

**Caution**

**CRITICAL SAFETY NOTE: Read all instructions before beginning installation.**

**WARNING – RISK OF FIRE OR ELECTRIC SHOCK. LUMINAIRES WIRING, POWER SUPPLY, OR OTHER ELECTRICAL PARTS MAY BE DAMAGED WHEN DRILLING FOR INSTALLATION OF RETROFIT KIT HARDWARE. INSPECT WIRING AND COMPONENTS FOR DAMAGE.**

**WARNING - RISK OF FIRE OR ELECTRIC SHOCK. INSTALLATION OF THIS RETROFIT KIT REQUIRES A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE LUMINAIRE'S ELECTRICAL SYSTEM AND THE HAZARD INVOLVED. IF NOT QUALIFIED, DO NOT ATTEMPT INSTALLATION. CONTACT A QUALIFIED ELECTRICIAN.**

**WARNING – RISK OF FIRE OR ELECTRIC SHOCK. INSTALL THIS KIT ONLY IN THE LUMINAIRE THAT HAS THE CONSTRUCTION FEATURES AND DIMENSIONS SHOWN IN THE PHOTOGRAPHS AND/OR DRAWINGS AND WHERE THE INPUT RATING OF THE RETROFIT KIT DOES NOT EXCEED THE INPUT RATING OF THE LUMINAIRE.**

**ONLY THOSE OPEN HOLES INDICATED IN THE PHOTOGRAPHS AND/OR DRAWINGS MAY BE MADE OR ALTERED AS A RESULT OF KIT INSTALLATION. DO NOT LEAVE ANY OTHER OPEN HOLES IN AN ENCLOSURE OF WIRING OR ELECTRICAL COMPONENTS.**

**WARNING – TO PREVENT WIRING DAMAGE OR ABRASION, DO NOT EXPOSE WIRING TO EDGES OF SHEET METAL OR OTHER SHARP OBJECTS.**

**THE RETROFIT KIT IS ACCEPTED AS A COMPONENT OF A LUMINAIRE WHERE THE SUITABILITY OF THE COMBINATION SHALL BE DETERMINED BY AUTHORITIES HAVING JURISDICTION. PRODUCT MUST BE INSTALLED BY A QUALIFIED ELECTRICIAN IN ACCORDANCE WITH THE APPLICABLE AND APPROPRIATE ELECTRICAL CODES. THE INSTALLATION GUIDE DOES NOT SUPERSEDE LOCAL OR NATIONAL REGULATIONS FOR ELECTRICAL INSTALLATIONS.**

**REPLACE LED LAMP ONLY WITH MODEL 1100mm(550mm for LXR 2205) LED ARRAY MANUFACTURED BY LONXEN.**

**THIS LUMINAIRE HAS BEEN MODIFIED TO OPERATE LED LAMPS. DO NOT ATTEMPT TO INSTALL OR OPERATE FLUORESCENT LAMPS IN THIS LUMINAIRE.**

**BRANCH-CIRCUIT CONDUCTORS WITHIN 75 MM (3 IN.) OF A LED DRIVER SHALL HAVE AN INSULATION TEMPERATURE RATING NOT LOWER THAN 90°C ( 194°F) UNLESS SUPPLYING A LUMINAIRE MARKED AS SUITABLE FOR A DIFFERENT INSULATION TEMPERATURE.**

---

**PRODUCT IDENTIFICATION**

Product Models: All LXR Series Linear LED Retrofit Kits.

Product Description: LED retrofit kit, w/magnetic LED strip(s) and driver.

- Models LRV 5311-HL-V2, LRV 4211-HL-V2, LRV 3211-HL-V2 - Suitable for field installation in any recessed linear fluorescent luminaire with minimum nominal overall dimensions of 48 in. long x 5 in. wide, by 1.5 in. deep.
- Models LRV 2205-HL-V2 - Suitable for field installation in any recessed linear fluorescent luminaire with minimum nominal overall dimensions of 24 in. long x 5 in. wide, by 1.5 in. deep.

## LXR MODEL NOMENCLATURE

LRV XXXX where:

LRV = Retrofit Kit Standard

4th digit, indicating nominal system wattage; "2"=20W, "3"=30W, "4"=40W, or "5"=50W.

