

Rough calibration of current factors for IBT\_2 motor board with 10k resistors on board. Data was captured using 12-volt sealed beam headlamps across the track. Power supply was adjusted to supply 13.4 volts DC, resulting in 12.8 volts to the tracks (no load – AC digital voltmeter reading of DCC).

	A	B	C	D	E	F	G	H	I	J
1				Measurements with Pololu ACHS-7121						
2		% of 2218		Reported		Pin	zero	Pin Read	Current	mA
3		Trip Current		mA		Reading	base	less 512	26.4	factor/spec
4	H4703	967		2095	2.99	701	512	189	4981	
5		949		2057	2.99	688	512	176	4645	
6		943		2045	2.99	684	512	172	4539	
7										
8	H4656	818		1773	2.99	593	512	81	2138	
9		804		1743	2.99	583	512	71	1873	
10										
11										
12				Measured with IBT_2 pins 5&6 - no resistor					7	factor guess
13	H4703	884		1916	2.99	641	0	641	4486	
14		928		2012	2.99	673	0	673	4710	
15										
16	H4656	401		870	2.99	291	0	291	2037	
17		438		950	2.99	318	0	318	2224	
18										
19				Measured with IBT_2 pins 5&6 w/10K resistor to GND					10	factor guess
20	H4656	607		1315	2.99	440	0	440	4398	
21		637		1381	2.99	462	0	462	4619	
22										
23	H4656	266		577	2.99	193	0	193	1930	
24		291		630	2.99	211	0	211	2107	
25										
26										
27										
28								561	4300	
29									7.66	calc factor
30										
31								561	1677	
32									2.99	std motor shield
33			Halogen Sealed Beam							
34			Amps	Volts	Watts		Onboard IBT_2			
35			I	V	P		2.74 volts		DC voltmeter	
36		H4703	4.2969	12.8	55		205	pins/volt		
37		spec	4.3				561	pins/2.74 volts		
38		H4656	2.7344	12.8	35					
39		spec	2.73							