Counts - Data Chart

PWM	Counter A	Counter B	Difference:
50	4892	4890	GREAT - 2
60	4897	4751	FINE/DECENT - 146
70	4886	3860	CRITICAL - 1026
80	4885	3655	CRITICAL - 1230
90	4898	3979	CRITICAL - 919
100	4898	4561	MODERATE - 337
110	4883	4604	FINE/DECENT - 279
120	4892	4412	ISSUE - 480
130	4888	4319	ISSUE- 569

STATUS:			DIFFERENCE:	
	Note		GREAT	< 100
	Checked		FINE/DECENT	100 - 299
	Working on - Potential Issue		MODERATE	300 - 399
	Projected		ISSUE	400- 650
	Issue - Check Times Sheet		CRITICAL	> 650

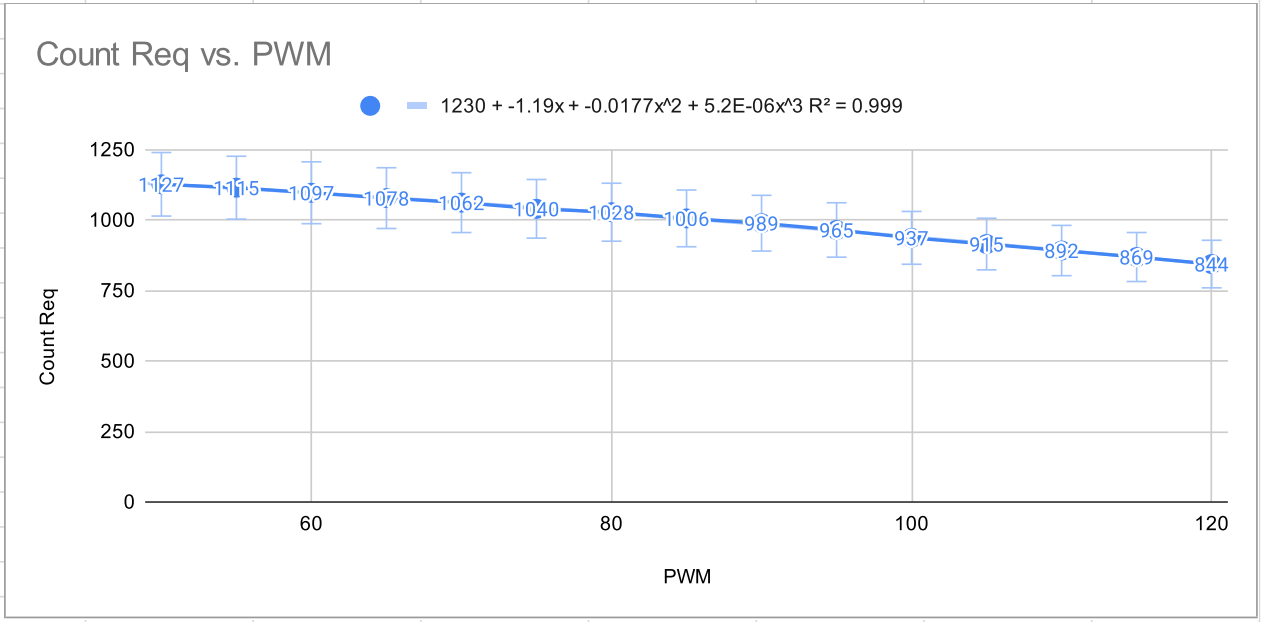
Counts/Distance without PID - Data Char

PWM	Count A - Try 1	Count B - Try 1	Difference:	Distance:
50	4897	4834	GREAT - 63	85 Inches
60	4890	4631	FINE - 259	80.5 Inches
70	4884	3601	CRITICAL - 1283	65.75 Inches
80	4894	3605	CRITICAL- 1289	63.25 Inches
90				
100				
110				
120				
130				

STATUS:			DIFFERENCE:	
	Note		GREAT	< 100
	Checked		FINE/DECENT	100 - 299
	Working on - Potential Issue		MODERATE	300 - 399
	Projected		ISSUE	400- 650
	Issue - Check Times Sheet		CRITICAL	> 650

