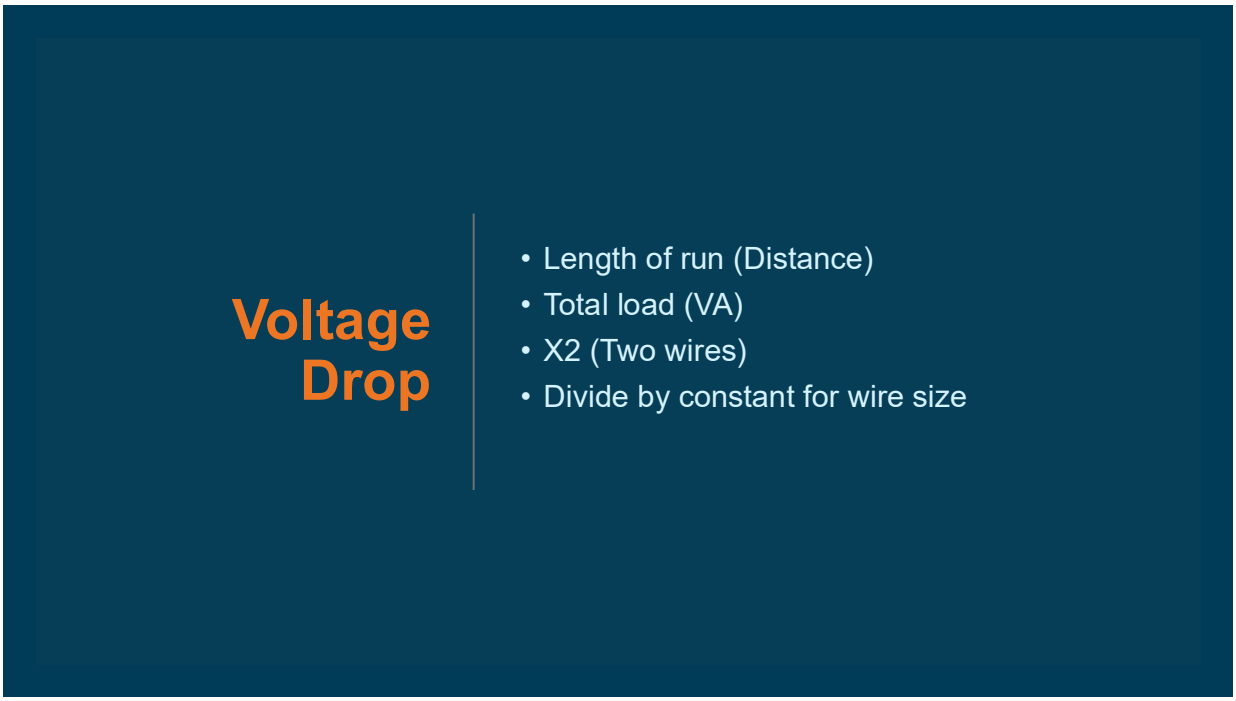


Voltage drop formula:

Length X Load =_____ X 2 = _____ Divided by the constants.

12AWG = 7500

10AWG = 11920

8AWG = 18960

Example: if my 12 AWG run is 100' and my load is 44 VA my formula would be 100 X 44 X 2 = 8800, divided by 7500 = 1.17 volt drop for this run.

Note: When voltage drop exceeds 3 Volts on a single circuit or run, look to increase wire size or decrease the VA load for that run. (total fixtures)

Note: The larger the wire AWG size, the smaller the wire.12AWG is smaller wire than 10AWG, confusing sometimes but consistent for all wire.