

## E6GMX Series

Fuel and Ignition Control System

### E6GMX System

The HALTECH E6GMX is a powerful “real-time” programmable fuel injection and ignition system computer designed as a plug-in replacement for certain models of DELCO computers used in General Motors and some other brands of motor vehicles.

There is no need to install a wiring harness, sensors, relays, etc. Simply plug it in, connect a suitable personal computer, boot up the supplied software, and presto, you have a “real-time” programmable engine management system!

The E6GMX has been designed for installations where changes have been made to the engine and full programmability is desired.

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 delivered at that particular load point.

The process is repeated for all load points in each rev range.

Ignition timing is precisely mapped through the rev range so that the exact timing required to obtain performance is applied in every rpm and load range.

#### As an alternative to performance chips you get the following advantages:

- Tune your own car
- Have a spare computer
- Flexibility in programming to suit your application
- Modify the engine later and simply re-program
- Fit a turbo or supercharger, simply re-program

The E6GMX capable of running up to 8 low impedance or 16 high impedance injectors.

#### Improved features from previous model:

- Surface mount components
- New injector drivers. (no need for E6GM-8 variant)
- New HalwinX Windows software
- On Board Barometric pressure sensor
- 2 Spare PWM outputs
- All Digital inputs and outputs are now configurable.
- Dual mapping feature
- New Red Anodized box

### E6GMX Specifications

**E6GM Kit Contents:** Electronic Control Unit (ECU)  
Programming Software  
Communication Cable  
Instruction Manual

**Injector Firing Mode:** Multi-Point  
Batch Fire

#### System Features:

Number of Cylinders **4, 6, & 8**  
Max Operating rpm **16000 rpm**  
RPM Range increments **500/1000**  
Max. Range **10500/16000 rpm**  
Number of Fuel Maps **22/17**  
Number of Ignition Maps **22/17**  
Number of Bars per Map **32**

#### ECU inputs:

MAP Sensor  
Coolant Temperature  
Air Temperature  
Throttle Position  
Internal Barometric Sensor  
Primary Trigger  
Oxygen Sensor  
Spec Purpose Digital  
2x Gen. Purpose Analog  
Road speed

#### Fuel Correction

##### Maps:

Coolant Temperature  
Air Temperature  
Battery Voltage  
Full Throttle  
Throttle Pump  
Auto Barometric Comp.  
Zero Throttle  
Cold Prime

#### ECU Outputs:

Injector Drivers E6GM(4)  
Fuel Pump Relay Control  
PWM Outputs (4)  
Idle Air Control (IAC)  
Ignition Output  
Spec. Purpose Digital (2)

#### Ignition Correction

##### Maps:

Air Temperature  
Coolant Temperature

#### Accessories:

Fuel/Ignition Trim Module  
Oxygen Sensor

#### Trigger Signal Type:

Hall Effect Sensor  
Optical Sensor

#### Engine Data:

Metric units  
Map Storage and Retrieval  
Data Logging

#### Trigger Pattern:

Single Pulse per Cycle

#### Ignition

##### Configuration:

Single Distributor  
Direct Fire (4, 6 & 8)\*  
(\*using GM DFI modules only)