



ELECTRIC SKATEBOARD ESC MANUAL

DECLARATION

Thank you for purchasing the SK8 Electric Skateboard ESC! Brushless power system can be very dangerous. Any improper use may cause personal injury and damage to the product and related devices. We strongly recommend reading through this user manual before use.

Because we have no control over use, installation, or maintenance of this product, no liability may be assumed for any damages or losses resulting from the use of the product. We do not assume responsibility for any losses caused by unauthorized modifications to our product.

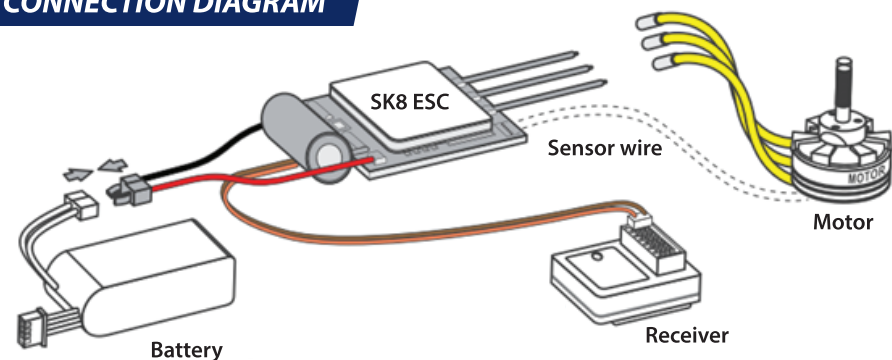
FEATURES

- STM32F4, 32-bit ARM MCU.
- High quality MOSFET and capacitor.
- Sensored and Sensorless operation.
- Sensored and Sensorless FOC with auto-detection of all motor parameters.
- Current and voltage measurement on all phases.
- Regenerative braking.
- GUI with lots of configuration parameters.
- Adaptive PWM frequency to get as good an ADC measurement as possible.
- RPM based phase advance (Or timing/field weakening).
- Good start-up torque in the Sensorless mode.
- Duty-cycle control, speed control or current control.
- Seamless 4-quadrant operation.
- Consumed and regenerated amp-hour and watt-hour counting.
- Optional PPM signal output (ESC V6 & 2in1 ESC only).
- Adjustable protections as follows:
 - Low/high input voltage
 - High motor/input current
 - High regenerative braking current (Separate limits for the motor and the input)
 - Rapidly duty-cycle changes (Ramping)
 - High RPM (Separate limits for each direction)

SPECIFICATIONS

Model	Single ESC	ESC V6	2in1 ESC
Specifications			
Hardware:	Based on V4.12	Based on V6	Based on V4.12
LiPo:	3-12S	3-12S	3-12S
Continuous current:	60A	80A	60A/60A
Peak current:	120A	150A	120A/120A
BEC:	5V/1.5A	5V/1.5A	5V/1.5A
Dimension(mm):	72*50*23	80*80*20	117*66*24
Weight:	127g	114g	200g
Note:	Continuous current values to depend on the temperature and the air circulation of the device.		

CONNECTION DIAGRAM



*Connector doesn't included

HOW TO USE

SK8 tool on-line manual: Refer to product listing page at www.hobbyking.com

On-line manual includes:

1. Updating the firmware
2. Motor Wizard FOC
3. Input Wizard for PPM remote
4. Input Wizard for NRF remote
5. Additional setting: Throttle curves, ERPM limits, safety features etc.