



VIEW. CAPTURE. ANALYZE.

INNOVATE
MOTORSPORTS **15**
CATALOG

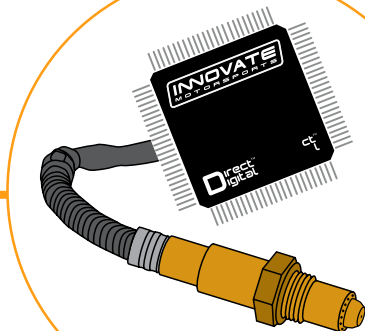
Data Acquisition - Gauges - Solenoid Control - Wideband O² Control

The INNOVATE MOTORSPORTS Difference.

All Innovate wideband products feature patented DirectDigital™ measurement technology. DirectDigital™ applies advanced digital signal processing (DSP) algorithms to zirconia sensing elements, delivering superior response times, self-calibration to compensate for sensor drift, and advanced diagnostics. DirectDigital™ – enabling the next generation of high-performance, high-efficiency engines.

“Why do I need to calibrate the O² sensor with Innovate products?” The answer is simple... Accuracy!

Innovate Motorsports is the only wideband O² device manufacturer on the market that allows the user to field calibrate the O² sensor. Our patented sensor calibration allows compensation for the two main causes of inaccurate air/fuel ratio data; sensor wear and altitude. The alternative to calibrating your sensor in the field is to rely on the sensor's Bosch™ factory calibration. The Bosch™ factory sensor calibration is done using a fixed atmospheric pressure value that may be incorrect for your location from the start!



Altitude Compensation

Changes in altitude will also affect the accuracy of the measurements. It is important to note the Bosch™ spec tests the accuracy of the sensor at 14.7 PSI atmospheric pressure (sea level). In the same way that the pre-calibrated resistor can not compensate for sensor wear, it can not compensate for changes in altitude. To illustrate how important a difference in altitude is, we can look at the difference between Innovate Motorsports' office in Irvine, CA which is at sea level, and Willow Springs Raceway in Rosamond, CA. The difference in altitude is approximately 2400 ft. between the two locations; this will make a difference in your measurements by as much as .2 AFR. If you do not have the ability to calibrate your sensor, and you happen to live in Denver (5280 ft. above sea level), your readings will be incorrect right from the start and will progressively get worse as the sensor degrades.

Sensor Wear

Most popular wideband systems, including Innovate, utilize the Bosch™ LSU4.2 or 4.9 wideband O₂ sensor. This sensor has an integrated calibration resistor located in the connector on the plug end. Like all sensors in a vehicle, O₂ sensors wear over time and being able to recalibrate the sensor is the only way to ensure continued accuracy. Innovate Motorsports is the ONLY wideband controller manufacturer that makes it possible for the sensor to be recalibrated because we do not rely on or utilize the Bosch™ calibration resistor. Without the ability to calibrate, your wideband will continue to rely on the Bosch™ factory pre-calibrated resistor settings as your sensor wears. The results of doing so have been ***published by Bosch™** in a technical document referenced below:

According to the Bosch™ spec the sensor leaves the factory with a \pm margin of error of .15 AFR. In **IDEAL** lab conditions sensor wear will cause the sensor to drift to an accuracy of \pm .29 AFR after approximately 500 hours and \pm .59 AFR after approximately 2000 hours. In aftermarket performance applications where engines typically see richer conditions with higher exhaust gas temperatures, the sensor will degrade at a greatly accelerated rate compared to the Bosch™ spec. Other factors such as detergents, additives in the fuel, sensor placement and lead will also accelerate sensor wear even further. The Innovate Motorsports patented digital wideband sensor controller technology eliminates any and all inaccuracies caused by sensor wear. The simple and quick free air calibration process will ensure that you have measurements accurate to \pm .1 AFR for the life of the sensor.

