

LED Dimmer Controls

Dimmer Controls That Can Be Used to Comply with 2019 California Title 24, Part 6 for Residential Indoor Lighting and Switching Devices and Controls and 2017 NEC®



Leviton offers many products that help lower electrical costs and add convenience to everyday living. Replacing standard switches with dimmers helps to reduce energy consumption and is a convenient way to create ambiance in a home.

Residential indoor lighting requirements in the State of California requires all forward phase-cut dimmers used with LED light sources to comply with NEMA SSL 7A as well as the NEC 2017. Leviton offers a wide range of dimmers that comply with these requirements.

NEW CONSTRUCTION/ADDITIONS (For permits filed after 1/1/2020)

CHALLENGE

Residential new construction in the State of California must adhere to the 2019 California Title 24, Part 6 energy code requirements for indoor lighting switching devices and controls as well as NEC 2017.

NEMA SSL 7A

- The NEMA standard provides compatibility requirements when a forward phase-cut dimmer is combined with one or more dimmable LED Light Engines (LLEs)
 - The reliability of the dimmer and LLE are not affected by combining them
 - Dimming behavior meets or exceeds what is specified in the standard

NEC 2017

- Prohibits current on the equipment grounding conductor during normal operation (Delayed effective date: January 1, 2020)

RETROFIT/REPLACEMENT CONSTRUCTION

CHALLENGE

Residential retrofit construction may or may not have a neutral in the wallbox.

NEC 2017

- Prohibits current on the equipment grounding conductor during normal operation (Delayed effective date: January 1, 2020)
- Although the NEC 2017 prohibits current on the equipment grounding conductor, there is an exception for retrofit and replacement construction where a neutral wire is not in the wallbox

SOLUTION Leviton offers a wide range of LED dimmers that can be used to comply with NEMA SSL 7A and NEC 2017.

- Designed to optimize performance with dimmable LED loads
- Offers smooth operation for precise dimming, a broader dimming range and flicker free operation
- 0-10V and ELV (Reverse Phase) options also available
- 24/7 access to online LED compatibility tool to pair Leviton dimmers with LED lamps

SOLUTION

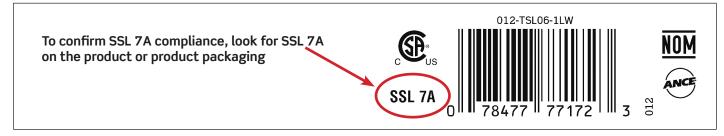
Leviton LED dimmers can be used to replace an existing wall switch.

- All no-neutral dimmers can be used in replacement and retrofit applications
- Devices that introduce current to the equipment grounding conductor, or devices that are listed for retrofit use only (i.e. DDL06 and DN6HD) can be used
- The number of these devices is limited to 5 per branch circuit and 25 per feeder circuit
- 24/7 access to online LED compatibility tool to pair Leviton dimmers with LED lamps

Ordering Options

| Product Line | Cat. No. | Description | New Construction | Retrofit/Replacement |
|-----------------|----------|---|------------------|----------------------|
| Decora Smart® | DWVAA | 300W LED Smart Wi-Fi® Dimmer with Amazon Alexa™ Built-In, Neutral Required | ✓ | ✓ |
| | D26HD | 300W LED Smart Dimmer, Wi-Fi Certified, Neutral Required | ✓ | ✓ |
| | DN6HD | 300W LED Smart No-Neutral Dimmer, Ground Required | × | ✓ |
| | D2MSD | 300W LED Smart Motion Sensing Dimmer, Wi-Fi Certified, Neutral Required | ✓ | ✓ |
| | DZ6HD | 300W LED Smart Dimmer, Z-Wave® Plus Certified, Neutral Required | ~ | ✓ |
| | DG6HD | 300W LED Smart Dimmer, Zigbee™ 3.0 Certified, Neutral Required | ~ | ✓ |
| Decora Digital™ | DDL06-1L | 300W LED Digital Dimmer, Ground Required | × | ✓ |
| | DDM06 | 300W LED Digital Dimmer, Neutral Required | ✓ | ✓ |
| | DDL06-BL | 300W LED Digital Dimmer with Bluetooth® Technology, Ground Required | × | ✓ |
| | DDMX1 | 450W LED Magnetic Low Voltage Digital Dimmer with Bluetooth Technology, Neutral Required | ~ | ✓ |
| | DDE06 | 300W LED Electronic Low Voltage Digital Dimmer with Bluetooth Technology, Neutral Required | ~ | ✓ |
| | DD710 | 10A LED 0-10V Digital Dimmer with Bluetooth Technology, Neutral Required | ~ | ✓ |
| Decora® Slide | DSL06 | 300W LED Preset Slide Dimmer | ✓ | ✓ |
| | DSM10 | 450W LED Magnetic Low Voltage Preset Slide Dimmer | × | ✓ |
| | DSE06 | 300W LED Electronic Low Voltage Preset Slide Dimmer, Neutral Required | ~ | ✓ |
| | DS710 | 10A LED 0-10V Preset Slide Dimmer, Neutral Required | ~ | ✓ |
| IllumaTech® | IPL06 | 150W LED Preset Slide Dimmer | ~ | ~ |
| | IP710 | 10A LED 0-10V Preset Dimmer, Neutral Required | ~ | ~ |
| SureSlide® | 6672 | 150W LED Slide Dimmer | ~ | ~ |
| | 6674 | 150W LED Preset Slide Dimmer | ~ | ~ |
| Toggle Slide | TSL06 | 300W LED Preset Slide Dimmer | ✓ | ✓ |
| | TSM10 | 400W LED Preset Slide Dimmer | ~ | ~ |

Note: The forward phase dimmers listed in the above chart are compliant with NEMA SSL 7A when in the factory default state. Any changes made to the minimum adjustment feature in certain models may render the device non-compliant.



Leviton LED Compatibility



Leviton is dedicated to providing our customers with the best experience when using Leviton dimmers. We work closely with LED lamp manufacturers and have a dedicated team in our in-house lab that conducts ongoing testing of the latest LED lamps/fixtures with our LED dimmers to determine the best combinations.

This test program measures a number of factors including dimming range and irregular functionality such as flickering, slow start up, noise (humming/buzzing) levels and inconsistent illumination. The testing is ongoing; and the tool is updated regularly with the latest results. Only pairings that meet our rigorous test criteria are published in our user-friendly online LED Compatibility Selector Tool. **www.leviton.com/led.**



Leviton Manufacturing Co., Inc.

Tech Line: 1-800-824-3005 Mon-Fri 8am-10pm EST, Saturday 9am-7pm EST, Sunday 9am-5pm EST For 24/7 product support visit **www.leviton.com/support**

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