

Odyssey

Manufactured by **Dakota Digital**

ODY-15 rev. B STEREO AMP TEMPERATURE GAUGE

Introduction:

The Odyssey gauge series from Dakota Digital, Inc. incorporates the reliability and quality of our standard gauges, along with several unique features and easy mounting. These features include:

- A warning feature that flashes the gauge readout when outside operating limits.
- User adjustable warning points.
- Microprocessor stabilized readings.
- Night dimming with lens label lighting.
- High Visibility VFD display for sunlight readability.
- Easy connection terminal strip. No splicing wires together.

The amp temperature gauge will read the amplifier case temperature from a remote sensor. The sensor should be secured to the case of the amplifier that is to be monitored. If the amp has forced air cooling it, then mount the sensor on the side opposite the air source. This will provide the highest case temperature reading. The amp temperature gauge will operate and read correctly between the temperature range of -39 - 255° F (-39 - 125°C). The gauge has a user adjustable high warning level. This can be set to indicate when the temperature is outside a set range.

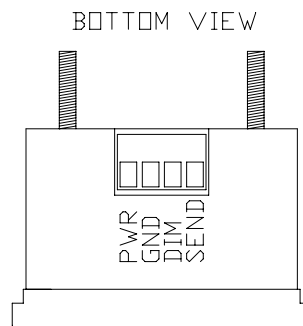
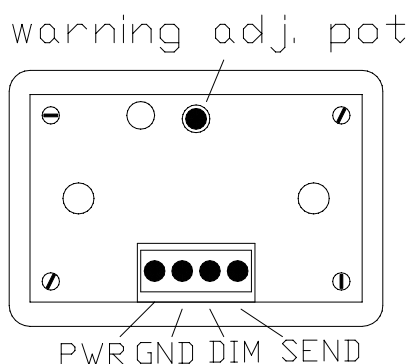
Operation:

The gauge needs only the PWR and GND terminals connected to light up. When the DIM terminal has 12 volts, it will dim the display for night viewing. The SND terminal is the temperature sensor input. The black wire from the sensor should be connected to the GND terminal along with the main ground wire. The red wire from the sensor should be connected to the SND terminal. **The sensor must be Dakota Digital part SEN-14-1 or SEN-15-1.** The sensor will measure the temperature where its probe is located. The sensor has a 12' two wire cable to connect it to the gauge. This cable can be shortened or additional wire can be added. If additional wire is added, the added wire pair should be twisted and polarity of the wires should be carefully noted. If the probe temperature is below -39° the display will show "—".

Setting the warning limit:

The high warning limit can be set to different values. The shaft sticking out of the back of the gauge is used for setting the warning limit. Any time the SND terminal is disconnected the gauge will display the warning set point and flash rapidly. The procedure for setting the warning limit is as follows:

1. Disconnect the SND terminal.
2. Turn the key on so the gauge is powered.
3. The display will flash rapidly and display a number between 98°F and 212°F (36°C - 100°C).
4. Turn the shaft on the back of the gauge until the desired high warning is displayed. The shaft will turn ¾ rotation from stop to stop. Do not attempt to turn it past the stops.
5. Turn the key off. Reconnect the SND terminal to the voltage source to be monitored.
6. The gauge will now operate normally when powered up again.

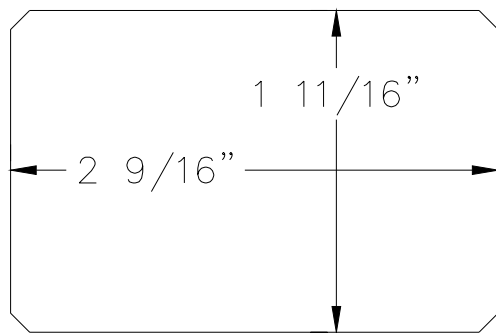


Wiring:

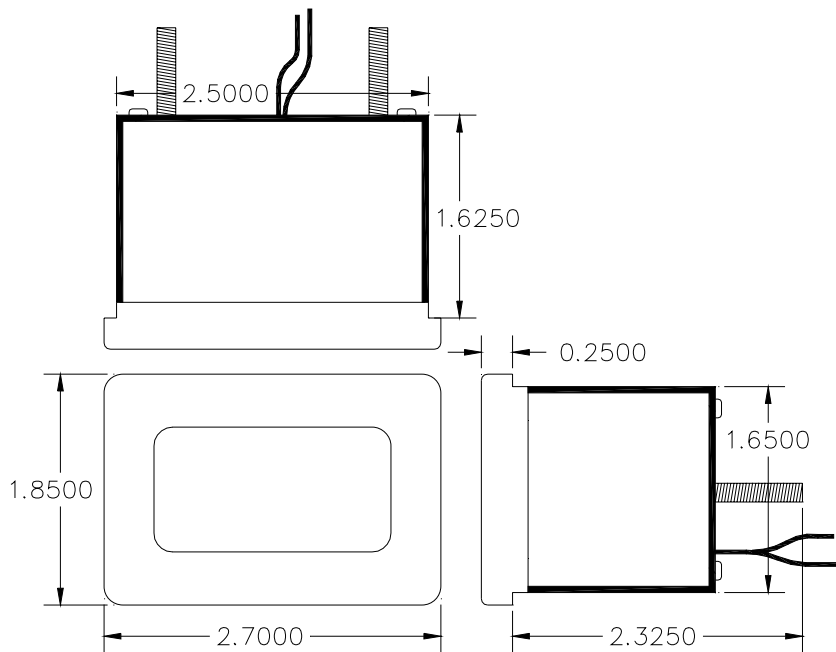
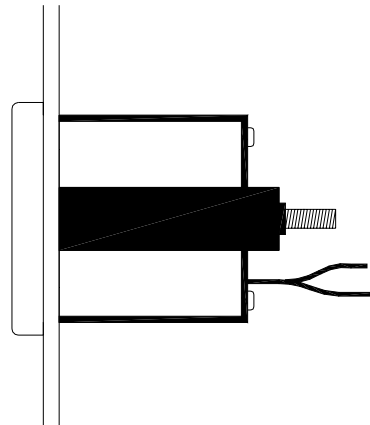
- PWR - connect to 12 volt power.
(An accessory terminal will work for this.)
- GND - connect to a good ground point in the vehicle and also to the sensor black wire.
- DIM - connect to the tail light circuit.
- SND - connect to the red wire from the sensor.

Mounting:

The gauge requires a rectangular cut out that is about 2 9/16" x 1 11/16". It 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. Figure 2 shows the required cut out for the gauge. Figure 3 shows how the gauge mounts.



dash cutout



Troubleshooting guide.

Problem	Possible cause	Solution
Gauge will not light up	PWR terminal does not 12 volt power.	Connect to a location that has power.
	GND terminal is not getting a good ground.	Connect ground to a different location.
	Power is reversed.	Check battery and wire polarity.
	Gauge is damaged.	Return gauge for repair. (see instructions)
Gauge lights up, but displays "EE".	Sender is not connected to gauge.	Connect SND & GND terminals from gauge to sender red & black wires.
	Wire between gauge and sender is broken.	Check for pinched or damaged cable.
	Sender is wrong type	Make sure sender is SEN-14-1 or SEN-15-1 two wire sensor.
	Gauge is damaged.	Return gauge for repair. (contact factory)
	Sender is damaged.	Return for repair. (contact factory)
Gauge lights up, but displays "--".	Sender temp is < -39°.	Check sensor location and temperature.
	Gauge is damaged.	Return gauge for repair. (contact factory)
Gauge lights up, but does not read correctly.	Loose connection on PWR terminal.	Reconnect PWR terminal.
	Poor ground connection.	Move ground to different location
	Incorrect sender type.	Make sure sender is the correct type (SEN-14-1 or SEN-15-1).
	Sender is damaged.	Return for repair. (contact factory)
Gauge flashes constantly.	Warning limits are not set properly.	Reset warning limits.
	Sensor is disconnected.	Check sensor connections and sensor cable.
Gauge will not dim.	DIM terminal is not connected correctly.	Check wiring connections.
	Gauge is damaged.	Return gauge for repair. (contact factory)
Gauge remains dim at all times.	DIM terminal is getting power all of the time.	Connect blue wire to location that only has power when the headlights are on.
	Battery is very low.	Recharge or replace vehicle battery.
	Gauge is damaged.	Return gauge for repair. (contact factory)

Technical specifications

Minimum operating voltage	-	7 volts
Maximum operating voltage	-	18 volts
(operating at or near maximum rating for an extended time can damage unit)		
Minimum temperature reading	-	-39 °F (-39°C)
Maximum temperature reading	-	255 °F (125°C)
Gauge Resolution	-	1° F (1°C)
Gauge accuracy	-	±2° F (±1°C)
Typical current draw (@ 13.8V)	-	0.13 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 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. Do not send any money. We will bill you for the repair charges. Any returns for warranty work must include a copy of the dated invoice or bill of sale.

ODYSSEY SERIES DIGITAL GAUGE LIMITED WARRANTY

DAKOTA DIGITAL (the Company) 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 the Company's option) without charge for parts or labor directly related to repairs of the defect(s).

To obtain repair or replacement within the terms of this Warranty, the product is to be delivered with proof of warranty coverage (e.g. dated bill of sale), name, address, phone number, and specification of defects, transportation prepaid, to the factory. This Warranty is valid for the original purchaser only and may not be transferred.

This warranty does not cover nor extend to damage to vehicle electrical system. 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 express 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. IN NO CASE SHALL THE COMPANY BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, WHATSOEVER. No person or representative is authorized to assume for the Company any liability other than that expressed herein in connection with the sale of this product.

The Company does not warrant that this product cannot be compromised or circumvented. THE EXTENT OF THE COMPANY'S LIABILITY UNDER THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT PROVIDED ABOVE AND, IN NO EVENT, SHALL THE COMPANY'S LIABILITY EXCEED THE PURCHASE PRICE PAID TO THE PURCHASER FOR THE PRODUCT.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damage so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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