*Source: Bosch™ Y258 K01 005-000e

Conclusion

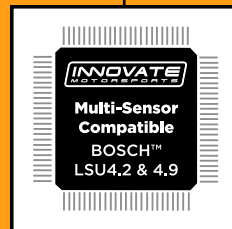
The purpose of installing a wideband O₂ system in a high performance engine is to accurately monitor the engine's operating air/fuel ratio to ensure maximum performance and safety. If you are using a wideband system that does not allow the sensor to be recalibrated, you are putting your engine at risk. Whether you only perform the simple calibration once when you first install a sensor, or at the recommended intervals; Innovate Motorsports' patented digital wideband O₂ sensor controller technology will ensure that you have the **fastest** and most **accurate** wideband instrument available at any price.

The difference between a wideband that does not require calibration and an Innovate Motorsports wideband is ACCURACY.



ANNOUNCING MULTI-SENSOR COMPATIBILITY BOSCH™ LSU4.2 & 4.9

- All current products featuring our patented DirectDigital™ wideband sensor control technology allow for **LSU4.2 & 4.9 compatibility**
- Why upgrade to the LSU4.9?
 - Improved internal design makes the sensor more durable in all applications
 - Improved thinner sensor element lowers the response time
- Want to upgrade to the new LSU4.9 sensor? No need to buy a new product! Upgrading is simple! Sensor & sensor cable kits are available (See below)
- Compatible products include all: LC-2, LM-2, MTX-L, SCG-1, and future products!



Upgrade Kits for Bosch™ LSU4.9 Conversion:

3896 Bosch™ LSU4.9 Sensor, 3 ft. Cable

3897 Bosch™ LSU4.9 Sensor, 8 Ft. Cable (Most Common)

3898 Bosch™ LSU4.9 Sensor, 18 Ft. Cable

DLG-1: DUAL LAMBDA O² GAUGE

New



- Monitor left and right exhaust banks on one single gauge!
- Perfect for all V configured engines
- Plug & Play setup for both O² sensors
- No PC required for additional configuration
- 52mm (2 1/6") diameter gauge body
- Interchangeable faceplates and bezels: Black and silver bezel, black and white faceplates included
- User configurable OLED display (AFR or Lambda)
- Multiple ways to display data on gauge
- Patented DirectDigital™ wideband sensor control, the only 100% digital wideband air/fuel ratio technology!
- Wideband O² compatible with several fuel types (Leaded, Unleaded, Diesel, E85 & more)
- Ability to calibrate O² sensors for maximum accuracy
- Configurable linear 0-5v analog output for wideband O² for use with piggy back or stand alone ECU's as well as external data loggers
- Innovate MTS serial in/out (for use with other Innovate & 3rd party MTS enabled devices to add additional logging channels)
- Datalog both O² channels using powerful LogWorks software on your PC

3891 DLG-1: Dual Lambda O² Gauge Complete Kit, includes Harness, O² sensors, & Bungs

SCG-1: SOLENOID BOOST CONTROLLER

Easy-to-use, intelligent boost control
with built-in wideband technology.

- All-in-one, intelligent boost control and wideband air/fuel ratio gauge
- Controller and display housed in 52mm (2 1/6") diameter gauge body
- Interchangeable faceplates and bezels: Black and silver bezel, black and white faceplates included
- No PC required for configuration
- OLED user configurable display
 - Boost, shift light, Air/Fuel ratio
 - AFR or Lambda, inHG, PSI, kPa, or BAR
- Includes high resolution solenoid
- 4 BAR map sensor, pressure range -29 inHG to 43.5 PSI (-1 to 3 BAR)
- User programmable boost cut safety using Air/Fuel and Pressure references
- Programmable solenoid duty cycle with separate gain control function
- Peak hold function
- Patented DirectDigital™ wideband sensor control, the only 100% digital wideband air/fuel ratio technology!
- Wideband O² compatible with several fuel types (Leaded, Unleaded, Diesel, E85 & more)
- Ability to calibrate O² sensor for maximum accuracy
- Configurable linear 0-5v analog output for wideband O² for use with piggy back or stand alone ECU's as well as external data loggers
- Innovate MTS serial in/out (for use with other Innovate & 3rd party MTS enabled devices to add additional logging channels)
- 4 channels of log-able data with powerful LogWorks PC Software (MAP, RPM, A/F, WG duty)

3882 SCG-1: Solenoid Controller includes Solenoid, 4-Bar MAP Sensor, & O² Sensor, & Bung



POWER SAFE

The PowerSafe gauges combine our patented DirectDigital™ O² sensor control technology with application specific sensors, an OLED display, and a smart safety override circuit for your high performance vehicle. Our PowerSafe technology can disable your factory or aftermarket boost control solenoid forcing the system to spring pressure. In nitrous applications, our PowerSafe technology will disable your nitrous solenoid to keep your engine safe. The PowerSafe gauges offer the looks, safety and performance enthusiast's demand!



