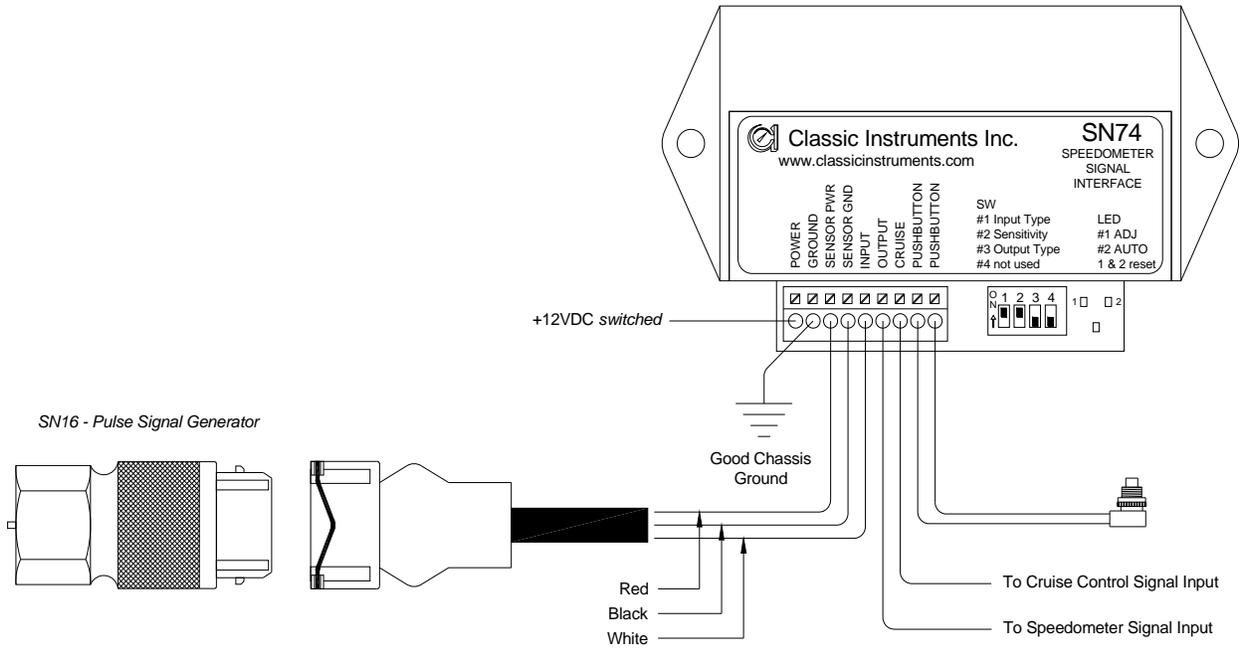


SN74 Speedometer Calibration Module Setup

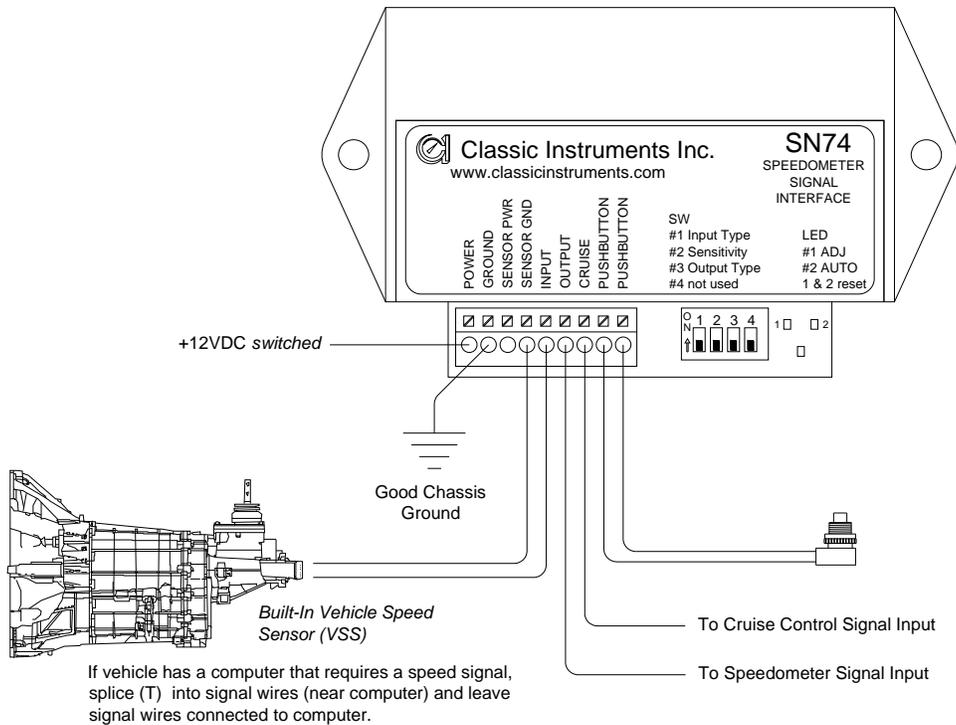
- 1) Connect a switched +12VDC source to "POWER"
- 2) Connect a good ground source to "GROUND"
- 3) Connect the red wire from a Classic Instruments SN16 pulse signal generator to "SENSOR PWR". *(if not using the SN16, do not use this connection)*
- 4) Connect the black wire from a Classic Instruments SN16 pulse signal generator OR one wire from the built-in transmission VSS (2-wire) to "SENSOR GND". *(if using an ECM speed signal, do not use this connection)*
- 5) Connect the white wire from a Classic Instruments SN16 pulse signal generator OR one wire from the built-in transmission VSS (2-wire) OR the ECM speed signal to "INPUT"
- 6) Connect "OUTPUT" to the signal terminal of the speedometer.
- 7) Connect "CRUISE" to the signal input for a cruise control module *(if needed)*. The cruise control signal is 8,000 pulses per mile (PPM).
- 8) Connect one lead from the momentary pushbutton to each of the two "PUSHBUTTON" connections.
- 9) Determine the default pulse setting for the speedometer (Classic Instruments speedometers with 8 dip switches are 8,000ppm, Classic Instruments speedometers with 12 dip switches are 16,000ppm)
- 10) If speedometer dip switches are not in the default position, set them at this time (8,000ppm speedometer 2 6 7 8 OPEN, 16,000ppm speedometer 5 6 7 8 OPEN)
- 11) Set switches on the module according to the chart below based on the speed signal source you will be using.

Signal Source	Gauge Type	Switch Setting
SN16 Pulse Signal Generator (3-wire signal)	8-Pulse (8,000ppm)	1 2 3 ON – 4 OFF
	16-Pulse (16,000ppm)	1 2 ON – 3 4 OFF
VSS (2-wire signal)	8-Pulse (8,000ppm)	3 ON - 1 2 4 OFF
	16-Pulse (16,000ppm)	1 2 3 4 OFF
ECM (1-wire signal)	8-Pulse (8,000ppm)	1 2 3 ON – 4 OFF
	16-Pulse (16,000ppm)	1 2 ON – 3 4 OFF

