

10A-150A Advance Plus Series-Programmed by Prog-card
PROGRAMMING CARD
FUNCTION

(Some functions can be programmed by using the RC throttle stick. Please refer to the instructions on page 2.)

1. Battery Type: Ni-MH-Ni-Cad / **Lion-Lipo (Factory default setting)** / LiFePO4 (A123 cells)

2. Cut-off voltage: High/**Medium (Factory default setting)** /Low

Cut-off voltage	Lion/Lipo	NiMH/NiCD	LiFe
High	3.2V	0.9V	2.8V
Medium	3.0V	0.8V	2.5V
Low	2.8V	0.6V	2.2V

3. Cut-off mode: Hard/**Slow down (Factory default setting)**
Motor Revolving Direction:Change

4. Brake Level: Off /**Medium(Factory default setting)** / Hard

5. Timing Mode: **Auto (Factory default setting)**
High: For 10 and more pole outrunner motors, this setting gives highest the RPM and current.
Low : For 2, 4, 6 or 8 pole outrunner and inrunner motors, this setting gives maximum efficiency.

6. Motor Acceleration: High/**Medium(Factory Default setting)**/Low

OPERATIONS

By using the Cobra Prog-Card, the above 6 functions can be programmed quickly and easily.

Note: When setting an ESC with the Prog-Card, you do not need to use the radio receiver or transmitter. Please refer to the diagram shown below for proper connection of the Prog-Card to the Cobra ESC.


PROGRAMMING INSTRUCTIONS

- Set all 6 jumpers to the required positions from the chart above.
- For ESC with BEC: Plug JR connector (part of ESC) to the Prog-Card position on the top right corner. **B**
(**Note:** Make sure that the polarity of the connector is correct, and the wire colors match.)
For ESC without BEC (OPTO): Connect a 4-cell Ni-Cad or Ni-MH receiver power pack to the Prog-Card position "External power for opto ESC" on the top left corner. **A**
Note: For ESC without BEC(OPTO), ESC cannot supply 5V power to Receiver and servos, so an additional 4-cell Ni-Cad or Ni-MH receiver power pack is needed.
- Connect a motor to the ESC. The motor is what emits the beep sounds heard during programming.
- Connect the main power pack to the ESC. After the battery is connected, one "beep" will be heard. This indicates that the settings of the Prog-Card have been transferred to the ESC.
- Disconnect the main power pack and then disconnect the Prog-Card. Now the settings are completed.

COBRA ESC ADVANCE PLUS SERIES SPECIFICATION (programmed by Prog-card)

No.	Model	Continuous Current	Burst Current	Prog-Device	BEC		Lipo Cells	Size (mm)
					Type	V/A		
1	DL11A	11 A	14 A	Prog-Card	Linear	5V/2A	2-3	22×18
2	DL22A	22 A	28 A	Prog-Card	Linear	5V/2A	2-3	33×24
3	DL33A+	33 A	41 A	Prog-Card	Switching	5.5V/3A	2-4	42×23
4	DL40A+	40 A	50 A	Prog-Card	Switching	5.5V/6A	2-6	50×30
5	DL60A+	60 A	75 A	Prog-Card	Switching	5.5V/6A	2-6	50×30
6	DL80A+	80 A	100 A	Prog-Card	Switching	5.5V/6A	2-6	50×30
7	DL100A+	100 A	125 A	Prog-Card	Switching	5.5V/6A	2-6	50×30
8	DL150A+	150 A	188 A	Prog-Card	Switching	5.5V/6A	2-6	50×30

COBRA ESC 6-MONTH WARRANTY POLICY

As the manufacturer of Cobra ESC's, Danlions Inc. promises a minimum of 6-month-lifecycle of each Cobra ESC starting from the original purchase date.

1. 6-month Warranty Policy

For 6 months from the date of purchase, any ESC failures caused by improper design or assembly are covered by the warranty. Any improper use of the product will invalidate the warranty. The following are improper uses:

- Modifications to the ESC without permission from Cobra Systems or use of non-Cobra ESC repair parts.
- Any damages caused as a result of misuse by the owner, or not operating the ESC in accordance with the detailed instructions included in this User's Manual.
- Any damages caused by model aircraft crashes.
- Use of the ESC in applications other than R/C aeromodeling.

2. Benefits Protection for Users

If the ESC fails to operate within the warranty period, the user can get a free replacement ESC.

3. What to do if damage occurs

If ESC damage does occur, we provide two methods to process the warranty:

- You can ask your local dealer to exchange the damaged ESC for another ESC.
- If your local dealer cannot provide a replacement, you can contact us directly at Service@CobraSystem.net

Whichever method you choose, the following materials are required:

- Proof-of-purchase, such as invoice, with the purchase date.
- A detailed description of the damage.
- Photos of the damage.

If the local dealer or our engineer thinks the photo is not clear enough, the user may need to send the ESC back.

Manufacturer of COBRA ESC-Danlions Electric Industrial Co., Ltd.

PRODUCTION INFORMATION

Model No	Purchase Date	Quantity	Dealer Information			
			Name	Web	TEL	Mail

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