

ES Calibrator | User Manual

Exhaust servo calibrator module | Model: ESC-A01

1. Foreword

Before using this product, please ensure the bike is compatible with this tool. Check the part number on the packaging and use the **Product Advisor** on our website to check compatibility. For more information on this product, please visit: www.healtech-electronics.com/ESC

Congratulations on your purchase of an ES Calibrator (ESC) module. Products from HealTech Electronics Ltd. are the most advanced aftermarket accessories and maintenance tools for motorcycles.

The ES Calibrator is designed especially for recent Aprilia motorcycles and enables an effortless, straightforward exhaust servo motor calibration with or without the original servo motor being in place.

There are two usage scenarios when the ES Calibrator can come in handy:

Scenario A) The exhaust servo and exhaust valve are in place and work normally, but requires calibration for proper, error-free operation.

Scenario B) The exhaust servo motor has been replaced with a HealTech Exhaust Servo Eliminator (ESE) module, but the ECU still gives an error code for the exhaust servo motor (due to it was out of calibration the last time it was used). In this case, the ESC will calibrate the ECU to accept the ESE module as the new (virtual) servo motor. There's no need to re-install the original servo motor and exhaust valve. The ESC will clear the FI error code when the calibration process is completed.

2. Features

⌚ Time-saving and effortless calibration

Enables exhaust servo motor calibration without the need to reconnect the original servo motor!

Save on service bills! The ESC is an economical solution for bike owners who carry out their own maintenance.

Save on servicing time! It is much quicker and more convenient to use the ESC module for servo calibration than using a dedicated diagnostic tool. Faster turnaround and lower costs even for workshops.

➡ Quick and simple to use

Just plug the ESC module into the diagnostic connector, turn the ignition key ON and wait a few seconds to see the result on the bicolor status LED.

➡ Built to last

- Rugged design, encased in epoxy resin.
- Only high-quality SMD components are used.
- Each unit is extensively tested before shipping.
- Oil and water resistant (IP68).

➡ Light and small

The ESC module is hardly larger than the OEM diagnostic connector it connects to.

3. Warranty

HealTech Electronics Ltd. guarantees this product against defects in material and workmanship for a period of two (2) years.

The warranty period starts from the date of the original purchase as shown on the invoice.

4. Specifications

- Supply voltage: +8V to +18V
- Max. supply current at 12V: 60 mA
- Operating temp: -40°C to +80°C (-40°F to +176°F)
- Waterproof (IP68)
- Unit size: 20 x 30 x 13 mm (1.2" x 0.8" x 0.5")
- Reverse polarity and transient protection

5. Operation

- ➡ Remove the seats and locate the red 6-pole diagnostic connector. Usually it is located near the ECU module and has a removable cap or “dummy” plug (without wires) attached to it. If in doubt, refer to the bike’s Service Manual.
- ➡ Make sure the ignition key is in the OFF position. Connect the ESC module.
- ➡ Have the engine stop switch in the RUN position, and gearbox in Neutral. Turn the ignition key ON. No need to start the engine.
- ➡ The bicolor LED on the ESC module shows the current status:

Solid green

Calibration in progress. In case the original servo motor is present, the calibrator will actuate the servo motor from start to end position.

Attention: Please keep off fingers off the servo motor during calibration to avoid injury!

Solid red

Communication issues with the ECU or the calibration can not be carried out. Reconnect the ESC module and start again the calibration process.

- ➡ Turn the ignition key OFF. When maintenance is complete on the vehicle, disconnect the ES Calibrator module by releasing the locking latch first to separate the connectors. Do NOT pull the cables. **After the calibration procedure, do NOT keep the ESC module connected.**



Smart Tech for your **Ride!**