

## ZR-1 3 Digit Wideband Air/Fuel and Lambda Gauge

Congratulations on purchasing the Zeitronix ZR-1 Air/Fuel and Lambda Gauge.

The Gauge works with the Zeitronix Zt-2 Wideband AFR meter and Datalogging System. The ZR-1 plugs into the Zt-2 DATA port. For clean and easy plug and play installation, power and data is supplied from the Zt-2 DATA port. The ZR-1 cable length is 5 ft (1.5m)

### Items included

ZR-1 Gauge	4-40 set screws 2 pc
Data Splitter	4-40 nuts 2 pc

### INSTALLATION INSTRUCTIONS

Power down the Zt-2, which usually requires turning off your car's ignition. Plug the ZR-1 directly into the Zt-2 DATA port or use the signal splitter for sharing the DATA connection with a PC for datalogging. Up to 3 Zeitronix displays can be used with the Zt-2 2010 model at the same time. These displays may be any combination of the LCD, ZR-1 or ZR-2 including all 3 being of the same type. For the 2009/earlier Zt-2's only one display at a time is recommended.

Power up the Zt-2. The ZR-1 gauge will power up in a self-test mode showing "8.8.8." on the 3-digit numeric display up and briefly light up each LED diode. The ZR-1 gauge is set up as the AFR gauge by default, thus "AFr" appears on the 3-digit display after start up. See SETTING UP THE GAUGE below for Lambda start up.

### ZR-1 BUTTON FUNCTIONALITY

#### ZR-1 Gauge in AFR mode

By briefly pressing the button the 3-digit numeric display shows the current gauge mode. "AFr" is shown on the 3 digit display for 1 second then the gauge returns to the operating mode showing the AFR number.

Holding the button for 1 second puts the ZR-1 gauge in a Peak and Hold mode. "PAF" is shown on the 3-digit numeric display. After 1 second the gauge displays a Peak and Hold AFR number.

While in a Peak and Hold mode briefly pressing the button shows current gauge mode "PAF" on the 3-digit numeric display.

Holding the button for 1 second puts the ZR-1 gauge back into the AFR mode. A peak and Hold value is erased after returning back to the AFR mode.

#### ZR-1 Gauge in Lambda mode

By briefly pressing the button, the 3-digit numeric display shows the current gauge mode. "Lbd" is shown on the 3 digit display for 1 second then the gauge returns to the operating mode showing the Lambda number.

Holding the button for 1 second puts the ZR-1 gauge in a Peak and Hold mode. "PLb" is shown on the 3-digit numeric display. After 1 second the gauge displays a Peak and Hold Lambda number.

While in a Peak and Hold mode briefly pressing the button shows current gauge mode "PLb" on the 3-digit numeric display.

Holding the button for 1 second puts the ZR-1 gauge back into the Lambda mode. A peak and Hold value is erased after returning back to the Lambda mode.

### SETTING UP THE ZR-1 GAUGE

The ZR-1 gauge can be set up to start up as AFR or Lambda gauge.

The ZR-1 gauge is set up from the factory as the AFR gauge. If you intend to use the ZR-1 as AFR gauge skip this paragraph.

To setup the ZR-1 gauge in Lambda mode, power down the gauge. Power down the gauge by powering down the Zt-2, which usually requires turning off your car's the ignition. Hold the ZR-1 gauge button and power up the ZR-1 gauge by turning on the ignition. The ZR-1 Gauge will power up with a self-test lighting up "8.8.8." and briefly light up each LED diode. After the self test the gauge will enter the set up mode by displaying "r 1". Now release the button. "AFr" appears on the 3-digit numeric display. By briefly pressing the button cycle through "AFr" and "Lbd" shown the on the 3-digit numeric display. Chose AFR or Lambda mode. By not pressing the gauge button for 3 seconds the gauge comes back to the operation mode. Chosen AFR or Lambda mode is saved in the ZR-1 internal memory and the gauge will power up in chosen AFR or Lambda mode.

### MOUNTING OPTIONS

The ZR-1 gauge can be surface mounted almost anywhere inside the cars cabin using a piece of Velcro or double sided tape (not included). The ZR-1 base allows the gauge to be mounted in a standard 2" 1/16 (52mm) gauge pod. For additional mounting options the package includes 2 set screws and 2 nuts.

### Warning!

For automotive use only.

This product is for off road use only.

Never place in a location, which obstructs the view. Never tune the car while driving.

To be used with Zeitronix Zt-2 or Zt-3 Wideband AFR Meter only.

Tune responsibly. Zeitronix Inc. is not responsible for any damages.