

## Voltage Drop Charts & Wire Length Distance Information

Wire run distances from the driver to LEDs based on the wattage of the load and a 3% allowed voltage drop.  
 Calculated for 24VDC and 12VDC outputs.

### 24V Voltage Drop & Wire Length Distance (3% Drop or 23.28V)

Wire Gauge	20W .83 A	30W 1.3 A	40W 1.7 A	50W 2.1 A	60W 2.5 A	70W 2.9 A	80W 3.3 A	90W 3.75 A	100W 4.2 A	150W 6.25 A	200W 8.33 A	300W 12.5 A
20	43 ft.	27 ft.	21 ft.	17 ft.	14 ft.	12 ft.	11 ft.	9 ft.	8 ft.	4 ft.	Don't Use	Don't Use
18	68 ft.	45 ft.	33 ft.	27 ft.	22 ft.	19 ft.	17 ft.	15 ft.	14 ft.	7 ft.	5 ft.	3.5 ft.
16	109 ft.	72 ft.	54 ft.	43 ft.	36 ft.	31 ft.	27 ft.	24 ft.	22 ft.	11 ft.	9 ft.	5.7 ft.
14	174 ft.	115 ft.	86 ft.	69 ft.	57 ft.	49 ft.	43 ft.	39 ft.	36 ft.	19 ft.	14 ft.	9 ft.
12	272 ft.	181 ft.	135 ft.	108 ft.	90 ft.	77 ft.	68 ft.	61 ft.	56 ft.	30 ft.	22 ft.	15 ft.
10	397 ft.	263 ft.	197 ft.	158 ft.	131 ft.	112 ft.	98 ft.	97 ft.	82 ft.	45 ft.	35 ft.	22.7 ft.

### 12V Voltage Drop & Wire Length Distance (3% Drop or 11.64V)

Wire Gauge	20W .17 A	30W 2.5 A	40W 3.3 A	50W 2.1 A	60W 4.2 A	70W 5.8 A	80W 6.67 A	90W 7.5 A	100W 8.3 A	150W 12.5 A	200W 16.67 A	300W 25.0 A
20	9 ft.	6 ft.	5 ft.	4 ft.	3 ft.	2 ft.	Don't Use	Don't Use	Don't Use	Don't Use	Don't Use	Don't Use
18	17 ft.	11 ft.	8 ft.	6 ft.	5 ft.	4 ft.	3.4 ft.	3 ft.	2.7 ft.	1.8 ft.	1.3 ft.	Don't Use
16	27 ft.	18 ft.	13 ft.	10 ft.	9 ft.	6.2 ft.	5.4 ft.	4.8 ft.	4.5 ft.	2.9 ft.	2.1 ft.	1.4 ft.
14	43 ft.	29 ft.	21 ft.	17 ft.	14 ft.	9.8 ft.	8.5 ft.	7.7 ft.	7 ft.	4.6 ft.	3.4 ft.	2.3 ft.
12	68 ft.	45 ft.	34 ft.	27 ft.	22 ft.	16 ft.	13.5 ft.	12 ft.	11 ft.	7.4 ft.	5.5 ft.	3.6 ft.
10	99 ft.	66 ft.	49 ft.	39 ft.	33 ft.	25 ft.	21.5 ft.	19.5 ft.	18 ft.	11.6 ft.	8.6 ft.	6 ft.