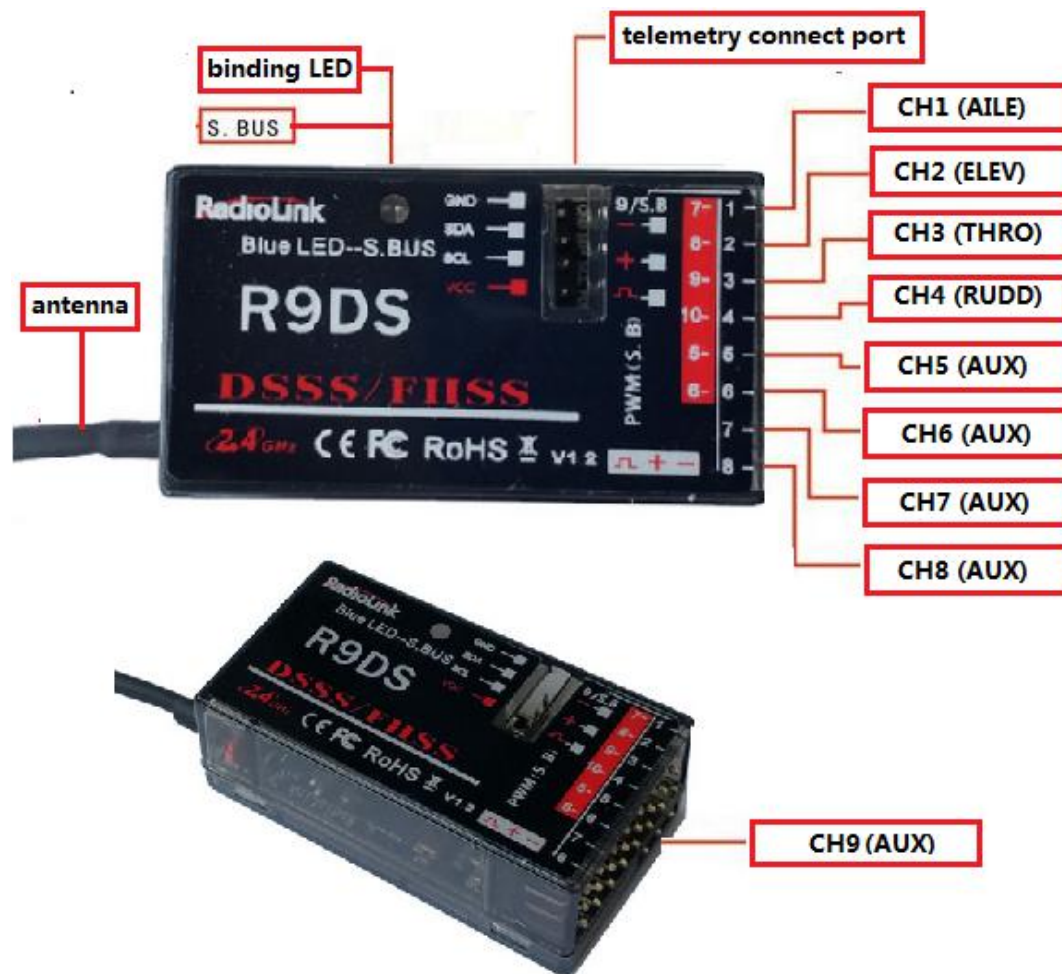
SBUS and PWM signal possible working at the same time.



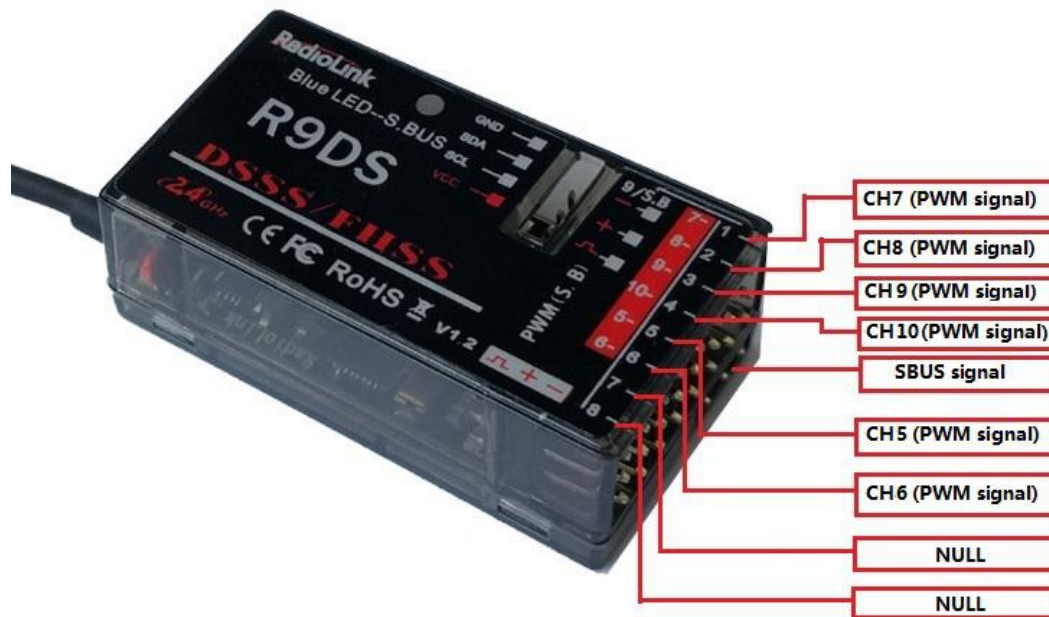
**Two signal working mode:**

(1) PWM signal output working mode : red LED indicates PWM signal output, 9 channels Totally.

(2) 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 to CH4 output CH7 to CH10 PWM signal at the same time.



**PWM signal working mode, 9 channels totally**



**SBUS working mode( SBUS and PWM signal working simultaneous, 10 channels totally)**

### **SBUS and PWM signal change :**

Short press the ID SET switch two times 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 meters.
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 press the button twice in two seconds and release, receiver light start blinking, after about 8 times blinking, match code success when receiver signal LED always on!

### **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\*15 MM
- 5) Receiver integrate telemetry sensor including signal strength and voltage. Support extended engine voltage telemetry module PRM-01 and module PRM-02 can feedback GPS info, Speed, voltage etc. on AT9/AT9S/AT10 display when work with flight controller APM or PIX.
- 6) 4096 section precision, 0.25us per section, servo anti-shake rudder.
- 7) MINI receiver, just need one cable if use SBUS signal.

**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 antennas should be placed at both sides of the model. Then the best RF signal condition is obtained at any flying attitude.
3. The antennas must be kept away from conductive materials, such as metal and carbon by at least a half inch. The coaxial part of the antennas does not need to follow these guidelines, but do not bend it in a small radius.
4. Keep the antennas away from the motor, ESC, and other noise sources as much as possible.
5. Press and hold the Easy Link (ID SET) one second, now the receiver starts work.
6. After all of the above steps finished, the LED indicator will turn and keep in red.
7. 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, turn off the transmitter and then power it on, now the program functions to assure it under control of transmitter with a right connection