5th digit, indicating the number of linear LED packages, or "strips"; maybe "2" or "3",.

6th,7th digit, indication nominal length of linear LED packages, or "strips" ; "11"=1100mm, or "05"=550mm.

## SPECIFICATIONS

Input voltage: 100~277Vac, 50/60Hz.

LED driver output voltage: 30-42Vdc.

SUITABLE FOR DAMP LOCATIONS.

**Table1: LED driver specifications**

Model No.	Input Volts(V)	Frequency(Hz)	System Watts(W)	System Current(A)	LED Driver Qty(PCS)	LED Driver Weight(g)
LRV 5311-HL-V2	100-277	50/60	50	0.5A	1	202g
LRV 4211-HL-V2	100-277	50/60	40	0.4A	1	202g
LRV 3211-HL-V2	100-277	50/60	30	0.3A	1	202g
LRV 2205-HL-V2	100-277	50/60	20	0.2A	1	202g

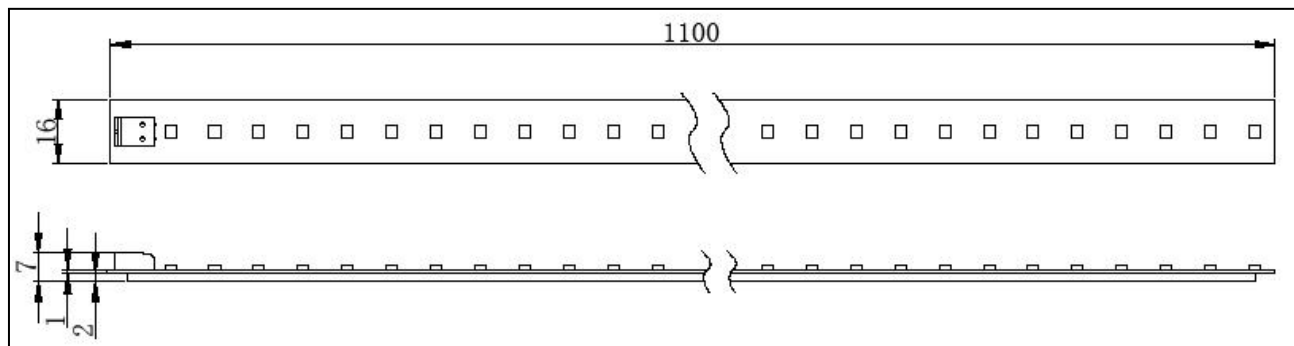
**Table2: LED array specifications**

Model No.	LED array Dimension(mm)	LED array QTY(PCS)	LED Qty(PCS)	CCT(K)
LRV 5311-HL-V2	1100x16x5	3	330	3000-6500
LRV 4211-HL-V2	1100x16x5	2	220	3000-6500
LRV 3211-HL-V2	1100x16x5	2	220	3000-6500
LRV 2205-HL-V2	550x16x5	2	130	3000-6500

