

# EASYTEER SPEED CONTROLLER GUIDE

The Electronic Power Steering Speed Unit can convert your vehicles existing speed pulses into a signal that the EPS ECU expects to see. This gives the EPS ECU the ability to run different assistant levels depending on the vehicle speed:

<15MPH	High Power Assistance
15-35MPH	Medium Power Assistance
>35MPH	Low Power Assistance

To do this the Speed Unit needs a 5 to 12V pulse from your speed sensor, so it would need either a proximity sensor, or a hall sensor that detects a bolt, toothed wheel, etc. If you have a VR sensor (abs style) then this needs converting to a 12V pulse before it can feed the Conversion Unit.

1) Program Mode: - *Temporarily wire the Prog Button in. - Disconnect . once programmed.*

To program the Speed Unit you will need to drive along and press the test button at the 2 speeds you want the unit to switch at.

1a) Program Mode - Get a passenger to hold the "Program Button" down for 3 Seconds with the Speed Unit powered on. (The Status LED will flash at a rate of 1/Sec indicating you are in "Program Mode")

1b) Mid Speed Point - *Speed that the EPS ECU swaps from High Assistance to Medium Assistance (Suggested 15-20MPH)*

This MUST be the first set point entered and you must be in "Program Mode" (See 1a)

Once you have reached the Mid Speed Point hold the "Program Button" down. The Status LED will flash faster to show it has accepted this as the Mid Speed Point. (2 /Sec)

1c) High Speed Point - *Speed that the EPS ECU swaps from Medium assistance to Low Assistance (Suggested 35-45MPH)*

This MUST be done immediately after the Mid Speed point has been entered and you must still be in "Program Mode" (See 1a)

Get up to the speed you desire for the Hi Speed Point switchover and press the "Prog Mode" button again. The Status LED was flashing at 2/Sec, now it will go back to being solid to indicate it has accepted the Hi Speed Point. It will only accept it if the speed is faster than the Mid Speed Point.

## 2) Wiring:

12V Power (Red) – Power to the controller. If you want Steering Assistance only when the engine runs, connect this to the fuel pump feed or something that is only powered up when the engine runs. (5A supply) Alternatively connect it to a 12V ignition switched supply (5A)

VSS input (Yellow) – This needs to switch between 12V (5V minimum) and 0V, this would be from the Speed Sensor from the vehicle. E.g. Prop shaft, wheel, electronic speedo input etc.

Program Mode (Red / Black) – This wire goes to the switch, the other end of the switch goes to a 12V supply. Pressing the switch connects this wire to 12V

Ground (Black) – Connect to a good clean ground away from any electrical interference.

Mode Input (Orange/Black or pink) – For most applications the above type of control is sufficient, but some drivers may prefer to have NO power assistance when driving over a certain speed.

Leave this wire disconnected for normal operation (High – Medium and Low assistance)

See section 5 for more on this input.

- Multi-pin Plug – This is to plug into the B or T ECU socket.

## 3) LEDs

The Status LED - Solid when the power is applied to the Speed Unit.

Flashes at 1/Sec when entered into Program Mode

Flashes at 2/Sec after entering Mid Speed Point,  
awaiting Hi Speed Point

The Speed LED – Off when in High Assistance Mode

Solid when in Medium Assistance Mode.

Flashing when in Low Assistance Mode.

4) Specifications:

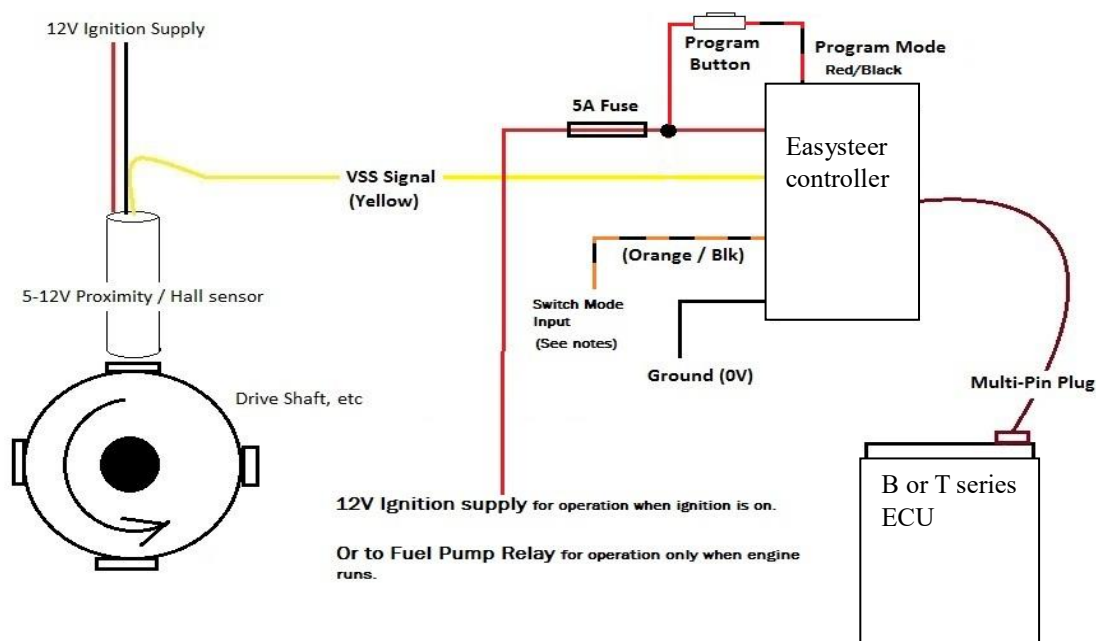
Input Voltage = 14Vdc to 9Vdc

Max Input Frequency = 5000Hz

Max Pulses / Mile depends on your max speed - Max Input Frequency is the limiting factor. (5000hz)

e.g. 120,000 Pulses / Mile allowing speeds of 150MPH

150,000 Pulses / Mile allowing speed of 120MPH



5) MODE INPUT:

For most applications the above type of control is sufficient, but some drivers may prefer to have NO power assistance when driving over a certain speed.

Leave this wire disconnected for normal operation (High – Medium and Low assistance)

Connect this wire to 12V if you want the assistance to work in the following method:

- <15MPH Medium Power Assistance
- 15-35MPH Low Power Assistance
- >35MPH Power Assistance OFF

