Aero-nuts EC series 80A-HV Brushless Speed Controller Programming Instructions

Enter programming Mode

1. Connect your motor and receiver to the speed controller, but do not connect the battery yet.

2. Turn on your transmitter and move the throttle stick to the full throttle position. Please Note: Most Futaba transmitters have the throttle channel reversed by default.

3. Connect your battery and the controller will initialize with a musical tone.

Programming

After 3 seconds, the controller will start beeping a sequence of tones – a musical tone followed by one or more beeps. Each sequence represents a parameter that you can program and is repeated 3 times. The parameters are:

Music Tone + 1 Beep --- Options 1. Cell Type and No. of Cells
Music Tone + 2 Beeps --- Options 2. Throttle Setting and start mode
Music Tone + 3 Beeps --- Options 3. Brake Setting
Music Tone + 4 Beeps --- Options 4. Direction and Cutoff Type
Music Tone + 5 Beeps --- Options 5. Timing Mode

Step 1. Starting, Enter Sub-optins. When you hear the sequence for the parameter you wish to program, move the throttle stick to the Center Position to Enter Sub-options. The controller will then start beeping a Morse code sequence of short and long beeps representing the possible options you may choose for the selected parameter. See the table below for a list of all programmable options. Each option sequence is repeated 3 times.

Step 2. Select and save, the select the option, move the throttle stick back to the Full-up-position., When you hear the sequence for the option you wish to select. The controller will then save the selected option, and sound a long beep as a confirmation. It then goes back to the beginning of the programming sequence

Step 3. Complete programming and save options. Setup all the parameters you need to change. When complete, move the throttle stick to the Lowest position. The controller will save all options and re-initialize in normal running mode so you can start your motor.

Music Tone + 1 Beep	Cell Type and Number of Cells
· — 1 Short + 1 Long	NiMH / NiCD Auto Cell Count - 0.8V/Cell Cutoff Voltage *
· — — 1 Short + 2 Long	10S Li-Po (37V) – 30V Cutoff Voltage
· — — — 1 Short + 3 Long	9S Li-Po (33.3V) – 27V Cutoff Voltage
· — — — — 1 Short + 4 Long	8S Li-Po (29.6V) – 24V Cutoff Voltage
· — — — — —1 Short + 5 Long	7S Li-Po (25.9V) – 21V Cutoff Voltage
· — — — — — — 1 Short + 6 Long	6S Li-Po (22.2V) – 18V Cutoff Voltage

Music Tone + 2 Beep	Throttle
· · — 2 Short + 1 Long	Auto Throttle Range *
· · — — 2 Short + 2 Long	1.1ms to 1.8ms
· · — — — 2 Short + 3 Long	Hard start *
· · — — — — 2 Short + 4 Long	Soft start

Music Tone + 3 Beep	Brake
· · · — 3 Short + 1 Long	No Brake
· · · — — 3 Short + 2 Long	Soft Brake *
· · · — — — 3 Short + 3 Long	Medium Brake
· · · — — — — 3 Short + 4 Long	Hard Brake

Music Tone + 4 Beep	Direction and Cutoff Type
· · · · — 4 Short + 1 Long	Clockwise Rotation *
· · · · — — 4 Short + 2 Long	Counterclockwise Rotation
· · · · — — — 4 Short + 3 Long	Soft Cutoff
· · · · — — — — 4 Short + 4 Long	Hard Cutoff *

Music Tone + 5 Beep	Timing Mode
· · · · · — 5 Short + 1 Long	1 - For 2-4 Pole Inrunner Motors *
· · · · · — — 5 Short + 2 Long	7 - For 6-8 Pole Motors
· · · · · — — — 5 Short + 3 Long	15- For 10-14 Pole Outrunner Motors
· · · · · — — — — 5 Short + 4 Long	30 - For 10-14 Pole High-RPM Outrunner

Music Tone + 6 Beep	Pulse Width Modulation (PWM)
· · · · · · — 6 Short + 1 Long	8KHz – For low RPM and low pole count motors*
· · · · · · — — 6 Short + 2 Long	For most out runner motors

* is Default Setting