

Autometer Wideband LC-1 Controller

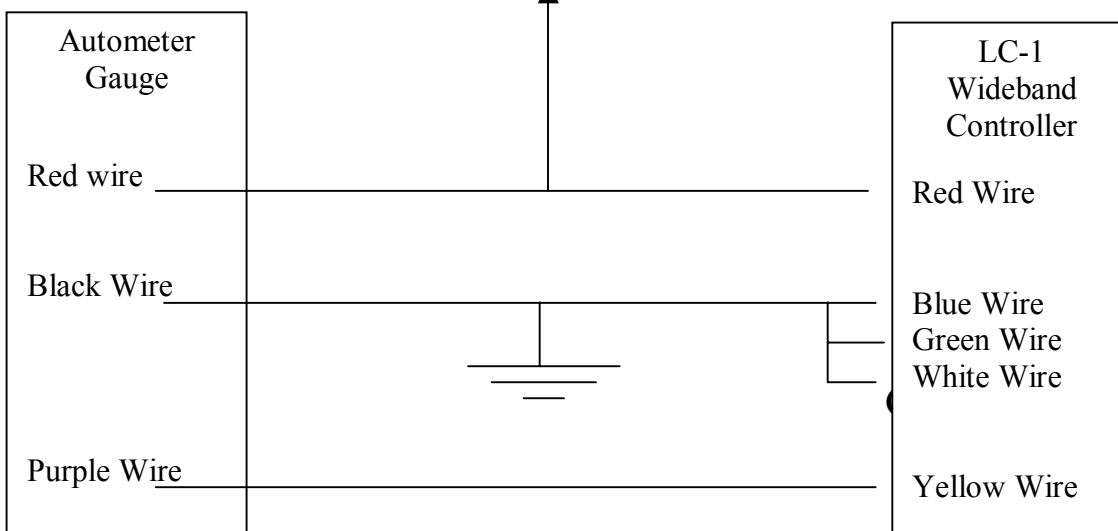
This Wideband controller will convert your basic Autometer gauge into a wideband air/fuel ratio display! The Autometer gauge will display the air/fuel ratio output from the LC-1 Wide-Band controller. The output of the LC-1 controller feeds into the gauge displaying actual air fuel ratio. This controller is pre-configured to work right out of the box .

Read all these directions first!

DO NOT LEAVE THE TERMINATOR PLUG INSTALLED IN THE “IN” CONNECTOR WHILE OPERATING THE LC-1, ONLY WHILE PROGRAMMING IT! KEEP WATER OUT OF THE “IN & OUT” CONNECTORS!

LC-1 Installation

To a switched and fused 12V power source



Connect the wires as follows:

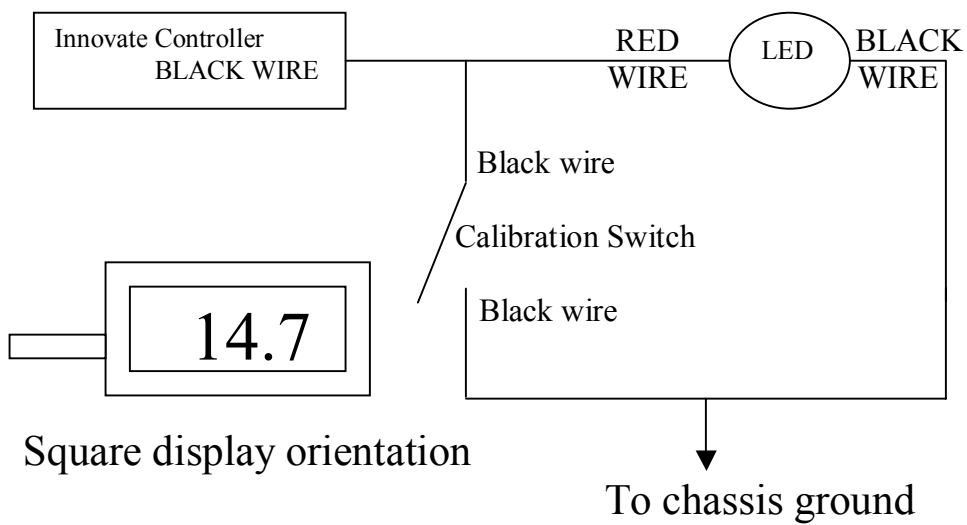
- 1) Connect the gauges RED wire and the controller's RED wire to a switched and fused 12V power source.
- 2) Connect the gauges BLACK wire and the controller's BLUE, GREEN and WHITE wires all to a good solid ground. Keep all the grounds together secured to one location.
- 3) Connect the Displays PURPLE wire to the controller's YELLOW wire.
- 4) Hook up the calibration switch and LED as shown below.

This switch and LED are required to recalibrate the unit or see diagnostics via the LED.

Hooking up the switch and led are optional.

NOTE: DO NOT RUN ANY GAUGE OR CONTROLLER WIRES NEAR IGNITION WIRES!

NOTE: The BROWN wire on the controller is not used. Tape is out of the way.



5) Run the serial connectors to a convenient location so you can use your laptop to change the configuration at some point if you need to. (Changing the configuration is optional)

Operation overview

Please read the LC-1 controller CD so you understand the principles of operation. We have pre-Programmed the LC-1 to work with the Autometer gauge. A computer is not needed to make your gauge work. If you want to configure it differently a computer will be needed to make changes. Again, read the LC-1 controller CD to learn how to program the unit.

When the gauge is first powered the readings will read approximately as shown until the sensor is warmed up.



This typically takes about 30 seconds. The free air calibration is **not** needed as it has been performed at the Dynotune factory. Read the Controller handbook for tuning hints. At idle the gauge should read around 14.7 as this air fuel ratio is normal. For the most accurate readings wait until your engine is at full operating temperature before doing serious tuning. Its always best to compare your gauge to a wideband on a dyno for the ultimate accuracy. A constant reading of 11.0:1 is typically an indication that the o2 sensor has gone bad and a new one is required. Check all wires before ordering a new sensor and also check the LED status indicator for troubleshooting information.





If you need to re-configure the output, Set analog output 1 as follows:

- a. Select the “air fuel ratio” button
- b. 1.050V= 11.00
- c. 0.000V= 19.40
- d. Select “advanced” button
- e. Select the “Instant” sample rate.
- f. Enter 0.15V at warm up.
- g. Enter 1.20V at output error.
- h. Press “OK”
- i. Press program