3 Wire Speed Sensor

The 3 wire speed sensor output signal is a square wave signal that connects between the input power source (battery voltage) and the power ground. The speed sensor outputs 4 pulses (High to Low voltage transitions) for each speed sensor revolution.

Most Toyota 3 wire speed sensors have the below (90980-11143) plug connection, however it is worth noting that there are some 20 pulse / revolution Toyota speed sensors that have a different (triangular) plug connection. Note, the below plug (90980-11143) connects to the speed sensor, the below plug image does not show the pin out of the sensor, it shows the pin out of the plug that connects to the speed sensor.

90980-11143 Toyota 3 Wire Speed Sensor

90980–11143

Pin	Symbol	Definition	Input / Output (To Sensor = Input) (From Sensor = Output)	Description	Usual Wire Colour
1	IGN	3 Wire, Speed Sensor Power (Ignition Switched)	Input	This pin is used to supply ignition switched battery power (+12V) to the speed sensor. This pin needs to be connected to an ignition switched power source that supplies battery voltage when the ignition is in the RUN and CRANK Positions.	Yellow (Y)
2		3 Wire, Speed Sensor Ground	Input	This pin is used to supply the power ground for the speed sensor. This pin needs to be connected to ground.	Red (R)
3	SP1	3 Wire, Speed Sensor Output	Output	This pin is used to output the speed signal. This pin most commonly connects to the dash cluster, however in some arrangements this can vary. The 3 wire speed sensor output signal is a square wave signal that connects between the input power source (battery voltage) and the power ground. The speed sensor normally outputs 4 pulses (High to Low voltage transitions) for each speed sensor revolution.	Light Blue - Red Dash (L-R)