

(This Program card is compatible with Simon and BLHeli and NANO series ESC)

● **Programming the ESC**

1. Disconnect the ESC from the battery
2. Pull the PPM signal wire into the program card jack. Please pay attention to the direction. (for 4IN1 ESC, please refer to the user instruction for 4IN1 ESC)
3. Connect the ESC to the battery, the motor will give a ♪2 3 1 tune within 5 seconds, and the LED on the program card will display as **no1. 1**.
4. The program card automatically reads parameters from the ESC, when different parameters are chosen, the LED will display the value for the parameter.
5. All parameters values can be viewed, modified, and written by pressing corresponding buttons.
6. Disconnect the ESC from the battery.

● **Functions of each button**

the “ITEM” button: to choose different parameters

the“OPTION” button: to choose different values of the parameters

the ‘WRITE’ button: to write the parameter values (press and release at once); or to restore factory defaults (by pressing the button and hold for more than 3 seconds.)

Press the “ITEM” button to choose different parameters, (The 3-digit LED will display the corresponding parameter number when they are chosen.), then press the“OPTION” button to choose different values of the parameters (the 1-digit LED will display the parameter value) , and press ‘WRITE’ button to write the parameter values into the ESC (press and let go at once, all the LEDs will flash three times), or to restore factory defaults by pressing the button and hold for more than 3 seconds (all the LEDs will flash until the button is released).

You can also modify all the values one after another and press the “WRITE” button to write all the modifications at once.

● **Programmable parameters**

1. Brake Type: There are 2 options, **OFF**, ON. The default is OFF. (Note: This parameter is invalid in boat ESC because there is no brake in this type of ESCs)
2. Timing Mode: There are 5 options, Low 0°, Mid-Low 8°, **Middle 15°**, Mid-High 23°, High 30°. The default is Middle 15°.
3. Start Force: There are 13 options, 0.031, 0.047, 0.063, 0.094, 0.125, 0.188, 0.25, 0.38, 0.50, **0.75**, 1.00, 1.25, 1.50. The default is 0.75.
4. Curve Mode: There are 4 options, **OFF**, Low, Middle and High. The default is OFF.
5. Control Frequency: There are 2 options, **8KHz** and 22KHz. The default is 8KHz.
6. Low-voltage Protection: There are 4 options, OFF, 2.8V/Cell, **3.0V/Cell**, 3.2V/Cell. The default is 3.0V/Cell.
7. Cutoff Mode: There are 2 options, **Soft-Cut** and Cut-Off. The default is Soft-Cut. (Note: This parameter is invalid in boat ESC because there is no Cutoff in the boat ESC)
8. Rotation Direction: There are 3 options, **Normal**, Reverse, Bidirectional. The default is Normal.