50CM - Data Chart

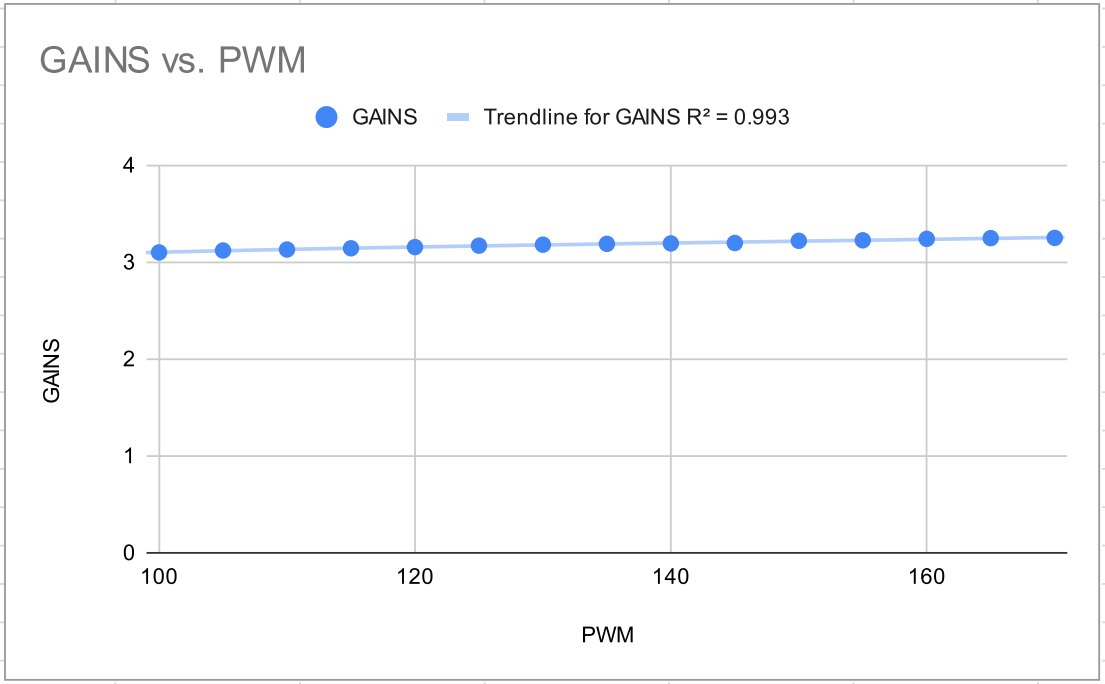
PWM	Count Req
50	1127
55	1115
60	1097
65	1078
70	1062
75	1040
80	1028
85	1006
90	989
95	965
100	937
105	915
110	892
115	869
120	844



STATUS:	
	Note
	Checked
	Working on - Potential Issue
	Projected
	Issue - Check Times Sheet

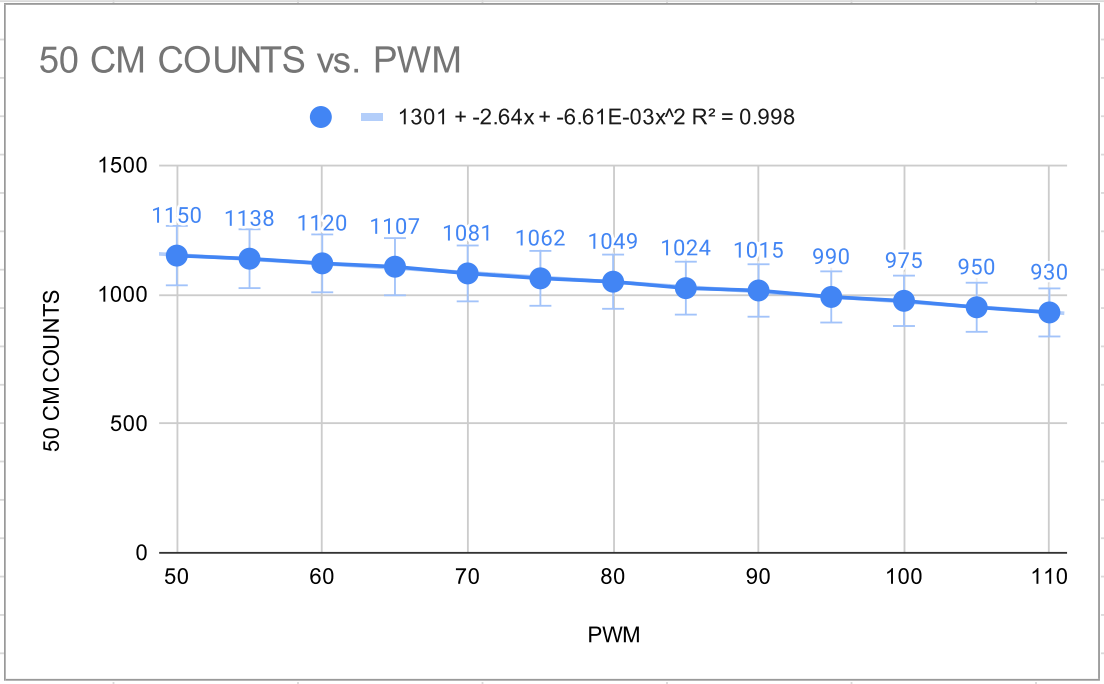
PD Gains - Data Chart

PWM	GAINS	50 CM COUNTS
100	3.1	
105	3.12	
110	3.13	
115	3.1425	
120	3.155	
125	3.17	
130	3.18	
135	3.1885	
140	3.193	
145	3.197	
150	3.22	
155	3.225	
160	3.24	
165	3.2475	
170	3.25	



