AEM

Installation Instructions for 30-4113, 30-4123, 30-4213, 30-4223 0-5V AFR Gauge

WARNING:
This installation is not for the electrically or mechanically challenged! Use this product with **EXTREME** 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 UEGO Display Gauge is designed to complement your AEM 30-2300 or 30-2301 UEGO controller and features a digital readout and sweeping 24 color-coded light emitting diode (LED) display, providing immediate visual reference to the engine air fuel ratio. The AEM 0-5V AFR Display Gauge is designed to work with the AEM 30-2300 or 30-2301 UEGO controllers ONLY.

INSTALLATION

Disconnect the negative (-) battery cable. There are six wires from the AEM UEGO Gauge. Connection is shown below.

RED <*Power*>
> Connect to a switched 10-18 volt power source utilizing a 5A fuse.

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

ORANGE <*Signal In*>
> Connect to the Orange wire coming from the AEM UEGO controller.

BROWN <*Signal Ground*>
> Connect to the Brown wire coming from the AEM UEGO controller.

WHITE <*Analog Output*>
> Connects to any auxiliary unit that accepts a 0-5 volt input.
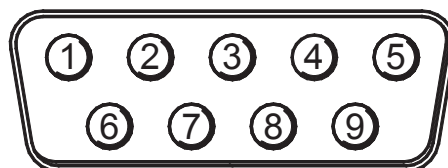
BLUE <*Serial Output*>
> Connects to a RS-232 com port for hyper-terminal data logging.

Analog Output

The White wire is a 0-5v analog output. This will output the same voltage as is input to the gauge on the Orange wire.

Serial Output

The serial output can be used for data logging when an EFI system is not accessible. To run the data stream, a RS-232 (DB-9) Female Receptacle shall be purchased.
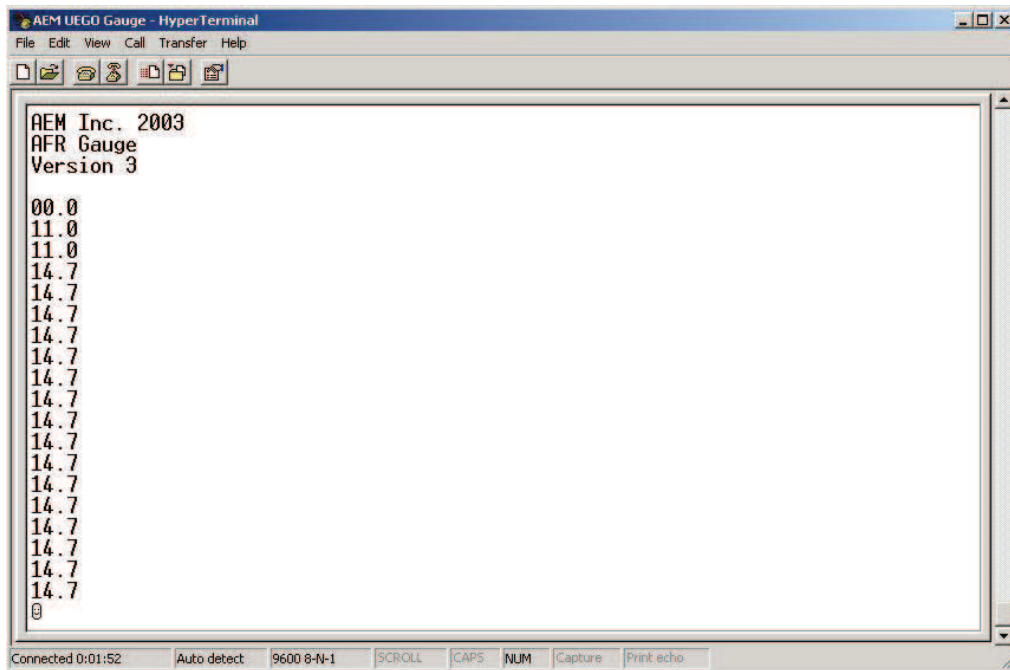

Wire View of RS-232 (DB-9) Male Plug

Two wires need to be connected to a RS-232 serial port. The BLUE wire from the AEM UEGO Gauge shall be connected to Pin #2 (RX) on the serial port for receiving data. Pin # 5 (GND) on the serial port shall be grounded. If a standard 9-pin serial cable is to be cut instead, the (RX) wire is typically RED and the (GND) wire is typically GREEN. However, this should be confirmed with a continuity tester before attempting.

Use HyperTerminal for testing the data stream. This software is found on most PCs. To find HyperTerminal go to: Start | All Programs | Accessories | Communications |

HyperTerminal. Name the New Connection and click OK. Set the COM port to the one being used and click OK.

Bits Per Second = 9600
Data Bits = 8
Parity = None
Stop Bits = 1
Flow Control = Hardware

Verify the settings above and click OK. When power is supplied to the AEM UEGO Gauge, AFR (or Lambda) data will be displayed, as shown below.

Data logging with HyperTerminal

12 MONTH LIMITED WARRANTY

Advanced Engine Management Inc. warrants to the consumer that all AEM High Performance products 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 AEM's option, 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. AEM does not warranty the UEGO sensor, please contact Bosch (888) 715-3616 for warranty claims. 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 Goods Authorization (RGA) number. Credit for defective products will be issued pending inspection. Product must be received by AEM within 30 days of the date the RGA is issued.

Please note that before AEM can issue an RGA for a UEGO Gauge, it is first necessary for the installer or end user to contact the EMS 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 RGA requested before the above process transpires.