

WIRE REFERENCE GUIDE FOR SINGLE PHASE 2-WIRE COPPER

Use the table below as a guide to determine the maximum remote installation distance (in feet) between the power supply and lighting fixture.

The length is based on 10% voltage loss and an air temperature of 70°F. Voltage drop is increased 1.5% per 30° increase.

The tables below are intended for reference use only. Always consult a qualified electrician or technician before wiring.

Install in accordance with local electrical codes and National Electrical Code.

12V POWER SUPPLY

	20W	30W	50W	60W	90W	100W	120W	150W	320W
8	462 ft.	307 ft.	184 ft.	153 ft.	102 ft.	92 ft.	76 ft.	61 ft.	28 ft.
10	290 ft.	193 ft.	116 ft.	96 ft.	64 ft.	57 ft.	48 ft.	38 ft.	18 ft.
12	182 ft.	121 ft.	73 ft.	60 ft.	40 ft.	36 ft.	30 ft.	24 ft.	11 ft.
14	115 ft.	76 ft.	45 ft.	38 ft.	25 ft.	22 ft.	19 ft.	15 ft.	7 ft.
16	71 ft.	47 ft.	28 ft.	23 ft.	15 ft.	14 ft.	11 ft.	9 ft.	4 ft.
18	45 ft.	30 ft.	18 ft.	18 ft.	10 ft.	9 ft.	7 ft.	6 ft.	2 ft.

WIRE GAUGE (AWG)

24V POWER SUPPLY

	20W	30W	50W	60W	90W	100W	120W	150W	320W
8	925 ft.	614 ft.	369 ft.	307 ft.	204 ft.	184 ft.	153 ft.	122 ft.	57 ft.
10	581 ft.	386 ft.	232 ft.	193 ft.	128 ft.	115 ft.	96 ft.	77 ft.	36 ft.
12	365 ft.	242 ft.	146 ft.	121 ft.	80 ft.	72 ft.	60 ft.	48 ft.	22 ft.
14	230 ft.	152 ft.	91 ft.	76 ft.	50 ft.	45 ft.	38 ft.	30 ft.	14 ft.
16	143 ft.	95 ft.	57 ft.	47 ft.	31 ft.	28 ft.	23 ft.	19 ft.	8 ft.
18	90 ft.	60 ft.	36 ft.	30 ft.	20 ft.	18 ft.	15 ft.	12 ft.	5 ft.

WIRE GAUGE (AWG)

EXAMPLE:

