

# Low Voltage LED Landscape Light



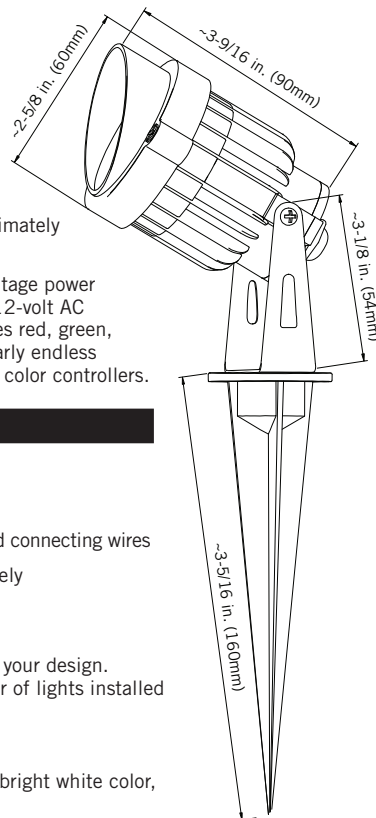
- *White Light Only LED Models (12-Volt DC or 12-Volt AC)*
- *RGB Color-Adjustable Model (12-Volt DC Only)*

Beautifully highlight small trees, shrubs, walls, structures, and pathways while providing enhanced safety and security of your property. These outdoor lights are easy to install and low-voltage safe.

- Rugged cast aluminum construction with a 36 in. power wire lead
- All stainless steel hardware with a durable black powder coat paint finish
- Use removable ground spike or mount to any surface; fully adjustable swivel bracket
- IP 65 wet location rated, water-resistant housing and seals; maintenance-free operation
- No bulbs to change, rated for 40,000 hours or 13 years if left on for eight hours a day
- Approximately 60° beam angle
- Ambient air operating temperature range is -4°F (-20°C) to 140°F (60°C)

**White 3000K LED models** Operate off either 12-volt DC or 12-volt AC power – this model can be used with existing low-voltage landscape lighting transformers that have 12-volt AC output. Use ultra-bright chip-on-board (COB) LED array technology with an optic lens to deliver approximately 350 lumens output; CRI is 80+. *White LED model is not dimmable.*

**RGB color-adjustable models** Use only with 12-volt DC output constant voltage power supplies. Not compatible with landscape lighting transformers that use 12-volt AC output unless used with Armaco AC to DC 12-volt power converter. Uses red, green, and blue LED chipsets with a color controller (required) to produce a nearly endless array of colors, plus shades of white. RGB lights are fully dimmable with color controllers.



## INSTALLATION

- Not suitable for underwater applications
- Do not stare directly into the light when illuminated
- Basic wiring skills are required, e.g., stripping, splicing, extending, and connecting wires
- Power supplies, color controllers, wire, and connectors sold separately

## Determine your power supply requirement

Add together the individual wattages of all the LED light fixtures used in your design. Always choose a power supply rated greater than your needs. The number of lights installed is limited only by the watts output rating of the power supply.

- White LED models use 5 watts each
- RGB LED color-adjustable models use 10 watts when set at 100% bright white color, which uses the most energy

## Power supply location, voltage drop

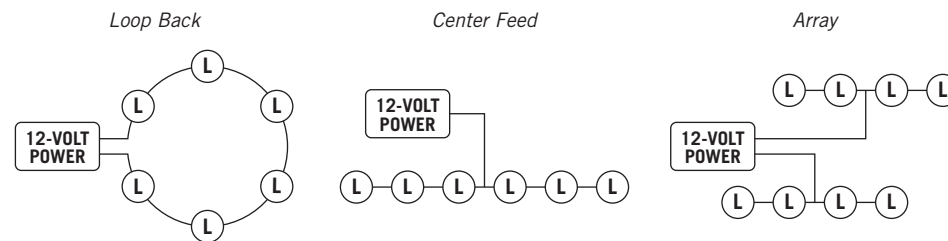
Voltage drop is the gradual decrease in voltage that occurs from your power supply to your LED lighting. The shorter the 12-volt DC wire leads between the power supply and the LED lighting, the brighter and more consistent the lighting will be. Do not coil excess wire.

It's best to locate the power supply and RGB color controller as close to the lighting as possible to lessen the effect of voltage drop. Always use an appropriate enclosure to protect the RGB color controller and power supply if not rated for wet location use.

Test your LED lighting prior to final installation.

On large installations with multiple lights, if voltage drop appears to be an issue, use thicker, heavier gauge wires or power your system from both ends (see loop back configuration).

## Layout options that will reduce voltage drop and promote more uniform light output



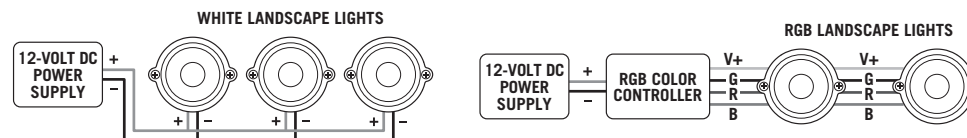
Be sure to observe same cable polarity in all applications.

**Normal recommended wire is 12 to 18 AWG. 20 AWG 4-conductor wire can be used for shorter runs of RGB color-adjustable light models. All cables must be rated for underground use.** To determine what wire size will work best in your design, visit [armacostlighting.com/voltagedrop](http://armacostlighting.com/voltagedrop) for an easy-to-use online voltage drop calculator.

## Typical connections

All wire splice connections should be made waterproof using outdoor, wet location rated connectors such as silicone-filled wire nuts, crimp butt-splice connectors that use sealants, or heat shrink tubing.

Always maintain polarity: red (+) to red and black (-) to black for 2-wire white lighting. For 4-wire RGB lighting connections, align all colors: red to red, green to green, and blue to blue, with the 12-volt positive (+) wire being either white or black.



2-wire white LED connection series hook-up

RGB landscape light requires an RGB color controller and 4-wire hook-up

## Limited three-year warranty

Improper installation, abuse, or failure to use this product for its intended purpose will void warranty. This warranty only applies when all components, including LED power supplies, have been provided by or approved for use by Armaco Lighting. The warranty does not cover labor or any other costs or expense to remove or install any defective, repaired, or replaced products.



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