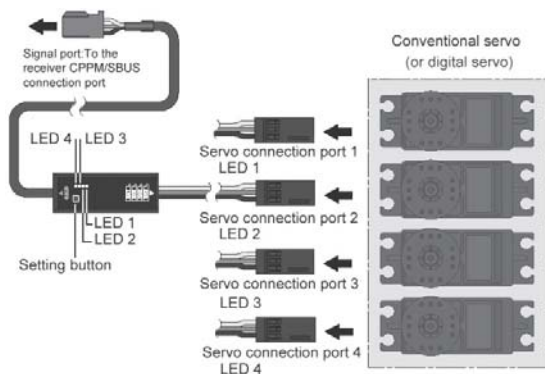


FrSky SBUS to PWM Decoder Instruction Manual

Thank you for purchasing FrSky SBUS to PWM Decoder. This product can be used to decode SBUS signal to PWM signal for conventional analog or digital servos with SBUS receivers. In order to fully enjoy benefits of this system, please, carefully read the instruction and set up the devices as described below.

- **Do not connect SBUS connection port to other device other than FrSky SBUS Servo Channel Changer, FrSky TFR8SB receiver, Futaba SBC-1 or Futaba S.BUS receivers (R6208SB, etc.)**
- **Do not connect any device other than analog or digital servos the PWM servo connection ports.**
- **Do not disassemble or modify the product.** FrSky are not responsible for man-made damage caused by improper set up, or replacement if disassemble or modification have been made.

Specifications



Channel Output Cable Lengths: 210mm

Total length: 350mm

Weight: 14.8g

Operating Temperature Range: -10-80°C

Operating Voltage Range: 4-10V

Compatibility for SBUS Connection Port: FrSky SBUS Servo Channel Changer, FrSky TFR8SB receiver, Futaba SBC-1 or Futaba S.BUS receivers (R6208SB, etc.)

Compatibility for PWM Connection Ports: conventional analog or digital servos

Warning: DO NOT connect the battery power HIGHER than the operating voltage of connected servos, otherwise injury or damage may occur.

Channel Setting Methods

Use FrSky SBUS Servo Channel Changer, FrSky TFR8SB receiver, Futaba SBC-1 or Futaba S.BUS receivers (R6208SB, etc.) to finish the channel settings.

Warning: DO NOT connect any servo to the PWM servo connection ports during channel setting procedures. FrSky are not responsible for any damage or injury caused by incorrect operation.

* Channel Setting with FrSky Servo Channel Changer:

- Connect the SBUS connector of FrSky Decoder to the servo connection port of FrSky SBUS Channel Changer.
- Connect the battery to the battery connection port of FrSky SBUS Channel Changer.
- Press briefly the button on the Decoder and select the servo connection port number that you want to set channel (see LED number and PWM servo connection port number for details).

The selected servo connection port number will be displayed as "servo channel number before set" on FrSky Servo Channel Changer.

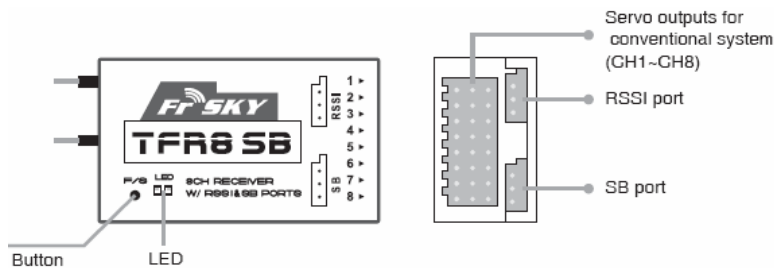
- Use the roller switch to set the channel number after "Set-to" to the one you require.
- Select "SET" and push the roll switch to confirm the channel setting. After the two channel numbers are the same, channel setting procedure is completed.
- To set channels for other servo connection ports, repeat from step c to e.

* Channel Setting with Futaba SBC-1:

- Connect the SBUS connector of FrSky Decoder to the S.BUS servo connection port of Futaba SBC-1.
- Connect the battery to the battery connection port of Futaba SBC-1.

- c. Press briefly the button on the Decoder and select the servo connection port number that you want to set channel (see LED number and PWM servo connection port number for details).
- d. Set the channel select switch to the channel number you require.
- e. Hold down the set switch for approx. 1second. The RED LED blinks rapidly at approx. 5times/second, and it lights steadily, indicating the channel setting procedure is completed.
- f. To set channels for other servo connection ports, repeat from step c to e.

*** Channel Setting with FrSky TFR8SB receiver:**



- a. Connect the SB port and RSSI port by the provided cable with TFR8SB.
- b. Connect the battery to any of the 8 servo output channels.
- c. Connect the SBUS connector of FrSky Decoder to any of the available servo output channels, and press briefly the button on the Decoder and select the servo connection port number that you want to set channel (see LED number and PWM servo connection port number for details).
- d. Disconnect both the battery and the Decoder.
- e. Connect the Decoder to the channel number you require (see chart below), and then connect the battery to any of the available servo output channels. RED blinking LED indicating the channel setting is completed in Mode A. To switch to Mode B, press the button on receiver for three seconds until GREEN LED starts to blink, indicating the channel setting is completed in Mode B.
Mode A: RED LED blinks
Mode B: GREEN LED blinks
- f. To set channels for other servo connection ports, repeat from step c to e.

Output Connector	Channel Setting	
	Mode A	Mode B
1	1	9
2	2	10
3	3	11
4	4	12
5	5	13
6	6	14
7	7	15
8	8	16

*** Channel Setting with Futaba SBUS receivers (R6208SB etc.):**

- a. Connect the accessory short-plug to the DATA port of R6208 receiver.
- b. Connect the battery to any of the 8 servo output channels.
- c. Connect the SBUS connector of FrSky Decoder to any of the available servo output channels, and press briefly the button on the Decoder and select the servo connection port number that you want to set channel (see LED number and PWM servo connection port number for details).
- d. Disconnect both the battery and the Decoder.
- e. Connect the Decoder to the channel number you require (see chart above), and then connect the battery to any of the available servo output channels. At once when turning on the receiver, the channel setting is completed in mode A. To switch to mode B, press the Link/Mode button until the red and green LED starts to blink simultaneously. The channel setting is completed in mode B.
Mode A: Red blinks 3 times
Mode B: Green blinks 3 times
- f. To set channels for other servo connection ports, repeat from step c to e.

Note: After the channel settings are completed, recycle the power and check if they are really under control of corresponding channels.

Note:

1. Follow the channel setting methods above for CPPM usage.
2. When the signal is lost, SBUS mode and CPPM mode will hold the last position. Failsafe is recommended to set on the receiver side to make sure the servos connected to the Decoder will be under control when the signal is lost.