

ELITE 550

PART NUMBER: HT-150400 (ECU only)



There has never been a better time to get a Haltech!

The Elite 550 is a simple yet powerful ECU ideal for basic 4 to 8 cylinder or 1-2 rotor engine applications. Suitable for either naturally aspirated or forced induction engines the Elite 550 gives you full control over fuel delivery, ignition timing and boost levels. This robust, competitively priced ECU features an environmentally sealed, waterproof case, 4 fuel and 4 ignition channels and a 3 BAR internal MAP sensor.

Alongside the Elite 550 ECU is the Elite Software Programmer (ESP) that brings levels of functionality and user friendliness never seen before in an engine control package. Together they offer true cutting edge technology to tuners and performance enthusiasts worldwide.

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FEATURES & APPLICATIONS

OVERVIEW:

- Supports 1 to 8 Cylinder engines
- 1 to 2 Rotor engines
- Normally aspirated or forced induction
- Load sensing by Throttle Position (TPS), Manifold Absolute Pressure (MAP) or Mass Air Flow (MAF)
- Sequential, semi sequential, batch or multipoint injection patterns
- Distributor ignition systems, multi-coil systems or Haltech Multiplex CDI systems
- Connect to a wide range of display dashes and expansion devices via CAN.
- Waterproof case (IP67) (with USB cover fitted)
- 34 position AMP connector
- 4 x Fuel Injection Outputs (peak and hold (0-8A peak / 0-2A hold)
- 4 x Ignition Outputs
- 2 x Dedicated Engine Position inputs with extensive trigger type support
- 1 x Digital Pulsed Input
- 5 x Digital Pulsed Outputs
- 1 x Analogue Voltage Input
- 3 x Dedicated Inputs (Throttle Position, Coolant Temperature & Air Temperature)
- Internal 3Bar MAP sensor rated up to 200kPa of boost (2Bar/29psi)
- Up to 33 channels of Input & Output (I/O) expansion (via CAN)
- USB Laptop Communication (Windows)
- ESP Calibration Software – Intuitive and easy to use

FEATURES:

- Low Impedance Injector control with Programmable Injector Peak and Hold Currents
- Closed Loop O2 Control – for precise tuning (With optional external CAN O2 Wideband Controller Kit).
- Closed Loop Idle Speed Control - requires 1 or 2 user defined outputs (BAC type)
- Laptop data logging –Data log all available channels directly to your laptops hard drive for both tuning and diagnostics
- CAN Bus communication for Haltech Dashes and expansion devices or OBDII (view live engine data & set and clear diagnostic trouble codes)
- 2 Injection Stages for use with Rotary Engines
- ECU comes fully enabled, no additional charges for advanced features.

ADVANCED TUNING

- Tuning Table Resolution up to 32 x 16
- Limitless tuning flexibility -Tune your engine by a combination of 3D tuning tables combined with 3D per cylinder compensations and multiple user definable corrections

Example tune by a combination of manifold pressure, throttle position, cam position, ethanol content, gear, road speed, race time, EGT, shock travel, ride height or any channel for ultimate flexibility – Dual mapping is a thing of the past.

- Per Cylinder Tuning Correction - 3D
- Wideband O2 - Connect up to 2 Channels via CAN expansion devices
- Thermocouples/EGT (Exhaust Gas Temperature) - Connect up to 12 Channels via external CAN expansion devices
- Boost Control –Intelligent 3D Open loop, with flexible user definable axis and 6 fully user definable corrections

Multiple modes – example boost by gear, road speed etc.

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TECHNICAL SPECIFICATIONS

OUTPUTS (Total 17)

4 Fuel Injection Outputs

- Current controlled injector drivers
- High or low impedance injector compatible
- Programmable peak current - 0A to 8A
- Programmable hold current - 0A to 2A

4 Ignition Outputs:

- Over current protected ignition drivers
- Max current 1A per driver

5 Digital Pulsed Outputs:

- Over current protected low side pulsed outputs.

INPUTS (Total 10)

7 Analogue Voltage Inputs:

- 1 is user definable
- 3 are function dedicated
 - Throttle Position Sensor (TPS)
 - Air Temperature Sensor (ATS)
 - Coolant Temperature Sensor (CTS)
- Accepts up to 20V Max input voltage
- Supports up to 1.5KHz input frequency

1 Digital Pulsed Input:

- Supports digital (hall effect) inputs Only - 50KHz Max frequency
- Accepts up to 25V Max input voltage
- Fixed 5V Pull-up

2 Engine Position Inputs:

- Supports variable retractor (VR) & digital (hall effect) inputs only - 50KHz Max frequency
- Accepts up to 20V Max input voltage

1 On-board 3 Bar MAP sensor:

- Supports up to 200Kpa of boost (2Bar / 29psi)

COMMUNICATION

- 1 x CAN Bus communication for Haltech CAN expansion
- 1 x USB connection for programming

POWER REQUIREMENTS AND RATINGS

Input supply voltage : 8VDC to 16VDC
5V supply: 100mAMax

PHYSICAL DIMENSIONS AND WEIGHT

Dimensions:

127mm (L) X 127mm (W) X 39mm(H)
5.0" (L) X 5.0" (W) X 1.54" (H) Weight:
ECU: 350g (0.771lb)
Basic Harness: 0.90kg (1.98lb) Premium Harness:
1.75kg (3.85lb)

MORE INFORMATION

For more information, wiring diagrams and quick start guides go to: www.haltech.com