



**Nordskog Performance Products**

## **DP10001 UNIVERSAL 5 GAUGE DIGITAL PANEL**

***\*\*Before beginning the installation, read through these instructions thoroughly. Also, disconnect the positive battery cable to avoid contacting any "live" wires.***

### **Instrument Panel Mounting**

1. Cut along the outside and inside of the enclosed template and tape it to the spot on your dash where you intend to mount the panel. Check behind the dash to make sure you have adequate clearance for the fasteners and wiring.
2. Mark the spots for the four mounting holes on each corner and drill through your dash. Use the enclosed mounting screws to securely fasten the panel.

### **Sender Installation**

In order to guarantee the accuracy of your DP10001 panel, the sending units included in this kit must be used. If your vehicle is already equipped with water temperature and oil pressure gauges and senders, simply replace the existing senders with those supplied. Refrain from using Teflon tape or any other type of sealer on the sending unit threads as this may cause inaccurate readings. If you do not have existing senders, install the new senders as follows:

1. Water Temperature - locate a plug on the intake manifold or cylinder head that allows access to the engine's water jackets. Remove the plug, select the proper sized bushing from the sender kit and install the sender.
2. Oil Pressure - Locate a plug on the engine block that allows access to the engine's oil passages. Remove the plug and install the sender.
3. Speedometer Sensor - Follow the instructions included with the sensor to install it on your transmission. In some instances, as an alternate to the transmission-mounted sensor, you may connect the speedometer to the sensor wire on your vehicle's cruise control if it is so equipped.
4. Fuel - Determine what type of fuel level sender your vehicle is equipped with. Use the enclosed diagram to position the "dip" switches on the circuit board to the appropriate configuration (73-10 Ford/Chrysler, 0-90 GM, 10-180 VDO, 240-33 Universal aftermarket).

### **Instrument Panel Wiring**

In order to isolate the signal wires that connect the senders to the gauges from electrical noise interference, we recommend that you use great care to insure that all sensing wires are run as far away from the ignition system and any voltage or signal carrying wires as possible, particularly spark plug wires. We also recommend the use of the twisted shielded cable enclosed with this kit to connect your speedometer to the transmission mounted sensor as well as using resistor-type spark plugs and spark plug wires that are in good working condition. Unless otherwise noted, the following wires are 18 gauge in thickness.

1. Connect the **BLACK** wire to a ground on the engine block (chassis or wire wall grounds are often inadequate). To help prevent inaccurate readings, ground the gauge to the same location as the individual senders.
2. Connect the **RED** wire to a 12 volt source which is adequately fused and turns on and off with the ignition switch.
3. Locate a headlight power wire at the dash and connect it to the **PURPLE** wire on the Nordskog digital panel. This wire will dim the light omitted by the display to aid in nighttime viewing. **DO NOT CONNECT THIS WIRE TO THE HEADLIGHT DIMMING WIRE.** Connecting to this rheostat type of switch will cause the gauge to malfunction. If you choose not to utilize the dimming feature, connect the purple wire to a ground.
4. Locate the factory right turn signal wire at the dash and connect it to the **WHITE** right turn signal wire on the Nordskog digital panel.
5. Locate the factory left turn signal wire at the dash and connect it to the **WHITE** left turn signal wire on the Nordskog digital panel.
6. Locate the factory high beam wire at the dash and connect it to the **BROWN** wire on the Nordskog digital panel.
7. Connect the **ORANGE** wire to one of the posts on the new oil pressure-sending unit (it does not matter which post you utilize). Connect the other post on the sending unit to a ground on the engine block.
8. Connect the **BLUE** wire to the new water temperature-sending unit.
9. Connect the **GRAY** (SPEED) wire to the tan wire on the new speedometer sending unit (if needed). A 10' length of twisted shielded pair cable is provided with this kit. This cable is provided to shield the speedometer signal wire from picking up electrical noise, which would interfere with the proper function of your speedometer. If your speedometer displays some unusual values when the engine is running, it is recommended that this cable be used. Run your speedometer signal and ground wire from the sender through this cable to the speedometer. The shield (bare uninsulated wire) should only be grounded at the sender.
10. Connect the **YELLOW** wire to your fuel level-sending unit making sure that the sending unit is properly grounded. This gauge displays the percentage of fuel left in the tank (0-99%), not gallons.
11. Optional. Connect the two thinner **26 gauge WHITE** wires to a momentary normally open switch (not supplied). This switch serves the same function as the pushbutton switch found on the speedometer. If you do not intend on using this feature, you may either cut the wires or insulate the wires to prevent them from shorting.

