

USER MANUAL OF PROGRAM CARD

Thank you for purchasing the program card for the brushless electronic speed controller (ESC). With this equipment, you can set the ESC very easily. The program card is pocket-sized and has a very friendly user-interface.

SPECIFICATION

1. SIZE: 92mm * 52mm * 6mm
2. WEIGHT: 26g

FRONT PANEL

1. Use "up/down" button to select the programmable item, use "left/right" button to select the options of each programmable item;
2. Brake: When "Brake" is ON, the motor will stop immediately when the throttle stick is moved to the lowest position;
3. Low Voltage Protection Mode (Cut-off Type): When "Soft-Cut" is selected, the ESC will gradually reduce the output power. When "Cut-Off" is selected, the ESC will immediately shut off the output power.
4. Low Voltage Protection Threshold (Cut-off Voltage):
Please check the user manual of the ESC to get detail information about this item.
5. Music/Lipo Cells:

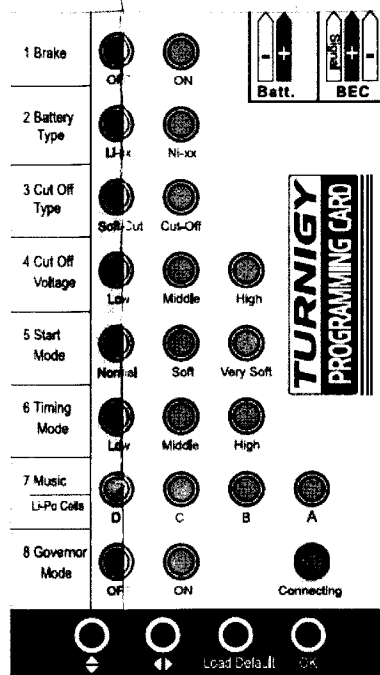
The 4 LEDs have different meanings for the normal voltage ESC (works with 2S to 6S Lipo) or the high voltage ESC (works with more than 6S Lipo).

- ◆ For ESC without a postfix character of "HV", for example, "Plush-60A", 4 LEDs have 16 possible states, representing 16 rhythms for ESC. The ESC will play the music when it is started. (Please refer to the Table 1 in the next page)
- ◆ For ESC with a postfix character of "HV", for example, "Sentilon-100A-HV", 4 LEDs represent the number of Lipo battery cells amount (Please refer to the Table 2 in the next page)

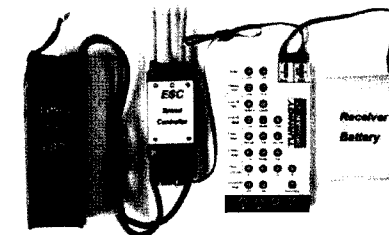
WIRING SEQUENCE

A) When you are using an ESC with a built-in BEC (Battery Elimination Circuit)

1. Disconnect the main battery pack from the ESC



2. For ESC with a built-in BEC, please disconnect the Rx cable (trio wires) of the ESC from your receiver, and then connect it to the program card at the top right corner position marked with "BEC".
3. Connect the main battery pack to the ESC
4. The LEDs on the program card will light to show the current programmable values of the ESC



NOTE1: The sequence of Step 2 and Step 3 cannot be reversed! Otherwise the program card cannot work properly.

B) When you are using an ESC without a built-in BEC

If the ESC is marked with "OPTO" (For example, Plush-80A-OPTO), that means this ESC hasn't a built-in BEC, then you must use an additional battery pack (4.8-6V) to supply the program card, and usually a receiver battery pack is a good choice. By the way, most of the high voltage ESC (works up to 10 or 12S Lipo) hasn't built-in BEC.

1. Disconnect the main battery pack from the ESC
2. Disconnect the Rx cable (trio wires) of the ESC from your receiver, and then connect it to the program card at the top right corner position marked with "BEC"
For high voltage ESC (with a postfix character of "HV"), if it has an individual data cable (that is a very short trio wire just nearby the Rx cable), please disconnect the Rx cable of the ESC from your receiver, and then connect the individual data cable to the program card at the position marked with "BEC"
3. Connect the receiver battery pack (4.8-6V) to the program card at the top right corner position marked with "Batt"
4. Connect the main battery pack to the ESC
5. The LEDs on the program card will light to show the current programmable values of the ESC

NOTE2: The sequence of Step 2, step 3 and Step 4 cannot be reversed! Otherwise the program card cannot work properly.

NOTE3: Don't use a battery pack higher than 6V to supply the program card!

OPERATION

Click the "up/down" button to select the programmable item, the corresponding LED will blink. Then click the "left/right" button to select the options of this item, the flashing LED shows the value you are just selecting. Finally, click the "OK" button, the blue LED will blink, which means the new settings are being transmitted to the ESC. When the data transmission is finished, the blue LED stops blinking, it means the new settings are accepted and stored in the ESC.

MUSIC LIST

Table 1: Music list

● = LED is lighting

No.	LED				MUSIC
	D	C	B	A	
1	○	○	○	○	Disable the music playing function
2	○	○	○	●	Susanna (USA)
3	○	○	●	○	To Alice (Germany)
4	○	○	●	●	Ode to joy (Germany)
5	○	●	○	○	Take off your hood (China)
6	○	●	○	●	Jasmine (China)
7	○	●	●	○	Red river valley (Canada)
8	○	●	●	●	Auld Lang Syne (Scotland)
9	●	○	○	○	Jingle Bells (USA)
10	●	○	○	●	Song of matador (Spain)
11	●	○	●	○	The end of the world (USA)
12	●	○	●	●	Rhythm of triumph (Germany)
13	●	●	○	○	Love is blue (USA)
14	●	●	○	●	Beautiful Spanish lady (Italy)
15	●	●	●	○	Post carriage (Japan)
16	●	●	●	●	Love bird (China)

LI-PO BATTERY CELLS AMOUNT LIST

Table 2: Lipo cells amount list

● = LED is lighting

No.	LED				Li-Poly Cells Number
	D	C	B	A	
1	○	○	○	○	Auto detect
2	○	○	○	●	Auto detect
3	○	○	●	○	Auto detect
4	○	○	●	●	Auto detect
5	○	●	○	○	5S (18.5V)
6	○	●	○	●	6S (22.2V)
7	○	●	●	○	7S (25.9V)
8	○	●	●	●	8S (29.6V)
9	●	○	○	○	9S (33.3V)
10	●	○	○	●	10S (37.0V)
11	●	○	●	○	11S (40.7V)
12	●	○	●	●	12S (44.4V)
13	●	●	○	○	Auto detect
14	●	●	○	●	Auto detect
15	●	●	●	○	Auto detect
16	●	●	●	●	Auto detect

We strongly suggest manually setting the cells amount of your Lipo battery pack. Please be careful to use "Auto detect" options.

DECLARATION

This program card is ONLY suitable for the ESC made by the same manufacturer. Please ask your retailer for detail product information.