

User Guide

PicoAAB

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www.gatee.eu



Notice

Information contained in this document is subject to change without notice.

**FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL
CAREFULLY BEFORE INSTALLING THE DEVICE**

Safety Summary

KEEP AWAY FROM CIRCUIT

Device cover must not be removed by user.

DO NOT SERVICE ALONE

Do not attempt any internal service.

DO NOT OPERATE IN AN EXPLOSIVE ATMOSPHERE

Do not operate the device in the presence of flammable gases or fumes.

WARNING: Always use fuse between battery and mosfet

WARNING: Wrong polarisation of supply cause immediate damage to the unit and it can lead to fire.

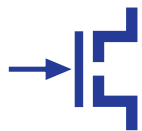
Table of Contents:

Notice	2
Safety Summary	2
I. Overview	4
II. Installation	7
AEG standard installation diagram	7
• Installation of PicoAAB without replacement of wires	8
• Installation of PicoAAB with replacement of wires	8
IV. Warranty	9

I. Overview

PicoAAB is the smallest, 3rd generation mosfet with Active Brake. It can work with 14.8V Li-Poly batteries. The system can be installed in every AEG. It can work with the strongest AEG replicas. The installation is very easy and the interference in the replica is limited only to running one or two additional wires from the contacts.

Key functions:



MOSFET

MOSFET

Do you want to achieve a higher rate of fire and faster trigger response? Are you planning a power upgrade of your rifle? In that case, you need a MOSFET.

It targets the energy from the battery directly to the motor, bypassing the mechanical trigger contacts. As a result, you will gain higher rate of fire of the rifle and a faster trigger response, and the contacts will be protected against burn out.



ACTIVE BRAKE

Active Brake

Do you care about realism? Would you like to increase the life of the gearbox? Does your rifle have such high rate of fire that you are not able to make a single shot? Active brake will sort things out.

In SEMI Mode, the brake will not allow for compressing the piston after a shot. The piston will stop in front position which eliminates unnecessary stresses, increasing the service life of Gearbox and its parts. It is very important, especially with an AEG power upgrade.

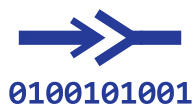
After releasing the trigger, the rifle immediately stops shooting. Thus, you will gain more realism and, additionally, won't lose your precious ammunition.



ELECTRONIC FUSE

Electronic Fuse

A new MOSFET will never let you down on the battlefield. It is totally protected against overheating and short-circuits of the electrical system. In case of the rifle becoming jammed, it will protect the motor and the battery against any damage.



DIGITAL INTERFACE

Digital Interface

It provides full compatibility with micro-switches. It is fully resistant to contact bounce. You gain a bigger ROF, faster trigger response and your MOSFET becomes less heated.



3rd GEN MOSFET

MOSFET of the 3rd Generation

Usage of most modern transistors and microcontroller enabled us to create the smallest and most reliable MOSFET in the market.

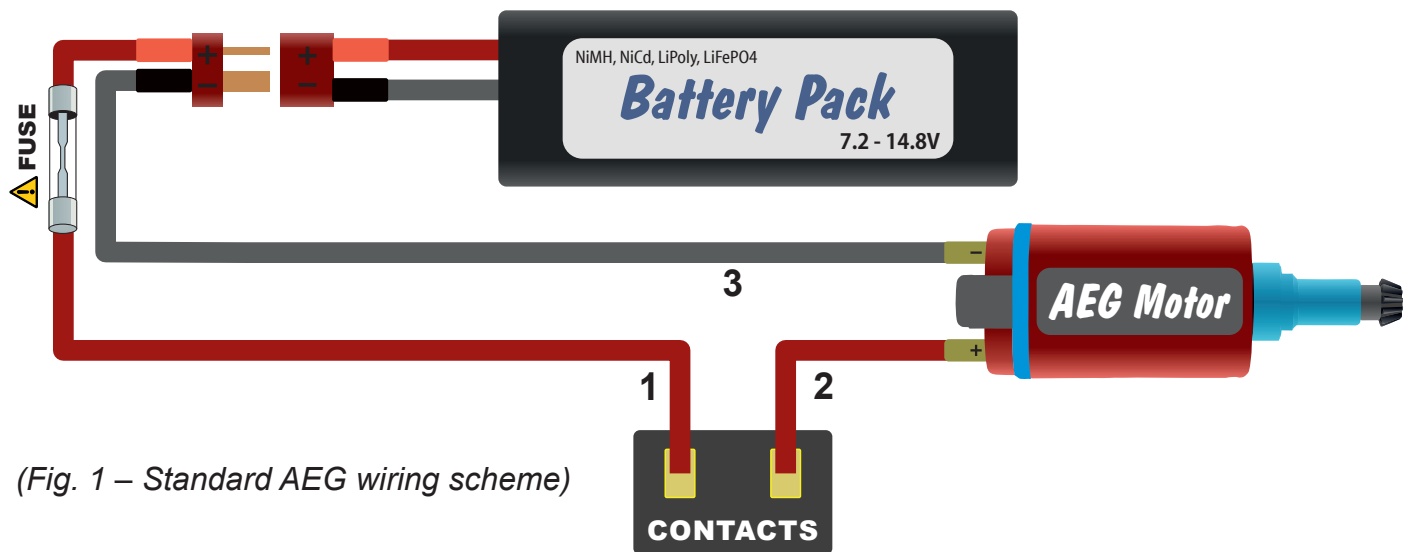
WE GUARANTEE that the MOSFET will work with the strongest AEG replicas. If you damage the MOSFET, we will reimburse you for 100% of your costs or replace it with a new one at our expense.