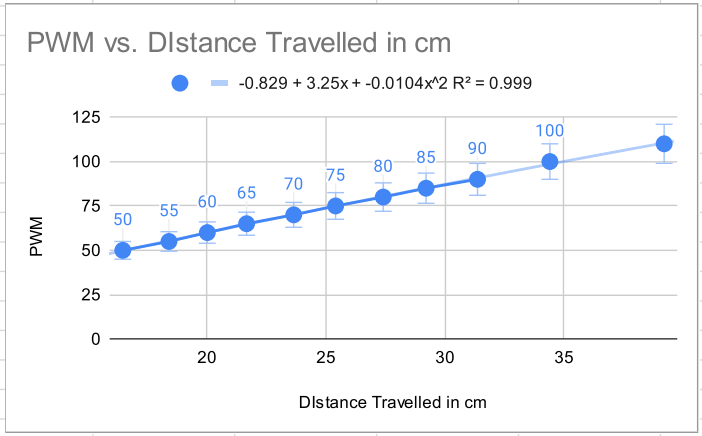
Count Calibrater - Data Chart

PWM	50 CM COUNTS	GAINS
50	1150	4.12
55	1138	4.22
60	1120	4.315
65	1107	4.425
70	1081	4.545
75	1062	4.66
80	1049	4.78
85	1024	4.895
90	1015	5.02
95	990	5.135
100	975	5.25
105	950	5.375
110	930	5.4875



CM/SECONDS - Data Chart

PWM	DIstance Travelled in cm		Time	KP	KI	KD
50	16.46	82.3	5000	0.2875	0.1075	0.3175
55	18.4	92	5000	0.2886	0.108	0.3178
60	20.01	100.05	5000	0.29	0.10825	0.318
65	21.66	108.3	5000	0.2905	0.1087	0.3183
70	23.64	118.2	5000	0.2915	0.109	0.3185
75	25.4	127	5000	0.29152	0.10902	0.3185
80	27.4	137	5000	0.292	0.10905	0.31855
85	29.2	146	5000	0.29205	0.10913	0.3186
90	31.36	156.8	5000	0.2925	0.109075	0.318575
95			5000	0.29239	0.10911	0.318625
100	34.4	172	5000	0.293	0.1091	0.3186
105			5000	0.29289	0.1091	0.3186
110	39.2	196	5000	0.2935	0.1091125	0.3186125



STATUS:	
	Note
	Checked
	Working on - Potential Issue
	Projected
	Issue - Check Times Sheet

DIstance Travell	PWM
16.46	50
18.4	55
20.01	60
21.66	65
23.64	70
25.4	75
27.4	80
29.2	85
31.36	90
	95
34.4	100
	105
39.2	110

Back Inconsistency - Data Chart

PWM	COUNT MM				
50					
55					
60	2 mm				
65	GOOD				
70	7 mm	Inconsistent and Good Sometimes			
75					
80					
85					
90					
95					
100					
105					
110					
STATUS:					
	Note				
	Checked				
	Working on - Potential Issue				
	Projected				
	Issue - Check Times Sheet				

Times: Straight Moves - Data Chart

PWM (Old Set)	Time (200 cm):	Est. Track Time:
50	*TBD*	*TBD*
60	*TBD*	*TBD*
70	**ISSUE**	**ISSUE**
80	**ISSUE**	**ISSUE**
90	**ISSUE**	**ISSUE**
100	5.86 Seconds	~64 Seconds
110	5.55 Seconds	~62 Seconds
120	5.05 Seconds	~58 Seconds
130	4.33 Seconds	~53 Seconds

Notes for Est: Take 30 Block Track with 20 Turns into consideration, where each turn is 1 second. Each block is 50 cm long + 25 for starting point

STATUS:	
	Note
	Checked
	Working on - Potential Issue
	Projected
	Issue: Undertravelling and bad drift. Count issue

PWM (New Set)	Time (200 cm):	Est. Track Time:
50	*TBD*	*TBD*
60	*TBD*	*TBD*
70	*TBD*	*TBD*
80	*TBD*	*TBD*

90	*TBD*	*TBD*						
100	*TBD*	*TBD*						
110	*TBD*	*TBD*						
120	*TBD*	*TBD*						
130	*TBD*	*TBD*						