

Ballast Installation Requirements

EcoSystem® / Hi-lume® 3D / H-Series



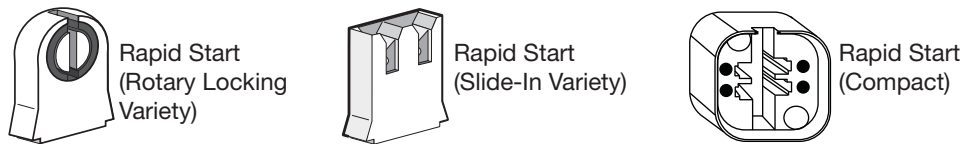
WARNING: Shock hazard. May result in serious injury or death. Disconnect power before servicing or installing.

Sockets Lutron requires and NEMA® recommends sockets complying with IEC 60400. Inspect sockets for marks to ensure the socket complies with IEC 60400. Two examples of these marks are: and .

Sockets must have a mark as well.

Use Rapid Start sockets. Do NOT use Instant Start sockets.

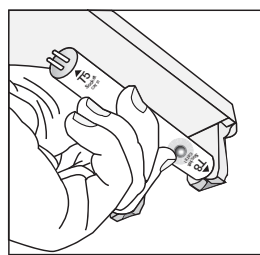
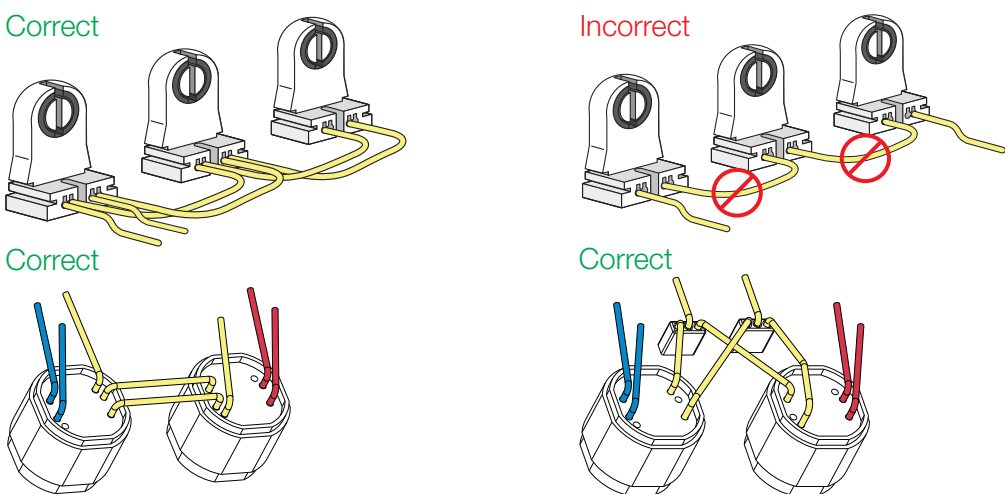
See Lutron App Note #122 or NEMA doc LSD-34-2006.



Socket Wiring:

Use 18 AWG (0.75 mm²) solid copper or tinned stranded wire. Refer to ballast label and socket manufacturer for proper strip lengths.

Make sure yellows are wired in parallel, not in series.



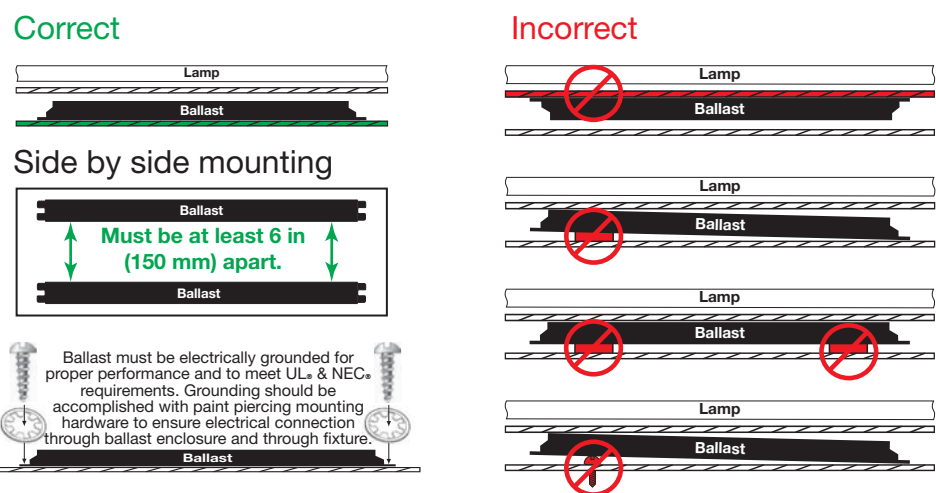
Lamp Socket Wiring Tester

Use Socket Tester (FDB-LSWT-T5/T8) to verify proper lamp holder wiring.

Available for purchase at www.lutronstore.com

Ballast Mounting

Mount ballast flush against fixture to provide best heat transfer. Also, avoid mounting ballast close to heat source such as fixture cover plate.

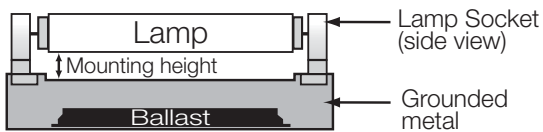


When installing more than one ballast in a fixture, contact Lutron Technical Support at 1.800.523.9466 for specific guidelines to maximize performance.

