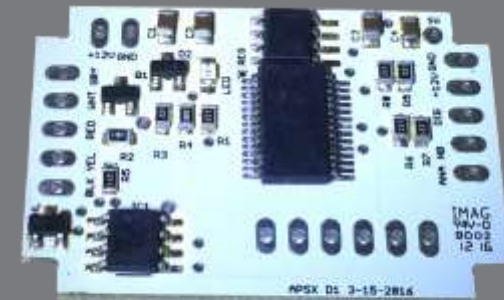


# WB WIDEBAND



## WB D1 DIGITAL WIDEBAND O2 AIR FUEL RATIO (AFR) CONTROLLER BOARD (DO IT YOURSELF – DIY)

Includes WB D1-DIY board & a magnet  
Quick Start Guide

**WB WIDEBAND**

[www.Wide-Band.com](http://www.Wide-Band.com)

[support@wide-band.com](mailto:support@wide-band.com)

FOR HELP, VISIT KNOWLEDGEBASE AT [WWW.WIDE-BAND.COM](http://WWW.WIDE-BAND.COM)

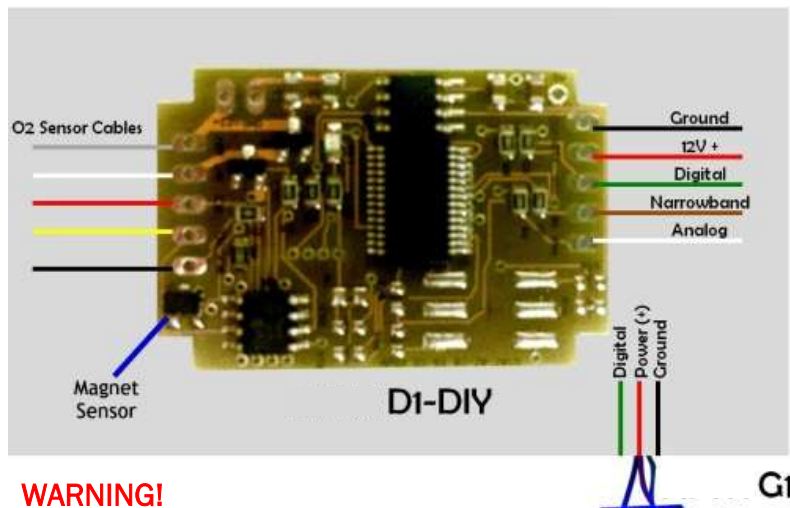
WIDE-BAND.COM

**WB**

WIDEBAND



YouTube



**WARNING!**

Oxygen sensor LSU4.2 can get very hot when powered.

**WIRING**

D1DIY can be connected to oxygen sensor cable (5 cables) and to power as shown in the picture above.

**Positive** power goes to 12V switched power source (5A fuse) in your vehicle. **Ground** cable goes to a grounded source such as battery ground (-) post.

**Green digital** output is 9600 8N1 serial (single byte i.e., 90 = 9.0 AFR) that can be connected to your PC or WB G1 display (sold separate) to monitor readings. Free WB software can be downloaded on WIDE-BAND.com.

If you want to connect other devices such as data loggers or ECM, you can use **white analog** for 0-5V linear (9-19AFR) output.

**Brown narrowband** is for simulated NB.

**PROGRAMMING**

Depending on when you release the magnet on D1 after holding it, you can modify different settings.

- 1 - **Set the fuel type** (1-Lambda [L], 2-E85 [E], 3-Gasoline [A], 4-Diesel [d], 5-Methanol [n]). See the table below for fuel types.
- 2 - Set NB lower limit
- 3 - Set NB upper limit
- 4 - **Set Analog lower limit** (Range 7-25 AFR/Default is 9 AFR)
- 5 - **Set Analog upper limit** (Range 15-25AFR/Default is 19AFR)
- 6 - **Calibration** - Watch YouTube video for details

**CALIBRATION**

The O2 sensor should be exposed to free air for the first time calibration. Hold the magnet close to D1, you will see display unit counting from 1 to 6.

Hold the magnet until you get to step 6 and release it to complete the calibration. This should take about 10 seconds.

Once it calibrated, display reads 19.0. You can now connect the O2 Sensor onto the exhaust pipe. For the factory settings, disconnect power, hold the magnet on while turning the power on and wait for 3 blinks. You should re-calibrate after this action.

**WB G1 does not work with other brand AFR gauges. D1 uses only BOSCH LSU4.2 O<sup>2</sup> sensor (#17014)**