

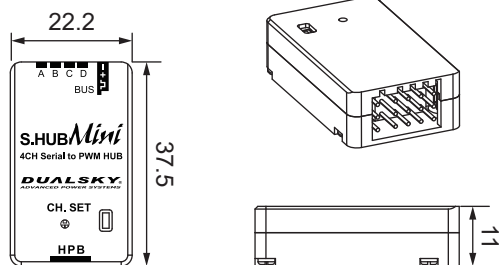
# S.HUB Mini

## 4CH Serial to PWM HUB Instruction Manual

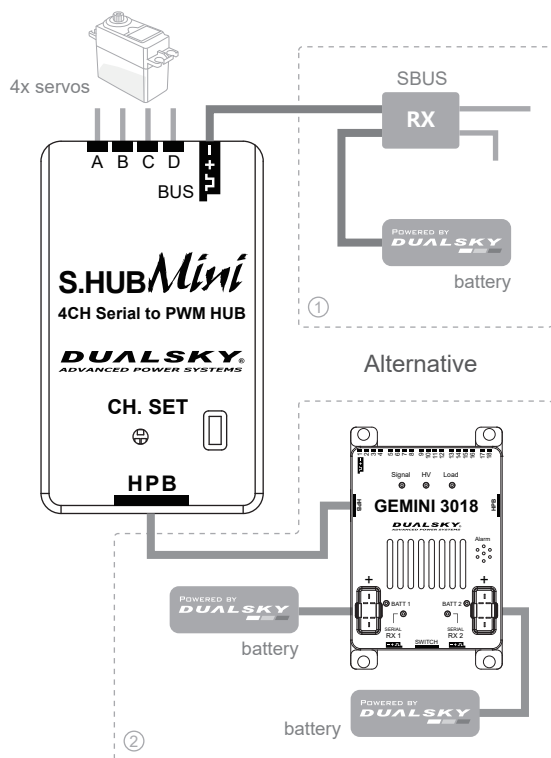
### Specifications

- Dimension : L 37.5 x W 22.2 x H 11mm
- Weight : 13.2g
- Working Voltage : 4.8V to 8.4V
- Working Current : 10A constant, 15A peak
- Number of serial input : Single
- Protocol supported : Futaba S.Bus / S.Bus2
- Number of PWM output : 4 of 16
- S.Bus output relay : Yes, directly
- Voltage Regulator : N/A
- Casing material : Fully aluminium alloy
- Applications : For the model which controlled via bus. Connect the PWM servos at the distal node.

### Dimensions



### Wiring Diagram

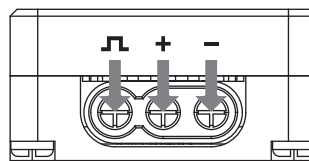


### S.Bus signal input

S.HUB mini provides two bus input ports and supports Futaba S.Bus & S.Bus2 protocol.

- ① The standard S.Bus port provides a lightweight method for connecting receivers.
- ② The HPB port can be conveniently connected to the Gemini 3018 via the HPB cable.

The input of the S.Bus signal through port ① has MAX 5A power supply capability. When inputting through HPB port ②, the power supply capacity is stronger (MAX 15A), and the device voltage drop is lower, which is suitable for long distance and high current applications. When using the standard S.Bus port ① as input, you can also use the HPB port ② to supply power. The polarity description is as follows:



The ports of ① and ② are connected in parallel. When one port is connected as a signal input, the other port can be used as a relay output. (It is recommended that the bus lines form a loop to increase the redundancy of the circuit)

### Output channel setting

S.HUB mini has four PWM servo sockets, marked as ABCD, and the polarity is as same as the BUS port marked. By the color of the LED light, we can know which group the current ABCD corresponds to (a group of 4 consecutive channels). Please see the following table:

LED indicator	A	B	C	D
Group 1 ( Blue )	1	2	3	4
Group 2 ( Green )	5	6	7	8
Group 3 ( Yellow )	9	10	11	12
Group 4 ( Purple )	13	14	15	16

Press and hold the setting button, you can change the color of the LED sequentially and cyclically, to change the output channels to the corresponding group and save automatically.

### Servo output port

The frequency of the ABCD servo output port is automatically synchronized with the input SBUS' s frequency. When the receiver works in S.Bus 16CH / 18CH mode, the output port frequency is 15ms. When the receiver works in S.Bus 12CH high-speed mode, the output port frequency synchronization is increased to 6ms.

**Note: Only digital servos can be used in HS mode; There are only 3 groups of channel, and there is no output if select the fourth group.**

The maximum continuous current of a single servo output port is 2.5A, MAX 5A. Excessive current will damage the pins.

### Signal fail-safe protection

S.HUB mini's fail safe strategy is "Hold", and the servo maintains the last position before the signal loss. Based on this strategy, it is not recommended to connect the throttle channel on the S.HUB mini.

### Disclaimer

Thank you very much for using this product. Please use this product strictly in accordance with the manual. We do not assume any liability arising out of the use of this product or illegal modification or improper operation, including but not limited to indirect damage or joint liability, the maximum compensation is not higher than the price of the product itself. By using this product, you agree to the terms of this statement.

### Warranty

Dualsky electronic products warranty is for 12 months from the date of sale. If you want to claim during the warranty period, please contact your dealer immediately.

The cashier receipt at the model store can prove whether the goods are under warranty. Please note that the warranty period will not be extended under any circumstances. Warranty service is provided free of charge for any functional defects, production failures or material defects during the warranty period. We will not accept any further claims, such as the user is responsible to pay the return shipping cost of the indirect damaged goods, we will pay for the return shipping cost to the user. If the shipping costs are not prepaid, we will not accept the goods. We do not accept the damage caused by transportation and do not make up for the loss of transportation. We recommend you to buy transportation insurance and send your equipment to the service center.

We can process your claim if the following conditions are met:

- Provide cashier receipts
- Operate the equipment correctly according to the instructions
- Use recommended power supplies and accessories
- The damage is not caused by water, reverse polarity, or over load.
- Please provide a concise and accurate description of the fault to help us solve the problem