

PERUN

AB

USER AND INSTALLATION MANUAL

1. General information

Perun AB is an electronic circuit that protects mechanical switches in your replica. When installed, high currents used to accelerate the motor are not directed through contacts, but through specialized MOSFET transistor. It not only increases reliability but also has a positive effect on the rate of fire as MOSFETs have much lower resistivity than contacts.

Besides that, **Perun AB** allows you to enable or disable active brake mode (AB), which stops the motor as soon as gearbox cycle ends. This helps by reducing spring wear.

For Li-Po battery users **Perun AB** offers Li-Po protection mode that will alarm you if battery voltage falls to dangerously low levels.

Warranty – 1 year

Allowed battery types:

Li-Po, 2 to 4 cells (7.4V to 14.8V)

NiMH/NiCd, 8 to 10 cells (9.6 to 12V)

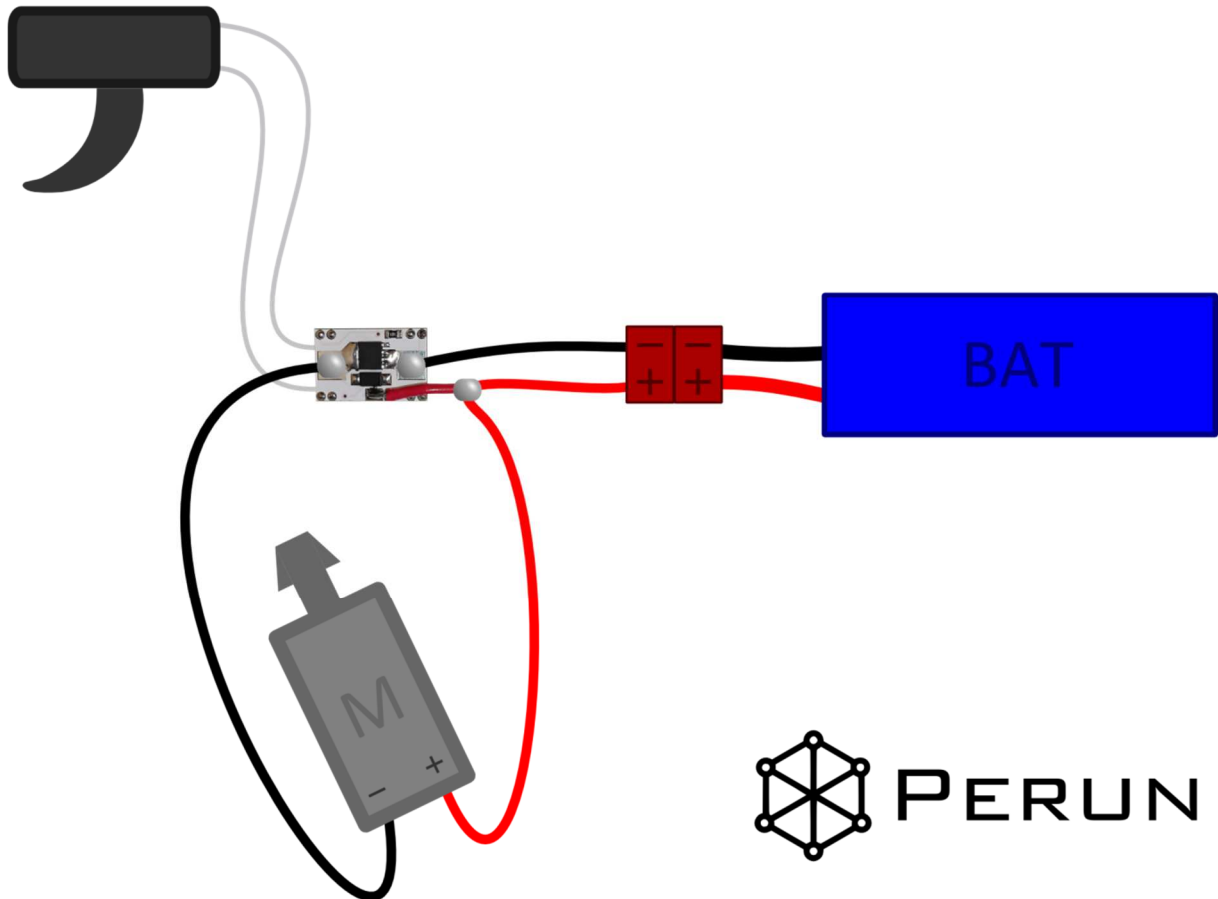
Li-Fe, 3 cells (9.9 V)

ATTENTION! The device must never be run without a fuse.

ATTENTION! Do not leave your replica with the battery plugged in for a longer period of time (more than a few days), because of the risk of complete battery discharge (which will permanently damage the battery).

2. Installation

Put wires together according to the following scheme:



You may shorten the white and red cables already soldered to Perun AB as needed, but please do not replace them. After soldering the whole wiring together, use attached shrinktube for insulation.

It is important to carefully follow the scheme above. Any deviations may result with device failure and warranty loss.

3. Active brake

Active brake (AB) is a feature, which if activated will stop the motor after each shot (in semi-automatic mode) or when the trigger is released (in full auto). This prevents the spring from staying compressed and in case of replicas with lower muzzle energy and high rate of fire, eliminates possible double shot problem.

On the other hand, activation of the active brake always leads to increased wear of motor brushes, as well as its faster heating. We advise to turn AB off during the game if it is not necessary, and to turn it on just to fire one shot in semi-automatic mode at the end of the day, so that the spring remains uncompressed during storage.

Also, with AB deactivated the piston will stop closer to the rear position, so the next shot will be fired quicker.

In order to turn AB on or off press and hold the button on the device. One long sound signal will mean that AB has been turned on, three short signals will mean it is off.

4. Low battery voltage warning

Batteries should never be discharged below certain level. **Perun AB** has a low battery voltage warning feature for lithium-polymer batteries (Li-Po). If activated, after the battery has been discharged to a dangerously low level **Perun AB** will signal that by short sound signals recurring every 30 seconds. Battery's nominal voltage will be detected automatically.

To activate low battery voltage warning, press and hold the button on the device. Keep holding the button until the second sound signal is heard. The first signal will be for the AB, as described above, the second one will be for Li-Po protection. One long sound signal will mean that protection is on, three short signals will mean it is off. AB setting will be changed after this, so you will have to restore previous AB setting.