

Recommendations at an installation the Markus pulse BEC.

The Markus pulse BEC is recommended to using on automodels, boats, helicopters, "fun-fly" airplanes and etc.

The most part of speed controllers has a built-in linear BEC for feed of a receiver and servos. The built-in linear BEC of controller can hold peak currents up to 4 A and also dissipation a loss power.

Below you can see the example of calculation of number servos for controller with built-in linear BEC.

Number of servos = Current I max / Current I servo

Power loss of linear BEC = (U batt-U BEC) x Current I max,

so if you use 3S LiPo pack. U batt = 3.5 x 3 =10,5 V and U BEC = 5 V,

Current I servo is from 0,2 A till 0,8 A and defined type of servos.

so if a controller has a good air cooling

Current I max = 7 W / (10,5 V-5 V) =1,27 A

and if a controller has a insufficient air cooling

Current I max = 5 W / (10,5 V-5 V) =0,9 A

hence the built-in BEC of controller can support from 2 till 5 servos.

If you are going to use 4S and more LiPo so the built-in linear BEC of controller can support only from 1 till 2 servos!!!

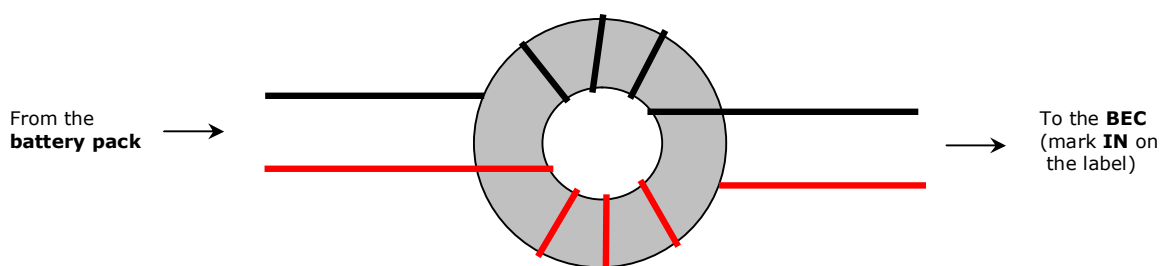
So we recommend to use the external pulse BEC for feed of a receiver and servos if U battery more than 12V or you are going to use from 4 till 8 servos. Besides the external pulse BEC is used with OPTO versions of controllers for feed a receiver and servos.

Important note! The external pulse BEC make interferences which can drop a range your RX-TX equipments.

So usually a range of RX-TX equipments decrease on 10-20% if external pulse BEC is installed in the model properly. But if external pulse BEC have been installed in the model improperly so a range of RX-TX equipments can decrease on 50-70%!!!

Therefore for effective using of external pulse BEC and decrease of interferences we recommend following:

- install an additional filter on an input wire of external pulse BEC (see the picture).



The picture. The three winds of each wire (red and black) which are reeled up in an opposite direction on a ferrite ring of size 10x6x4 (included).

- the external pulse BEC should be placed as far as possible from the receiver and antenna;
- the input wire of BEC (mark IN on the label) must have a minimum length;

Remember! Always before use of your model you must check effective range of your RX-TX equipments!