New

- All-in-one, boost safety override and wideband air/fuel ratio gauge
- 52mm (2 1/6") diameter gauge body
- Interchangeable faceplates and bezels: Black and silver bezel, black and white faceplates included
- No PC required for configuration
- OLED user configurable display
 - Boost, shift light, Air/Fuel ratio
 - AFR or Lambda, inHG, PSI, kPa, or BAR



- 4 BAR map sensor, pressure range -29 inHG to 43.5 PSI (-1 to 3 BAR)
- User programmable boost cut safety using Air/Fuel and Pressure references
 - Boost cut by pressure
 - Boost cut by lean air/fuel condition
- Valet mode that will temporarily hold the system at spring pressure
- Peak hold function
- Patented DirectDigital™ wideband sensor control, the only 100% digital wideband air/fuel ratio technology!
- Wideband O² compatible with several fuel types (Leaded, Unleaded, Diesel, E85 & more)
- Ability to calibrate O² sensor for maximum accuracy
- Configurable linear 0-5v analog output for wideband O² for use with piggy back or stand alone ECU's as well as external data loggers
- 30A Relay included
- Innovate MTS serial in/out (for use with other Innovate & 3rd party MTS enabled devices to add additional logging channels)
- 3 channels of log-able data with powerful LogWorks PC Software (MAP, RPM, A/F)

3892 PSB-1: PowerSafe Boost Gauge Complete Kit, includes Harness, 4 Bar MAP, Relay, O² Sensor, & Bung

PSN-1: PowerSafe Nitrous Bottle Pressure & Air/Fuel Ratio Gauge

- All-in-one, Nitrous safety override and wideband air/fuel ratio gauge w/RPM window switch
- 52mm (2 1/6") diameter gauge body
- Interchangeable faceplates and bezels: Black and silver bezel, black and white faceplates included
- No PC required for configuration
- OLED user configurable display
 - Nitrous Bottle Press., shift light, Air/Fuel ratio
 - AFR or Lambda, inHG, PSI, kPa, or BAR
- 1500 PSI nitrous bottle pressure sensor



4 BAR map sensor
included with PSB-1
PowerSafe Boost &
Air-Fuel Ratio Gauge

1500 PSI Nitrous Bottle
Pressure Sensor included
with PSN-1 PowerSafe
Nitrous Bottle Pressure
& Air-Fuel Ratio Gauge



- User programmable nitrous safety cut using Air/Fuel ratio and bottle pressure references
 - Nitrous cut by lean air/fuel condition
 - Nitrous cut by minimum bottle pressure
- User programmable RPM window switch range, 10 RPM increments
- 30A Relay included
- Patented DirectDigital™ wideband sensor control, the only 100% digital wideband air/fuel ratio technology!
- Wideband O² compatible with several fuel types (Leaded, Unleaded, Diesel, E85 & more)
- Ability to calibrate O² sensor for maximum accuracy
- Configurable linear 0-5v analog output for wideband O² for use with piggy back or standalone ECU's as well as external data loggers
- Innovate MTS serial in/out (for use with other Innovate & 3rd party MTS enabled devices to add additional logging channels)
- 4 channels of log-able data with powerful LogWorks PC Software (MAP, RPM, A/F, Nitrous solenoid active)

3893PSN-1: PowerSafe Nitrous Bottle Pressure Gauge Complete Kit, includes Harness, Pressure Sensor, Relay, O² Sensor, & Bung

New



MTX-L: WIDEBAND AIR/FUEL RATIO GAUGE



All-in-One!

