



Installation instructions

Speedometers, Stepper motor technology, Front face programmable

Application notes

The operating voltage is nominally 12 volts. The range of operation is 10 to 16 volts, negative earth only. The speedometer is intended for panel mounting, it is water resistant from the front only and must be protected from environmental damage at the rear. The speedometer must be calibrated to suit the pulses per mile of individual vehicles using the programming harness and push button assembly (supplied in your kit as an accessory) or via the reset button on the front of the instrument. This must be done when the speedometer is installed in the vehicle and powered. The calibration range is from 2500 to 128,000 pulses per mile.

<u>Wire Colour</u>	<u>Pin number</u>	<u>Connect to</u>
Green	1	Ignition positive 12 volt supply
Brown/slate	2	Connected to harness reset switch OR not used
Red	3	Pull Up/Down (if required)
Red/white	4	Instrument illumination 12 volt supply
Black	5	Chassis or battery negative
White/black	6	Speed signal input (hall/ecu)
Red/blue	7	Speed signal input (magnetic)
Light green/purple	8	Not used

Setting the pulses per mile.

The calibration mode is selected by switching on the ignition while simultaneously holding the programming button and waiting for 3 seconds.

After 3 seconds release the reset button, in calibration mode the odometer display will flash.

By momentarily pressing and releasing the reset button each number (extreme left side first) can be incremented to your desired value.

When the desired value is selected release the button and wait 3 seconds.

The next number to the right will flash, increment this number in the same way and continue until all the numbers are programmed to your pulses per mile.

At the end of the sequence wait 3 seconds and the speedometer will return to normal operation. If you switch off at any time before the end of the sequence no changes will be programmed.

How to calculate the pulses per mile (Calibration number)

1. Propellor shaft mounted magnetic sensor (magnets or bolt heads moving past the sensor)
Calibration number = (Tyre revs per mile) X (differential ration) X (no. of magnets or bolts)

2. Sender driven from transmission cable drive
Calibration number = (Cable turns per mile) X (number of pulses per sender turn)

‘Produced by the original makers of SMITHS Instruments’

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