











Interface with Narrowband Air/Fuel Gauges

PLXApp001 (V1.1) July 18, 2005

Summary

This application note describes how the M-Series/R-Series simulated narrowband output is connected to narrowband 0-1V air/fuel ratio gauges. The R-Series/M-Series narrowband output signal (gray wire) is capable of interfacing with the AutoMeter Air/Fuel Ratio gauges as well as other 0-1V narrowband gauges on the market. This is ideal in situations where the stock narrowband sensor has been replaced by our wideband oxygen sensor controller and a visual reference is needed to indicate the behavior of the narrowband output. This is also very useful for monitoring "closed loop" ECU operation.

Compatible Autometer Gauges

	2675	Z-Series Air/Fuel Ratio (Black Dial & Bezel)
	3375	Sport-Comp Air/Fuel Ratio (Black Dial, Silver Bezel)
	4175	Lunar Air/Fuel (White Dial, Silver Bezel, Black Numbering & Increments, and Green Nite Glow)
	4375	Ultra-Lite Air/Fuel Ratio (Silver Dial, Silver Bezel)
	4775	Carbon Fiber Air/Fuel Ratio (Carbon Fiber Dial, Silver Bezel)
	5775	Phantom Air/Fuel Ratio (White Dial, Black Bezel)
	6175	Cobalt Air/Fuel Ratio (Black Dial, Anodized Bezel, White Numbering & Blue Accents)
	7175	C2 Air/Fuel Ratio (White Dial-Blue at night, Chrome Bezel, Orange Pointer, Black Numbering)

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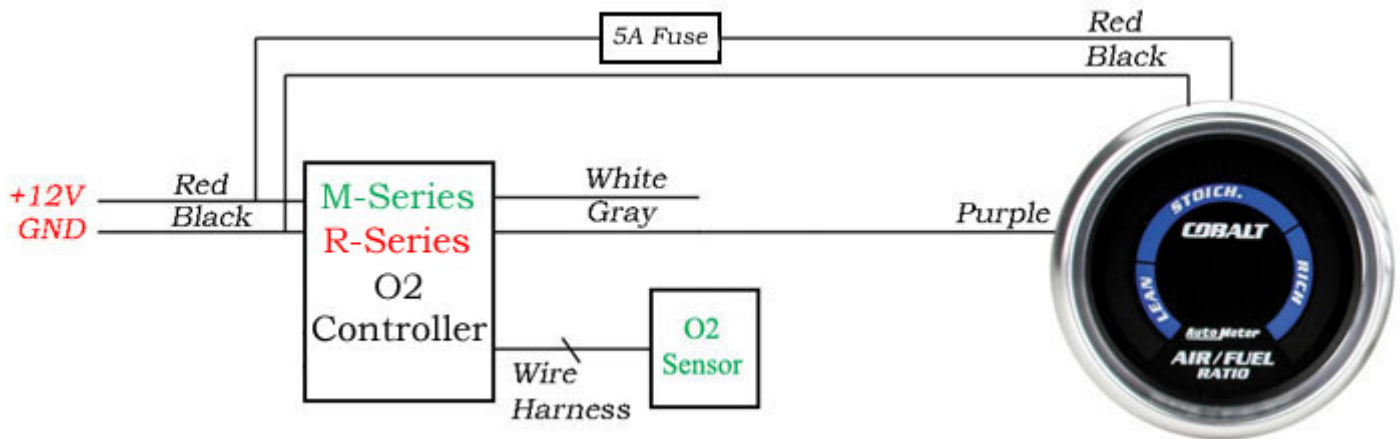
(408)745-7591



Other Compatible Gauges

Virtually any narrowband gauge will also apply to this application note, as long as the gauge accepts a 0-1V input signal.

Connection Diagram



Special Considerations

It is important that the black and purple wires from the Air/Fuel Ratio Gauge is connected as close as possible to the R-Series/M-Series unit. Long wires introduce unwanted resistance, and a different reference ground will be seen between the R-Series/M-Series and the gauge. By keeping the wires as short as possible the gauge will display more accurate readings.

Revision History

Version 1.0 (7/7/04)	Initial release
Version 1.1 (7/18/05)	Revised format to PDF Added "Other Compatible Gauge" Added text for R-Series