## DIGITAL PERFORMANCE SPEEDOMETER

Your digital panel is equipped with an electronic speedometer that has the capability to display your speed as well as your mileage traveled (odometer). It also has the ability to track your trip distance, record and display the highest speed you obtained as well as your 0-60 mph and ¼ mile elapsed times. Your speedometer will also allow you to adjust your readings (through electronic recalibration) to different tire or gear sizes.

Your speedometer comes with factory set defaults and must be recalibrated for your specific application. To accomplish this, you must locate a measured mile of highway where you can safely start and stop your vehicle. By running the vehicle over this measured distance, your speedometer will learn how many pulses your speedometer sensor is outputting in this measured distance. It will then use this acquired data to calibrate itself for accurate reading.

After installing your speedometer according to the installation instructions, with the ignition on or your car running, it should immediately exhibit the default display (figure 1): the first green light bar, the odometer display (small "0") and speedometer display (large "0"). If, for any reason, your instrument does not show this display, please thoroughly re-check all of your connections

and try it again. If the problem persists, please contact us for assistance. In the right hand corner of the face, you will notice a small recall pushbutton. This will be used to calibrate and read all of the data involved with your speedometer. The unit is also equipped with wires that allow you to add an external recall button which can be mounted in a location which is easily reached during operation of the vehicle (Earlier models are not equipped with the wires. Please contact us if you have an earlier model and wish to have the wires installed).

***\*\*THE FOLLOWING INSTRUCTIONS WILL INFORM YOU ON HOW TO CALIBRATE YOUR SPEEDOMETER. TO INSURE THAT IT IS DONE CORRECTLY, IT IS IMPARTITIVE THAT YOU READ THROUGH THE INSTRUCTIONS COMPLETELY BEFORE YOU ATTEMPT TO PROGRAM OR OPERATE YOUR SPEEDOMETER!\*\****

### **Calibration**

- 1.) While stopped at the beginning of the measured mile with your vehicle running, press and hold down the pushbutton on the face until the odometer displays "HI-SP" (figure 2). **IMMEDIATELY** release the button.
- 2.) On its own, the gauge will cycle through the performance data that it records in the following order "0-60," "1/4," "CAL." (figures 2 thru 5). While "CAL" is being displayed, quickly tap the pushbutton one time. This will put the speedometer in the program mode and "PROG" will be displayed (figure 6) (**YOU MUST BE EXTREMELY CAREFUL TO TAP THE PUSHBUTTON QUICKLY AND NOT HOLD IT DOWN.** If you miss stopping the display at "CAL", simply repeat the step). With "PROG" displayed, the speedometer is now waiting to record the data that will be accumulated over the measured mile.
- 3.) When you are ready to begin driving, quickly tap the pushbutton one time. The speedometer will display "CAL" and the odometer will show "0" (figure 5). Begin driving the vehicle at a safe speed (the level of speed is not important) through the measured mile. As you move, the odometer will begin showing the speedometer pulses as they are being calculated.
- 4.) At the end of the mile, bring the vehicle to a safe stop and quickly tap the pushbutton one time. The odometer will now display the number of speedometer pulses that were registered over the distance (**NOTE: If the number displayed is 12,800, your stock speedometer sensor does not put out a pulse per mile count between 2000 and 32,000. If the number displayed is 8000, the default setting, the pulses per mile were not recorded and steps 2-4 must be repeated.**).
- 5.) The odometer will continue to display the pulse reading for a few seconds. Once it reverts to the default mode (figure 1), your speedometer has been calibrated and is ready for operation.

