

Onedimerc Speed Controller Programming Instructions

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For Advance programmable helicopter version
50A/70A ESC

*Phrases 1 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 (full up). 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.

*Phrases 2 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 times. The parameters are:

	Music	Tone +1 Beep	Options 1. Cell Type and No. of Cell
	Music	Tone +2 Beeps	Options 2. Throttle Setting
	Music	Tone +3 Beeps	Options 3. Throttle type
	Music	Tone +4 Beeps	Options 4. Direction and Cutoff Type
	Music	Tone +5 Beeps	Option 5. Timing Mode
	Music	Tone +6 Beeps	Option 6. PWM setting

Step 1. Starting, Enter Sub-options. When you hear the sequence for the parameter you wish 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 table 2 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 (phrases 2).

Step 3 Complete programming and save options. Setup all the parameters you need to change.

When complete, move the throttle stick to the Lowest (Down) Position. The controller will save the options and re-initialize in normal running mode so you can start your motor.

The table below summarizes the various programming options for each parameter:

Option 1 (2S-6S)-ESC	H70A (2-6s Lipo)
Cell Type and Number of Cells	H50A (2-3s Lipo)
•	NiMH/NiCD Auto Cell Count
•	6S Li-Po (22.2V) – 16.8V Cutoff Voltage
•	5S Li-Po (18.5V) – 14V Cutoff Voltage
•	4S Li-Po (14.8V) – 11.2V Cutoff Voltage
•	3S Li-Po (11.1V) – 8.4V Cutoff Voltage
•	2S Li-Po (7.4V) – 5.6V Cutoff Voltage

Option 2. Throttle Setting	
•	Auto Throttle Range *
•	1.1ms to 1.8ms
•	Hard Acc*
•	Soft Acc

Option 3. Throttle Type	
•	Normal (Disable Governor Mode) *
•	Governor Mode with 2-4 poles motors
•	Governor Mode with 6-10 poles motors
•	Governor Mode with 12-14 poles motors

Option 4. Direction and Cutoff Type	
•	Clockwise Rotation *
•	Counterclockwise Rotation
•	Soft Cutoff
•	Hard Cutoff *

Option 5. Timing Mode Setting	
•	1° - For 2-4 Pole Inrunner Motors *
•	7° - For 6-8 Pole Motors
•	15° - For 10-14 Pole Outrunner Motors
•	30° - For 10-14 Pole High-RPM Outrunner

Option 6. Pulse Width Modulation(PWM) Setting	
•	8KHz
•	16KHz
•	– For low RPM and low pole count motors *
•	– For most out runner motors

Note: Helicopter version 50A supports 2-3s lipo only. Customer just choose corresponding options in