

DHP Speed Controller Programming Instructions

For Advance programmable Normal ESC

50A/70A/125A 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 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 |
| ♪ — — — | 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 |
| ♪ — — — — — — | Music Tone + 6 Beeps | Option 6. PWM setting |

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 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 all 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. Cell Type and Number of Cells ♪— | Only for 50A/70A/100A/125A (LV as 2S-7S) |
|---|--|
| •— 1 Short + 1 Long | NiMh/NiCD Auto Cell Count - 0.8V/Cell Cutoff Voltage |
| •—•— 1 Short + 2 Long | 7S Li-Po (25.9V) – 21V Cutoff Voltage ** |
| •—•—•— 1 Short + 3 Long | 6S Li-Po (22.2V) – 18V Cutoff Voltage |
| •—•—•—•— 1 Short + 4 Long | 5S Li-Po (18.5V) – 15V Cutoff Voltage |
| •—•—•—•—•— 1 Short + 5 Long | 4S Li-Po (14.8V) – 12V Cutoff Voltage |
| •—•—•—•—•—•— 1 Short + 6 Long | 3S Li-Po (11.1V) – 9V Cutoff Voltage |
| •—•—•—•—•—•—•— 1 Short + 7 Long | 2S Li-Po (7.4V) – 8V Cutoff Voltage |

| Option 2. Throttle Setting ♪— — | |
|------------------------------------|-----------------------|
| ••— 2 Short + 1 Long | Auto Throttle Range * |
| ••—•— 2 Short + 2 Long | 1.1ms to 1.8ms |
| ••—•—•— 2 Short + 3 Long | Hard Acc* |
| ••—•—•—•— 2 Short + 4 Long | Soft Acc |

| Option 3. Brake Setting ♪— — — | |
|-----------------------------------|--------------|
| •••— 3 Short + 1 Long* | No Brake |
| •••—•— 3 Short + 2 Long | Soft Brake* |
| •••—•—•— 3 Short + 3 Long | Medium Brake |
| •••—•—•—•— 3 Short + 4 Long | Hard Brake |

| Option 4. 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 * |

| Option 5. Timing Mode Setting ♪— — — — — | |
|---|--|
| •••••— 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 Motors |

| Option 6. Pulse Width Modulation(PWM) Setting ♪— — — — — | |
|--|---|
| ••••••— 6 Short + 1 Long 8KHz | – For low RPM and low pole count motors * |
| ••••••—•— 6 Short + 2 Long 16KHz | – For most out runner motors |

* is Default Setting