

# INSTALLATION INSTRUCTIONS

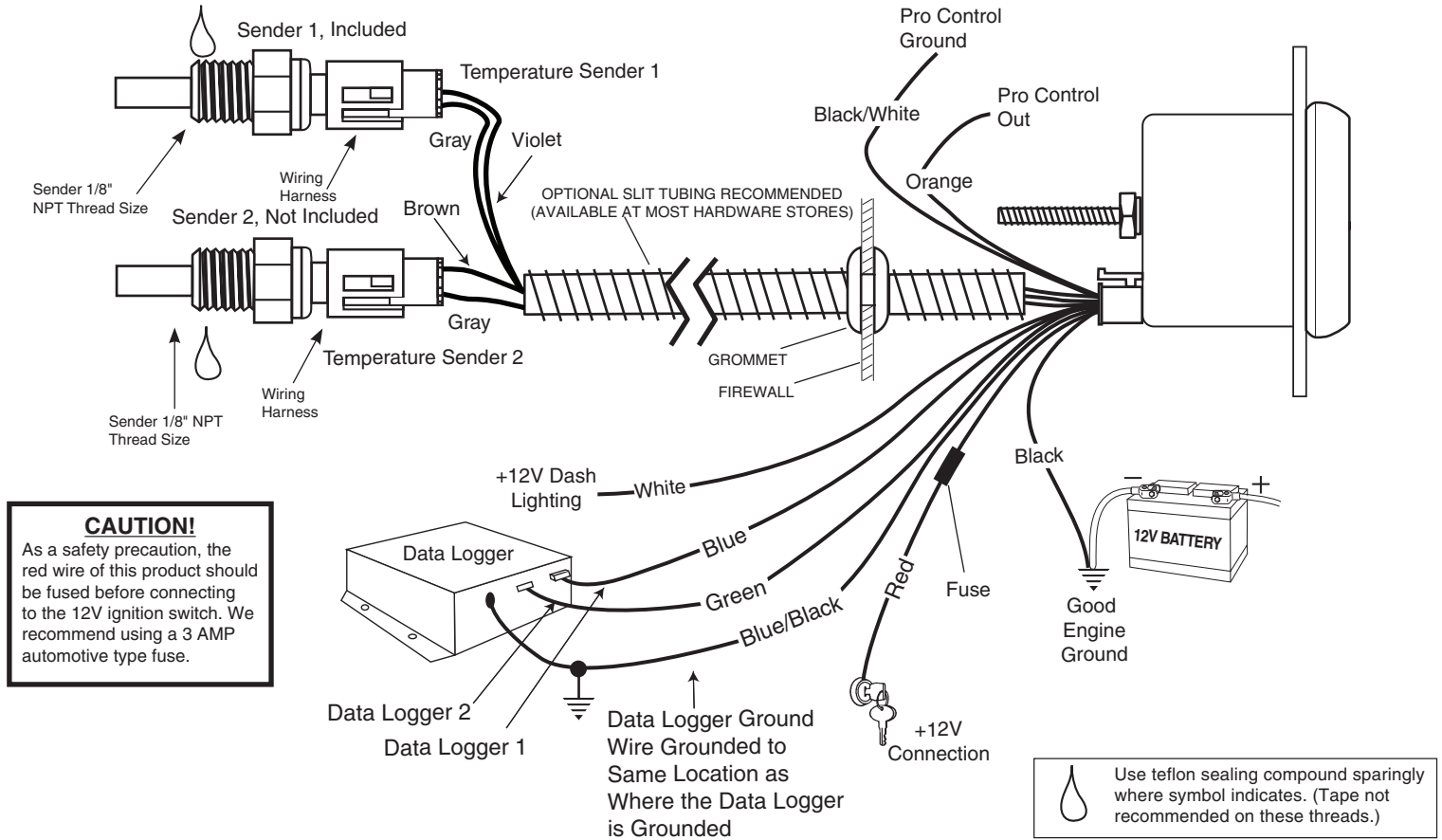
## ELITE DIGITAL DUAL TEMPERATURE GAUGES

2650-1946-77 Rev. A Models 6754-CB, 6754-PH, 6754-SC, 6754-UL



### QUESTIONS ?

If after completely reading these instructions you have questions regarding the operation or installation of your instrument(s), please contact AutoMeter Technical Service at 866-248-6357. You may also email us at [service@autometer.com](mailto:service@autometer.com). Additional information can also be found at [www.autometer.com](http://www.autometer.com)



