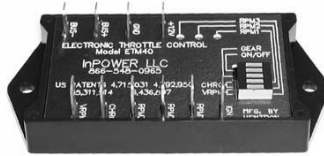


OWNERS MANUAL

Model ETM40 Electronic Throttle Module for Ford 6.0 and 7.3 Liter Diesel Truck Engines



Introduction

The Model ETM40 Electronic Throttle Module is designed to provide four modes of engine rpm control for trucks that use Ford 6.0 and 7.3 liter turbo diesel engines. Mode selection is via four inputs, and mode priority interlocking is provided.

Standard Features

- Supports Ford 6.0 liter and 7.3 liter Power Stroke diesel engines
- Four modes of operation
- Direct interface to engine controller
- Licensed Ford patented technology assures compatibility and reliability
- Encapsulated electronics for maximum environmental protection
- Reads sensor information directly from engine controller
- Eliminates connections to sensors
- LED status indicators

Operation

When the vehicle is parked and *Chassis Conditions for Proper Operation* are satisfied the engine idle speed may be controlled by selection one of the four available modes (three presets or variable rpm). The preset rpm modes may be adjusted by the user via three calibration potentiometers on the top of the ETM40 unit.

Chassis Conditions for Proper Operation

1. Parking brake is set.
2. For automatic transmission, gear shift lever is in "PARK."
3. For manual transmission, foot is off clutch pedal.
4. Foot is off service brake.
5. Foot is off accelerator pedal.
6. Vehicle is stationary.
7. Engine is started and idling.

Modes Of Operation

A. Three Preset RPM High Idle Modes:

Function:	Increase idle to a preset rpm value
Terminals:	RPM1, RPM2, RPM3
Activation:	Apply ground to terminal
Range of Calibration:	1200 to 2600 rpm
Type of Adjustment:	Internal potentiometers
RPM1 Adjustment:	Potentiometer 1
RPM2 Adjustment:	Potentiometer 2
RPM3 Adjustment:	Potentiometer 3

B. Variable RPM Mode:

Function:	Varies rpm as a function of voltage on VRPM
Terminal:	VRPM
Adjustment:	10K Ohm potentiometer between terminal and ground
Enable:	Turn potentiometer down to zero resistance, then slowly increase until desired rpm is reached
Disengage:	Turn Potentiometer down to zero and rpm will drop to standard idle
RPM Range:	1200 to 2600 rpm

C. Mode Priorities

RPM 1	Highest - Will override all other modes
RPM2	Second - Will override lower modes
RPM3	Third - Will override lower modes
Variable RPM	Lowest - Will only activate when other modes are off

Warranty

InPOWER LLC warrants its products to be free from defects in material and workmanship under normal use, care and maintenance for a period of two (2) years from the date of shipment. Please see www.inpowerdirect.com/warranty.htm for specifics or call 866-548-0965 for a copy of our warranty policy.

Status Indicators

A five segment LED provides status and problem detection information. Refer to the following table for coding of these functions.

LED	Status	Indication
ON/OFF	On Solid	Module ON and functioning
ON/OFF	Flashing	Module ON, but a problem was detected
*GEAR	On Solid	Vehicle Gear = Park, Park Brake set
*GEAR	Flashing	Park Brake not set or Foot Brake on
RPM1	On Solid	RPM1 terminal grounded, engine at RPM1
RPM1	Flashing	RPM1 terminal grounded, engine at Low Idle
RPM2	On Solid	RPM2 terminal grounded, engine at RPM2
RPM2	Flashing	RPM2 terminal grounded, engine at Low Idle
RPM3	On Solid	RPM3 terminal grounded, engine at RPM3
RPM3	Flashing	RPM3 terminal grounded, engine at Low Idle
RPM2/RPM3	On Solid	VRPM terminal grounded, engine at High Idle
RPM2/RPM3	Flashing	VRPM terminal grounded, engine at Low Idle

* Note that "GEAR" LED indicators are NOT VALID on units identified as ETM40-B and ETM40-C (6.0 liter engine applications).

Specifications

Electrical

Input Voltage (+12V Terminal):	8 to 16 volts
Input Current (+12V Terminal):	37 mA
Standby Current:	28 mA
Input Current (on/off terminal):	1 mA
Control Current:	1 mA

Mechanical

Weight:	0.17 lbs
Connections:	Faston 0.25 inch terminals
Case Material:	Cyolac thermoplastic (UL 94VO)
Encapsulation Material:	Epoxy potting compound, resistant to most fuels, oils, acids, and cleaning agents.

