HALTECH™
ENGINE MANAGEMENT SYSTEMS

E6K Fuel and Ignition Control System

E6K System Description

*The HALTECH **E6K** is a powerful "real-time" programmable fuel injection and ignition computer 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 **E6k** can control it.*

Compared to the Haltech E6M the E6K features:

- *4 additional pulse width modulated outputs*
- *8 injector drivers as standard equipment*
- *An Internal barometric pressure sensor*
- *Enhanced BAC valve control*
- *Enhanced wastegate control*

*The **E6K** is capable of controlling up to 8 low impedance or 16 high impedance injectors. If necessary an additional driver box can be added for more injector outputs. The **E6K System** optimises engine performance by giving full control over the following:*

User Configurable Outputs:

*Closed loop idle speed		*Closed loop 02 Sensor
*Electronic boost control		*Deceleration fuel cut
*Thermofan	*NOS enable	*Intercooler fan
*BAC valve	*Shiftlight	*Aux. fuel pump
*Stall saver	*Anti-lag	*Staging signal
*Turbo timer	*VTECH	*Torque convertor
*Rev limiter	*Air con	*Dual intake valve

(not all functions are available at the same time)

*The **E6K** is much more than a programmable engine management computer - it provides logging of engine data and allows 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.

E6K 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)*

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*

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

Ignition Correction Maps:
- *Ignition Crank*
- *Air Temperature*
- *Coolant Temperature*

Trigger Signal Type:
- *Inductive Magnetic-(Internal Signal Conditioning)*
- *Hall Effect Sensor*
- *Optical Sensor*

Trigger Pattern:
- *Twin Trigger*
- *Multi-Tooth*
- *Subaru*
- *Single Pulse per Cycle*
- *Bosch Motronic (60t - 2)*
- *Nissan*
- *Mazda/Ford FS engine*

Ignition Configuration:
- *Twin Distributor*
- *Twin Rotor (Dist. or DF)*
- *Single Distributor*
- *Direct Fire (1 - 4) & 6, 8 Cylinder Wasted Spark*

Injector Firing Mode:
- *Throttle Body (Batch)*
- *Sequential (up to 4 banks)*
- *Multi-Point*
- *Staged*

ECU inputs:
- *MAP Sensor*
- *Coolant Temperature*
- *Air Temperature*
- *Throttle Position*
- *Internal Barometric Sensor*
- *Primary Trigger*
- *Secondary Trigger*
- *Oxygen Sensor*
- *Spec. Purpose Digital*
- *Gen. Purpose Analog*
- *Boost/fuel/ignition trim*

ECU Outputs:
- *Injector Drivers: 8*
- *Fuel Pump Relay Control*
- *Dedicated PWM Outputs (4)*
- *Idle Air Control (IAC)*
- *Ignition Output*
- *Spec. Purpose Digital (1)*

Accessories:
- *Idle Air Control Motor*
- *Boost/Fuel/Ignition Trim Module*
- *Ignition Module*
- *Oxygen Sensor*
- *Electronic Boost Bleed Valve*
- *Ignition Coils*

*For more information & free demo software please visit our website at **www.haltech.com** • For any enquiries you are most welcome to contact us at:*

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