

## 1. Remote Controller Specification:

- 1) 2.4GHz bidirectional communication, 3 channels, automatic frequency modulation and anti-interference.2
- ) 32bit ID code, extremely low probability of duplicate codes
- 3) Built in lithium battery, USB port for charging.
- 4) Accelerator and braking functions
- 5) Remote control and receiver disconnection reminder function, automatically shuts down after 5 minutes of disconnection, saving power.
- 6) The code memory function allows for quick connection between the remote control and receiver during use.
- 7) When the receiver loses contact with the remote controller, turn off the accelerator, and the Electric Speed Controller adjusted into an emergency state to protect the user.

## 2. Remote Controller Technical Parameters

NO	ITEM	SPECIFICATION	REMARK
1	Transmitting power	2dBm	
2	Operating Frequency	2400 to 2483MHz	Error±10ppm
3	Working Current	Average 60mA, peak 235mA	@3.7V
4	ShutDown Current	<1uA	
5	Operation Time	10hours	
6	Communication Distance	>80M	Open ground without WIFI interference
7	Battery Capacity	420mAH 3.7V	Capacity Error+30%, -10% @ 0.2C discharge rate
8	Charging input current	180 to 230mA	
9	Charging Time	3hours	Automatic stop when the battery is fully charged

### 3. Receiver Technical Parameters

1	Transmitting Power	20dBm	
2	Operating Frequency	2400 to 2483MHz	Error±10ppm
3	Working Current	Average 60mA, peak 235mA	@5V
4	Working Voltage	Battery Side 1S to 2S	Electric Speed Controller side 3.8V to 12V
5	Throttle PWM pulse width	Maximum braking=1000us, Midpoint=1500us, Maximum throttle=2000us	Error 30ppm
6	Directional PWM pulse width	Forward=2000us, Reverse=1000us	
7	Start time of disconnected throttle closing	750ms	
8	UART Throttle	Bauds=115200, Benjamin VESC Control Protocol	
9	SW1 (MOS)	Withload 12V, 1A	Max Voltage<20V, Peak Current<3A
10	Motor phase line speed measurement	Max 75960 erpm	

### 4. Pin voltage, refer to PCB bottom screen printing

HALL: Input pin, connected to motor Hall, for speed measurement, high level 3.3 to 5V.

RXD: Input pin, receiver UART RXD

TXD: Output pin, receiver UART TXD

PWM\_R: Output pin, PWM reserved pin

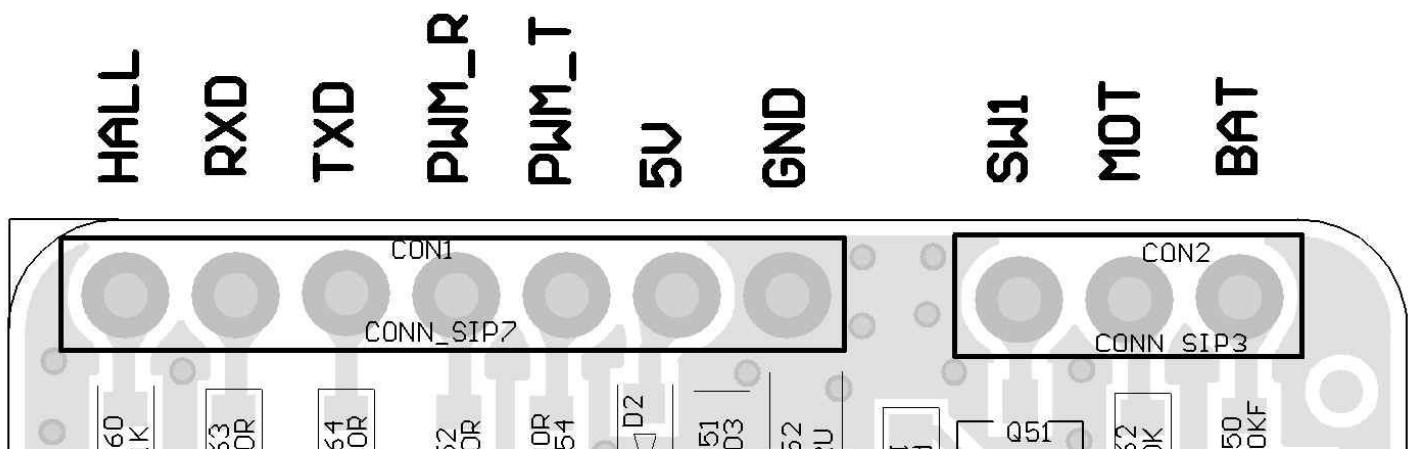
PWM\_T: reserve

5V: Input pin, power supply 3.8 to 12V from the Electric Speed Controller.

GND: Ground

SW1: reserve

BAT: Input pin, Electric Speed Controller battery side voltage, 2S to 20S



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, and (2) this device must accept any interference received, including interference that may cause undesired operation

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.

Warning: changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

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