How to Install and Configure an AEM Series X Wideband into an Honda with OBD1 wiring

Installation

Wire the wideband according to the reference table below:

[1] Just tap the wires. No need to cut.

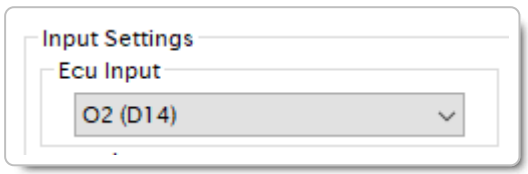
[2] Also, if you're using a Jumper Harness, tap on those wires instead. that way you'll preserve your car's wiring.

Wiring Reference		
Description	**Wideband**	**ECU** (Pinouts on FF-Squad.com)
Power	RED	A25 (YELLOW on BLACK)
Power Ground	BLACK	A24 (BLACK)
+ Analog Output	WHITE	D14 (WHITE)
- Analog Output	BROWN	D22 (GREEN on WHITE)

Connecting the Brown wire will provide the best ground with the least interference, thus needing little to no *Voltage Offset correction*.

Configuration using the *HTS* (Honda Tuning Suite) software

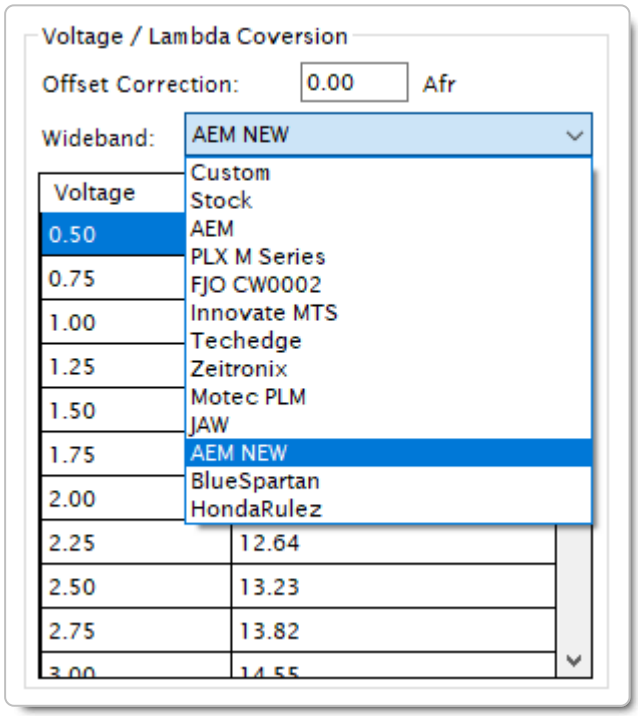
1. Open *Honda Tuning Suite*
2. Select the pin on the ECU, which we will be using as input for the wideband's signal, which is D14.
   Yes, D14. The voltage limit on this input pin is 3.8V which will convert to an AFR value above 16.0, which no one will ever use!



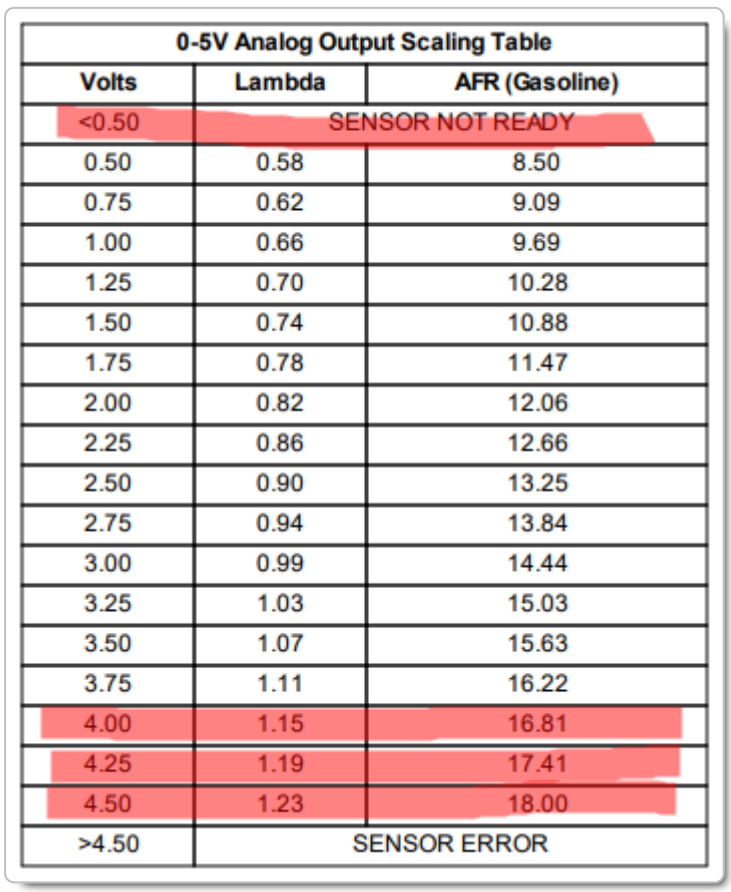
ECU PIN for voltage Input from the Wideband

3. Open the *Wideband Configuration Dialog* via the navigation menu (*File* > *Settings* > *Wideband*).

   Setup the *Voltage to Lambda/AFR conversion* table. Either using the pre-configured values (as shown in the figure) the software provides or the manufacturers values (via the *Custom* option):



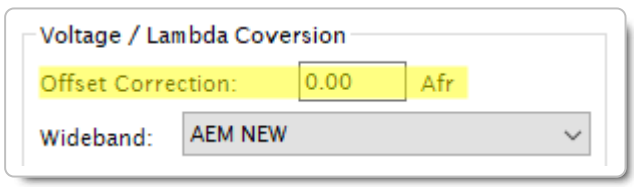
Preconfigured values in HTS. AEM NEW selected.



0-5V Analog Output Scaling Table		
Volts	**Lambda**	**AFR (Gasoline)**
<0.50	SENSOR NOT READY	
0.50	0.58	8.50
0.75	0.62	9.09
1.00	0.66	9.69
1.25	0.70	10.28
1.50	0.74	10.88
1.75	0.78	11.47
2.00	0.82	12.06
2.25	0.86	12.66
2.50	0.90	13.25
2.75	0.94	13.84
3.00	0.99	14.44
3.25	1.03	15.03
3.50	1.07	15.63
3.75	1.11	16.22
4.00	1.15	16.81
4.25	1.19	17.41
4.50	1.23	18.00
>4.50	SENSOR ERROR	

AEM's values. Unused values are shown in red.

4. Adjust the offset with **-/+**0.00 to match what your Gauge is displaying.



Offset Correction Factor

5. Enjoy