

LSI - Dimming Application Sheet

All LSI Fixtures can be specified to be compatible with various control/dimming technologies. Please refer to the fixture's specification sheet for the standard control/dimming options as well as the mounting options available for each fixture type.

Control/dimming options include:

- “TE” – **Trailing Edge:** For use with 2-wire Trailing Edge / Reverse Phase / Electronic Low-Voltage dimmers.
- “ED” – **Integral:** Fixture is equipped with on-board integral dimmer for use with 2-wire switched power.
- “LE” – **Leading Edge:** For use with 2-wire Leading Edge / Forward Phase / TRIAC dimmers.
- “L2” – **Lutron LTE:** For use with Lutron Leading Edge, 2-wire dimmers.
- “L3” – **Lutron L3D:** For use with Lutron digital dimming, 2-wire EcoSystem control and 2-wire switched power.
- “10” – **0-10V:** For use with analogue 2-wire 0-10V control and 2-wire switched power.
- “DX” – **DMX:** For use with DMX-512 protocol, 3- wire control and 2-wire switched power.

The remainder of this dimming application sheet is specific to the dimming system specified.

“TE” – Trailing Edge: Fixtures specified with “TE” are built using drivers that are compatible with most electronic low-voltage / trailing edge / reverse phase dimmers. LED and Low-voltage fixtures can be mixed on the same track circuit, but the correct dimmer for the given load must be used. The total load must not exceed the dimmers capacity. In-rush must also be taken into consideration when selecting breakers, dimmers, or relays. Fixtures utilizing leading edge or magnetic transformers should not be installed on or powered by the same section of track as “TE” fixtures.

“LE” – Leading Edge: Fixtures specified with “LE” are built using drivers that are compatible with most Leading Edge / Forward Phase / Triac dimmers. The total load must not exceed the dimmers capacity. In-rush must also be taken into consideration when selecting breakers, dimmers, or relays. The “LE” option is available with 120V systems only.

“ED” – Integral Dimmer: Fixtures specified with “ED” are built using an onboard potentiometer that adjusts the light level of the LED via an integral circuit on the fixture. Most fixtures house the potentiometer in a special track fitting. The total load must not exceed the breaker or relay's capacity. **DO NOT USE FIXTURES WITH INTEGRAL DIMMERS ON CIRCUITS THAT ARE POWERED BY A DIMMER AS IT WILL DAMAGE THE FIXTURE AND/OR THE DIMMING SYSTEM. DO NOT DIM A DIMMER**

“L2” – Lutron LTE: Fixtures specified with “L2” are built using a Lutron Hi-Lume A- Series LTE drivers capable of dimming to 1% when used with Lutron LTE compatible dimmers. Lutron LTE is available with 120V systems only.

“L3” – Lutron L3D: Fixtures specified with “L3” are built using a Lutron Hi-Lume A-Series L3D driver that use 2-wire EcoSystem digital control. These fixtures are compatible only with Lutron approved EcoSystem control systems. When using LSI CONTROLTrack the fixtures receive both data and power from the track. Lutron EcoSystem allows independent control of lighting fixtures. Each EcoSystem Bus can support a maximum of 64 EcoSystem enabled devices.

“10” – 0-10V: Fixtures specified with “10” are built using drivers that utilize 0-10V analogue control to dim the fixtures. Fixtures utilizing 0-10V dimming can only be dimmed from 100% to 10%, the fixture must be powered by a switch or relay to turn the fixture off (0%). When using LSI CONTROLTrack, the fixtures will receive both data and power from the track. LSI CONTROLTrack offers the capability to incorporate One or Two 0-10V control zones in single track run.

“DX” – DMX: Fixtures specified with “DX” are built using LSI DMX drivers. These fixtures are compatible with any DMX controller available today. “DX” fixtures are addressed via rotary or push-button encoders and on select models, can be addressed using RDM. When using LSI CONTROLTrack, the fixtures will receive both data and power from the track. “DX” fixture can also be dimmed locally by setting the DMX address to 901-999 (1-100% respectively). DMX allows independent control of lighting fixtures. Each DMX home run can support a maximum of 32 fixtures.