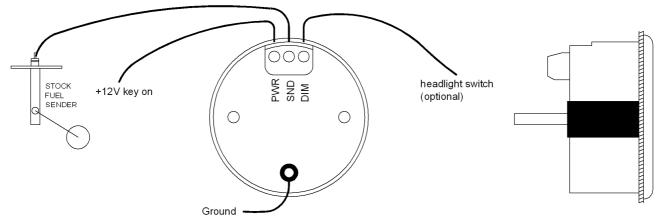


Wiring:

GND PWR DIM SND

- connect to a main ground location
- connect to fused switched 12 volt power. (An accessory terminal will work for this.)
- Night Dimming: connect to the head light switch.
 - connect to the fuel level sender. SET THE SENDER TYPE FIRST



Mounting:

The gauge requires a round hole 2-1/16" diameter for mounting. The gauge should be inserted into the opening from the front and the U-clamp will be installed from the back. Tighten the two nuts on the U-clamp so that the gauge is secure. Gauge depth to the back of the case is 1". Gauge depth including the mounting studs is 1-7/8".

Factory settings:

Sender type: 240 – 33 ohms **GO THROUGH SETUP TO CHANGE THIS TO MATCH YOUR SENDER.** Full tank reading: 100%.

- User adjustable for GM, Ford, VDO, or Stewart Warner senders.
- User selectable to display %full or gallons remaining.
- The gauge will flash any time the fuel level is below 10% to warn of low fuel.

Fuel sender resistances:

empty resistance	full resistance .
0 ohms	30 ohms
0 ohms	90 ohms
40 ohms	250 ohms
73 ohms	10 ohms
20 ohms	150 ohms
10 ohms	180 ohms
240 ohms	33 ohms
112 ohms	4 ohms
	0 ohms 0 ohms 40 ohms 73 ohms 20 ohms 10 ohms 240 ohms

If a sender is not connected properly or the gauge is not set for the sender, the display will show "EEE". If the SND terminal is shorted to ground, the display will show "---". When the gauge is set for a GM sender the gauge will flash "00" when shorted to ground, not show the "--" since 0 ohms is a valid reading for the GM sender.

Setting the full tank reading and sender type setup:

The SND terminal is used to enter and change the gauge settings. You will need a wire connected to the SND terminal that can be momentarily grounded while you watch the gauge. The headlights should be off or the DIM terminal unhooked so that it does not interfere with the setup.

- 1. To enter the set mode, turn the key on with the SND wire not grounded. The gauge will display "SEt".
- 2. Ground the SND wire. The gauge will display "Snd". (If you wait too long the gauge will exit the setup routine and you will need to repeat step #1).
- 3. Release the SND wire. The gauge will display the current setup. "33" is for Stewart Warner/Sun, "180" if for VDO, "10" is for Ford-10, "150" is for Ford-150, "90" is for GM-90, "250" is for GM-250, "30" is for GM-30, and 4 is for Import.
- 4. Each time you momentarily ground the SND wire the setup will change.
- 5. When the desired setup value is displayed, keep the SND wire grounded for about 2 seconds. The gauge will display "FUL".
- 6. Release the SND wire. The gauge will display a number from 100 or 11.0-40.0. 100 is for %full and 11.0-40.0 is full tank capacity in gallons.
- 7. Each time you momentarily ground the SND wire the number will change.
- 8. When the desired full tank reading is displayed, keep the SND wire grounded for about 2 seconds. The gauge will display "--".
- 9. Turn the key off.

Troubleshooting guide.

Problem	Possible cause	Solution
Gauge will not light up	PWR terminal does not have power.	Connect to a location that has power.
	GND terminal does not have a good	Connect to a different ground location.
	ground.	
	Gauge is damaged.	Return gauge for service. (see instructions)
Gauge lights up, but does	Loose connection on SND terminal.	Reconnect wire.
not read correctly.	Poor ground connection.	Move ground to different location
	Gauge sender setup is incorrect.	See "Setting sender setup" in the manual.
	Voltage or wiring problem in the vehicle wiring harness.	Check wiring harness for loose or damaged wires.
Gauge lights up, but displays "Er0".	Gauge is damaged.	Gauge must be returned for service. (see instructions)
Gauge lights up, but displays	SND terminal is shorted to ground.	Check wire for damaged insulation. Replace if necessary.
""	Sender is damaged.	Replace sender.
Gauge lights up, but displays	Sender is not connected to gauge.	Connect SND terminal on gauge to sender terminal.
"EEE".	Wire between gauge and sender is	Test and replace wire.
	broken.	
	Sender is not grounding properly.	Sender grounds through it's mounting plate. Make sure the mounting plate has a good ground
	Sender is damaged.	Replace sender.
	Gauge is damaged.	Return gauge for service. (see instructions)
Gauge lights up, but displays "Er3".	Gauge sender setup needs to be reset.	See "Setting sender setup" in the manual
Gauge lights up, but displays "Er4".	Gauge full tank reading needs to be reset.	See "Setting the gauge setup" in the manual.
Gauge flashes constantly.	Fuel level is below 10%.	Fill gas tank.
	Gauge sender setup is incorrect.	Check sender resistance or type and gauge setting.
Gauge will not dim.	DIM terminal is not connected correctly.	Check wiring connections.
Gauge remains dim at all	DIM terminal is getting power all	Connect DIM wire to location that only has power when the headlights
times.	of the time.	are on.
	Battery is very low.	Recharge or replace vehicle battery.
	Gauge is damaged.	Return gauge for service. (see instructions)

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 units.

Should you ever need to send the unit back for repairs, please 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 a complete description of the problem, your full name and address (street address preferred), and a telephone number where you can be reached during the day. An authorization number for products being returned for repair is not needed. Any returns for warranty work must include a copy of the dated invoice or bill of sale.

Technical specifications

Minimum operating voltage	-	7 volts
Maximum operating voltage	-	17 volts
(operating at or near m	aximum	voltage for an extended time can damage unit)
Compatible fuel senders	-	SW/Sun, VDO, GM, Ford, and some import
Gauge accuracy	-	depends on sender
Typical current draw (@ 13.8V)	-	0.1 A

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.

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