AEM

Installation Instructions for 30-4300 AEM Serial Gauge

WARNING:

This installation is not for the electrically or mechanically challenged! Use this gauge with <u>EXTREME</u> caution! If you are uncomfortable with anything about this, please refer the installation to an AEM trained tuning shop or call 800-423-0046 for technical assistance. You should also visit the AEM Performance Electronics Forum at http://www.aempower.com

NOTE: AEM holds no responsibility for any engine damage that results from the misuse of this product!

This product is legal in California for racing vehicles only and should never be used on public highways.

Congratulations, the 52MM (2 1/16") AEM Serial Gauge features a three digit LED digital readout with 24 sweeping multi color LED's, and two input buttons. Also included in the box are all the necessary wiring cables and brackets to install and use the gauge. A non-limited fully functional version of Pro Gauge software by AEM is also in the box. The AEM Serial Gauge allows users to monitor up to 19 different parameters. In addition, users can "daisy chain" multiple gauges together using the included harness.

Contents:
- (1) Serial Gauge assembly
- (1) Appearance kit (Silver bezel, silver pin guide, white faceplate)
- (1) Installation kit (Butt connector, 6 pieces)
- (1) Serial Gauge adapter cable
- (1) Serial Gauge flying lead
- (1) Instruction manual
- (1) Pro Gauge by AEM installation CD
- (1) DB9 Female Female adapter cable

Getting Started

NOTE: The Serial Gauge only works with version 1.19 and newer EMS firmware.

 Installation

Disconnect the negative (-) battery cable from the battery. Secure the gauge in a suitable mounting panel/pod using the supplied bracket and thumbnuts. Locate the single row 8-pin connector on the adapter harness. Plug the 8-pin connector into the connector on the back of the gauge as shown in Figure 1. Connect the flying lead to the adapter as shown in Figure. 2. Connect the DB9 connector on the flying lead to its mate on the backside of the EMS as shown in Figure 2. Connect the two non-terminated black wires on the flying lead to a known good ground. Connect the non-terminated red wire to a switched +12Vdc source.

Figure 1. 8-pin connector location
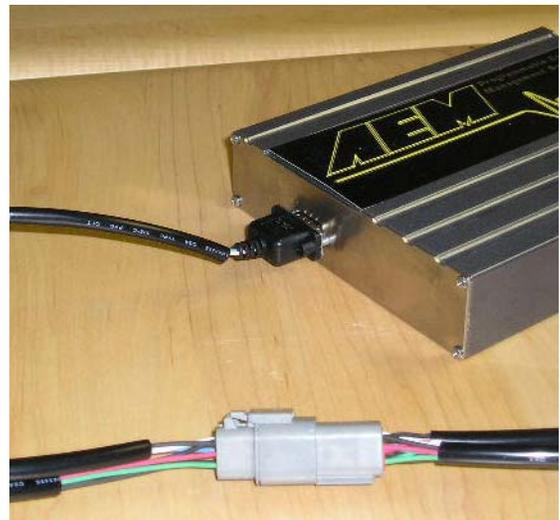
Figure 2. Installation connections

Configuring AEM Pro

 Note: The serial gauge will only work with version 1.19 or newer firmware. When connected to the EMS, the firmware version is shown in the blue strip at the top of the screen.

Open AEM Pro and connect to the EMS. Wait for the EMS to finish downloading. Left click on "VIEW" and select the telemetry wizard from the wizards drop down menu, see Figure 3. In the telemetry wizard, left click on "AEM Serial Datastream Gauge: and click OK, see Figure 4. Close AEM Pro, connect the serial gauge to the EMS, and cycle power to the EMS. The EMS is now configured to output data to the gauge.
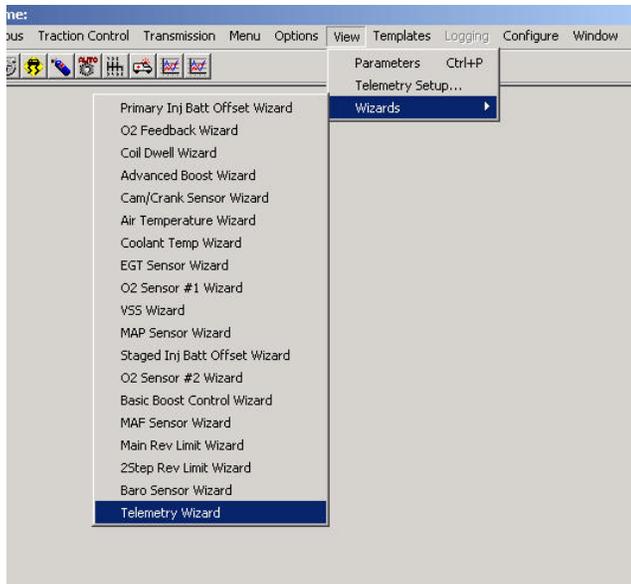
Figure 3. Telemetry wizard
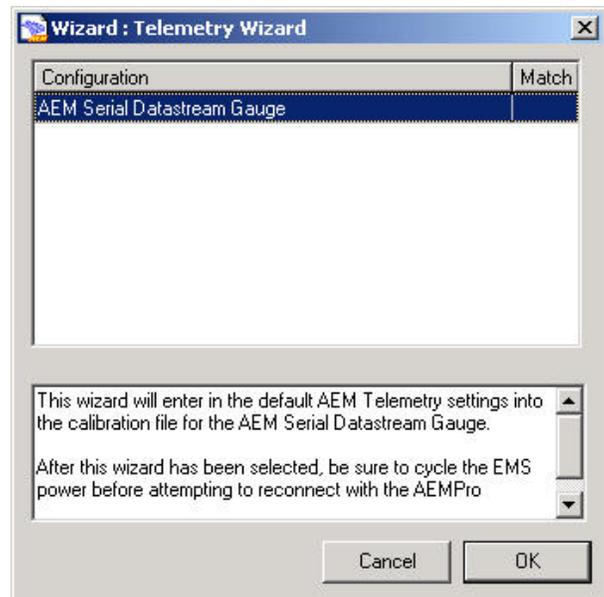
Figure 4. Select AEM Serial Datastream

