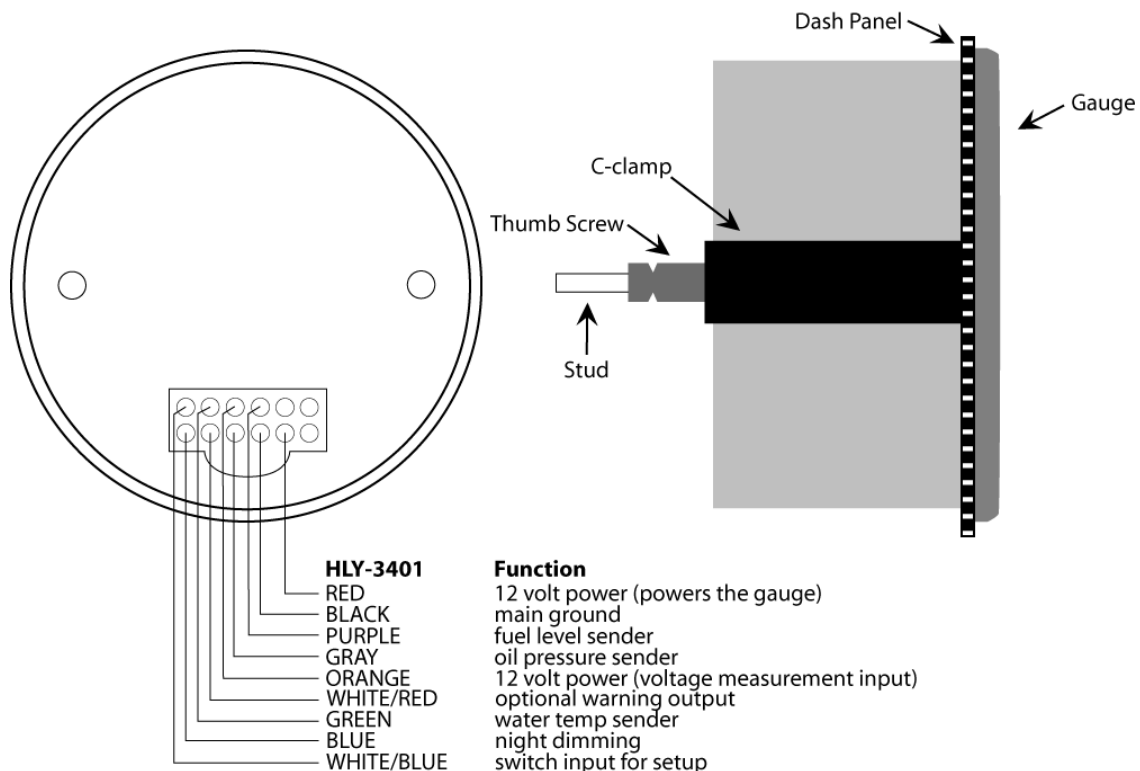


Dakota Digital

HLY-3401 3-3/8" multi-gauge display (weather and vibration resistant for exposed environments)



Operation:

- The gauge needs only the red and black wires connected to light up. Connect the red wire to 11-15 volt power and connect the black wire to a main ground point.
- The voltage gauge reads from the orange wire. This can be connected to the same power as the red wire or to a different power location in the vehicle.
- The purple wire should connect to the fuel level sender. The stock or existing fuel sender can be used with this gauge.
- The gray wire should connect to the supplied oil pressure sender. The sender uses its case for the ground connection. The mounting threads are a tapered dry-seal type. Do not use any sealant on the threads.
- The green wire should connect to the supplied water temperature sender. The sender threads are a tapered dry-seal type. Do not use any sealant on the threads.
- When the blue wire is switched to power, the display will dim for night viewing. This can be connected to a toggle switch or left disconnected. Typically this will connect to a 'parking light' circuit if used.
- The white/red wire can be connected to an optional warning light. When any of the gauges go outside of their operating limits the readout will flash and the white/red wire will provide a grounded output for indicators drawing less than 250mA, see "Using external warning indicator" below for additional information.
- The white/blue wire is only used for changing the gauge warning points and selecting the fuel sender type. The high temperature, low pressure, and low voltage warning points are user adjustable. The factory default settings are 250F, 10psi, and 11.0 volts respectively. The fuel gauge will display "FL" until the sender type is selected.

Using external warning indicators:

The white/red wire provides a ground trigger whenever the gauge is outside its set limits. Low current indicators (less than 1/4 A) can be activated directly by connecting their power wire to 12 volts and connecting their ground wire to the white/red output wire.

For higher current buzzers or lights, a relay will need to be used to switch the indicator on. Dakota Digital's RLY-1 30A relay may be used for this. One of the relay coil wires should be connected to 12 volts and the other relay coil wire connected to the white/red warning wire. When the gauge is outside its limits, the relay will turn on. The relay contact wires can be used to switch the higher current.

Changing the warning set points and fuel sender set-up:

The white/blue wire is used for this setup. You can strip the end and touch the wire end to power or connect a push button switch. Make sure the blue wire is **not** powered during the setup routine, it will interfere with the setup.

1. Begin with the key off.
2. Power the white/blue wire.
3. Turn the key on. The display will show "SETUP" in the upper left corner. The volt, water, and oil will each show their current warning set points. The fuel display will show the current sender setting.
4. Release the white/blue wire. The current fuel setting number will be displayed in the left display. The top display will show the full sender resistance and the bottom display will show the empty sender resistance. Fuel sender #0 can be programmed to a custom resistance range.
5. Momentarily power the white/blue wire to change the sender type. Hold the white/blue wire to power for several seconds to save the setting and go on.
6. Release the white/blue wire. The display will show the current temperature unit and label. "F" for Farenheit and "C" for Celsius and either "WATER" or "TEMP".
7. Momentarily power the white/blue wire to change the unit and label type. Hold the white/blue wire for several seconds to save the setting and go on.
8. Release the white/blue wire. The current high temperature warning point will be displayed.
9. Momentarily power the white/blue wire to change the set point. Hold the white/blue wire to power for several seconds to save the setting and go on.
10. Release the white/blue wire. The display will show the current low oil warning point.
11. Momentarily power the white/blue wire to change the set point. Hold the white/blue wire to power for several seconds to save the setting and go on.
12. Release the white/blue wire. The display will show the current low voltage warning point.
13. Momentarily power the white/blue wire to change the set point. Hold the white/blue wire to power for several seconds to save the setting and go on.
14. Release the white/blue wire. The display will show "End" unless the custom fuel sender setting was selected. If "End" is displayed, turn the key off.
15. If fuel sender #0 was selected, the display will show "00" in the left display and "Set" in the bottom display. The top display will show the resistance seen on the purple fuel sender wire. A reading of "EEE" indicates that the resistance is too high or nothing is connected.
16. Make sure the fuel sender is at its empty position and then momentarily power the white/blue wire. The left display will switch to "33".
17. Move the fuel sender float to its 1/3 full position (33%). Momentarily power the white/blue wire. The left display will switch to "66".
18. Move the fuel sender float to its 2/3 full position (66%). Momentarily power the white/blue wire. The left display will switch to "99".
19. Move the fuel sender float to its full position. Momentarily power the white/blue wire. The bottom display will show "End".
20. Turn the key off.

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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