- Patented DirectDigital™ wideband sensor control, the only 100% digital wideband air/fuel ratio technology!
- Digital display in AFR or Lambda
- 52mm (2 1/6") diameter gauge body
- Built-in Direct Digital™ Wideband Controller reduces wiring and simplifies installation
- Wideband O₂ Sensor is compatible with all fuel types (Leaded, Unleaded, Diesel, Methanol, E85, etc)
- Ability to calibrate O₂ sensor for increased accuracy
- (2) Configurable linear 0-5v analog output for wideband O₂ for use with piggy back or stand alone ECU's as well as external data loggers
- Interchangeable faceplates and bezels: Black and silver bezel, black and white faceplates included
- Large digital readout and programmable "Digital Needle" provides the functionality of a needle style gauge with the pinpoint accuracy of a digital display
- Datalog using LogWorks on your PC
- Innovate MTS serial in/out (for use with other Innovate & 3rd party MTS enabled devices to add additional logging channels)

Innovate DirectDigital™ Display Range

Fuel Type	Low	High
Gasoline	7.35	22.4
Lambda	0.50	1.52
Diesel	7.3	99.9
Methonal	3.2	9.95
E85	4.9	14.93
LPG (Propane)	7.85	23.91

3844 MTX-L: Air/Fuel Ratio Gauge Complete Kit, includes Harness, O₂ Sensor, & Bung

3845 MTX-L: Air/Fuel Ratio Gauge Complete Kit, Powersports applications

MTX-D: DUAL FUNCTION GAUGES

One Gauge, Two Functions!

- 52mm (2 1/6") diameter gauge body
- Interchangeable faceplates and bezels: Black and silver bezel, black and white faceplates included
- Large digital readout and programmable "Digital Needle" provides the functionality of a needle style gauge with the pinpoint accuracy of a digital display
- Datalog using LogWorks on your PC
- Innovate MTS serial in/ out (for use with other Innovate & 3rd party MTS enabled devices to add additional logging channels)

Dual Function



VACUUM / BOOST & SHIFT LIGHT

- Boost: pressure range -29 inHG to 43.5 PSI (-1 to 3 BAR)
- Display as either inHG/PSI or BAR (Digital Display)
- Over boost warning (Digital Display)
- Shift: Up to 20460 RPM (max)
- Progressive Shift Light or Single Stage Shift Light (outer LEDs)
- Pressure: 0-100 PSI (7 BAR)

3851... MTX-D: Digital, Vacuum / Boost & Shift Light Gauge Kit



OIL TEMPERATURE & PRESSURE

- Display in either PSI or BAR (Digital Display)
- Programmable Low Oil Pressure Warning (Digital Display)
- Temp: 120-280 °F (49-138 °C)
- Change exterior LED as a fill bar or light a single indicating LED
- Programmable exterior LED ranges vs. Color
- Programmable unit of measure as °F or °C
- Programmable oil temperature warning (outer LED)

3852 ... MTX-D: Digital, Oil Temperature & Pressure Gauge Kit



WATER TEMPERATURE & BATTERY VOLTAGE

- Water Temp: 120-280 °F (49-138 °C)
- Display in either °F or °C
- Water temp warning (Digital Display)
- Battery V: Volts 6 - 25 VDC
- Programmable outer LED ranges vs Color
- Programmable voltage warning (outer LEDs)

3853... MTX-D: Digital, Water Temperature & Battery Voltage Gauge Kit



(SINGLE FUNCTION)

EXHAUST GAS TEMPERATURE

- Temp: 32 - 1999 °F (0-1093 °C)
- Change from EGT to CHT range. CHT range allows greater resolution
- Display in either °F or °C
- Change exterior LED as a fill bar or light a single indicating LED
- Programmable outer LED's needle range
- Programmable temperature threshold warning.

3854 ... MTX-D: Digital, Exhaust Gas Temperature (EGT) Gauge Kit



MTX-A: ANALOG GAUGES



MTX-AL

- Superior needle holding force for high shock and high vibration applications
- High Performance, High Torque, 270° Stepper Motor
- Programmable warning indicator and User selectable background lighting
- Microprocessor driven!
- Interchangeable bezels: Black and silver bezel included
(Faceplate color black or white, not interchangeable. See part description.)