Using the Gauge:

The gauge comes pre-configured to display engine speed, engine load, throttle, air temp, coolant temp, O2#1, and vehicle speed. The gauge also stores the min and max value for each parameter. The two buttons on the front of the gauge (see Figure 5) allow the user to switch between parameters and view min/max values. The functions for the buttons are listed below.

Right button: Displays next gauge, moves in forward direction
Left button: Displays next gauge, moves in backward direction
Press and hold right button for 2 seconds: Displays max value
Press and hold left button for 2 seconds: Displays min value
Pres and hold both buttons for 2 seconds: Clears min/max values for displayed gauge
Press and hold both buttons for 5 seconds: Clears all min/max values

Figure 5. Gauge buttons

Changing the gauge configuration
The AEM Serial gauge comes configured with the black bezel, black pin guide, and the black faceplate. However, a silver bezel, a silver pin guide, and a white faceplate are also included in the gauge kit. To change the faceplate, pin guide, or bezel, orient the gauge so you are looking at the faceplate. Rotate the bezel counter-clockwise to unscrew it from the gauge cup. The bezel, lens, pin guide, rubber spacer, faceplate, diffuser, and anti-glare shield are all removable. Reassemble the gauge as shown in Figure 6. Make sure the small light holes in the faceplate, diffuser, and anti-glare shield line up with the light sensor on the circuit board. Do not over tighten the bezel when reassembling the gauge.

Wire Connections

RED *<Power>*
    Connect to a switched 10-18 volt power source.

BLACK *<Ground>*
    Connect to a clean power ground.

*BROWN *<Low Side 1>*
    Connect to negative side of warning device, 1 amp max.

ORANGE<Low Side 2>*
    Connect to negative side of warning device, 1 amp max.

GREEN ,<Not Used>

*optional

Visit the AEM electronics forum for instructions on how to use the Pro Gauge software.

AEM Electronics Warranty

Advanced Engine Management Inc. warrants to the consumer that all AEM Electronics products will be free from defects in material and workmanship for a period of twelve months from date of the original purchase. Products that fail within this 12-month warranty period will be repaired or replaced when determined by AEM that the product failed due to defects in material or workmanship. This warranty is limited to the repair or replacement of the AEM part. In no event shall this warranty exceed the original purchase price of the AEM part nor shall AEM be responsible for special, incidental or consequential damages or cost incurred due to the failure of this product. Warranty claims to AEM must be transportation prepaid and accompanied with dated proof of purchase. This warranty applies only to the original purchaser of product and is non-transferable. All implied warranties shall be limited in duration to the said 12-month warranty period. Improper use or installation, accident, abuse, unauthorized repairs or alterations voids this warranty. AEM disclaims any liability for consequential damages due to breach of any written or implied warranty on all products manufactured by AEM. Warranty returns will only be accepted by AEM when accompanied by a valid Return Merchandise Authorization (RMA) number. Product must be received by AEM within 30 days of the date the RMA is issued.

Please note that before AEM can issue an RMA for any electronic product, it is first necessary for the installer or end user to contact the tech line at 1-800-423-0046 to discuss the problem. Most issues can be resolved over the phone. Under no circumstances should a system be returned or a RMA requested before the above process transpires.

AEM will not be responsible for electronic products that are installed incorrectly, installed in a non approved application, misused, or tampered with.

Any AEM electronics product can be returned for repair if it is out of the warranty period. There is a minimum charge of $50.00 for inspection and diagnosis of AEM electronic parts. Parts used in the repair of AEM electronic components will be extra. AEM will provide an estimate of repairs and receive written or electronic authorization before repairs are made to the product.