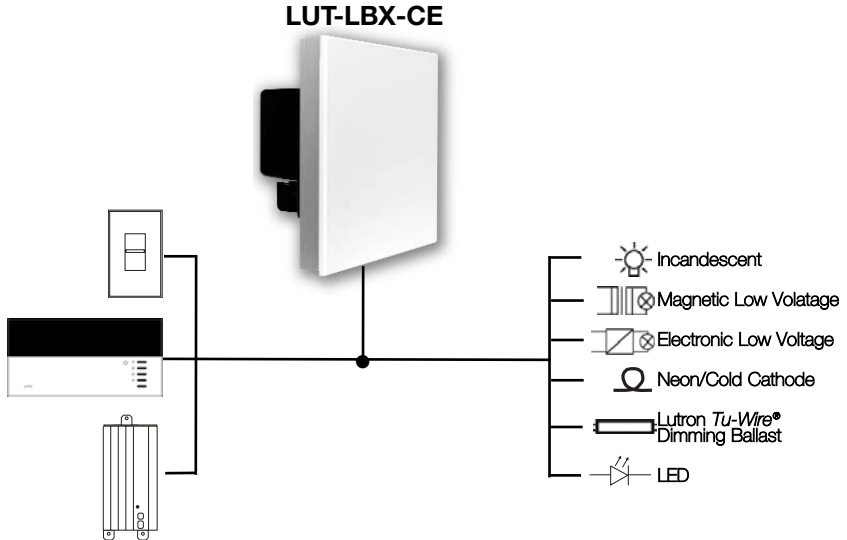


# LUT-LBX-CE Synthetic Minimum Load

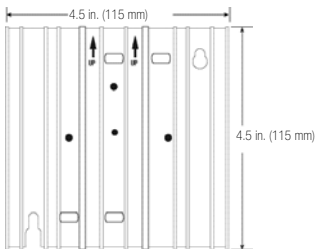
For use with Reverse and Forward Phase Dimmers

*Installation Instructions*

**Please Read**



- This device provides capability for certain Lutron dimmers to control low-wattage loads from 0 watts up to the dimmer's minimum rating.
- It presents a simulated load to the dimmer to meet the minimum load requirements even when the actual load is smaller.

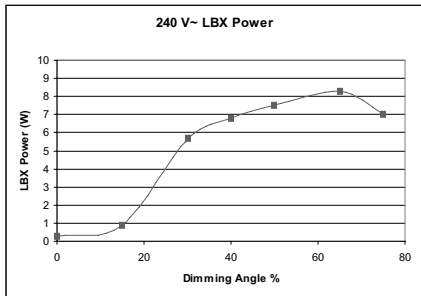


Interface shown with faceplate removed

This “load-side” equipment installs on the zone wiring in parallel with the lighting load. It provides an equivalent minimum load for Lutron dimmers when the actual load is too low for proper control unit operation.

Input:

- 220-240 V  $\sim$  65 mA 50/60 Hz (LUT-LBX-CE)
- Power dissipation less than 10 watts

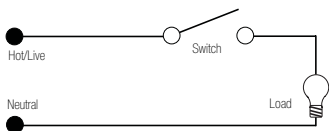


**Danger!** Always turn OFF the circuit breakers/MCB or remove the main fuses from the power line before doing any work. Failure to do so can result in serious personal injury. **Disconnect all power sources before servicing unit.**

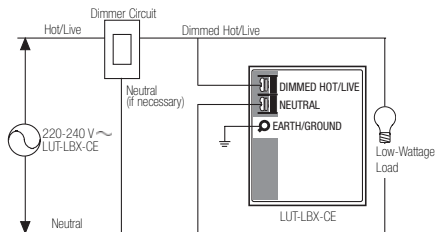
1. This Interface must be installed by a qualified electrician in accordance with all applicable regulations.
2. Improper wiring can result in personal injury, damage to the Interface, or damage to other equipment.
3. One LUT-LBX-CE per circuit below minimum load.
4. The LUT-LBX-CE must be mounted with arrows on yoke facing upward to ensure adequate cooling.
5. **CAUTION!** Dimmed magnetic low-voltage transformers: To avoid excessively high current flow that can cause transformer overheating and failure, observe the following:
  - (a) Do not operate the MLV dimmers with all of the lamps removed or with any lamps inoperative.
  - (b) Replace any burned out lamps immediately.
  - (c) Use only transformers that incorporate thermal protection or fused primary windings.
6. The LUT-LBX-CE does not change the approved load types of the dimmer. Use the required dimmer for the given load type.
7. For LED lighting dimming operation, refer to Application Note #138.

## Test load for short circuits

- Turn power Off.
- Connect standard switch between Hot/Live lead and the load wire to test circuit.
- Turn power On and check for short or open circuits.



## Single-Zone Wiring

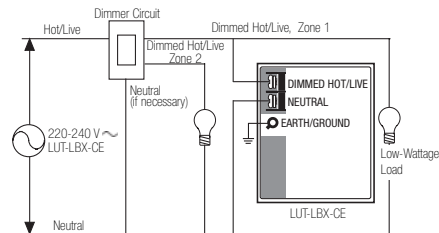


## Installation Instructions

1. Turn power Off to the Control Unit.
2. Mount in provided 4x4 junction box (Lutron, P/N 241-496); 3 1/2 in. (89 mm) deep is strongly recommended, 2 3/4 in. (68 mm) minimum. Allow at least 4 1/2 in. (110 mm) clearance above/below Interfaces to ensure proper heat dissipation.
3. Strip 1/2 in. (12 mm) insulation from all wires in wallbox and wire as shown. All connections are made using #12 AWG to #16 AWG (2,5 - 1,0 mm<sup>2</sup>) wire. Power terminals can accept up to two #12 AWG (2,5 mm<sup>2</sup>) wires. The recommended installation torque is 9,0 in. • lbs. (1,0 N • m) for line voltage connections.



