



Dimmer Buying Guide



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Dimmers offer an ideal way to create ambiance in a room or adjust lighting for a specific task or activity. Leviton offers a wide range of dimmers to suit every bulb preference and lifestyle. Our selection of LED compatible dimmers helps ensure smooth, flicker-free dimming when used with the latest LED bulbs; and our line of Smart dimmers is the perfect way to control lighting by app or voice from within your home or while away.

Dimmers easily replace standard switches and can be used in any room of the home such as family rooms, dining rooms, kitchens and bedrooms. There are several factors to consider when choosing a dimmer. This guide will provide insight into the options available so you can decide which is the right solution to enhance your living environment.



Dimmer/Bulb Compatibility

Choosing the right dimmer and bulb combination can be a confusing task, especially because there are so many different types of dimmers and bulbs on the market. Today, LED bulbs are the most common. Our LED Compatibility Selector Tool (leviton.com/led) makes it easy to find the best dimmer and LED bulb combinations to avoid potential issues such as lights flickering, limited dimming range, slow start-up, or inconsistent illumination.

The chart below provides some helpful hints pertaining to the most common types of dimmers you may see on the market. It will give you a better understanding of the types of bulbs to use with them for the best dimming experience based on your application.

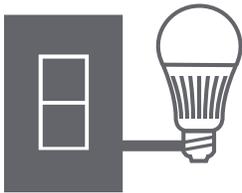
Dimmer Type	Helpful Hints	
LED (Light Emitting Diode) 	Works with dimmable LED bulbs. Some models may also be compatible with incandescent, dimmable CFL and magnetic low voltage bulbs. Provides full-range dimming, smooth start-up, and eliminates flickering of lights.	Be sure the bulb package indicates DIMMABLE. Most bulb and dimmer manufacturers have compatibility information listed on their websites to help guide you to finding the perfect pairing. Visit: leviton.com/LED
Incandescent/Halogen 	Works with incandescent and halogen bulbs.	These types of dimmers are not designed to control LED and CFL bulbs and using them to do so may result in inconsistent or limited performance. Many incandescent dimmers do not have LED ratings and therefore cannot be used with LED bulbs.
CFL (Compact Fluorescent Lamp) 	Works with dimmable CFL bulbs. Some models may also be compatible with incandescent, dimmable LED and magnetic low voltage bulbs. Provides full-range dimming, smooth start-up, and eliminates flickering of lights.	Be sure the bulb package indicates DIMMABLE.
ELV (Electronic Low Voltage) 	Works with electronic low voltage transformers used in low voltage fixtures and dimmable LED power supplies such as those found in ELV track lighting, under cabinet lighting and LED strips.	ELV Dimmers require a neutral wire for installation and perform well when paired with LED bulbs. Also referred to as trailing-edge and reverse phase dimmers.
MLV (Magnetic Low Voltage) 	Works with magnetic low voltage transformers used in low voltage lighting fixtures and are suitable for recessed lights that are magnetic low voltage. Often found in under cabinet lighting and recessed lights.	Magnetic low voltage transformers tend to be larger and heavier than electronic low voltage.
0-10V 	LED dimming protocol used when control signal is DC voltage that varies between zero and ten volts. Common in controlling fluorescent dimming ballasts and some drivers for LED lighting. Used in indoor and outdoor lighting in high-end residential and commercial spaces.	Often dimming ballasts and dimming LED power supplies use 0-10V control signals to control the dimming functions. In order to choose the proper control, be sure to know the maximum "sinking" current needed to control the ballast. Use the "sinking" capability of the dimmer and divide by the source current of each ballast to determine the maximum number of ballasts that can be controlled by that device.
Fluorescent 	Works with fluorescent fixtures that incorporate rapid start fluorescent bulbs and dimming ballasts.	

Wiring Options

All dimmers are designed for either single pole, 3-way or multi-location applications. Some models are single pole and 3-way capable. Be sure to reference the packaging to choose the proper dimmer based on the application.

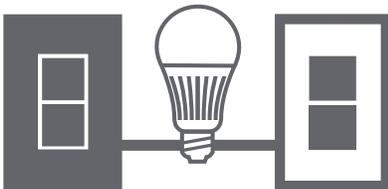
Single Pole

Controls light(s) from one location.



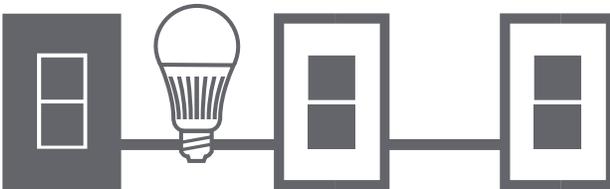
3-Way

Controls light(s) from two locations. Usually, in a 3-way application, the dimmer is at one location from which the user can switch the light(s) ON/OFF and adjust the brightness level. The second location is generally a 3-way switch that only allows the user to switch the light(s) ON/OFF.



Multi-Location

Controls lights from three or more locations. Designed for larger areas or rooms, the dimmer is at one location and the companion dimmers are in the other locations. The user can switch the lights ON/OFF and adjust the brightness level from all locations.



Dimmer Styles

Dimmers come in a variety of styles to meet both decorative and functional needs.