Lamp Mounting Height Requirements:

Lamp Type	Lamp Mounting Height
T8 Linear	1/8 in to 3/4 in (3.2 mm to 19.1 mm)
T5 Linear	1/16 in to 3/8 in (1.6 mm to 9.5 mm)
T5 TwinTube	1/16 in to 1/2 in (1.6 mm to 12.7 mm)

IMPORTANT: Lamps must never touch ground plane and should be placed without obstruction.



Warranty

For Lutron ballast warranty, please visit www.lutron.com/ResourceLibrary/warranty/Limited%20Comm.pdf Lutron warranty does not cover costs or damages caused by misapplication or improper installation.

Lamp Wiring

Socket Lead Length Requirements:

Lamp Type	Max. Length of Socket Leads (ballast to socket)
T5 Linear T8 Linear T8 U-Bend	7 ft (2.1 m)
T4 Compact T5 Twin Tube	3 ft (1.0 m)

Lamps

Temperature: Avoid operating with air blowing directly on lamps. Lutron® ballasts are designed to strike the lamps when the lamp temperature is at a minimum of 50 °F (10 °C). See lamp manufacturer's specifications for maximum lamp temperature.

Ballast wire strip lengths:

For power, output, and digital terminals (E1, E2). For control and sensor terminals.



For proper wiring: Follow wiring schematic on ballast.

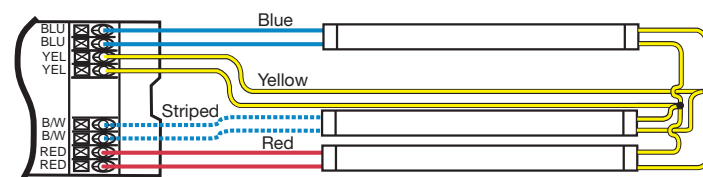
EcoSystem® & Hi-lume® 3D



H-Series



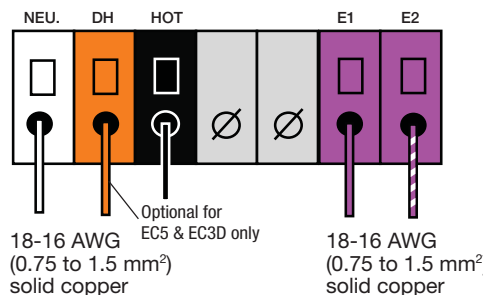
Wiring to three lamps



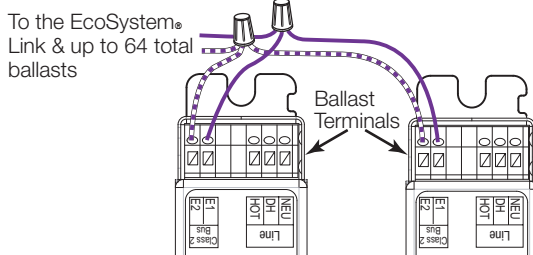
Note: Yellows wired in parallel

Power Wiring

Power Input (Line Voltage):* EcoSystem® Link:**



18-16 AWG (0.75 to 1.5 mm²) solid copper
Optional for EC5 & EC3D only
18-16 AWG (0.75 to 1.5 mm²) solid copper



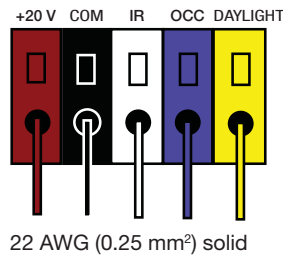
* If using EcoSystem® Digital control, Hot and Neutral should not be switched.
Link can be Class 1 or IEC PELV/NEC® Class 2
** NOTE: IEC PELV/NEC® Class 2 must be separated from Class 1 and line voltage wiring by the following: 0.25 in (6 mm) or physical barrier. Please refer to App Note #142 for further information.

EcoSystem® Link Wiring

Wire Gauge	Digital Link Length (max)
12 AWG	2200 ft
14 AWG	1400 ft
16 AWG	900 ft
18 AWG	550 ft
Wire Gauge	Digital Link Length (max)
4.0 mm ²	828 m
2.5 mm ²	517 m
1.5 mm ²	310 m
1.0 mm ²	207 m
0.75 mm ²	155 m

Sensor Wiring

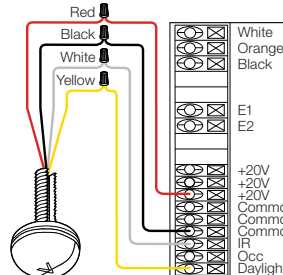
Sensor Wiring IEC PELV/NEC® Class 2 (EC5 models only):



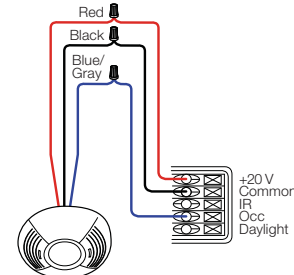
22 AWG (0.25 mm²) solid

- 22 AWG (0.25 mm²) solid wire. Do not exceed 100 ft (30 m) from sensor to ballast.
- Connect only one sensor per input.
- Wire sensors to one ballast only.
- * NOTE: Sensor wiring only applies to EcoSystem® Ballasts. EcoSystem® compact, Hi-lume® 3D, and H-Series ballasts do not have connections for sensors.
- * NOTE: IEC PELV/NEC® Class 2 must be separated from Class 1 and line voltage wiring by the following: 0.25 in (6 mm) or physical barrier. Please refer to App Note #142 for further information.

G-can with daylight sensor



J-can with occupancy sensor



G-can with wallstation

