ELITE 750
PART NUMBER: HT-150600 (ECU only)

Everything you need and nothing you don't!

The Elite 750 is an entry-level ECU offering many features available on the more advanced Elite 1500/2500 at an affordable price. Featuring a robust, environmentally sealed, waterproof case, 6 fuel and 6 ignition channels, on-board data logging and flex fuel tuning the Elite 750 is a powerful, compact ECU.

Alongside the Elite 750 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 3 Rotor engines
- Normally aspirated or forced induction
- Load sensing by Throttle Position (TPS), Manifold Absolute Pressure (MAP) or Mass Air Flow (MAF)
- Staged, Sequential, semi sequential, batch or multipoint injection patterns
- Distributor ignition systems, multi-coil systems, expand CDI range 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
- 6 x Fuel Injection Outputs (peak and hold (0-8A peak / 0-2A hold)
- 6 x Ignition Outputs
- 2 x Dedicated Engine Position inputs with extensive trigger type support
- 2 x Digital Pulsed Inputs
- 5 x Digital Pulsed Outputs
- 2 x Analogue Voltage Inputs
- 3 x Dedicated Inputs (Throttle Position, Coolant Temperature & Air Temperature)
- Internal 3Bar MAP sensor rated up to 200kPa of boost (2Bar/29psi)
- Up to 45 channels of Input & Output (I/O) expansion (via CAN)
- USB Laptop Communication (Windows)
- On-board data logging
- ESP Calibration Software – Intuitive and easy to use

FEATURES:

- Low Impedance Injector control with Programmable Injector Peak and Hold
- Flex Fuel Function (Direct sensor input) - Tune your engines boost, fuel and ignition by ethanol content
- Flexible tuning setup for Petrol (Gasoline), Methanol and Ethanol allows you to simply select your fuel type E85 flex fuel ready – direct connection to sensor
- Closed Loop O2 Control – for precise tuning (With optional external CAN O2 Wideband Controller Kit). Long Term Learning
- Closed Loop Idle Speed Control with learning for consistent idle stability. Requires 1 or 2 user defined outputs (BAC type)
- Long term learning (Auto tune) on fuel, cam & idle control maps (up to 3D)
- 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.
- Variable cam control - Independently control a single camshaft - Requires a minimum of 1 user-defined input & output.

* Variable Cam Control supported for engines with a single cam sensor only, located on the variable cam.
VVT Engines Supported – Toyota 1JZ/2JZ VVT, Toyota 1ZZ and 2ZZ , Mazda MX5 NB with VVT , Mazda / Ford Duratec, Suzuki M Series

ADVANCED TUNING

• Tuning Table Resolution up to 16 x 32

• 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

• Nitrous control with advanced programming of wet or dry nitrous kits with on/off delays.

3D fuel and ignition corrections available.

• 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)

6 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
- Up to 5 unused injector outputs can be re-assigned as user definable outputs (DPOs) with 1A Max output.

8 Ignition Outputs:

- Over current protected ignition drivers
- Max current 1A per driver
- Up to 7 unused ignition outputs can be re-assigned as user definable generic outputs (DPOs) with 1A Max output.

5 Digital Pulsed Outputs:

- Over current protected low side pulsed outputs.

INPUTS (Total 10)

10 Analogue Voltage Inputs:

- 2 are 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

2 Digital Pulsed Inputs:

- 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 reluctor (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

DATA LOGGING

- On-board data logging
- Up to 10 channels of logging, Fastest sample rate: 20ms Internal storage: 512Kb

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