

HALTECH™

ENGINE MANAGEMENT SYSTEMS

F10X Series

Fuel Injection Control System

F10X System Description

The HALTECH F10X is a powerful “real-time” programmable fuel injection system computer designed for those seeking optimum performance.

No other system in the same class is as adaptable, easy to install or program.

The **F10X System** has up to 22 adjustable fuel maps each with 32 individual bars. The **F10X** will run up to 16000 rpm with better resolution and greater accuracy than ever before.

The **F10X** has 4 injector drivers capable of controlling 8 low impedance or 16 high impedance injectors. If necessary an additional driver box can be added for more injector outputs.

Injectors can be controlled directly, fired all together, in batches, or can be staged when running high boost turbo or superchargers.

In standard form the **F10X** allows Closed Loop Idle Speed Control, Closed Loop O₂ Correction plus 4 PWM Outputs.

The F10X PWM Outputs include:

- ‡ Electronic Boost Control
- ‡ Turbo Timer
- ‡ Torque Converter Control
- ‡ Thermofan
- ‡ Intercooler Fan
- ‡ Shift Light
- ‡ BAC Valve
- ‡ Staging Signal
- ‡ Dual Intake Valve
- ‡ Auxiliary Fuel Pump
- ‡ Stall Saver

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 rpm range.

F10X Specifications

F10X Kit Contents:

Electronic Control Unit (ECU)
Flying lead wiring loom
2x Power Relays
Air Temperature Sensor (Extra)
Coolant Temperature Sensor (Extra)
MAP Sensor (Extra)
Throttle Position Sensor (Extra)
Communications Cable
HalwinX Windows Software
Instruction Manual

ECU Inputs:

Primary Trigger
Air Temperature
Throttle Position
MAP Sensor
Coolant Temperature

ECU Outputs:

Injector Drivers **F10X (4)**
Fuel Pump Relay Control
PWM outputs (x4)*
Special pupose digital (1)*
Idle air control (IAC)*
Closed loop O₂ correction*

System Features:

Number of Cylinders: 1-6, 8, 10, 12
and 1-2-3 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 Bars per Map: 32

Accessories:

Fuel / Boost Trim Module
Boost Control Solenoid
Idle Air Control Motor
O₂ Sensor

Fuel Correction

Maps:

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

Engine Data:

Map Storage and Retrieval
Data Logging

Trigger Signal Type:

Hall Effect Sensor
Coil Negative
Optical Sensor

Trigger Pattern:

Single Pulse per Cycle

Injector Firing Mode:

Multi-Point
Throttle Body (Batch)
Staged