

# ECM G100 Air-Fuel Ratio Gauge with Playback



- Wide AFR Measurement Range
- Fast Response
- Recording and Playback
- Black or White Backlit Gauge
- Easy Calibration in Air
- Linearized Analog Output

ECM's G100 series of Air-Fuel Ratio (AFR) gauges revolutionizes vehicle instrumentation and tuning by combining four important features into a single system: a true wide-range AFR sensor, a backlit 270-degree sweep gauge, data recording with playback, and a linear 0 to 5 volt analog output.

The most important component of the system is the true wide-range, 5-wire, air-fuel ratio sensor (not a production stoichiometric sensor). This sensor provides fast, accurate AFR measurements over the full operating range of performance engines. The sensor is mounted in the engine's exhaust using the supplied 18mm mounting boss.

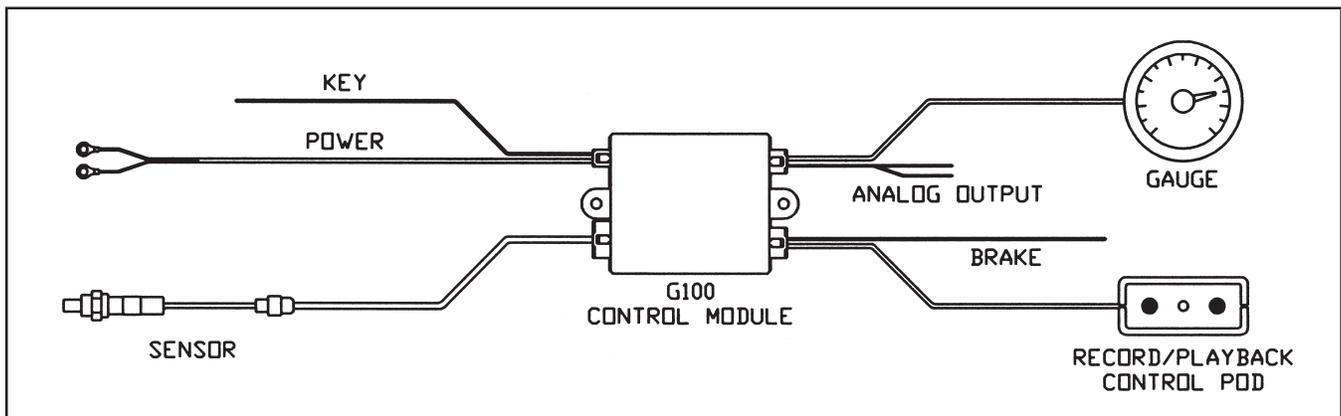
Data recording can be triggered either manually using the buttons on the Record/Playback Control Pod, or automatically by the release of a wheel or transmission brake using a 12 volt signal. Recordings of up to one minute can be made and the data is retained even if the vehicle's battery is disconnected. Holding down the Playback button plays back the AFR data on the gauge and the analog output. The 5 ft. pod cable allows the buttons to be mounted conveniently for the driver. The pod's buttons can also be removed and integrated into the vehicle's dashboard.

The precision 270-degree sweep gauge provides a fast, accurate, and attractive display of real-time and recorded AFR data. The gauge has a black or white backlit face, illuminated pointer, and is highly visible in both daylight and night conditions.

An air-calibration feature is provided to maintain the system's accuracy in case of sensor ageing or large altitude changes. The system is easily calibrated by holding the sensor in air and adjusting the calibration control.

The linear 0 to 5 volt analog output is suitable for input into an external data acquisition system or an engine controller for real-time AFR control.

## System Overview



## Specifications

<b>Measurement Range:</b> 9.0 to 16.0 AFR	<b>Calibration:</b> Hold sensor in air
<b>Accuracy:</b> 1.6%	<b>Power:</b> 11 to 28V, Key activated
<b>Recording Duration:</b> Up to 1 minute	<b>Cables:</b> 11'(AFR), 15'(Power), 5'(Pod)
<b>Recording Activation:</b> Button or 12V signal	<b>Sensor:</b> 18mm x 1.5mm thread
<b>Voltage Output:</b> 0 to 5V linear in AFR	<b>Module Size:</b> 4" x 3.5" x 1"

## Ordering Information (Four Kits Available)

- G100-RAC\*** **Kit:** 2-1/16" Gauge with Record/Playback and Analog Output
- G100-RC\*** **Kit:** 2-1/16" Gauge with Record/Playback (no Analog Output)
- G100-AC\*** **Kit:** 2-1/16" Gauge with Analog Output (no Record/Playback)
- G100-C\*** **Kit:** 2-1/16" Gauge (no Record/Playback or Analog Output)
- \*Gauge Color:** -B (Black Face, White Backlight), -W (White Face, Red Backlight)

All kits include gauge, control module, AFR sensor, AFR cable, power cable, sensor mounting boss and plug, and instruction manual. Optional DJET 1000 Adapter Module brings real-time AFR into any Dynojet™ dynamometer that has a WinPep™ hardware stack.

**ECM** ENGINE CONTROL  
AND MONITORING

Los Altos, CA • 94023-0040 • Tel: 408-734-3433 • Fax: 408-734-3432 • [www.ecmmotorsports.com](http://www.ecmmotorsports.com)

Specifications subject to change without notice. Dynojet and WinPep are trademarks of Dynojet Research, Inc. Copyright © 2003, ECM. Printed in the U.S.A.