## Connections

Red	Switched +12V
Black	Good Engine Ground
White	+12V Dash Lighting
Gray, Violet	Temperature Sender 1
Gray, Brown	Temperature Sender 2
Orange	Pro Control Out
Black/White	Pro Control Ground
Blue	Data Logger Output Channel 1
Green	Data Logger Output Channel 2
Blue/Black	Data Logger 1 and 2 Ground

## Installation

**NOTE:** Some late model vehicles use electronic sensors in their pressure and temperature senders for engine control functions. Before removing the original sender, we recommend that you contact your automotive dealer to be sure no critical functions will be disrupted.

1. Check that you have all parts required for installation, and the engine is cool.
2. Disconnect the negative (-) battery cable.
3. Gauge mounts in a 2-1/16" hole. Use supplied brackets and nuts to secure gauge to dash.
4. Drill 1" diameter hole where wires pass through sheet metal (such as firewall and install rubber grommet provided. (Grommet will require slit.)
5. Connect the white wire to dash lighting or switchable 12v light source, the red wire to switched +12V source and the black wire to ground.(see diagram for details)
6. Install temperature sender.
  - A. Water Temp: Install temperature sender. Note: Included sender is 1/8" NPT. For 3/8" NPT or 1/2" NPT ports, use included adapter.
  - B. Trans. Temp: Some transmissions have a usable pressure port that can be used for measuring internal trans temp. When choosing this method, be careful to measure internal clearance to accommodate extended probe of the sender. Hole may have to be drilled, and adapter nut welded or brazed in pan. Be sure there is adequate internal clearance for nut and sender.

- Cut end of included dielectric grease packet, and squeeze grease into connector of temperature sender prior to connecting harness.
- Connect red wire to switched +12V source and the black wire to ground. (see diagram for details)
- Reconnect negative (-) battery cable.

**NOTE:** Test all fittings and connections for leaks. If any leaks are detected, determine the cause of the leak and repair.  
Do not operate vehicle if any leaks are detected.

(Important: This will protect connection from dirt and moisture.)

**Caution:** LUBRIPLATE® DS-ES is a non-hazardous substance.  
However, it is recommended to wash hands thoroughly after use.

**NOTE:** Do not remove factory temp sender to install temp sender. If no location found, a hose adapter can be used.

## Menu Options:

There are many features provided by your AutoMeter Elite Digital Dual Temperature gauge. Use the left (-) button to navigate through the following options in order:

- Peak Recall – Digit display will show "P"
- Differential Mode – Digit display will show "diF"
- Pro Control 1 Set – Digit display will show "PC1"
- Pro Control 2 Set – Digit display will show "PC2"
- Temperature Channel 1 Display Assignment – Digit display will show "CH1"
- Temperature Channel 2 Display Assignment – Digit display will show "CH2"
- Channel 1 Alarm Set – Digit display will show "A1"
- Channel 2 Alarm Set – Digit display will show "A2"
- Channel 1 Temperature Range Set – Digit display will show "t1"
- Channel 2 Temperature Range Set – Digit display will show "t2"
- Select English or Metric Units for the Digit Display – Digit display will show "uni"
- Gauge Firmware Revision – Digit display will show a the firmware revision number.

## Power-Up

When power is applied to the gauge, the digit display will light with "8.8.8." and the entire bargraph display will light for one second. Then the gauge will begin normal operation and display real time sender readings.

## Sender Range Set

Temperature Range Set

The Elite Digital Dual Temperature Gauge can be set to the following temperature ranges:

- 60 to 210 degrees F
- 100 to 260 degrees F
- 140 to 280 degrees F
- 100 to 340 degrees F This gauge comes preset as 100°-340°
- 40 to 120 degrees C
- 60 to 140 degrees C
- 60 to 170 degrees C

This kit includes one AutoMeter model 2252 sender which works for all the ranges listed above. To set Channel 1 to the one of the Fahrenheit ranges, press the left button repeatedly until the digit display shows "t1". Then press the right button. Use the right (+) and left (-) buttons until the number shown on the display is maximum temperature value of the desired range. When the desired number is shown, wait for the display to flash this number rapidly, then "S c". It will continue to do this until the left button is pressed to save the setting, or the right button is pressed to cancel the setting.

To set Channel 2 to the proper range for the attached sender, press the left button repeatedly until the digit display shows "t2". Then press the right button. Set the Temperature in the same manner as Channel 1.

