

# LTE 2-Wire Forward-Phase UL® Listed Driver | Installation

041483  
Rev. C  
01/2014

LTEA4U1UKL-AV120 (12 V)  
LTEA4U1UKL-CV240 (24 V)  
LTEA4U1UKL-XXXXX  
120 V~ 50/60 Hz UL® Listed Driver

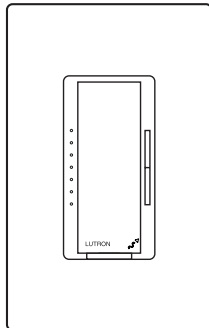
### Important Notes: Please read before installing.

- For installation by a qualified electrician in accordance with all local and national electrical codes.
- Use copper conductors only.
- For indoor use only.
- Check to see that the driver type and rating are suitable for the application.
- **DO NOT** install if product has any visible damage.
- If moisture or condensation is evident, allow the product to dry completely before installation.
- Operate between 32 °F (0 °C) and 104 °F (40 °C).
- 0% to 90% humidity, non-condensing.

## English

### Required Components For each system ensure you have:

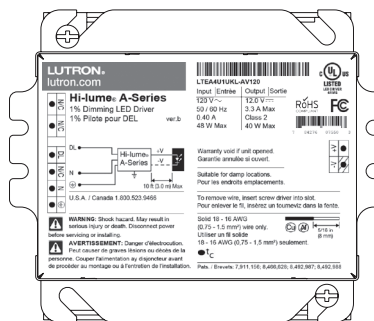
One Compatible Lutron Control<sup>1, 2</sup>



<sup>1</sup> See list of compatible controls on reverse side.

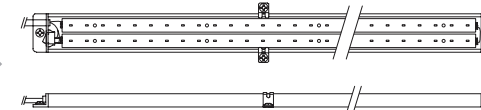
<sup>2</sup> Please refer to Installation Sheet with your control for wiring instructions.

At least one UL® Listed Hi-lume® A-Series LTE Driver<sup>3</sup>



<sup>3</sup> Driver output range is factory-set. Different output ratings are available for different loads.

At least one compatible LED Load (light engine)<sup>4, 5</sup>



<sup>4</sup> 5 W minimum.

<sup>5</sup> Load ratings must match driver output ratings.

## Install the UL® Listed Driver

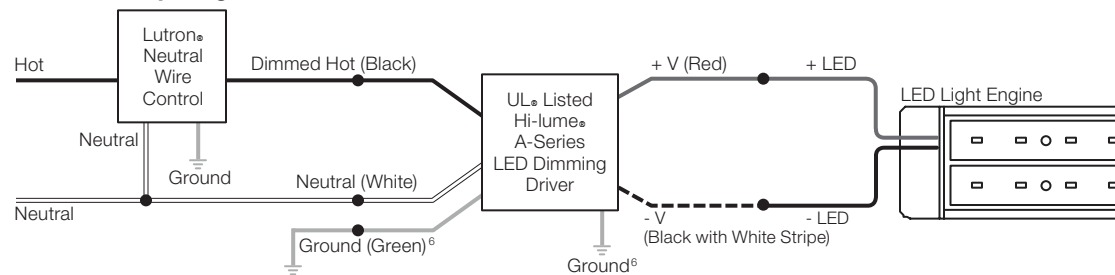


**WARNING** Shock Hazard. May result in serious injury or death.  
Turn off power at circuit breaker before installing the unit.

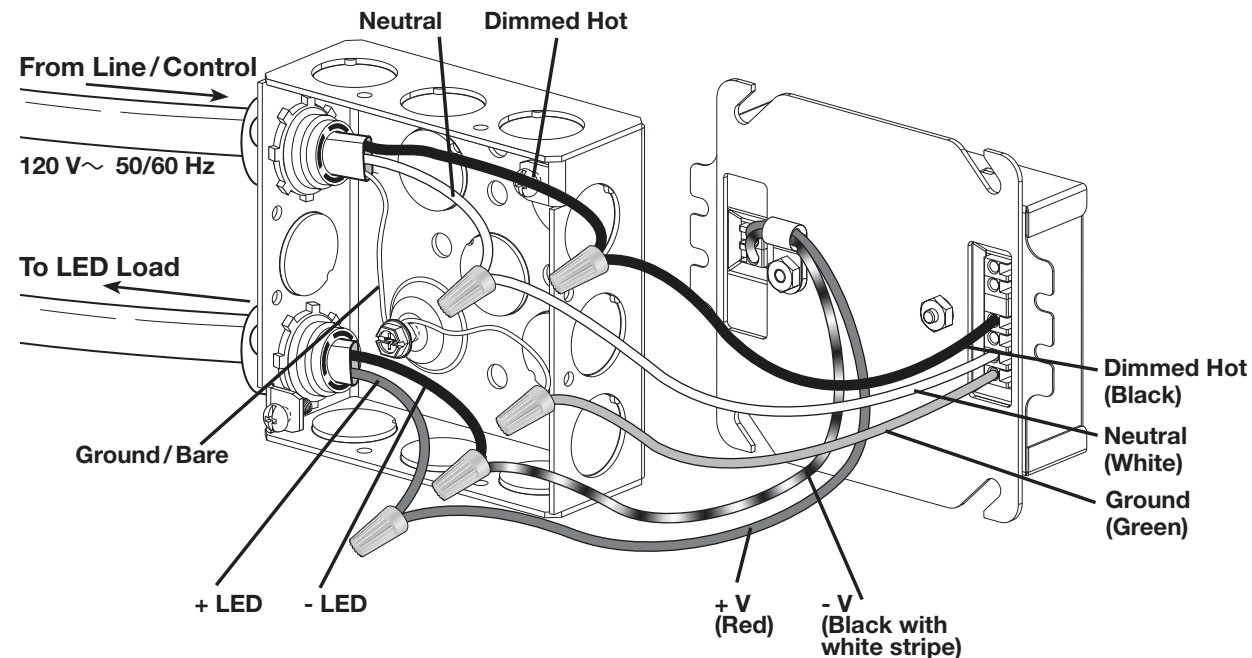
### When installing the UL® Listed Driver, wire as shown.