### **Trip Distance**

A single tap of the recall button will show the trip distance mileage in the odometer display. A decimal point will appear to in the odometer to indicate that you are in the trip odometer mode. Holding down on the button for a few seconds in this mode will clear the trip distance. To return to the default odometer display, tap the recall button. The decimal point will disappear to indicate that you are in the default odometer display.

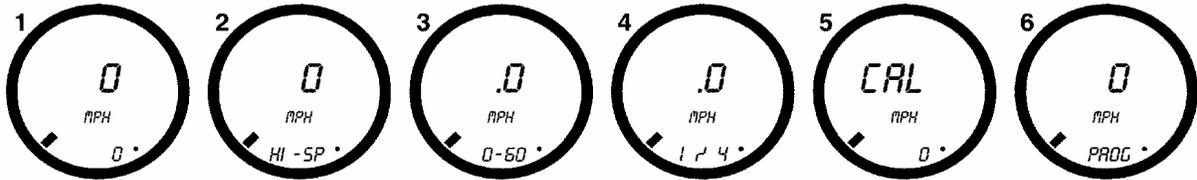
### **Recording and Viewing Performance Data**

To begin recording Performance Data (High speed, ¼ mile elapsed time and 0-60 mph elapsed time), execute the following:

1. Before each run your car must be at a complete stop at the starting position.
2. Press and hold the pushbutton until "HI-SP" is displayed (figure 2) and then **IMMEDIATELY** release the button. On its own, the gauge will cycle through the performance data that it records in the following order "0-60", "1/4", "CAL" (figure 2-5).
3. At the end of your desired run, safely bring the vehicle to a complete stop.
4. Repeat step 2 to view the data gathered from this run. While stopped, you can view this data as many times as you wish. However, once it finishes scrolling one time, the memory is ready to record new data for the ¼ mile and 0-60 mph elapsed times and will begin once the

vehicle starts moving. The highest speed measured over multiple runs will be retained in memory. To gather new data, repeat steps 1 thru 4.

5. If you wish to clear out all of the performance data and gather new data before each run, press and hold the pushbutton. Continue to hold the pushbutton as it cycles through the performance data. At the end it will say "RESET" and all of the performance data will then be cleared from memory (This will not affect your stored calibration value or the odometer reading.). Turning off the gauge then turning it back on can also clear the performance data.



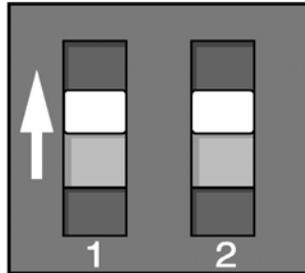
# Fuel Selector Switch Position

Manufacturer

Switch Position

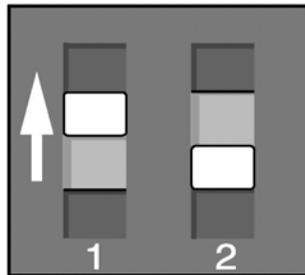
Ohm Range (Empty to Full)

Ford/  
Chrysler



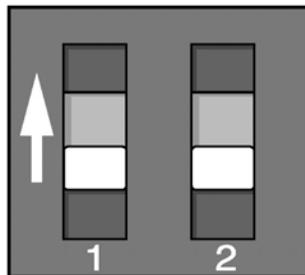
73-10 OHM

GM



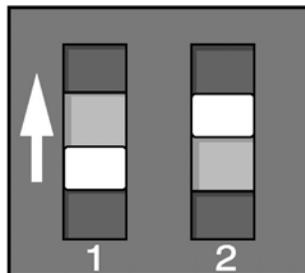
0-90 OHM

VDO



10-180 OHM

Universal/  
Stewart  
Warner



240-33 OHM

Revision 4 02/10/04

1120 Yarnell Pl, Oxnard, CA 93033 805-483-2411ph 805-483-2373fax  
[www.nordskogperformance.net](http://www.nordskogperformance.net)