

Choosing a power supply for white LED lighting

Power supplies come in various sizes with different wattages and are often referred to as transformers, AC/DC adaptors, or LED drivers. All Armacost LED lighting operates on low voltage and requires a power supply to convert 120-volt household AC power to 12-volt DC power.

When planning, you will need to take into consideration the size in watts of your power supply and the type of power supply.

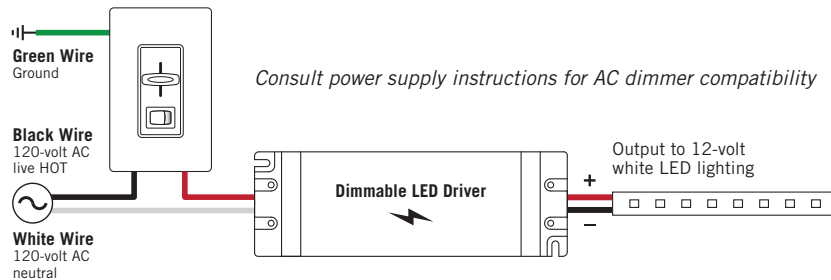
Armacost Lighting carries two types of power supplies, **Standard Power Supplies** and AC **Dimmable Power Supplies** or LED Drivers.

The type of power supply you choose will be based on how you want to turn on/off or dim your lighting. Generally, you have 3 main options:

1 Using 120-volt AC dimmers (e.g., Lutron® style)

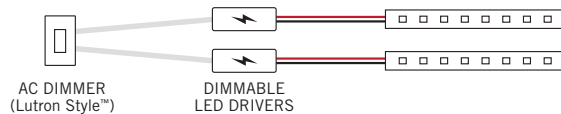
To use an AC dimmer, your Armacost Lighting LED driver/power supply must clearly state on the packaging and case label that it is dimmable with 120-volt AC dimmers. Using a 120-volt AC dimmer with a Standard Power Supply will damage the power supply.

Typical wiring diagram when used with an AC dimmer



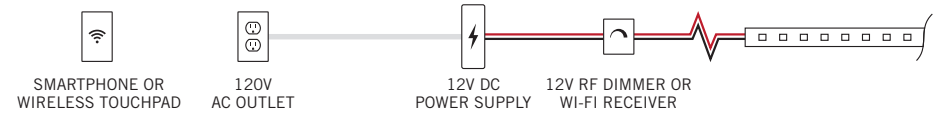
When using a 120-volt AC dimmer, the Dimmable LED Driver/ Power Supply must be direct wired to household current.

Large lighting applications may require the use of multiple dimmable LED drivers/power supplies. For synchronized on/off and brightness control of LED lighting on multiple power supplies, connect a 120-volt AC dimmer to multiple Armacost Lighting Dimmable LED Drivers.

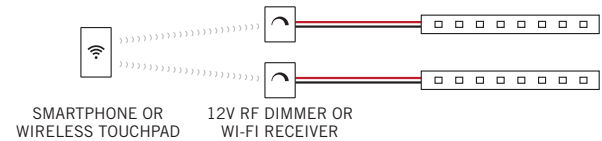


2 Using Armacost Lighting 12-volt LED dimmers

If installing an in-wall AC dimmer isn't practical, choose an Armacost low-voltage, 12-volt dimmer and use a **Standard Power Supply**. These dimmers connect on the low-voltage side anywhere between your power supply and LED lighting. Wireless model options are available, useful in situations where installing new wiring can be difficult. Choose from RF designer-style touch pads or Wi-Fi® controllers that work with any smartphone.



For large lighting applications and multi-zone lighting control, use multiple Armacost 2-in-1 or Wi-Fi LED dimmers.



3 For simple on/off control (no dimming)

If you do not desire brightness control for your LED lighting, use a **Standard Power Supply** that is controlled by a wall switch, or a simple 12-volt inline DC switch. Alternatively, you can use an Armacost Lighting Wireless Switch. This device adds switched outlet convenience, without running any new wires.



Power supply size

Determining your wattage requirements

LED lighting power requirements are stated in watts and can vary greatly depending on the LED fixture or type of LED tape lighting you may be using. Armacost Lighting carries various sizes of power supplies with output ratings ranging from 6 watts to 150 watts. Always consult the instructions or specifications that are supplied with your 12 volt LED lighting to determine the size of power supply you will need. When using LED tape lighting, your model number and design configuration or layout will also be a factor in your wattage requirements and must be noted as outlined in the instructions.