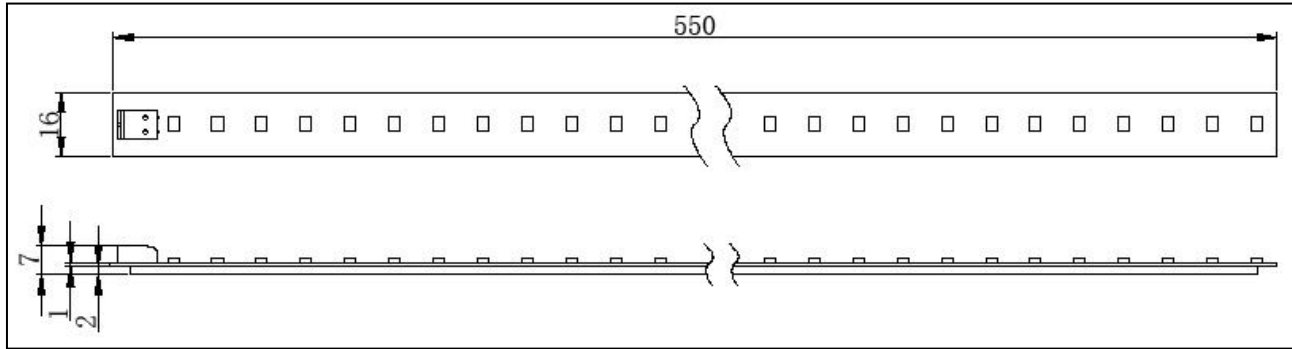
## COMPONENTS INCLUDED IN THIS KIT

- (1, 2 or 3) LED light strips with magnetic back and quick-connect plug. (see Model Nomenclature paragraph on Page 1)
- (1) LED Driver with magnetic back and quick-connect output wires.
- (1) The one-two (two each of red + and black - wires) and one-three (three each of red + and black - wires) strips just connect directly with the wires.

