

VOLTAGE DROP & WIRE LENGTH DISTANCE

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

12V – 3% Drop or 11.64 Volts

	Wire Gauge	20W 1.7 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
12V	20	9 ft.	6 ft.	5 ft.	4 ft.	3 ft.	2 ft.	<i>Don't Use</i>	<i>Don't Use</i>	<i>Don't Use</i>	<i>Don't Use</i>	<i>Don't Use</i>	<i>Don't Use</i>
	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.	<i>Don't Use</i>
	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	18 ft.	11.6 ft.	8.6 ft.	6 ft.

24V – 3% Drop or 23.28 Volts

	Wire Gauge	20W 0.83 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
24V	20	43 ft.	27 ft.	21 ft.	17 ft.	14 ft.	12 ft.	11 ft.	9 ft.	8 ft.	4 ft.	<i>Don't Use</i>	<i>Don't Use</i>
	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.