



### SEN-01-128

128k High Speed Signal Generator



The kit includes the following parts:

1. Speed pulse generator (128000 ppm)
2. Harness, 3-wire w/speed connector, 10'

#### Installing the sensor to the transmission:

- Remove existing speedometer cable
- Thread the SEN-01-128 onto the transmission speedometer gear housing until snug.
- Thread-lock or anti- seize should **NOT** be used on the threads.
- **This product is NOT for use with transmission shift computers or ABS systems. The sensor is a steady, non-calibrated 128,000 pulse per mile output with possible dither which may cause issues with systems other than its intended use.**

#### Wiring

The sensor will generate voltage, 12V sine-wave signal. Typical wiring for Dakota Digital products is:

Color	Function
Red	DC supply power
Black	Ground
White	Speed signal (to the speed input)

**Note:** Since the voltage generated by this sensor is small and low current it is susceptible to noise interference. It is best to route speed signal wires away from alternators, coils, spark plug wires, ignition boxes, and other high current carrying wires to avoid erratic speed readings.

#### Testing

Failure of this speed sensor is very uncommon. To test, disconnect the white wire of the sensor from the gauge/control box and clip the positive lead of a voltmeter (set to read AC volts) to the white wire. Clip the negative lead to the black ground wire on the speed harness. Turn on supply power. If you see that your voltage reading is fluctuating from  $\approx 1.5\text{VAC RMS}$  to  $\approx 6\text{VAC RMS}$  (2Hz signal) there is an internal problem within the sensor and it will need to be returned to Dakota Digital for service work. If you don't see VAC fluctuations please remove the sensor from the transmission and attach the sensor to a drill and spin the sensor. This will simulate what the transmission is doing. When you spin the sensor your voltmeter will show a fluctuation from  $0\text{VAC RMS}$  to  $\approx 6\text{VAC RMS}$ . When you stop the drill the voltage reading should be minimal  $\approx 0\text{ VAC RMS}$ . If you spin the drill and don't get a reading there may be an internal problem with the sensor and it will need to be returned to Dakota Digital for service work.

<b>Sensor Specifications</b>	
Supply	
Voltage Range	8 to 22V
Current draw	≈.03mA

### **SERVICE AND REPAIR**

DAKOTA DIGITAL offers complete service and repair of its product line. In addition, technical consultation is available to help you work through any questions or problems you may be having installing one of our products. Please read through the Troubleshooting Guide. There, you will find the solution to most problems.

**Should you ever need to send the unit back for repairs, please call our technical support line, (605) 332-6513, to request a Return Merchandise**

**Authorization number.** Package the product in a good quality box along with plenty of packing material. Ship the product by UPS or insured Parcel Post. Be sure to include the RMA number on the package, and include a complete description of the problem with RMA number, your full name and address (street address preferred), and a telephone number where you can be reached during the day. Any returns for warranty work must include a copy of the dated sales receipt from your place of purchase. Send no money. We will bill you after repair.

### **Dakota Digital 24 Month Warranty**

DAKOTA DIGITAL warrants to the ORIGINAL PURCHASER of this product that should it, under normal use and condition, be proven defective in material or workmanship within 24 MONTHS FROM THE DATE OF PURCHASE, such defect(s) will be repaired or replaced at Dakota Digital's option. This warranty does not cover nor extend to damage to the vehicle's systems, and does not cover removal or reinstallation of the product. This Warranty does not apply to any product or part thereof which in the opinion of the Company has been damaged through alteration, improper installation, mishandling, misuse, neglect, or accident. This Warranty is in lieu of all other expressed warranties or liabilities. Any implied warranties, including any implied warranty of merchantability, shall be limited to the duration of this written warranty. Any action for breach of any warranty hereunder, including any implied warranty of merchantability, must be brought within a period of 24 months from date of original purchase. No person or representative is authorized to assume, for Dakota Digital, any liability other than expressed herein in connection with the sale of this product.



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