

12V Circuit - Current Spreadsheet

- 1 *Determine the total length of the circuit, (Include return path)*
- 2 *Determine the total amperage requirements of the load*
- 3 *Select wire gauge from chart*

Amps	Up to 10 Ft	15 Ft	20 Ft	25 Ft	30 Ft	40 Ft	50 Ft	70 Ft	100 Ft
2	18 Ga	18 Ga	18 Ga	18 Ga	18 Ga	18 Ga	18 Ga	18 Ga	16 Ga
3	18 Ga	18 Ga	18 Ga	18 Ga	18 Ga	18 Ga	18 Ga	18 Ga	14 Ga
4	18 Ga	18 Ga	18 Ga	18 Ga	18 Ga	16 Ga	16 Ga	14 Ga	12 Ga
6	18 Ga	18 Ga	18 Ga	16 Ga	16 Ga	16 Ga	14 Ga	12 Ga	12 Ga
8	18 Ga	18 Ga	16 Ga	16 Ga	16 Ga	14 Ga	12 Ga	12 Ga	10 Ga
12	18 Ga	16 Ga	16 Ga	14 Ga	14 Ga	12 Ga	12 Ga	10 Ga	8 Ga
16	18 Ga	14 Ga	14 Ga	12 Ga	12 Ga	12 Ga	10 Ga	10 Ga	8 Ga
20	16 Ga	14 Ga	12 Ga	12 Ga	10 Ga	10 Ga	10 Ga	8 Ga	6 Ga
24	14 Ga	12 Ga	12 Ga	10 Ga	10 Ga	10 Ga	8 Ga	8 Ga	6 Ga
36	14 Ga	10 Ga	10 Ga	8 Ga	8 Ga	8 Ga	8 Ga	6 Ga	4 Ga
40	12 Ga	10 Ga	10 Ga	8 Ga	8 Ga	6 Ga	6 Ga	4 Ga	2 Ga
50	12 Ga	10 Ga	10 Ga	8 Ga	8 Ga	6 Ga	6 Ga	4 Ga	2 Ga
100	10 Ga	6 Ga	6 Ga	4 Ga	4 Ga	4 Ga	2 Ga	1 Ga	0 Ga
150	8 Ga	4 Ga	4 Ga	2 Ga	2 Ga	2 Ga	1 Ga	0 Ga	00 Ga
200	6 Ga	4 Ga	4 Ga	2 Ga	2 Ga	1 Ga	0 Ga	000 Ga	0000 Ga