

YGE BattSwitch

Please read these instructions carefully before first use and observe the **safety instructions!**

The YGE BattSwitch is a very compact buffer circuit that makes it possible to operate a BEC with a buffer battery and switch it off at the touch of a button. It differs from other buffer solutions in that it has no self-consumption when switched off, which means that the battery can remain permanently connected. Furthermore, you can use a battery of any size with a voltage of 5.0V to 13.2V, making it suitable for the smallest helicopters or airplanes as well as for large models. The BattSwitch comes as a pure circuit board and therefore as a kit. Any connectors (e.g. XT30, XT60, XT90, Deans, gold connectors...) or cables can be soldered to the input and output.

BEC voltage and battery must be selected to match each other. We recommend setting the BEC slightly lower than the end-of-charge voltage of the battery.

Examples:

BEC voltage 8.0V-8.2V with use of 2S Lipo.

BEC voltage 12.0V-12.2V when using 3S Lipo.

BEC voltage 7.0V-7.1V when using 2s LiFe.

The battery does not need to be recharged after every flight, as it is kept at the set BEC voltage by the BattSwitch. However, it should be checked and balanced with a charger at least once per season.

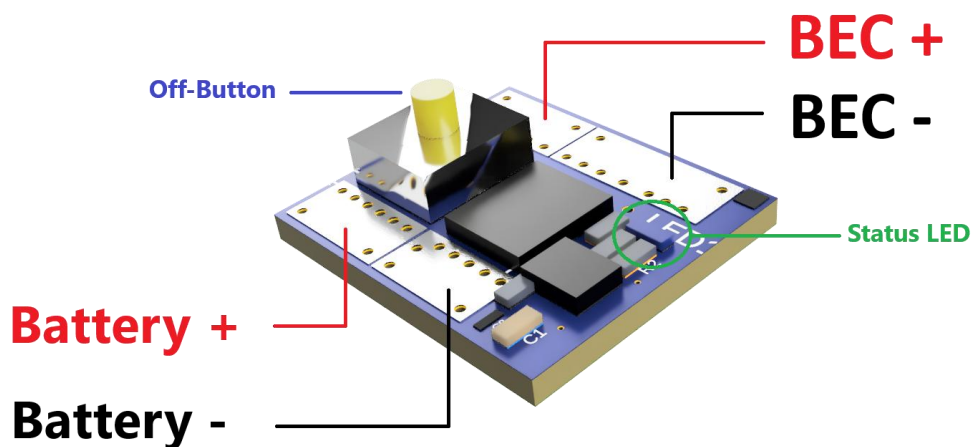
Our BEC controllers are suitable, except for the YGE 35LVT. When using the BattSwitch with controllers from other manufacturers, please check the buffering capability of the BEC.

Safety instructions:

The battery must be fully charged or charged to the selected BEC voltage before first use! The battery switch has no reverse polarity protection and can be damaged if the polarity is reversed.

Connections:

The connections are also labeled on the back of the circuit board.



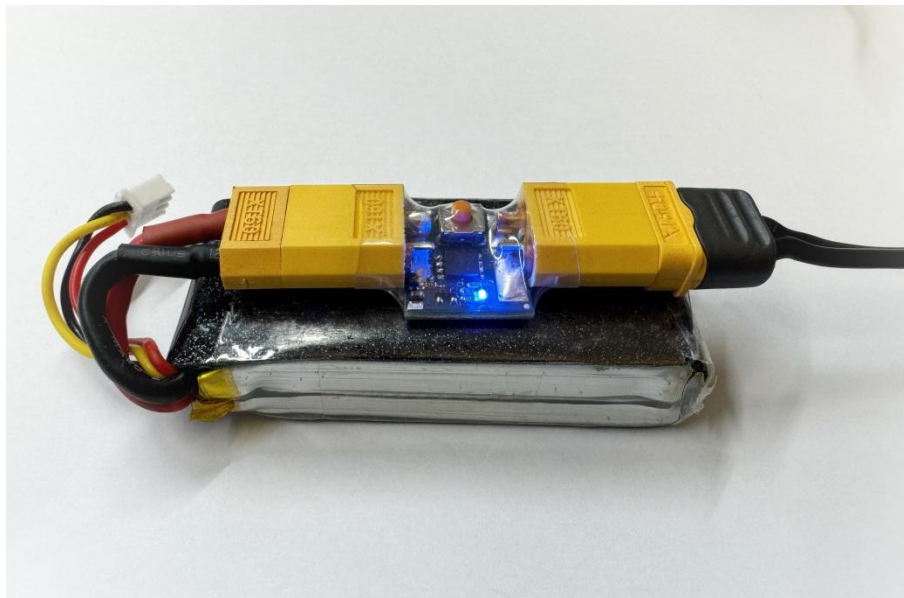
Undervoltage:

Please note that the BattSwitch is purely an electronic switch that connects or disconnects the buffer battery to the receiver system. It has no undervoltage detection, which means that the battery can become permanently over-discharged if it is not switched off. This is because the operational safety of the receiving system is paramount. In the event of a failure of the main power supply, the buffer battery should maintain safe operation for as long as possible and thus ensure a safe landing.

Overcurrent:

The BattSwitch has no overcurrent limitation for the above-mentioned reason. It can be loaded with 30A, making it suitable for large models and current-hungry servos. Make sure that the connected battery is full or has approximately the same voltage as the BEC when switching on. If an empty battery is connected, it will be charged quickly with the maximum BEC current. Our BECs and the BattSwitch can handle this, but most smaller buffer batteries cannot. If a full buffer battery is connected, it is discharged to the set BEC voltage by the receiver system during operation and then kept at this voltage.

Installation example:



BattSwitch with a 2S Lipo and XT60 connectors on both sides.

Technical data:

Suitable battery types:	LiPo, Lilon, LiFePo4, NiMh, NiCd
Input voltage:	5.0 - 13.2V
Output voltage:	5.0 - 13.2V
Maximum output current:	30A
Dimensions:	19.5 x 17.4 x 6.7mm
Weight (without connector):	1.5g

Contents:	-Assembled BattSwitch circuit board without connector -2 pieces of shrink tubing
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Warranty:

Our warranty conditions are based on the European Warranty Act. All further claims are excluded. This applies in particular to claims for compensation for damage caused by failure or malfunction. We accept no liability for damage to property, personal injury and their consequences arising from our delivery or work, as it is not possible for us to control the handling and application.

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