

## What the heck is a BEC?

Our Battery Eliminator Circuits are small devices that eliminate the need for a receiver and servo battery pack. They draw higher voltage from the motor batteries and drop it to a voltage level that is suitable for your receiver and servos. This is required in applications which draw high power for multiple servos or use more than 3S motor packs, as most ESCs with linear BECs are not designed for these applications.



**CC-010-0004-00  
CC BEC 10A**

### Technical specs

Max. Voltage (V)	5V ~ 25V
N° Li-xx cells	2 ~ 6
N° Ni-xx cells	5 ~ 20
BEC Power max. A	10A 12V input = 7A 24V input = 5A
Dimensions	30x15x10mm
Weight (no cable)	11g



**CC-010-0004-01  
CC BEC PRO 20A**

### Technical specs

Max. Voltage (V)	5V ~ 50V
N° Li-xx cells	2 ~ 12
N° Ni-xx cells	5 ~ 36
BEC Power max. A	20A
Dimensions	43x33x24mm
Weight (no cable)	29g

## CC CapPack

CC CapPack is useful in all brushless motor applications, where it serves to give just that little boost needed to overcome ripples in the battery voltage caused by hard acceleration or long battery wires. Remember, ripple voltage is hard on an ESC, adding the CC CapPack can help reduce the load on the controller's on-board capacitors.

Helis: CC CapPack is highly recommended for all 500 class and larger heli applications where Y harnesses and long wires can bleed voltage and hard collective pulls can strain even the most powerful batteries.

Cars/Trucks: With their high torque requirements – going from 0 to 100% throttle isn't easy on controllers or batteries - RC cars and trucks put enormous loads on brushless power systems. Use CC CapPack to help your system power through the abuse.

Aircraft: Larger electric power systems lead to larger electric powered aircraft, and sometimes the distance between the battery pack and the ESC grows beyond the length of the wires installed on the components. Adding wire also adds inductance, which can increase the ripple voltage in a system. CC CapPack essentially negates the ripple caused by the addition of up to 8 inches of length to the battery wires.

CC CapPack is designed for quick and easy installation. Users simply cut the soft silicone insulation on the battery wires – do this as close to the ESC as possible – and place the exposed wires in the channels on CC CapPack's posts. Check for proper polarity and then solder the wires to the posts. Use the included heat shrink to finish it off for a professional looking install.

Note: All Castle controllers with data logging capabilities can report the ripple voltage they encounter during use. Ripple voltage peaks should always be less than 10% of the total pack voltage; the smaller the ripple voltage the better. If an application exhibits more than 10% ripple voltage under peak loads, the user should consider using higher discharge (C Rating) batteries, shorter wires, higher current connectors, better gearing or a smaller load.

Multiple CapPacks may be used in an application. They should all be installed as close to the ESC as possible.



**CC-011-0002-02  
CC CAP PACK**

### Technical specs

Max. Voltage (V)	50V
N° Li-xx cells	2 ~ 12
N° Ni-xx cells	5 ~ 36
Capacity	4x 220mF = 880mF
Dimensions	46x20x18mm
Weight (no cable)	14.2g