

# CHOOSING THE RIGHT LUTRON DIMMING BALLAST

## *Factors for Choosing Dimming Ballasts*

Ballasts are specified according to the lamp type, low-end light level, supply voltage, and control method.

### **Lamp Type**

Each type of fluorescent lamp has specific electrical requirements in order to operate at variable light levels and achieve the expected lamp lifetime. Lutron designs each fluorescent dimming ballast to achieve the best performance for each lamp type. The result is superior dimming, continuous flicker-free illumination, and expected lamp lifetime.

For information on the various lamp types, please see pg. 13.

### **Low-End Light Level**

Lutron offers 10%, 5%, and 1% dimming ballasts.

This percentage refers to the measured low-end light level.

<b>Ballast Family</b>	<b>Dimming Range</b>	<b>Control Method</b>
Hi-lume®	100%-1%	3-wire
Tu-Wire®	100%-5%	2-wire
Compact SE™	100%-5%	3-wire
Eco-10™	100%-10%	3-wire
TVE	100%-10%	0-10V, 4-wire

### **Supply Voltage**

Lutron offers ballasts for 120V, 277V, and 347V, all at 60Hz.

Ballasts for international voltages and frequencies are also available. Consult Lutron for availability.

*For selection information on our entire line of ballasts and controls for different lamp types, please see the Fluorescent Dimming Systems Selection Guide (P/N 366-002), visit [www.lutron.com/ballasts](http://www.lutron.com/ballasts), or contact the toll-free Lutron Technical Support Center at 1.800.523.9466.*

### **Control Method**

Lutron offers several different ways to install and control our dimming ballasts. See the wiring diagrams in the Appendix for more information.

- **3-wire control**

Ballasts controlled by this method require three control wires: Switched Hot, Dimmed Hot, and Neutral. The Switched Hot and Neutral provide power to the ballast. The Dimmed Hot provides a line-voltage dimming signal from the control to the ballast.

- **2-wire control**

Ballasts controlled by this method require only two control wires. Dimmed Hot and Neutral provide both power and the dimming signal to the ballasts. This control method is ideal for retrofit installations.

- **0-10VDC (4-wire control):**

Ballasts controlled by this method require four control wires: Switched Hot, Neutral, 0-10VDC Positive, and 0-10VDC Negative. The Switched Hot and Neutral provide power to the ballast. The 0-10VDC wires provide the dimming signal from the control to ballasts.