1. Remove driver and mounting plate from the rest of the junction box. **Do not remove driver from mounting plate.**
2. Using leads and ground (bundled in junction box) make power, load, and ground connection with provided wire nuts (see wiring diagrams).
3. Re-install LED driver and mounting plate to the junction box.
4. Ensure compatible dimmer and load are installed and restore power to circuit.  
See reverse side for **Compatible Controls**.

### Controls Requiring a Neutral Wire



<sup>6</sup> Driver and junction box must be grounded in accordance with local and national electrical codes. Ground provided by grounding of junction box and by using the green ground wire connection.



# LTE 2-Wire Forward-Phase UL® Listed Driver Compatible Controls

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## Compatible Controls

- Dimming Modules and Panels
- Neutral Wire Dimmers

Please consult individual component installation for more details.

### Driver Leads

Maximum driver-to-LED light engine wire length for  
**Constant Current Drivers:**

Wire Gauge	Maximum Lead Length		
	200 mA to 700 mA	710 mA to 1.50 A	1.51 A to 2.10 A
18 AWG (0.75 mm <sup>2</sup> )	30 ft (9 m)	15 ft (4.5 m)	10 ft (3 m)
16 AWG (1.5 mm <sup>2</sup> )	35 ft (10.5 m)	25 ft (7.5 m)	15 ft (4.5 m)
14 AWG (2.5 mm <sup>2</sup> )	50 ft (15 m)	40 ft (12 m)	25 ft (7.5 m)
12 AWG (4.0 mm <sup>2</sup> )	100 ft (30 m)	60 ft (18 m)	40 ft (12 m)

Maximum driver-to-LED light engine wire length for  
**Constant Voltage Drivers:**

Wire Gauge	Maximum Lead Length		
	10 V <sup>---</sup> to 20 V <sup>---</sup>	20.5 V <sup>---</sup> to 40 V <sup>---</sup>	40.5 V <sup>---</sup> to 60 V <sup>---</sup>
18 AWG (0.75 mm <sup>2</sup> )	10 ft (3 m)	15 ft (4.5 m)	30 ft (9 m)
16 AWG (1.5 mm <sup>2</sup> )	15 ft (4.5 m)	25 ft (7.5 m)	50 ft (15 m)
14 AWG (2.5 mm <sup>2</sup> )	25 ft (7.5 m)	40 ft (12 m)	75 ft (22.5 m)
12 AWG (4.0 mm <sup>2</sup> )	40 ft (12 m)	60 ft (18 m)	100 ft (30 m)

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## Compatible Control Lists

For assistance selecting controls, contact our LED Center of Excellence at 1.877.346.5338 or LEDs@lutron.com

### Lutron® Neutral-Wire Dimmers

Product	Part Number	Low-End Setting/ Load-Type Setting	Drivers per Control		
			A: Not Ganged	B: End-of- Gang	C: Middle- of-Gang
Maestro Wireless® dimmer	MRF2-6ND-120	Trim low-end per dimmer Advanced Programming Mode App Note 048370 <sup>7</sup>	1-8	1-8	1-8
RadioRA® 2 adaptive dimmer	RRD-6NA	"Hi-lume® A-Series LTE LED Driver 2-wire"	1-8	1-8	1-8
HomeWorks® QS adaptive dimmer	HQRD-6NA	"LED Lutron A-Series 2 Wire"	1-8	1-8	1-8
HomeWorks® QS 600 W dimmer	HQRD-6ND	"LED Lutron A-Series 2 Wire"	1-8	1-8	1-8
Stanza® dimmer	SZ-6ND	Trim low-end per dimmer Installation Guide <sup>7</sup>	1-8	1-8	1-8
RadioRA® 2 1000 W dimmer	RRD-10ND	Set Device Type: INC/MLV neutral dimmer, trim high-end to 99%, trim low-end to 35%	1-13	1-13	1-13
HomeWorks® QS 1000 W dimmer	HQRD-10ND	"LED Lutron A-Series 2 Wire"	1-13	1-13	1-13

