

# PHOENIX EDGE

# QUICK START GUIDE

## Optional Stick Programming

1. Power ESC with TX throttle stick (stick) in the top position (full throttle). LED will repeat a quick single flash.
2. Move stick to the middle. Phoenix Edge will emit a short tone, and LED repeats a quick double flash. Repeat high / medium through to a triple flash.
3. ESC sounds four short tones, and the LED will repeat a long single flash.
4. Step through settings and values by answering "yes" (full throttle) or "no" (low throttle). The setting and value are "flashed" out by the LED. Example: setting #3 value #2, = 3 beeps/flashes, then 2 beeps/flashes. Answering "no" moves to the next value. A "yes" answer is signaled by rapid LED flashes and a constant beep.
5. Move the stick to the middle position to move to next setting. Repeat steps 4 and 5 as needed.
6. Once the desired settings are entered, remove and reconnect power. Arm speed control as normal.

**Stick programming offers quick access to basic settings only. Many more may be accessed using Castle Link and a Windows PC.**

<b>SETTING 1: LOW VOLTAGE CUTOFF BATTERY CELL CUTOFF VOLTAGE*</b>	
Option 1:	3.0V per cell
Option 2:	3.1V per cell
Option 3:	<b>3.2V per cell (Factory Setting)</b>
Option 4:	3.3V per cell
Option 5:	3.4V per cell
Option 6:	DISABLED
<b>SETTING 2: BRAKE TYPE</b>	
Option 1:	Soft Delayed Brake
Option 2:	Hard Delayed Brake
Option 3:	Soft Brake - No Delay
Option 4:	Hard Brake - No Delay
Option 5:	<b>Brake Disabled (Factory Setting)</b>
<b>SETTING 3: LOW VOLTAGE CUTOFF TYPE</b>	
Option 1:	Hard Cutoff
Option 2:	<b>Soft Cutoff (Factory Setting)</b>
Option 3:	RPM decrease
Option 4:	Pulsing RPM ESC pulses throttle
<b>SETTING 4: PWM SWITCHING RATE**</b>	
Option 1:	8kHz outrunners
Option 2:	<b>12 kHz (Factory Setting)</b>
Option 3:	16 kHz

*\*Refer to cell vendor's instructions for cutoff voltage.*

*\*\*Refer to motor manufacturer's instructions for frequency settings.*

## PHOENIX EDGE ERROR CODES

-tone	MEANING
● -	Low voltage cutoff
● - ●	Over temperature
● - -	Excessive load
● ●	Start fail
● ● -	Radio glitch
● ● ●	Motor anomaly
- ●	Over-current
- ● ●	Auxiliary Wire Radio Glitch

## DEFAULT SETTINGS

OPTION	DEFAULT SETTING
Auto-LiPo Volts/Cell	3.2 Volts/Cell
BEC Voltage	5.0V
Brake Delay	0.6 sec (Delayed)
Brake Ramp	Immediate
Brake Strength	Disabled
Current Cutoff Type	Soft Cutoff
Current Limiting	Normal
Cutoff Voltage	Auto-LiPo
Direction	Forward
Motor Start Power	Medium 59
Motor Timing	Normal 5
PWM Rate	12 Khz
Throttle Type	Auto-Calibrate Endpoints
Vehicle Type	Airplane
Voltage Cutoff Type	Soft Cutoff
Auxiliary Wire	Disabled
Link Live	Disabled

Castle continually updates the firmware for this controller. Please use your Castle Link USB adapter, available directly from Castle using the coupon included in the original product packaging, and free Castle Link software (available at [castlecreations.com/downloads](http://castlecreations.com/downloads)) to install the most current firmware before operating this controller.

## CLEARING THE DATA LOG

Power your controller up with your TX and RX on and set to full throttle. The controller will chime the normal power up chimes. Leave your TX at full throttle for 6 seconds after power up. The controller will emit a short tone after 1 second and then a long tone 5 seconds later. The controller will then erase the data log. You must then move the throttle stick to lowest power to arm the controller.



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