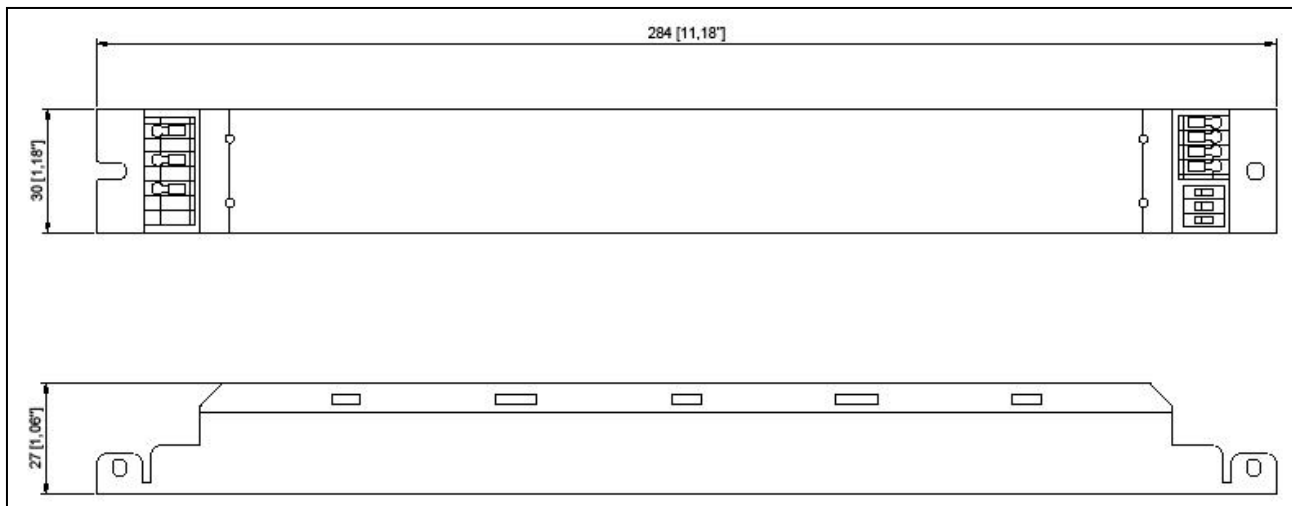
**Figure 1: 1100mm LED array**



**Figure 2: 550mm LED array**



**Figure 3: LED driver**

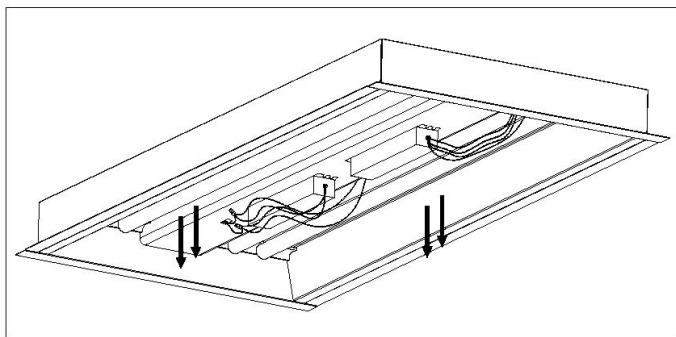


## **INSTALLATION PROCEDURE**

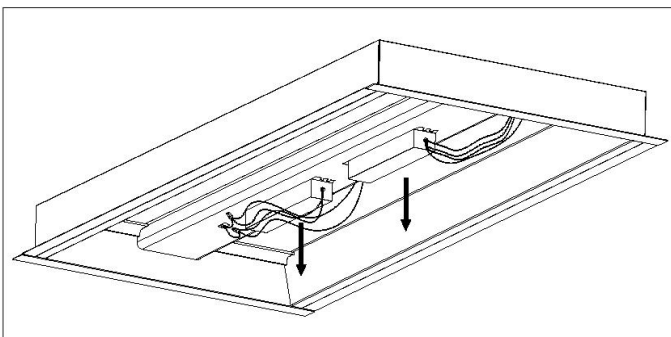
1. Shut off power to luminaire.
2. Open or remove luminaire lens or grille (if present).
3. Remove fluorescent lamps and ballast cover(s). (See figure 4)
4. Confirm that the branch circuit voltage of your electrical system is compatible with this kit.
5. Disconnect input power from ballast and remove existing ballast, sockets, brackets and socket wiring. (see figure 5)
6. Place driver inside the ballast box, allowing the magnet to hold it in place temporarily.
7. Insert power input wires to the input end on the LED driver. IMPORTANT NOTE: TWIST-ON OR PUSH-ON CONNECTORS MUST BE RATED FOR A MINIMUM OF 600V. (see figure 6)
8. Permanently secure driver to the luminaire body with #8 x 1/2" or shorter self-tapping screws, through the mounting flanges on the driver case. Be certain that there are no power wires in the path of the screws.
9. Be certain that "Line" wire is connected to the ACL(black) input wire of driver, and that "Neutral" wire is connected to the ACN((white) input wire of driver.
10. Be certain that the ground wire of the power circuit remains connected to the body of the luminaire.
11. Connect the LED driver output to the harness, connect the brown wire of LED driver to the "dimming +" wire, connect the blue wire of LED driver to the "dimming -" wire.
12. Reinstall the ballast cover(s), covering the driver and all electrical connections. Route the harnesses out the end of the ballast cover, in such a way as to not expose them to any sharp edges, or pinch them between any metal surfaces.
13. One at a time, plug the LED strip(s) into the harnesses and insert them into/onto the body of the luminaire. (see figure 7).
14. At this time, you may temporarily turn on power to test retrofitted luminaire.

15. Permanently affix the Retrofit Kit label to the body of the luminaire in a conspicuous place, where it will be plainly visible when the fixture is opened for service.
16. Close or reinstall the lens/grille/cover and restore power to luminaire.

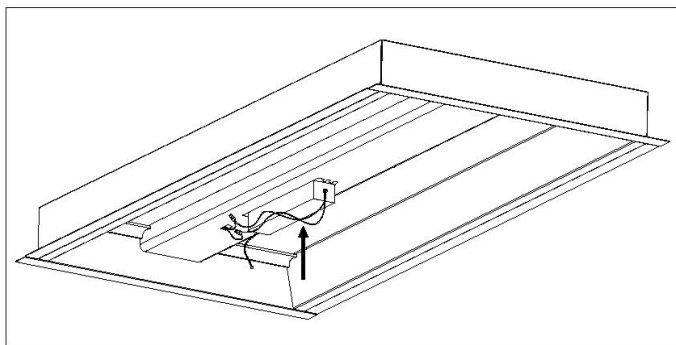
**Figure 4**



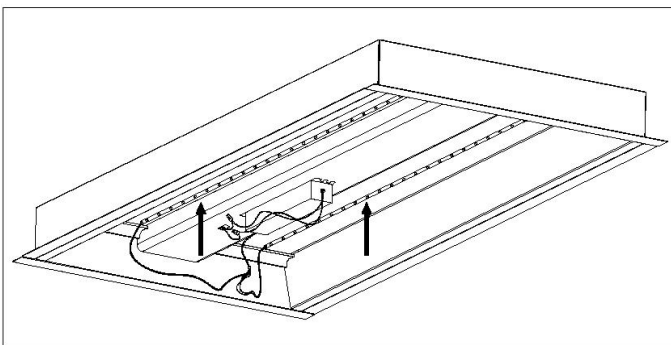
**Figure 5**



**Figure 6**



**Figure 7**



**Figure 8: Wiring diagram**

