

VOLTAGE DROP CHART

MAX CABLE LENGTH / WATTAGE / WIRE GAUGE



This voltage drop chart is intended for use as reference to determine the approximate amount of voltage loss occurring in a circuit due to resistance of current flow. It is recommended to round off to the nearest distance in feet when choosing the appropriate cable gauge.

24V VOLTAGE DROP CHART

WIRE
GAUGE

TRANSFORMER WATTAGE /MAXIMUM DISTANCE IN FEET

	20W	40W	60W	96W	150W	300W
18 AWG	210 ft.	105 ft.	70 ft.	46 ft.	28 ft.	14 ft.
16 AWG	330 ft.	175 ft.	115 ft.	70 ft.	46 ft.	23 ft.
14 AWG	525 ft.	260 ft.	118 ft.	115 ft.	75 ft.	36 ft.
12 AWG	830 ft.	420 ft.	300 ft.	175 ft.	120 ft.	58 ft.
10 AWG	1300 ft.	650 ft.	475 ft.	285 ft.	185 ft.	94 ft.
8 AWG	2016 ft.	1025 ft.	750 ft.	460 ft.	300 ft.	150 ft.

12V VOLTAGE DROP CHART

WIRE
GAUGE

TRANSFORMER WATTAGE /MAXIMUM DISTANCE IN FEET

	20W	40W	60W	150W	300W
18 AWG	55 ft.	28 ft.	18 ft.	7 ft.	3 ft.
16 AWG	88 ft.	44 ft.	29 ft.	11 ft.	5 ft.
14 AWG	140 ft.	70 ft.	47 ft.	18 ft.	9 ft.
12 AWG	225 ft.	110 ft.	74 ft.	30 ft.	15 ft.
10 AWG	355 ft.	175 ft.	118 ft.	46 ft.	23 ft.
8 AWG	565 ft.	280 ft.	188 ft.	75 ft.	38 ft.



ALL VALUES ARE BASED ON A VOLTAGE DROP OF 10%