

Introduction

This application note describes how to use the SMT6 as a **TURBO FUELLER**.

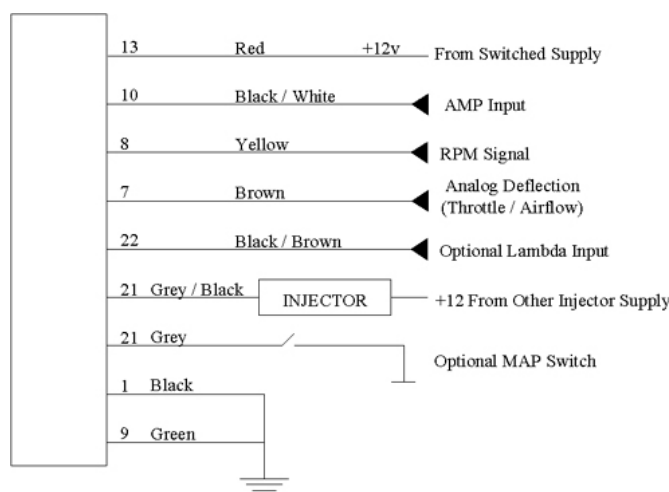
Purpose

“Turbo Fuelling” adds fuel to the engine via an extra injector. It is applied to Supercharged and Turbocharged engines and eliminates fuel starvation due to the increased power.

SMT6 Installation

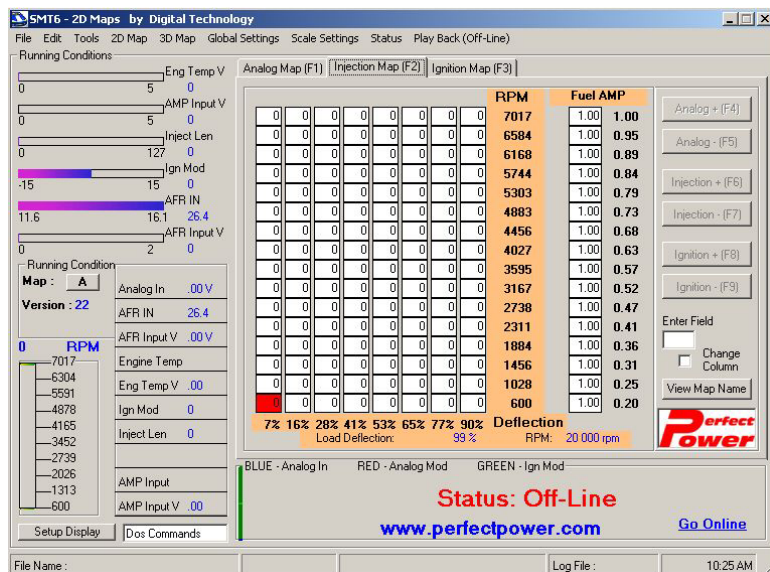
Follow the steps below to install the SMT6:

- Locate a cool, dry place under the dashboard, which has easy access. Make sure that you can reach the computer connector, then wire up the unit as per the diagram below:



- The AMP input (or “MAP” in some countries), is a signal from 0 – 5 Volts and should span the boost pressure. It can be calibrated to suit your application and it can be read in BAR or LBS.
- The RPM signal can be from any pickup. It can be a missing tooth wheel or any other signal.
- The ANALOG DEFLECTION input should describe the engine load. It is normally connected to a throttle sensor, but airflow or manifold pressure can also be used.
- The LAMBDA input is optional. It assists in the tuning process. If your engine is running a closed loop lambda, then you may want to run this signal through the SMT6 and limit the range for rich AFRs. See Application Note 3.2 describing LAMBDA TUNING.
- The MAP SWITCH is optional. It allows you to switch between TWO maps while you drive. For example, the one map can be used for power tuning, while the other map for fuel economy.

SMT6 Setup



On the left is the Injection screen or Injection Map from the SMT6 Windows Tuning Software.

To activate this screen enter any number.

The Injection Map is made up of 8 columns with 16 RPM steps (rows). When a number is entered on this screen, it is multiplied by the value in the "Fuel AMP". The Fuel AMP column displays the manifold pressure.

By making the AMP column zero, this would inject no fuel. This is usually done when there is no boost as the injector would not pulse. To have

progressive fuelling under boost would require that the Fuel AMP column increases. This would in turn multiply the numbers on the screen, adding more fuel for the higher boost.

Conclusion

In this Application, only the fuel was adjusted. It is easy, neat, produces a very smooth ride and is excellent for fuel control.