## Dual-Zone Wiring

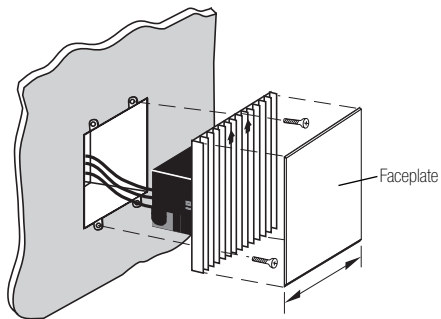


- \* Wallbox may be recess mounted or surface mounted. If mounting Interface in a panel, please refer to Panel Mounting section for important information.

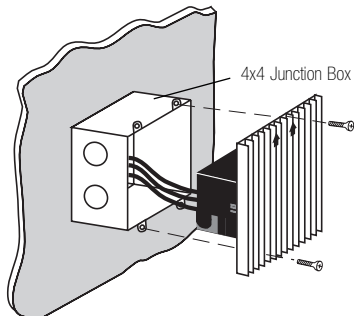
## Mounting: Interface must be mounted *vertically*!

1. Confirm all connections and mount the Interface using the screws provided.
2. Restore power to the system.

Recess Mount



Surface Mount

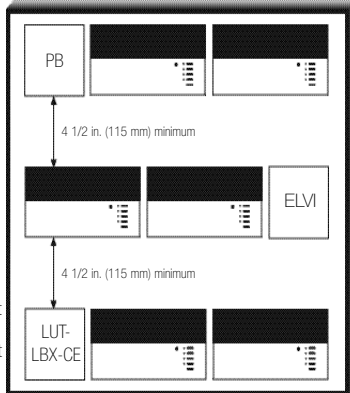


## Panel Mounting

- The enclosure must be in accordance with all local and national electrical codes.
- Lutron does not recommend using a door to enclose the front of a panel, since this restricts airflow to the *GRAFIK Eye* Control Units and Interfaces.
- If mounting multiple Control Units or Interfaces in an enclosure:
  1. Ambient temperature within an enclosure must remain between 32 °F - 104 °F (0 °C - 40 °C).
  2. If not mounting in a metal enclosure, all units **must** be mounted in a wallbox.
- To improve heat dissipation of the Interface, remove the faceplate from the unit.



*GRAFIK Eye* Control Units and Interface Units dissipate heat when operating. Obstructing these units can cause malfunction to both the Control Unit and the Interface if ambient temperature does not remain between 32 °F - 104 °F (0 °C - 40 °C).



## Troubleshooting Guide

### Symptom

Lights do not come on.

### Causes

Power is off  
 Miswire  
 Bulb(s)/lamp(s) burned out  
 Control Unit

### Solution

Restore power to the control unit.  
 Confirm wiring per wiring diagrams.  
 Replace bulb(s)/lamp(s).  
 Refer to troubleshooting section of Control Unit Installation Guide.

Lights turn on/off unexpectedly.

Load Type

Confirm that the load type being switched/dimmed is compatible with the control unit or dimmer being used. Line/Mains voltage phase control dimming only.

Miswire  
 Control Unit

Confirm wiring per wiring diagrams.  
 Refer to the troubleshooting section of Control Unit Installation Guide.

Damaged/disconnected  
 LUT-LBX-CE

Lighting load does not meet minimum requirements of dimmer; check for damage or disconnection.

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Lutron EA Ltd. ("Lutron EA") warrants each unit to be free from defects in material and workmanship and to perform under normal use and service. To the extent permitted by law, Lutron EA and Lutron Electronics Co. Inc. ("Lutron") make no warranties or representations as to the units except as set forth herein. This warranty shall run for a period of two years from the date of purchase and Lutron's obligations under this warranty are limited to remedying any defect, replacing any defective part or replacement (at Lutron EA's sole option) and shall be effective only if the defective unit is shipped to Lutron EA postage pre-paid within 24 months after purchase of the unit. Repair or replacement of the unit does not affect the expiry date of the warranty. This warranty does not cover damage or deficiencies due to abuse, misuse, inadequate wiring or insulation or use or installation other than in accordance with instructions accompanying the unit.

To the extent permitted by law, neither Lutron EA nor Lutron shall be liable for any other loss or damage including consequential or special loss or damages, loss of profits, loss of income, or loss of contracts arising out of or relating to the supply of the unit or the use of the unit and the purchaser assumes and will hold harmless Lutron EA and Lutron in respect of all such loss or damage. Nothing in this warranty shall have the effect of limiting or excluding Lutron EA's or Lutron's liability for fraud or for death or personal injury resulting from its own negligence, or any other liability, if and to the extent that the same may not be limited or excluded as a matter of law.

This warranty does not affect the statutory rights of consumer purchasers of this product.

Although every attempt is made to ensure that catalogue information is accurate and up-to-date, please check with Lutron EA before specifying or purchasing this equipment to confirm availability, exact specifications, and suitability for your application.

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Lutron Electronics Co., Inc.  
Made and printed in U.S.A.  
P/N 030-932 Rev. A 10/06