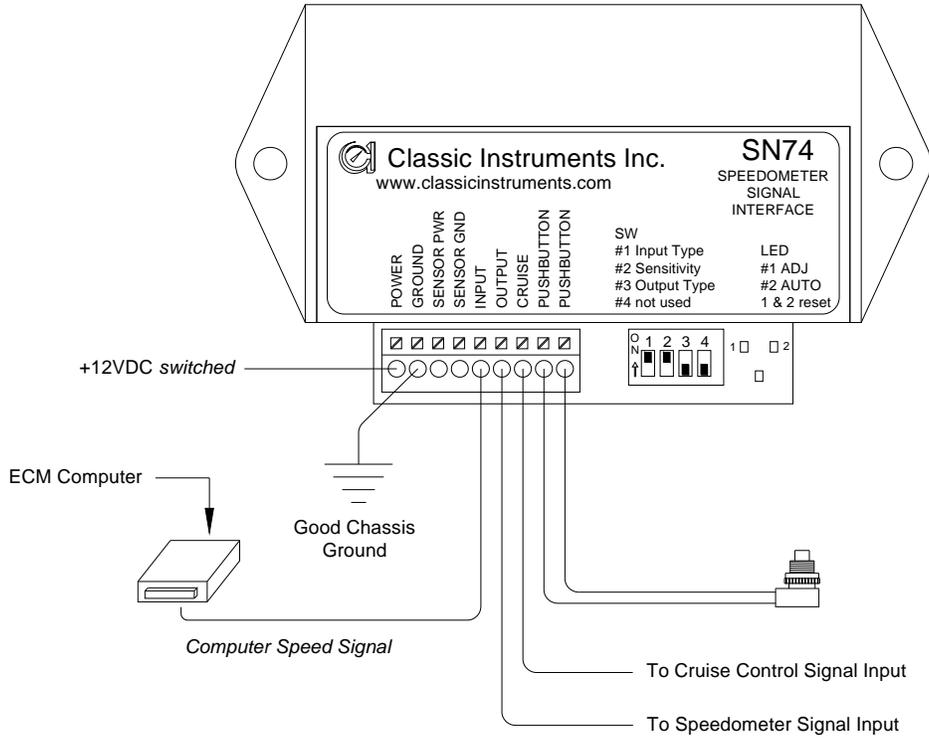
- Switch 1 – **OFF** = sine wave signal input, **ON** = square wave signal input
- Switch 2 – **OFF** = high sensitivity, **ON** = low sensitivity
- Switch 3 – **OFF** = 16,000ppm signal output, **ON** = 8,000ppm signal output
- Switch 4 – *Not Used*



Module Connected to SN16 Pulse Signal Generator



Module Connected to Electronic Transmission's VSS



Module Connected to ECM Speed Signal

Marked Mile Calibration Mode

(Use When Calibrating for the First Time)

- 1) Start with the vehicle power / engine off. Push and hold the pushbutton while starting the engine.
- 2) When the engine is running, release the pushbutton.
- 3) The red LED labeled “1” on the module will be lit (indicating real-time calibration mode).
- 4) Tap the pushbutton. The red LED labeled “1” will turn off and the red LED labeled “2” will turn on (indicating marked mile calibration mode).
- 5) Push and hold the pushbutton with red LED “2” lit until LED “2” starts blinking *(approximately 5 seconds)*
- 6) Begin driving a known mile. *(The green LED between the red LEDs should blink once you start moving indicating that the module is getting a signal.)*
- 7) When driving the known mile, the speedometer will not indicate any speed. This is normal.
- 8) At the end of the known mile, press and hold the pushbutton until the red LED “2” turns off. *(approximately 5 seconds)*

Real-Time Calibration Mode

(For Fine Tuning the Speedometer Calibration)

- 1) Start with the vehicle power / engine off. Push and hold the pushbutton while starting the engine.
- 2) When the engine is running, release the pushbutton.
- 3) The red LED labeled “1” on the module will be lit (indicating real-time calibration mode).
- 4) Push and hold the pushbutton with red LED “1” lit until LED “1” starts blinking. *(approximately 5 seconds)*
- 5) Drive a known speed using a GPS or by pacing another car. *(The green LED between the red LEDs should blink once you start moving indicating that the module is getting a signal.)*
- 6) Press and hold the pushbutton to change the speed show on the speedometer. The first time the pushbutton is pressed and held, the speed shown on the speedometer will increase. The second time the pushbutton is pressed and held, the speed shown on the speedometer will decrease. *Note: Changes in speed will happen slowly. The button will need to be held longer if a large change of speed is required.*
- 7) The pushbutton will alternate between increasing or decreasing the speed shown on the speedometer each time it is pressed. Press and hold the pushbutton to fine tune the speed shown on the speedometer.
- 8) Once the correct speed on the speedometer has been achieved, wait *at least 8* seconds without pushing the pushbutton, then turn power to the module off in order to save the calibration.