Black
Face

White
Face

- | | | |
|------------|------------|--|
| 3855 | 3856 | MTX-AL: Analog, Air/Fuel Ratio Gauge Kit, Includes Harness, O ₂ Sensor & Bung |
| 3857 | 3858 | MTX-A: Analog, Vacuum / Boost Gauge Kit |
| 3859 | 3860 | MTX-A: Analog, Oil Pressure Gauge Kit |
| 3861 | 3862 | MTX-A: Analog, Water or Oil Temperature Gauge Kit |
| 3863 | 3864 | MTX-A: Analog, Fuel Pressure Gauge Kit |
| 3865 | 3866 | MTX-A: Analog, Exhaust Gas Temperature Gauge Kit |



AIR / FUEL RATIO



OIL PRESSURE



OIL OR WATER
TEMPERATURE



FUEL PRESSURE



EXHAUST GAS
TEMPERATURE (EGT)

LC-2: DIGITAL WIDEBAND “LAMBDA” O² CONTROLLER



- Patented DirectDigital™ wideband sensor control, the only 100% digital wideband air/fuel ratio technology!
- Integrated dual-color status LED (Green/Red)
- Optional sensor cable lengths available: 3ft, 8ft, and 18ft
- Wideband O² compatible with several fuel types (Leaded, Unleaded, Diesel, E85 & more)
- Ability to calibrate O² sensors for maximum accuracy
- Configurable linear 0-5v analog output for wideband O² for use with piggy back or stand alone ECU's as well as external data loggers
- Innovate MTS serial in/out (for use with other Innovate & 3rd party MTS enabled devices to add additional logging channels)
- Datalog O² channel using powerful LogWorks software on your PC

3877 LC-2: Wideband Controller, 8ft Sensor Cable, O² Sensor & Bung (Supersedes LC-1 P/N: 3769)

3881 LC-2: Wideband Controller & 8ft Sensor Cable (Supersedes LC-1 P/N: 3744)

3884 LC-2: Wideband Controller, 3ft Sensor Cable, O² Sensor & Bung

DB SERIES GAUGES

The Innovate DB Air/Fuel Ratio Gauges (52mm, 2 1/16") feature a bright LED (available in blue, red, or green) and is blacked out when powered off.

3793 DB Gauge Blue, Accessory for LC-1, LC-2, or LM-2

3794 DB Gauge Red, Accessory for LC-1, LC-2, or LM-2

3795 DB Gauge Blue Kit: Complete Air/Fuel Ratio Gauge Kit, Incl. LC-2 & O² Sensor

3796 DB Gauge Red Kit: Complete Air/Fuel Ratio Gauge Kit, Incl. LC-2 & O² Sensor

3872 DB Gauge Green, Accessory for LC-1, LC-2, or LM-2

3873 DB Gauge Green Kit: Complete Air/Fuel Ratio Gauge Kit, Incl. LC-2 & O² Sensor



PL-1: POCKET LOGGER – INNOVATE MTS DATALOGGER



- Record up to 32-channels of Innovate MTS compatible devices
- Sample rate of 12 times per second
- Log directly to SD card (included) 2GB SD = 580 hours of recording!
- Playback log data with powerful LogWorks software (available for download)
- Innovate MTS serial in/out (for use with other Innovate & 3rd party MTS enabled devices to add additional logging channels)

3875 PL-1: Pocket Logger Kit (See page 18-19 for example log chains (MTS))

SSI-4: SIMPLE SENSOR INTERFACE

- Simple sensor device that adds 4-inputs to an MTS Log Chain
- Channel 1 is a direct RPM input by default, and can also be configured for external 0-5V or frequency.
- Channels 2-4 are configured to digitize external 0-5V analog signals by default but they can setup to directly measure frequency (for example: driveshaft speed or injector duty cycle).

