

APSX WIDEBAND



NEW! APSX D1 Air-Fuel Ratio Controller
New Enclosure with Visible LED backlight

WB 19
AIR/FUEL

APSX D1 DIGITAL WIDEBAND O2 AIR FUEL RATIO (AFR)
CONTROLLER
(Weather & Temperature Proof)
Quick Start Guide

APSX WIDEBAND

www.Wide-Band.com

support@wide-band.com

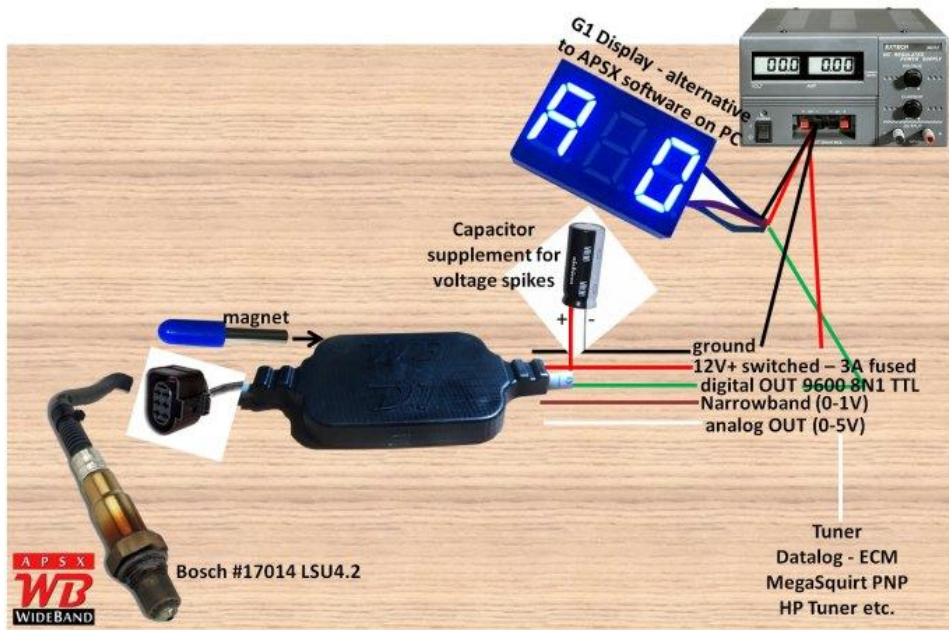
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FOR HELP, VISIT KNOWLEDGEBASE AT WWW.WIDE-BAND.COM





WARNING!

Oxygen sensor can get very hot when powered. Keep the oxygen sensor powered when the engine is running to prevent damage to the O2 sensor.

WIRING

APSX D1 has oxygen sensor plug and output cable (5 wires).

Positive power (RED) cable goes to 12V source. Ground power cable (BLACK) goes to a grounded source such as battery ground (-) post.

GREEN digital output is 9600 8N1 serial that can be connected to your PC or APSX G1 LED display. If you want to connect other devices such as data loggers, you can use WHITE analog cable for 0-5V linear output (9-19AFR). Free APSX software can be downloaded on WIDE-BAND.com.

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.

APSX G1 does not work with other brand AFR gauges. D1 uses only BOSCH LSU4.2 O2 sensor (#17014)

| | APSX | Gasoline | Diesel | E85 | Lambda | Methanol |
|--------|-------|----------|--------|-------|--------|----------|
| MIN | 73.5 | 7.35 | 7.25 | 4.88 | 0.50 | 3.23 |
| LOW | 90 | 9.00 | 8.88 | 5.98 | 0.61 | 3.96 |
| STOICH | 147 | 14.70 | 14.50 | 9.77 | 1.00 | 6.47 |
| HIGH | 190 | 19.00 | 18.74 | 12.62 | 1.29 | 8.36 |
| MAX | 220.5 | 22.05 | 21.75 | 14.65 | 1.50 | 9.70 |