Included in the kit:

1. Single signal wire for trigger contacts
2. Double signal wire for trigger contacts
3. Male terminal [2,8x0,8mm] with red heatshrink tube (for battery positive wire)
4. Male terminal [2,8x0,5mm] with black heatshrink tube (for motor negative wire)
5. Male terminal [2,8x0,5mm] with red heatshrink tube (for motor positive wire)
6. Female terminal [2,8x0,5mm] with black thin heatshrink tube (for battery negative wire)



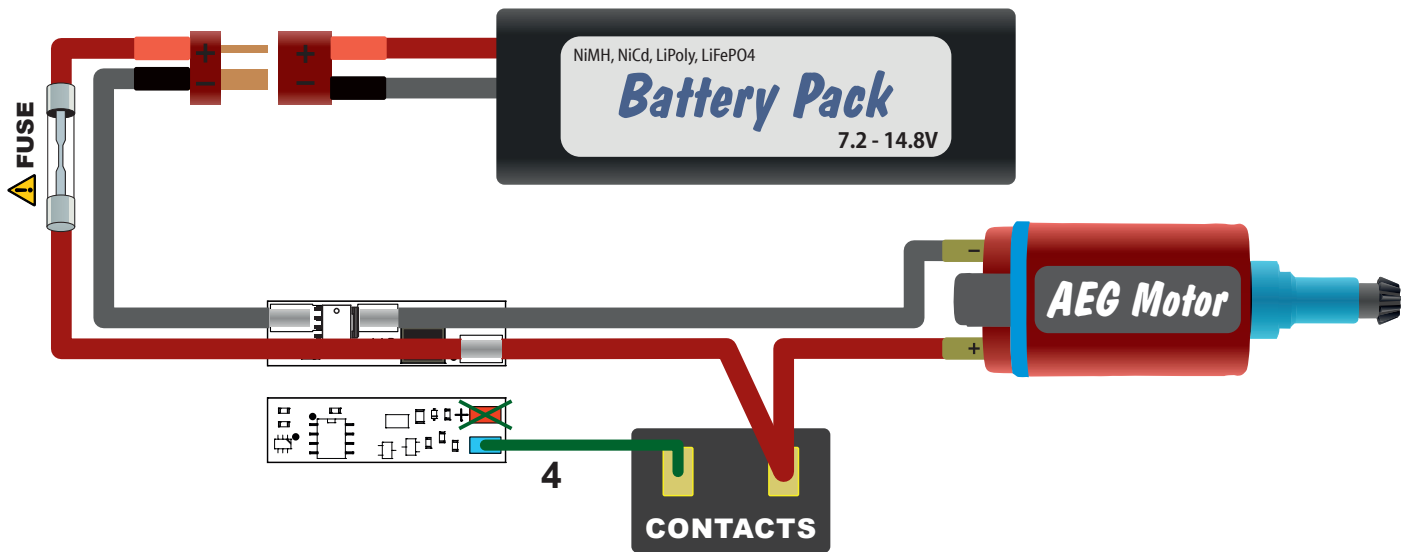
II. Installation



(Fig. 1 – Standard AEG wiring scheme)

To adapt the standard AEG installation to work with PicoAAB we have to get to the trigger contacts. In the case of GB v2 contacts are located inside a gearbox. With a version 3 gearbox, installation will be easier because the contacts are on the outside of gearbox. Please consult a local airsoft technician if you have never disassembled a gearbox before or if you have any installation concerns.