3783 SSI-4: Simple Sensor Interface



TC-4: THERMOCOUPLE AMPLIFIER

- Thermocouple amplifier that adds 4-inputs to an MTS Log Chain
- Inputs of the TC-4 can be configured by the user for either EGT range (32-1999 °F, 0-1093 °C) or for CHT range to measure cylinder head temperatures (32-572 °F, 0-300 °C).
- The TC-4 can also be used to measure other temperature metrics such as intercooler inlet and outlet temp, catalytic converter temp, transmission temp, and more.

3784 TC-4: Thermocouple Amplifier

LMA-3: "AUXBOX" MULTI-SENSOR DEVICE

- Multi-sensor device with 5 built-in sensors for the Innovate MTS Log Chain
- 5v power supply for optional external sensors
- 1-bar to 3-bar pressure sensor (MAP, Vacuum, Boost, etc.)
- Tach signal (RPM)
- Thermocouple amplifier (EGT, CHT, etc.)
- Duty cycle (dwell) sensor (or frequency)
- 2-axis accelerometer (acceleration Gs, braking Gs, and cornering Gs)

3742 LMA-3: "AuxBox" Multi-Sensor Device



OT-2: ALL-IN-ONE WIRELESS METER FOR IPHONE™/ IPOD TOUCH™ / IPAD™ / OR PC

OT-2

The OT-2 is a simple device that wirelessly connects your iPhone, iPod Touch or iPad, to your vehicle. When used with the free LogWorks Mobile app, the OT-2 transforms your device into a wireless Gauge, Dyno, OBD-II Scan Tool, Efficiency Meter and Datalogger!

For OBD-II vehicles 1996 and up



- GAUGE** – OBD-II or Innovate MTS display
- DYNO** – Measure vehicle performance
- EFFICIENCY METER** – Learn to drive more efficiently!
- OBD-II SCAN TOOL** – Wirelessly view diagnostic trouble codes (DTCs)

3831..... OT-2: "OpenTune" OBD-II/CAN Wireless (Wifi) Interface

3832..... OT-2: "OpenTune" Interface with LC-2 Wideband Controller & O₂ Sensor

POWERED BY **LogWorks Mobile**. FREE APP!



LM-2: DIGITAL AIR/FUEL RATIO METER



The LM-2 combines an air/fuel ratio meter, a full-function 32-channel datalogger, and powerful logging software to deliver a complete tuning workshop for less than the cost of one dyno day. Whether you have a piggy-back fuel controller, carburetors, aftermarket ECU, OBD-II tuning software, or a flash/chip programmer, an LM-2 is the measurement tool you need to dial in maximum HP. The meter's digital signal processing technology provides data on exactly how rich or lean an engine is running at any load. The LM-2's self-calibrating circuitry also compensates for changes in temperature, altitude, and sensor condition.

- Patented DirectDigital™ wideband sensor control, the only 100% digital wideband air/fuel ratio technology!
- Single or dual wideband O² sensor versions available
- High contrast LCD display
- Display in AFR or Lambda, metric or imperial
- Wideband O² compatible with several fuel types (Leaded, Unleaded, Diesel, E85 & more)
- Ability to calibrate O² sensors for maximum accuracy
- RPM input (direct frequency or with optional inductive clamp, P/N: 3834)
- 4 fully-differential analog inputs and 2 configurable analog outputs
- OBD-II Scan Tool – Read/Clear DTCs, and log up to 16 channels of OBD-II / CAN Data
- Datalog up to 32-channels directly to SD memory card (included in Complete Kits)
- 16v DC compatible
- Configurable linear 0-5v analog output for wideband O² for use with piggyback or standalone ECU's as well as external data loggers
- Optional sensor cable lengths available: 8ft (included) or 18ft
- USB connection to your PC
- Playback datalog on screen or with powerful LogWorks PC software
- Innovate MTS serial in/out (for use with other Innovate & 3rd party MTS enabled devices to add additional logging channels)

Complete Kits include: wideband O² sensor (x2 for Dual Channel Kit), 8 ft sensor cable (x2 for Dual Channel Kit), cigarette-lighter power adapter, analog in/out cable, OBD-II cable, SD memory card, USB PC cable, weld-in bung and plug, carrying case, and manual

Basic Kits include: wideband O² sensor (x2 for Dual Channel Kit), 8 ft sensor cable (x2 for Dual Channel Kit), cigarette-lighter power adapter, USB PC cable, weld-in bung and plug, and manual

