

# PowerView+™ Gen 3 Automation Wiring Compatibility in Pre-Wired Homes

This document specifies the types of wiring which are compatible with PowerView+™ Gen 3 Automation, using the PowerView+ Gen 3 Smart Power Supply. It also shares examples of compatible wiring from competitors to help better identify in the field.

## IMPORTANT:

Wiring must be done by a qualified person in accordance with all applicable codes and standards.

## PowerView+ Gen 3 Power Supply Compatible Wiring

PowerView+ Gen 3 shades can be hard-wired for power and communication using the PowerView+ Gen 3 Smart Power Supply, which can power up to 16 shades. The PowerView+ Gen 3 Smart Power Supply can also provide power only to PowerView Gen 3 window treatments. It is not compatible with Legacy PowerView+ or Legacy PowerView window treatments. This power supply is compatible with low-voltage wiring that meets the following requirements:

- Must have 2 conductors for power (12-18 AWG) and 2 stranded cables for data (20-24 AWG) in a shielded, twisted pair.
- Daisy-chaining up to three shades together is permitted, with a maximum total of 16 PowerView+ Gen 3 shades per power supply.
- Wire run must not exceed maximum distance per output based on wire gauge, as indicated on the table below.

Maximum PowerView Gen 3 Automated Window Treatments per Output	Maximum Distance per One Output Based on Power Conductor Wire Gauge			
	12 AWG	14 AWG	16 AWG	18 AWG
One Window Treatment	1500 feet	800 feet	300 feet	300 feet
Two Window Treatments ≤ 100 square feet total	750 feet	250 feet	150 feet	50 feet
Three Window Treatments ≤ 100 square feet	500 feet	100 feet	50 feet	50 feet

**NOTE:** Wire terminations at the shade are made by connecting the electrical wiring to a provided male plug-in connector, and the ports on this connector are compatible with 16-24 AWG conductors for power. If using a cable with 12 or 14 AWG conductors for power, you will need to use a wire stripper to reduce the gauge to 16 AWG or less.

## Examples of Competitors' Wiring

### Somfy®, Lutron®, Crestron®, Screen Innovations, and Savant

Somfy®, Lutron®, Crestron®, Screen Innovations, and Savant shades often use cables that meet the compatibility requirements listed above. Here is a description of what to look for in homes that have been wired for these types of shades.

- 4, 5, or 6 stranded wires in a bundled cable, including 2 power conductors with an AWG between 12 and 18, and 2 stranded cables for data (20-24 AWG) in a shielded, twisted pair. These cables will have conductors for power, communication, and possibly a drain wire.

### QMotion®/Legrand® Shading Systems and PowerShades

QMotion® shades and PowerShades may use CAT5 or CAT6 cables.

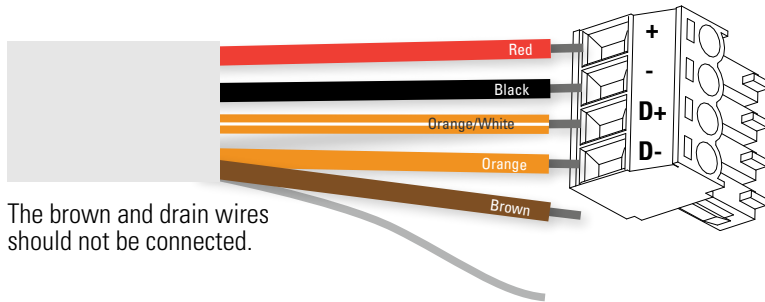
- CAT5 and CAT6 cables consist of 4 pairs of twisted wire, in colors blue, green, orange, and brown.
- These wires will have a gauge between 22 and 26 AWG.

**IMPORTANT:** You will need to join multiple wires together to get an effective gauge, in order to use this cable for power and communication. Twist together the striped orange, brown, and blue wires together for the Power + conductor; twist together the solid orange, brown and blue wires together for the Power - conductor, and then the green twisted pair will serve as the last two conductors, Data + and Data -. Because of these wiring challenges, Cat5/Cat6 should ONLY be used when the home was already prewired that way and there is no way to change it.

**CAUTION:** Category cable typically uses solid core conductors which can be easily damaged. Use caution when twisting the wires together. We strongly recommend either tinning the wires or utilizing crimp-on ferrules.

# Wiring Guide

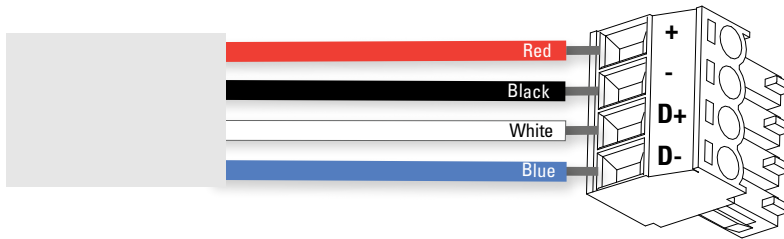
## Somfy®, Savant, and Screen Innovations



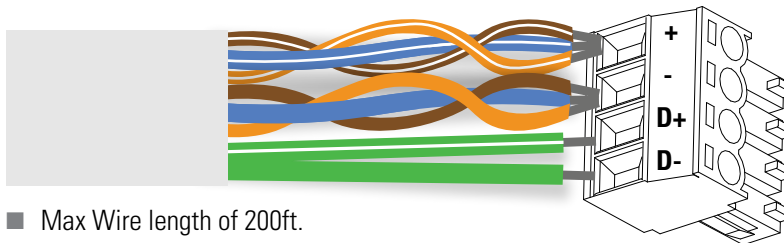
## Lutron®



## Crestron®



## QMotion®



- Max Wire length of 200ft.
- No daisy-chaining allowed.
- Tinning the wires or the use of crimp-on ferrules is highly recommended.
- Cat5/Cat6 should only be used when the home was already prewired that way and there is no way to change it.