<sup>7</sup> To properly trim low-end, start at lowest setting and raise step by step until light level appears to increase. Step down one setting. Your low-end is now properly trimmed for use with your driver

### Lutron® Dimming Modules/Panels

Product	Part Number	Drivers per Control	Low-End Setting/ Load-Type Setting
HomeWorks® QS wallbox power module	HQRJ-WPM-6D-120	1-10 (per output); 26 total per module	"LED Lutron® A-Series 2 Wire"
GRAFIK Eye® QS control unit	QSGR-, QSGRJ-	1-10 (per output); 26 total per unit	Set load-type to "Fluorescent Module"
GRAFIK Eye® 3000 control unit	GRX-3100, GRX-3500	1-10 (per output); 26 total per unit	Set load-type to "GRX-FDBI" or "GRX-TVI"
RPM-4U module (LCP, HomeWorks®, GRAFIK Systems™, Quantum®)	HW-RPM-4U-120	1-26 (per output); 26 total per module	"LED Lutron® A-Series 2 Wire"
	LP-RPM-4U-120		Set load-type to "2-1"
RPM-4A module (LCP, HomeWorks®, GRAFIK Systems™, Quantum®)	HW-RPM-4A-120	1-13 (per output); 26 total per module	"LED Lutron® A-Series 2 Wire"
	LP-RPM-4A-120		Set load-type to "2-1"
GP dimming panels	Various	1-26	Set load-type to "2-1"

**Note:** For information about Legacy Product use in existing control application, contact LEDs@lutron.com

## LTE Troubleshooting

<b>LED does not illuminate</b>	<ul style="list-style-type: none"> <li>• Verify that the driver is wired correctly according to wiring diagram.</li> <li>• Verify that the LED load is wired correctly; red to positive, black/white to negative.</li> <li>• Verify that the LED load is compatible with the specified voltage output of the driver.</li> <li>• If using a constant voltage driver, verify that the LED load is for "constant voltage" applications.</li> <li>• If using a constant current driver, verify that the LED load is for "constant current" applications.</li> <li>• Verify that a GFCI or GFCI breaker has not tripped; drivers should not be powered by a GFCI circuit.</li> <li>• Lutron drivers are not for use with MR16 LED lamps.</li> </ul>
<b>LED exhibits a flash or steppy dimming on first use</b>	<ul style="list-style-type: none"> <li>• Drivers will "learn" the LED load on first startup. This is a one-time event for a particular driver/LED combination. Running the load at full output for 5 seconds should complete "learning."</li> </ul>
<b>LED is flashing, flickering, dropping out, or has poor dimming performance</b>	<ul style="list-style-type: none"> <li>• Verify that a compatible dimmer is being used to control the driver.</li> <li>• Verify that the dimmer low-end trim has been properly adjusted.</li> <li>• If using a constant voltage driver, verify that the LED load is for "constant voltage" applications.</li> <li>• Verify that length of wires between driver and LED does not exceed Lutron specification.</li> <li>• Certain types of LED loads may be incompatible.<sup>8</sup></li> <li>• Lutron drivers are not for use with MR16 LED lamps.</li> </ul>
<b>LED is flashing slowly (6 to 8 second interval)</b>	<ul style="list-style-type: none"> <li>• If using a constant voltage driver, verify that your LED load does not exceed the maximum specified power rating of the driver (40 W).</li> <li>• If using a constant voltage driver, verify that your LED load matches the specified voltage output of the driver.</li> <li>• If using a constant current driver, verify that your LED load falls within the specified voltage rating of the driver.</li> <li>• Verify that length of wire between driver and LED does not exceed Lutron specification.</li> <li>• Certain types of LED loads may be incompatible.<sup>8</sup></li> </ul>
<b>LED output appears dim at high-end</b>	<ul style="list-style-type: none"> <li>• Verify that the driver is operating in an environment within its ambient temperature rating.</li> </ul>
<b>LED emits audible noise at dimmed levels</b>	<ul style="list-style-type: none"> <li>• Certain types of LED loads may be incompatible.<sup>8</sup></li> </ul>
<b>LED strip/array has dark spots</b>	<ul style="list-style-type: none"> <li>• If using a constant current driver, check to see if dimming parallel-wired LEDs with CCR driver; PWM is recommended for these applications.</li> </ul>
<b>Not all LED strips/fixtures illuminate</b>	<ul style="list-style-type: none"> <li>• Verify that multiple LEDs connected to a single driver are properly wired.</li> </ul>

<sup>8</sup> Certain constant current loads may have additional circuitry and certain constant voltage loads may have added capacitance. Contact the Lutron LED Center of Excellence at 1.877.346.5338 for more information about these loads.