3806 LM-2 Complete Kit:
Single Wideband O² sensor

3807 LM-2 Dual Complete Kit:
Dual Wideband O² sensors

3837 LM-2 Basic Kit:
Single Wideband O² sensor

3894 LM-2 Dual Basic Kit:
Dual Wideband O² sensors

(See page 18-19 for example log chains (MTS))





ACCESSORIES & REPLACEMENT PARTS



Exhaust Clamp

Patented, Venturi-effect, tapped exhaust clamp for obtaining accurate air-fuel ratio measurements without welding a bung in the system.

Perfect for dyno applications or temporary installation.

3728 Exhaust Clamp



3729 HBX-1 (Heat-Sink Bung Extender)
High Heat Applications



3834 LM-2 Inductive Clamp for RPM



3835 Bung Adapter (Powersports)
12mm to 18mm



3814 LM-2 Window Mount

3733 USB to Serial Adapter

3735 ½ inch, Bung & Plug Kit (mild steel)

3736 ½ inch, Bung & Plug Kit
(stainless bung)

3737 O² Sensor (Bosch™ LSU4.2)

3764 1 inch, Bung & Plug Kit (mild steel)

3787 2GB SD Card (LM-2, PL-1)

3808 Power Cable (LM-2, PL-1)

3809 OBD-II Cable (LM-2)

3810 8ft. Sensor Cable for LSU4.2
(LC-2, LM-2, MTX-L, SCG-1)

3811 Analog IN/OUT Cable (LM-2)

3812 Serial Patch Cable (2.5mm to 4-pin)

3828 18ft. Sensor Cable for LSU4.2
(LC-2, LM-2)

3835 Bung Adapter (Powersports)
12mm to 18mm

3838 1 inch, Bung & Plug Kit
(stainless bung)

3839 1 inch, Bung only (mild steel)

3840 Program Cable
(LC-2, MTX, SCG-1, PS)

3842 1 inch, Bung & Plug Kit (Titanium)

3843 3ft. Sensor Cable for LSU4.2
(LC-2, LM-2, MTX-L, SCG-1)

