

INJECTOR/PWM INTERCEPTION METHOD

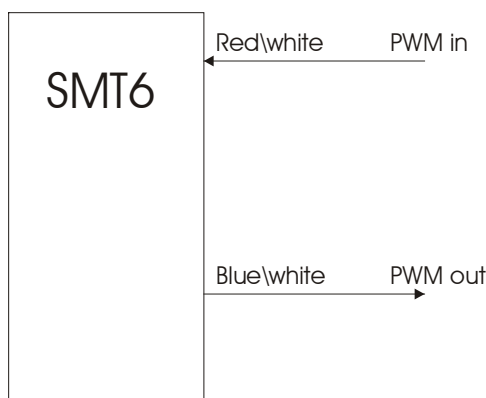
The SMT6 has the ability to capture and modify PWM signals in mode 13. A PWM signal stands for pulse width modulation. Made simple it is a pulsed signal that stays on for a certain amount of time and then goes off for a certain amount of time. The signals on time changes/modulates. In mode 13 the SMT6 can increase or decrease the current signals on time.

The most common form of this is an injector signal (I would hope every car has this), but there are other forms such as a boost control solenoid signal, ignition signal or the continuous VANOS/VVT signals.

WIRING

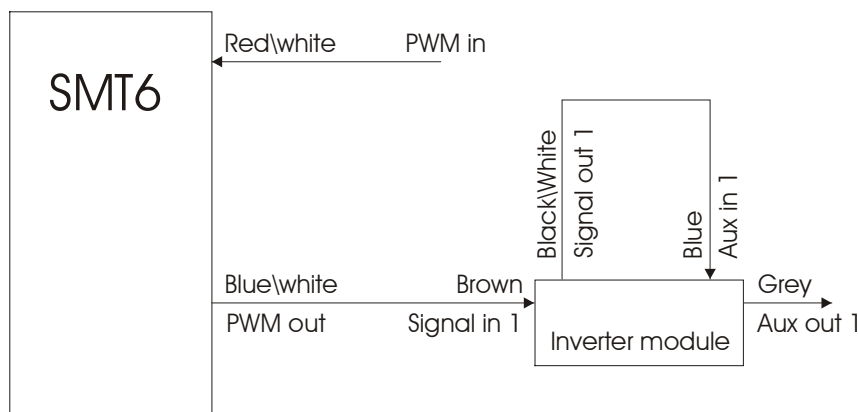
The on board driver of the SMT6 in this method is only capable of driving 120mA of current. If you have a 12V supply the lowest impedance this unit can drive is 100ohms. For 5V its 42ohms. If you need to go less than this, which I would expect is definitely necessary if you are driving injectors. An external driver must be used.

The following diagram is for high impedance applications:



Unit must be set to mode 13

The following diagram uses the Perfectpower inverter modules on board driver to drive low impedance signals:



Unit must be set to mode 13

GLOBAL SETTINGS

Very straight forward, this application needs Mode 13 to work. Tuning is done of the analog map.

POSSIBLE APPLICATIONS

- a) Fueling modification in older management systems that only had one injector driver output and an on board MAP sensor like the Bosch L3 JETRONIC system.
- b) Not yet confirmed but could control VVT and Continuous Vanos oil solenoid signals.
- c) Fuel trimming on a single injector or set of injectors in batch sequential fueling applications.

BOOST CONTROL SIGNAL MODIFICATION. NOT TO BE MIXED WITH BOOST CONTROL, WHERE THE SIGNAL IS CONTROLLED COMPLETELY BY THE SMT6 VIA THE INJECTOR DRIVER OUTPUT.