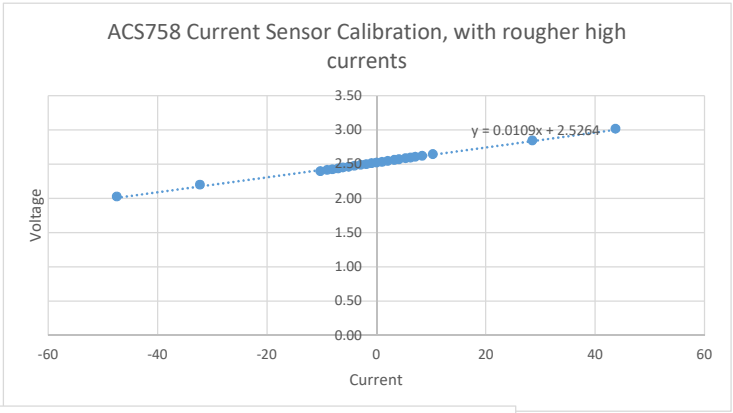
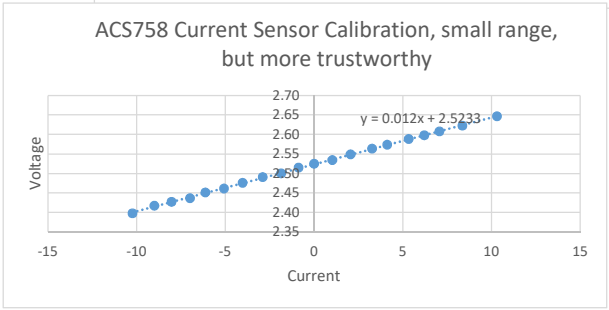
Calibrating the ACS758 Current Sensor

For use with the GreenPowerUSA electric car. Calibrated because of major discprepancies between what was being measured and what was expected. Suspect that the package is mislabeled.

Raw Current input (10-bit, 5V)	DMM Current	Output Voltage	
583	28.512	2.85	
618	43.712	3.02	Extrapolated using
451	-32.288	2.20	high current PS old
415	-47.488	2.03	analog meter
519	1.02	2.53	
522	2.05	2.55	
525	3.26	2.56	
527	4.12	2.57	
530	5.33	2.59	
532	6.21	2.60	
534	7.06	2.61	
537	8.35	2.62	
542	10.3	2.65	
517	0	2.52	
515	-0.88	2.51	
512	-1.86	2.50	
510	-2.9	2.49	
507	-4.03	2.48	
504	-5.08	2.46	
502	-6.13	2.45	
499	-7	2.44	
497	-8.04	2.43	
495	-9.01	2.42	
491	-10.24	2.40	

Conclusion: The sensor is mislabeled as 50A (40 mV/A), but is either 150 A (13.3 mV/A) or 200 A (10 mV/A, based on the slope. **Will use 11.5 mV/A.**





Calibrating scale on high current power supply

correct	meter
0	0.7
1.18	2
2.41	3
4.48	4
7.25	6
10.22	8