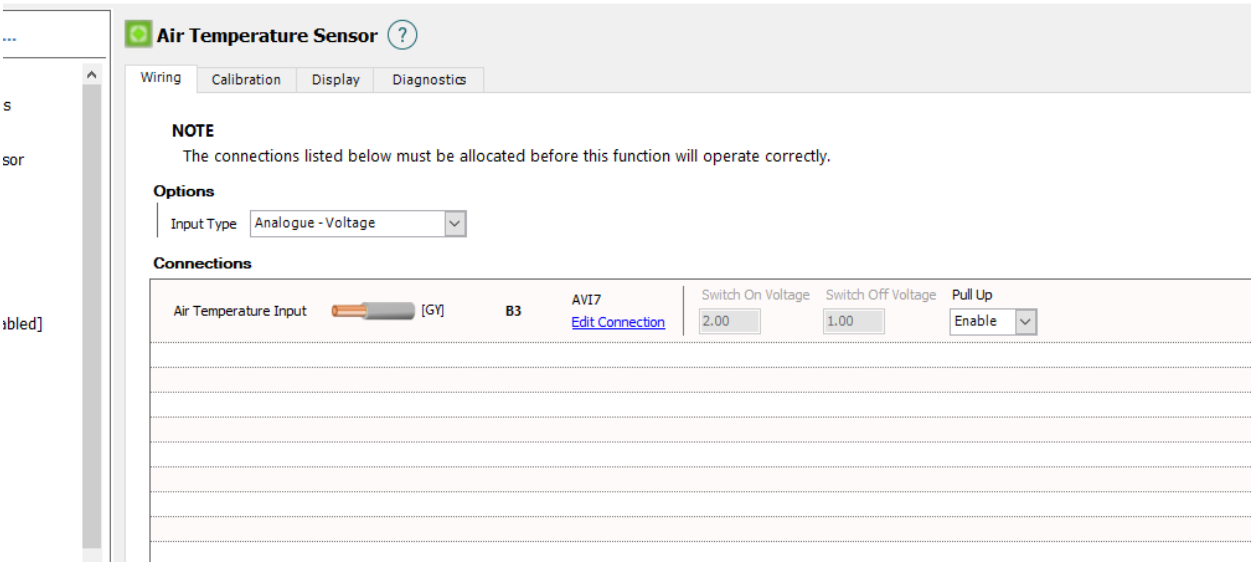
Air Temperature Sensor Calibration

Note All Haltech IAT Applications should use one of the following RIFE Part #'s 52-1201 thru 52-1208 or 52-1243 These are "Lo-AT" sensors

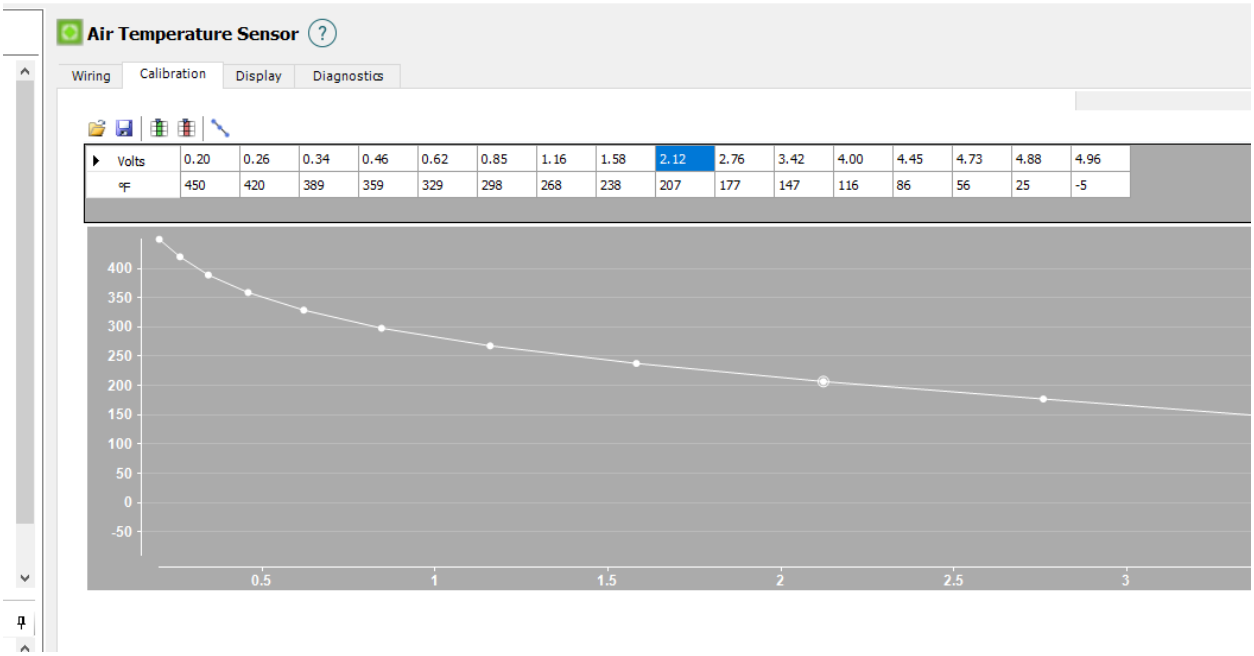
Haltech ECU's place some constraints on resistance inputs (20,000Ω), This requires the user to utilize the "Voltage – Analogue" sensor input feature on the ECU. Using the resistance input function would limit the minimum temperature to ~50°F on the Lo-AT and ~150°F on the Hi-AT. By using a Lo-AT sensor, Analog input and a specific calibration (shown below), the sensor will provide good resolution with the only downside being a slight trimming of the total range. In this application, the total range is -5°F to 450°F.

To set up your sensor in the Haltech software, go to Main Setup>Functions>Air Temperature. Set Input Type to "Analogue – Voltage" and make sure Pull Up is set to "Enable".

The "Wiring" Page should look like this:



The “Calibration” page should look like this:



That’s it, save and upload to ECU.

The calibration table is below, if you have any questions, don’t hesitate to call your dealer or RIFE at 805-987-7867

RIFE SENSORS by TBM

Haltech

IAT Calibration Table

	Temp°C	Temp°K	Temp°F	Voltage	Resistance (Ω's)
1	-21	253	-5	4.955	110,877
2	-4	269	25	4.882	41,418
3	13	286	56	4.728	17,373
4	30	303	86	4.446	8,026
5	47	320	116	4.004	4,022
6	64	337	147	3.418	2,160
7	81	354	177	2.759	1,231
8	97	371	207	2.123	738
9	114	387	238	1.582	463
10	131	404	268	1.159	302
11	148	421	298	0.845	203
12	165	438	329	0.620	141
13	182	455	359	0.459	101
14	199	472	389	0.344	74
15	215	489	420	0.262	55
16	232	505	450	0.202	42