3846 Serial Patch Cable
(Chain LC-2, LM-2, MTX, PL-1)

3869 Clamp for EGT probe

3883 Boost Solenoid (SCG-1)

3885 Vacuum Hose Complete Kit (SCG-1)

3886 Bracket Kit for Boost Solenoid

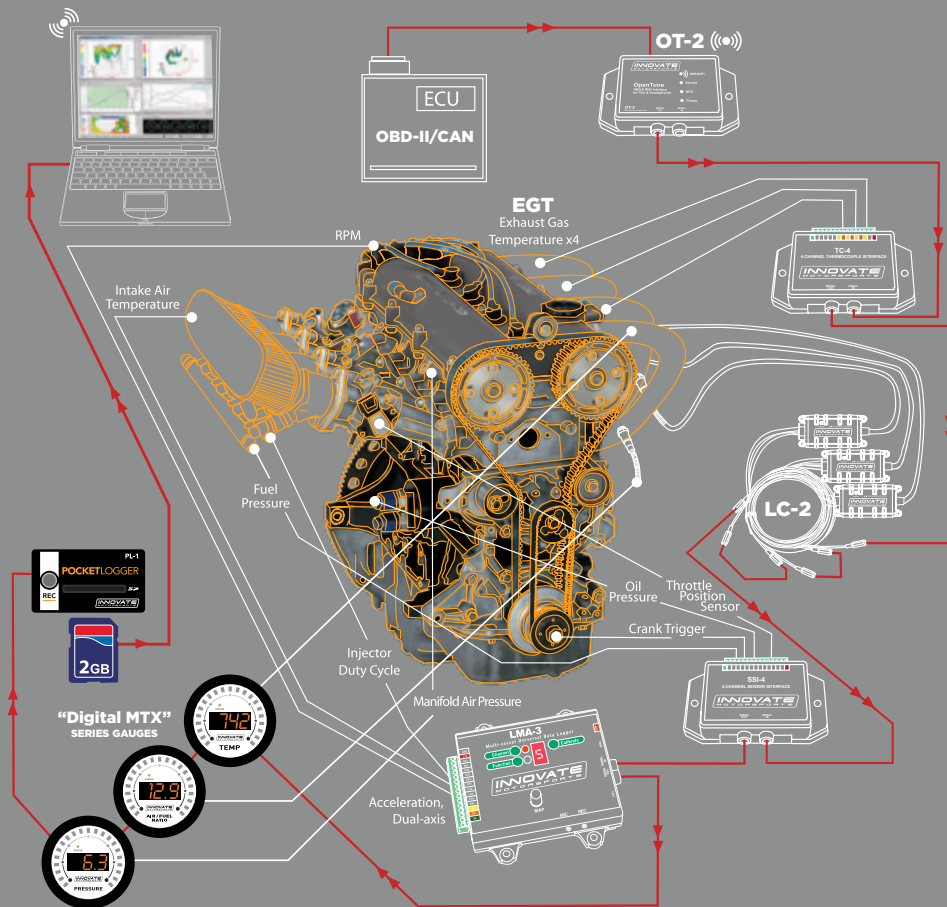
3887 8ft. Sensor Cable for LSU4.9

3888 O² Sensor (Bosch™ LSU4.9)

3889 18ft. Sensor Cable for LSU4.9

3890 3ft. Sensor Cable for LSU4.9

**For more products and accessories visit our
website: www.innovatemotorsports.com**



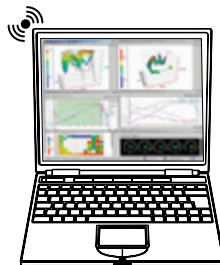
MODULAR TUNING SYSTEM (MTS)

Unique in the industry is Innovate's concept of the modular logging chain. The Modular Tuning System (MTS) includes meters, sensors, gauges, and recorders designed to work together. MTS is scalable, and all components share a common communications protocol. At its simplest, the MTS can be a basic LM-2 kit. At its most complex, a 32-channel data-acquisition system, with an LC-2 on every cylinder and sensors for every critical engine parameter.

LOGWORKS 3.0

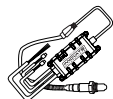
Available online for free, the LogWorks software delivers a complete 32 channel tuning workshop for your PC.

LogWorks enables users to gather performance data with a number of different fuel maps (or jetting changes), then use LogWorks to directly determine peak efficiency at any RPM or load. In other words, LogWorks can tell you not only what your AFRs are, but also what they should be.



EXAMPLE LOG CHAINS & MODULAR TUNING SYSTEM (MTS)

EXAMPLE 1



LC-2

Air/Fuel Ratio



SSI-4

RPM, TPS, Drive Shaft
RPM & MAP

(example only, see our website
for additional channel input configurations)



PL-1

Recorded to
SD Card in
Pocket Logger

EXAMPLE 2



MTX-L

Air/Fuel Ratio



MTX Boost/Shift

RPM, VACUUM/BOOST



PL-1

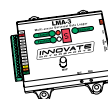
Recorded to
SD Card in
Pocket Logger

EXAMPLE 3



LC-2 x4

4-channels
Air/Fuel Ratio



LMA-3

RPM, MAP, TPS,
Injector Duty Cycle
& EGT



PL-1

Recorded to
SD Card in
Pocket Logger

Any MTS device that generates data must come BEFORE a recording device.

LM-2 LIVE DISPLAY or DATA LOGGING EXAMPLES

EXAMPLE 1



LM-2

(3837)



ANALOG CABLE

(3811)



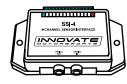
- Air/Fuel Ratio
- RPM
- TPS

EXAMPLE 2



LM-2

(3806)



SSI-4

(3783)



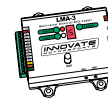
- Air/Fuel Ratio
- RPM
- Injector Duty
- TPS
- Drive Shaft

EXAMPLE 3



LM-2

(3807)



LMA-3

(3742)



- Air/Fuel Ratio (Dual (2) Channel)
- RPM
- Drive Shaft
- Map
- EGT



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