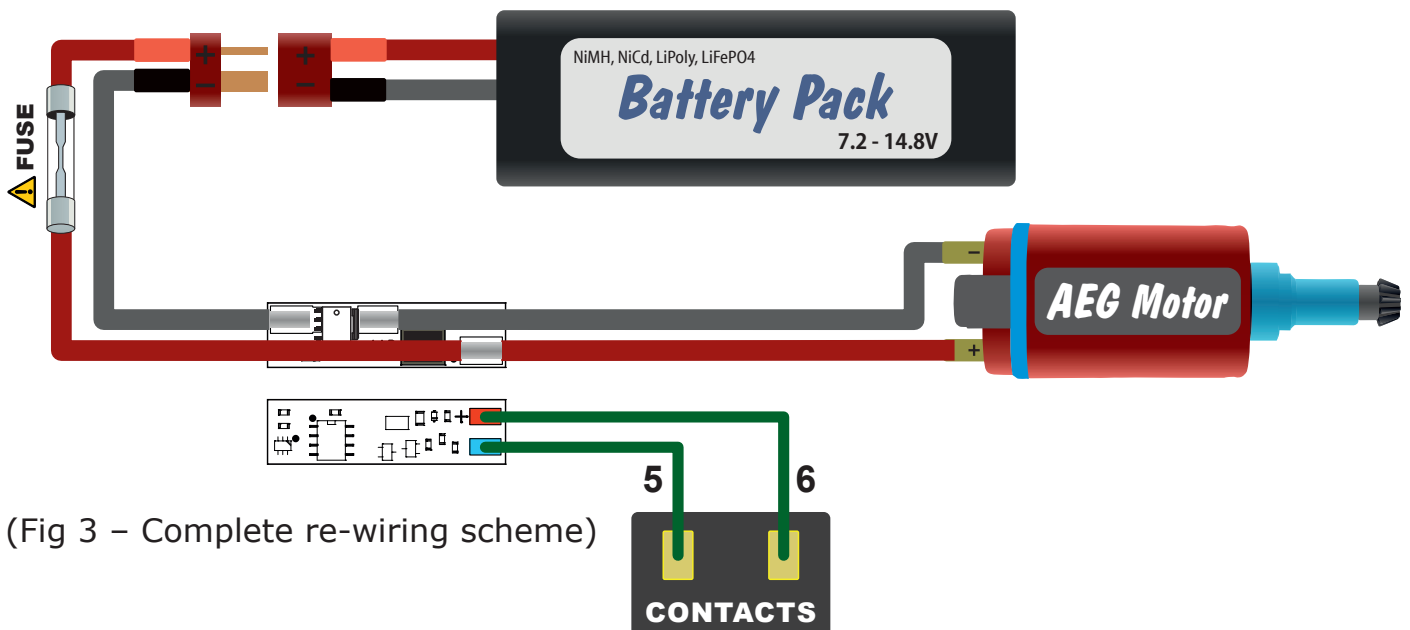
a) Installation of PicoAAB without replacement wires. Using this method, the original wiring is kept, and the connections are modified. Referencing Fig. 1, de-solder No. 1 wire from one of the trigger contacts and then solder it to the No. 2 wire. It does not matter which wire you disconnect from the trigger switches, just join 2 together at one terminal. In the place of the No. 1 wire, solder additional signal wire (No. 4 – provided in the kit). The gate wire is very thin because it handles very low current and is only used for switch-detection. Now, we have just connected system between battery and AEG. Don't forget about signal wire.



(Fig 2 – Connection-modification scheme)

b) Installation of PicoAAB with replacement of wires.

Replacing the existing AEG wiring with high-quality, low-resistance wiring in conjunction with the installation of a MOSFET will allow for the ultimate in system efficiency. 16 awg or thicker wire is recommended. Solder dual signal wire (No. 5, 6 – provided in the kit) to the trigger contacts.



(Fig 3 – Complete re-wiring scheme)

IV. GATE Limited Warranty Policy

1. The product must be delivered with proof of purchase and properly completed Warranty Form. Installing the product is not considered as a warranty repair.
2. The Warranty Form is available on our website: **<http://www.gatee.eu/en/rma-2>**
3. The warranty is valid for 12 months from date of purchase.
4. Repairs will be made as soon as possible, not exceeding 14 working days.
5. All repairs and structural modifications made by the purchaser will result in termination of a contract of guarantee.
6. The guarantee may be rejected if product failure is the result of improper operation, installation, maintenance, mechanical, thermal or chemical damage.

If you have any questions, please feel free to ask: **office@gatee.eu**