Application Note #482

LUTRON

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DALI® Compatibility with Lutron DALI® Controllers

According to the Digital Illumination Interface Alliance (DiiA)_®, the global industry alliance for DALI_® lighting control, "DALI-2_® certification brings the promise of significantly improved interoperability and additional functionality compared with current DALI_® version-1 devices in the market." The DALI-2_® certification program is based on test specifications derived from the relevant parts of IEC 62386, the international DALI_® standard. DALI-2_® certification involves independent verification of test results. In contrast, DALI_® version-1 product compliance is based solely on self-declaration, which has led to interoperability and compatibility issues in the market.

Below are the logos that help identify if a device is DALI version-1 or DALI-2:





DALI version-1

DALI-2

In order to ensure compatibility with Lutron DALI_® controllers, the connected DALI_® LED drivers and fluorescent ballasts must be DALI-2_® certified and marked. In addition to compatibility, it is important to select high-quality and high-performance LED drivers and fluorescent ballasts. DALI-2_® certified devices (Device Type-6 and Device Type-8 [Tunable White Tc Only]) are readily available from many manufacturers and are tested for compatibility with the standard. For a complete list of available DALI-2_® certified devices, see the DiiA_® website at www.digitalilluminationinterface.org/products. DALI_® devices that are not listed on the DiiA_® website and are not marked DALI-2_® cannot be considered DALI-2_® certified.

The DALI_® version-1 standard does not ensure compatibility. If you would like to use an LED driver or fluorescent ballast that is not DALI-2_® certified but carries a DALI_® version-1 logo, Lutron recommends that these devices be tested to ensure compatibility. Lutron is able to perform this testing on request. Samples of the drivers and light engines must be submitted to Lutron and the expected turnaround time is 6 to 8 weeks after the drivers are received. Fees for testing may apply. Lutron recommends that this testing be performed before the fixtures and lighting controls are purchased and installed. Contact your Lutron sales representative for more information.

Frequently Asked Questions:

- 1) Why would I use a DALI_® version-1 LED driver or fluorescent ballast instead of DALI-2_®?

 Until a device type has an associated DALI-2_® test sequence that is released and listed by DiiA_®, an LED driver or
 - fluorescent ballast that supports and advertises that device type cannot be marked DALI-2. For a complete list of the device types available in DALI-2. please visit the DiiA. website at https://www.dali-alliance.org/dali2/status.html
- 2) Will my DALI-2_® certified LED driver or fluorescent ballast be compatible with Lutron DALI_® controllers?
 - Yes, however to get the full benefit of any particular DALI_® feature, it must be supported by both the LED driver or fluorescent ballast and application controller. Not every feature specified in a LED driver or a fluorescent ballast specification may be supported by the Lutron DALI_® controller. To find out what DALI_® features are supported by each Lutron DALI_® controller, please refer to the individual product's specification submittal at www.lutron.com.
- 3) Why is DALI-2_® better than DALI_® version-1?
 - The DALI-2_® certification program involves independent verification of test results by the DiiA_®. The independent verification removes ambiguity in the testing process and ensures consistency in test results. In contrast, DALI_® version-1 compliance testing is based only on self-declaration without independent verification of test results.

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