

# HALTECH™

ENGINE MANAGEMENT SYSTEMS

## E6H and E6M

### Fuel and Ignition Control System

#### E6H & E6M Systems

The HALTECH **E6H** and **E6M** are powerful "real-time" programmable fuel injection and ignition computers designed to control most ignition type engines. Whether 1-6, 8, 10 or 12 cylinders, 1-2 rotors, naturally aspirated, turbocharged or supercharged, the HALTECH **E6H** or **E6M** can control it.

The E6H is suitable for triggering by signals from Hall effect sensors, Haltech dual Hall effect sensors, or optical type sensors. The E6M is identical except that it features an in-built reductor adaptor and can also accept signals from reductor (magnetic) type sensors.

The **E6H & M** are capable of controlling up to 4 low impedance or 8 high impedance injectors. Versions are available (the E6H-8 and E6M-8) which have additional injector drivers fitted and can control up to 8 low impedance or 16 high impedance injectors.

#### User Configurable Outputs:

- |                           |                        |
|---------------------------|------------------------|
| *closed loop idle speed   | *closed loop O2 sensor |
| *electronic boost control | *deceleration fuel cut |
| *thermofan                | *NOS enable            |
| *shiftright               | *intercooler fan       |
| *anti-lag                 | *stall saver           |
| *VTECH                    | *aux. fuel pump        |
| *rev limiter              | *staging signal        |
|                           | *turbo timer           |
|                           | *air con               |
|                           | *torque convertor      |
|                           | *dual intake valve     |

(not all functions are available at the same time)

The **E6H & M** are much more than programmable fuel injection computers - they provide logging of engine data and allow access in real time to maximise performance and trouble-shoot problems in a vehicle while running.

#### Typical Applications

- Conversion from carburetion to fuel injection
- Control of fuel injection/ignition on modified engines
- Race and rally applications of all descriptions
- Design and development purposes
- Educational use by universities and colleges
- Original equipment in cars and motorcycles

The patented HALTECH system of programming virtually eliminates the input of numbers. You simply manipulate graphics in the form of bar graphs and by pressing arrows you increase or decrease the amount of fuel or ignition timing delivered at that particular load point.

#### E6H & E6M Specifications

##### Kit Contents:

Electronic Control Unit (ECU)  
Main Wiring Loom (flying lead)  
2 x Power Relays  
Air Temperature Sensor  
Coolant Temperature Sensor  
Injector Loom (supplied with full harness kit)  
Throttle Position Sensor  
Communicating Cable  
Programming Software  
Instruction Manual  
MAP Sensor (Extra Cost)

##### Trigger Pattern:

Twin Trigger  
Multi-Tooth  
Subaru  
Single Pulse per Cycle  
Bosch Motronic (60t - 2, 36t - 1)  
Nissan  
Mazda/Ford FS engine

##### Ignition Configuration:

Twin Distributor  
Twin Rotor (Dist. or DF)  
Single Distributor  
Direct Fire (1 - 4) & 6, 8  
Cylinder Waste Spark

##### System Features:

Number of Cylinders: 1-6,8,10,12  
and 1-2 Rotors  
Max Operating RPM: 16000 rpm  
RPM Range Inc: 500/1000 rpm  
Max. Range: 10500/16000 rpm  
Number of Fuel Maps: 22/17  
Number of Ignition Maps: 22/17  
Number of Bars per Map: 32

##### Injector Firing Mode:

Throttle Body (Batch)  
Sequential (up to 4 banks)  
Multi-Point  
Staged

##### Fuel Correction Maps:

Coolant Temperature  
Air Temperature  
Battery Voltage  
Cold Primer  
Zero Throttle  
Full Throttle  
Injector Phasing  
Throttle Pump  
Injector Trim (Seq. only)  
Barometric Pressure Correction

##### ECU inputs:

MAP Sensor  
Coolant Temperature  
Air Temperature  
Throttle Position  
Primary Trigger  
Secondary Trigger  
Oxygen Sensor  
Spec. Purpose Digital  
Gen. Purpose Analog

##### Ignition Correction Maps:

Ignition Crank  
Air Temperature  
Coolant Temperature

##### ECU Outputs:

Injector Drivers: 4 (8 optional ext)  
Fuel Pump Relay Control  
Idle Air Control (IAC)  
Ignition Output  
Spec. Purpose Digital (1)

##### Trigger Signal Type:

Inductive Magnetic-(Internal Signal Conditioning) (E6M only)  
Hall Effect Sensor  
Optical Sensor

##### Accessories:

Idle Air Control Motor  
Boost/Fuel/Ignition Trim Module  
Ignition Module  
Haltech dual Hall effect sensor  
Haltuner air/fuel ratio meter  
Oxygen Sensor  
Electronic Boost Bleed Valve  
Ignition Coils

For more information & free demo software please visit our website at [www.haltech.com](http://www.haltech.com) • For any enquiries you are most welcome to contact us at:

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