Voice Dimmer with Amazon Alexa Built-in



Decora Smart® Dimmer



Decora Smart® Plug-in Dimmer

Decora Smart®

Today, SMART technology is everywhere - including in dimmers. Leviton Decora Smart® dimmers are available with Wi-Fi®, Z-Wave®, Zigbee or Bluetooth® technologies to bring app control or voice command dimming with Amazon Alexa or Google Assistant to your home. Imagine using your voice or your smartphone or tablet to dim and time your lights from inside your home or while away. Decora Smart dimmers make it easy to enjoy scheduling lighting events, full-range dimming, adjustable fade rates and other exciting functions to create ambiance, enhance safety and make every day living more convenient. Smart dimmers come in wall mount and plug-in options to meet every need.

	 Wi-Fi®	 Z-WAVE PLUS	 zigbee	 Bluetooth®
Application	Control from anywhere using the My Leviton app or hands-free using your voice (Amazon Alexa, Google Assistant)	Control from anywhere using a compatible Z-Wave hub	Control from anywhere using a Zigbee Certified hub	Single point solution using the Leviton Decora Digital™ Dimmer & Timer app
Set up	Wi-Fi	Internet	Internet	Bluetooth
Hub required	No	Yes	Yes	No
App set up on smart device	Yes	Yes	Yes	Yes
Smart device compatible	iOS, Android	iOS, Android	iOS, Android	iOS, Android

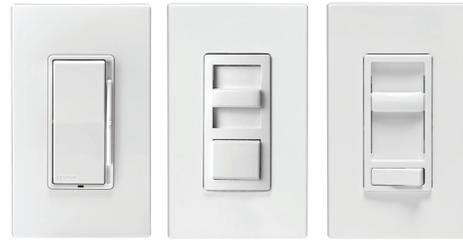
Decora®

Good design stands the test of time and our hallmark Decora brand is no exception. From the first Decora switch introduced in 1973 to a full collection of products today, Decora has set the industry standard for style and performance.



Digital Dimmers

Provide full-range dimming with fade on/fade off appearance, a Decora rocker switch for ON/OFF and separate dim/bright bar. Includes ability to set maximum brightness level, low end dimming range and fade rates.



Slide Dimmers

Utilize a slide bar to control the level of light. The ON/OFF function varies by model and may be either a rocker switch or push-button switch. The separate ON/OFF function preserves the dimming level that has been set.

Traditional

For a traditional home, the classic style of Rotary or Toggle dimmers offer the ideal way to upgrade the functionality of devices without compromising the character of the décor.



Toggle Dimmers

A traditional switch turns the lights ON/OFF and a separate slide bar that moves up and down is used to adjust the light level. Some models utilize the actual toggle switch to control dimming.



Rotary Dimmers

Switch the lights ON/OFF by either turning or pushing the knob. Once the lights are ON, lighting may be adjusted to the desired level by rotating the knob.

Other Styles

Aside from the more common dimmers just discussed, the following dimmer types are also available to meet more specific needs:



Plug-in Lamp Dimmers

Designed to provide dimming control for plug-in lamps, rather than for lighting fixtures. They come in four styles:

- 1) Smart Plug-in Dimmer** - control your plug-in lamps from anywhere. No wiring is required.
- 2) Table Top** - the cord of this dimmer is plugged into the outlet. Then the cord from the lamp is plugged into an outlet on the dimmer. The dimmer sits on a table or desk providing easy access to regulate the level of light desired. No wiring is required.
- 3) Cord** - installed directly on the cord of the lamp.
- 4) Socket** - replaces the standard bulb holder on lamps allowing dimming by turning the knob.

Dimming Sensor

Combines a dimmer with the energy savings and convenience of a motion sensor.

Basic Lighting Terms

Watt – a measurement of the rate at which electrical energy is dissipated.

Lumen – a measurement of illumination or brightness. The higher the lumen value, the brighter the bulb.

Kelvin – LED bulbs have a range of what is known as “color temperature”, which is measured in Kelvin units. It is the number of Kelvin units that make some LEDs appear stark white and others radiate a warmer hue similar to the incandescent bulbs we are used to.

Kelvin Color Temperature	2700K	3000K	3500K	4100K	5000K
Ambiance	Cozy Personal	Relaxing	Friendly	Clean	Institution
Applications	Living/Family Dining Rooms Bedrooms	Living/Family Dining Rooms Bedrooms	Kitchen Bathrooms	Garage Basement	Commercial Industrial

Heat Sink - some dimmers contain a metal mounting strap that has fins designed to dissipate heat from the device. If more than one dimmer is being installed in a multi-gang application, the user may be required to break off the fins before installing. Please refer to installation instructions for when it is necessary to remove the fins.

Derating – derating may be required if you have two or more dimmers sharing a wallbox to help dissipate the internal heat of the dimmer. Some dimmers will have fins (heat sink) on the side which will need to be removed. By removing the fin, it decreases the wattage capacity that the dimmer can control. Be sure to refer to the dimmer instruction sheet for fin removal. Derating is NOT required when using dimmable LED or dimmable CFL bulbs.

Dimmer Type	1 Dimmer	2 Dimmers	3 Dimmers
LED/CFL	No derating required		
Incandescent/Halogen	600W per dimmer	500W per dimmer	400W per dimmer
ELV	400VA	350VA	250VA

Neutral Wire - for dimmers with higher ratings, or advanced technology, a neutral wire may be required for operation. The neutral wire is generally white and serves as a “path home” for the additional electricity used to power the dimmer.

Ground Leakage – some dimmers mention that a ground is required for installation. Similar to the neutral wire, some additional electricity may be needed to power the dimmer. These dimmers release very small amounts of power through the ground line, while also ensuring complete safety is maintained.

Visit our Website at: www.leviton.com/dimmers

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