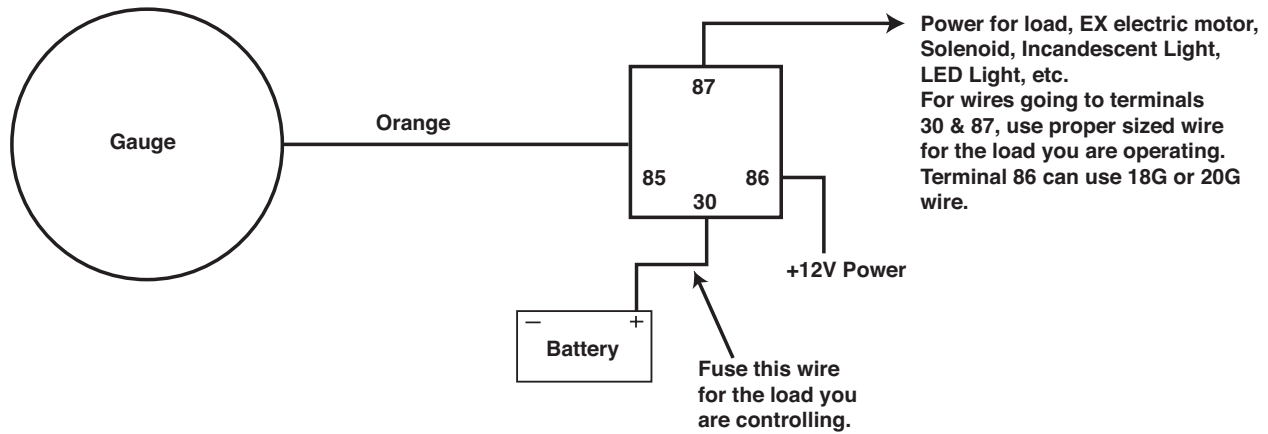
To set either channel to the one of the Centigrade ranges, press the left button until the digit display shows "uni", then press the right button. The digit display will show "F". Press the left button. The digit display will show "C". Press the right button. Select the range in the same manner as the Fahrenheit ranges. See also "**English or Metric Units**"

## Channel Assignment

The Elite Digital Dual Temperature Gauge has two displays, one shows digits, the other is a radial bar graph consisting of 30 green LEDs. If the 100 to 340 degree F temperature range is assigned to the bar graph display, all 30 LEDs will be lit if the gauge reads 340 degrees F. Only the 15 left side LEDs will be lit if the gauge reads 220 degrees F (halfway between 100 and 340 degrees F). No LEDs will be lit if the gauge reads 100 degrees F. To assign Channel 1 to one or both displays, press the left button repeatedly until the digit display shows "CH1". Then press the right button. The digit display will show "dig", "bAr", "bth", or "---". To assign Channel 1 to the digit display, press the left button until the digit display shows "dig". Wait for the display to flash this text rapidly, then "S c". It will continue to do this until the left button is pressed to save the setting, or the right button is pressed to cancel the setting. Saving the setting when the digit display shows "bAr" assigns Channel 1 to the bar graph display. Saving the setting when the digit display shows "bth" assigns Channel 1 to the digit display and the bar graph display. Saving the setting when the digit display shows "---" assigns Channel 1 to neither display.

## Peak Recall

To view Temperature peaks, press the left button. The digit display will show "P". Press the right button. The digit display and bar graph display will show the highest Temperature values measured by the gauge. After 3 seconds the gauge will return to normal operation. Pressing the right button while the peaks are still being shown will clear the peaks. The display will show "---", then the gauge will return to normal operation.



## Pro Control On Set

The Pro Control Output orange wire supplies ground when activated. It is recommended to use a relay switch such as the Dedenbear HPR or equivalent. To set the temperature level that will activate the Pro Control Output, press the left button until the digit display shows "PC1" or "PC2", depending on the temperature channel it's being set for. Press the right button. The digit display will show "on". Press the right button again. Use the right (+) and left (-) buttons until the number shown on the display is the desired value of temperature. When the desired number is shown, wait for the display to flash this number rapidly, then "S c". It will continue to do this until the left button is pressed to save the setting, or the right button is pressed to cancel the setting.

It is possible to set Pro Control values for both channels. If either channel exceeds it's Pro Control set point, the Pro Control Output will activate. Both channels must be below their Pro Control set point to deactivate the output.