NOTE - This version of the Model ETM40 has been revised to operate on both 7.3 liter and 6.0 liter engines, and is identified as "Revision C". The ETM40 will operate the same on both engine types EXCEPT that the GEAR diagnostic LED on the 6.0 liter engine applications should not be used as it will contain erroneous indications. The revision code is in the product name on the product box (e.g., ETM-40-C), and preceding the LOT number printed on the side of the ETM40 (e.g., ETM40C Lot: xxxxx).

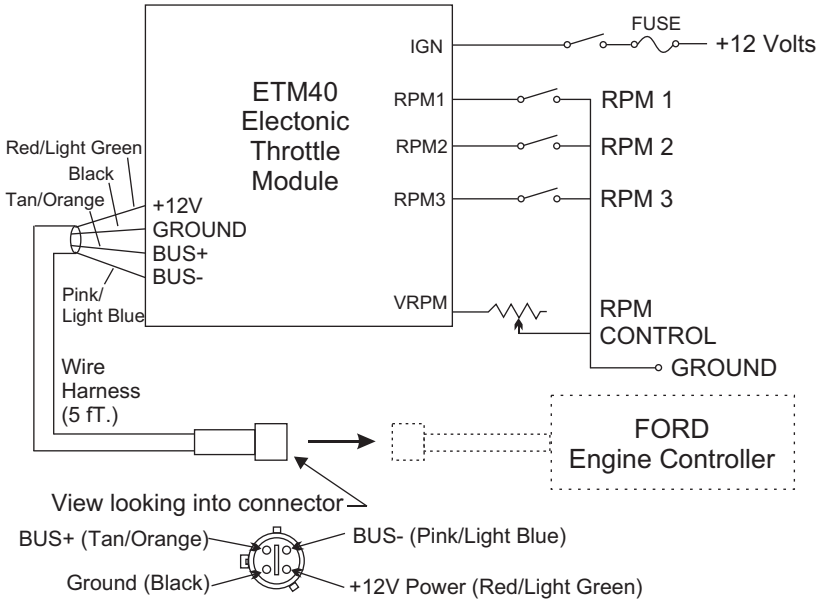
Installation

The ETM40 is usually mounted inside the cab under the dashboard. A five ft. Cable is supplied that connects to the Ford wiring harness' four-pin connector. The mode activation connections are supplied by the user and are 0.25 inch Faston terminals (see wiring diagram).

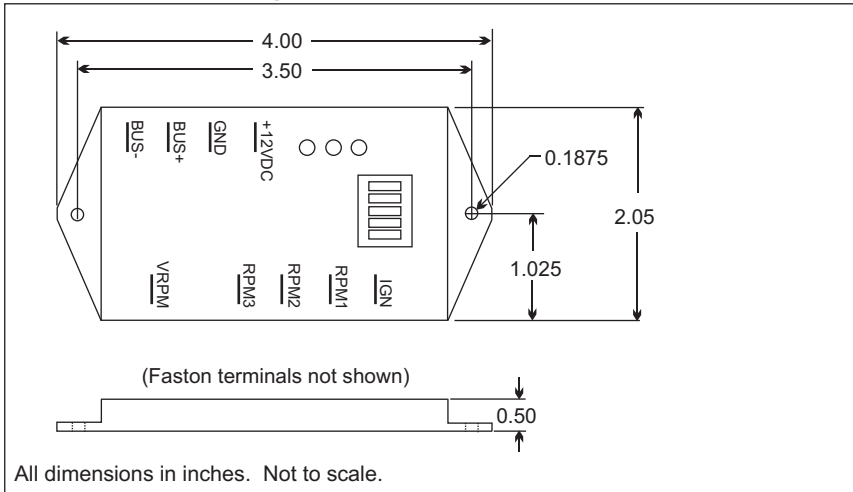
Setup and Calibration

The only calibration required is to select each of the three preset modes (RPM1, RPM2 and RPM3) and adjust the three respective potentiometers on the ETM40 to the desired rpm.

Wiring Diagram



Mechanical Drawing



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Customer Evaluation

InPower wants to ensure total customer satisfaction. Please download a product evaluation form at www.InPowerDirect.com/Customer_evaluation.htm or call us toll free at 866-548-0965 to be sent a form by mail.