

SLC Gauge User Manual

Warning

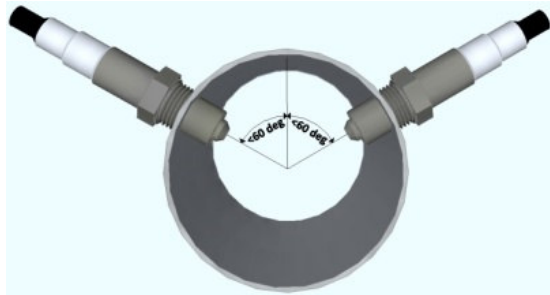
- SLC Gauge is designed for Gasoline fuel only.
- Lambda Sensor gets very hot during normal operation, be careful when handling it.
- Do not install Lambda Sensor in such a manner that the unit is powered before your engine is running. An engine start can move condensation in your exhaust system to the sensor, if the sensor is already heated this can cause thermal shock and cause the ceramic internals inside the sensor to crack and deform.
- While the Lambda Sensor is in an active exhaust stream, it must be powered. Carbon from an active exhaust can easily build up on an unpowered sensor and ruin it.
- Lambda sensor life when used with leaded fuels is between 100-500 hrs. The higher the metal content the shorter the life of the Lambda sensor.

Package Contents

1x SLC Gauge, 1x Metal bracket, 2x washer, 2x nut, 2x bolt, 1x Combination cable; sensor+power+input+outputs, 1x O2 Bung

Exhaust Installation

- Lambda Sensor should be installed between the 10 o'clock and the 2 o'clock position, less than 60 degrees from vertical, this will allow gravity to remove water condensation from the sensor.
- For all Oxygen sensor installations the sensor must be installed before the catalytic converter.



For normally aspirated engines the sensor should be installed about 2ft from the engine exhaust port. For Turbocharged engines the sensor should be installed about 3ft from the engine exhaust port after the turbocharger. For Supercharged engines the sensor should be installed 3ft from the engine exhaust port. Installing the sensor too close to the engine exhaust port may overheat the sensor, installing the sensor too far from the exhaust port may leave the sensor too cool, both will cause damage to the sensor and lead to wrong measurements.

Wiring

If you plan on using SLC Gauge as just a visual display of Air to Fuel ratios

- Only Red, Black, and Blue wires need to be connected
- The Black and Blue wires can be grounded at the same location

If you plan on interfacing the Linear Output to a device such as an ECU or datalogger

- Black wire should be grounded where interfacing device is grounded
- Blue wire should be grounded to engine block or chassis

Wire Color	Name	Connects to	Note
Red	Power	Switched 12[v]	12[v] should be live only when engine is running
Black	Electronics Ground	Ground	Ground
Blue	Heater Ground	Ground	Ground
Yellow	Linear Output	ECU/Datalogger/etc... if required	0[v] @ 10[AFR] Linear to 5[v] @ 20[AFR] for gasoline
White	Simulated Narrowband Output	ECU if required	Switch point @ 14.7[AFR] for gasoline fuel
Orange	Dim	Headlight Power	Half brightness when @ 12[v], full brightness when < 12[v]. Leave disconnected if night dimming is not required.

Warranty

14Point7 warrants SLC Gauge to be free from defects for 2 years. Sensors if purchased from 14Point7 carry no warranty whatsoever. Warranty does not cover user error and abuse.

Disclaimer

14Point7 is liable for damages only up to the purchase price of its products. 14Point7 products should not be used on public roads.