## Pro Control Off Set

If it is desired to have the Pro Control Output deactivate at a lower temperature than it activates, press the left button until the digit display shows "PC1" or "PC2", depending on the temperature channel it's being set for. Press the right button. The digit display will show "on". Press the left button. The digit display will show "OFF". Press the right button again. Use the right (+) and left (-) buttons until the number shown on the display is the desired value of temperature. When the desired number is shown, wait for the display to flash this number rapidly, then "S c". It will continue to do this until the left button is pressed to save the setting, or the right button is pressed to cancel the setting.

## Alarm Set

This Alarm feature will cause the digit display or the bar graph display to flash rapidly if the temperature channel shown on that display exceeds a user set value. To set the temperature level that will activate the Alarm, press the left button until the digit display shows "A1" or "A2", depending on the temperature channel it's being set for. Press the right button. Use the right (+) and left (-) buttons until the number shown on the display is the desired value of temperature. When the desired number is shown, wait for the display to flash this number rapidly, then "S c". It will continue to do this until the left button is pressed to save the setting, or the right button is pressed to cancel the setting.

## Differential Mode

This will allow the user to view the difference in temperature of the two channels on the digital display. The bar graph display will continue to show whichever channel was assigned to it. To turn on differential mode, press the left button until the display shows "diF". Press the right button. The display will show "OFF". Press the left button. The display will show "On". Press the right button.

## English or Metric Units

This will allow the user to view the temperature value shown on the digit display in degrees C instead of degrees F. To change this, press the left button until the digit display shows "uni", then press the right button. The digit display will show "F". Press the left button. The digit display will show "C". Press the right button. Temperature will now be displayed in degrees C. The bar graph display is not affected by this.

## Data Logger Output

The AutoMeter Elite Digital Dual Temperature gauge has a signal output for each channel for supplying information to a Data Logger or engine management system. The signal provided is a linear 0-5v output. It will output 5.0 volts at full scale temperature (340 degrees F if set to 100 to 340 degrees F in Temperature Range Set). It will output 2.5 volts at 170 degrees. It will output 0.0 if below 100 degrees.

To calculate the measured temperature from the voltage output:

$$T = \text{Temperature Range Maximum} * (\text{Voltage Out}/5.00)$$

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## SERVICE

For service send your product to Auto Meter in a well packed shipping carton. Please include a note explaining what the problem is along with your phone number. If you are sending product back for Warranty adjustment, you must include a copy (or original) of your sales receipt from the place of purchase.

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## 12 MONTH LIMITED WARRANTY

AutoMeter Products, Inc. warrants to the consumer that all AutoMeter High Performance products purchased from an Authorized AutoMeter Reseller will be free from defects in material and workmanship for a period of twelve (12) months from date of the original purchase. Products that fail within this 12 month warranty period will be repaired or replaced at AutoMeter's option, when determined by AutoMeter that the product failed due to defects in material or workmanship. This warranty is limited to the repair or replacement of parts in the AutoMeter High Performance product and the necessary labor done by AutoMeter to effect the repair or replacement of the AutoMeter High Performance product. In no event shall AutoMeter's cost to repair or replace an AutoMeter High Performance Product under this warranty exceed the original purchase price of the AutoMeter High Performance Product. Nor shall AutoMeter Products, Inc. be responsible for special, incidental or consequential damages or costs incurred due to the failure of an AutoMeter High Performance Product. This warranty applies only to the original purchaser of the AutoMeter High Performance Product and is non-transferable. This warranty also applies only to AutoMeter High Performance Products purchased from an Authorized AutoMeter Reseller. All implied warranties shall be limited in duration to the said 12 month warranty period. Breaking the instrument seal, improper use or installation, accident, water damage, abuse, unauthorized repairs or alterations voids this warranty. AutoMeter disclaims any liability for consequential damages due to the breach of any written or implied warranty on all products manufactured by AutoMeter Products, Inc. For a comprehensive listing of Un-Authorized AutoMeter Resellers please visit [www.autometer.com/autometerlocator/index/unauthorized](http://www.autometer.com/autometerlocator/index/unauthorized).

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FOR SERVICE SEND TO: **AUTOMETER PRODUCTS, INC.** 413 W. Elm St., Sycamore, IL 60178 USA (866) 248-6357  
Email us at [service@autometer.com](mailto:service@autometer.com)  
<http://www.autometer.com>

