

NEXTLamp™ 4ft. T12/T8 LED Linear Retrofit Kit: NL48-UNVN-WW-8YY-C1* Contractor Series Installation Guide

This retrofit kit is Class 2 rated. The output voltage from the LED driver (input voltage to the tombstones) is low voltage (~40V).

* YY indicates the specific color temperature (CCT) of the lamp (e.g. 35 = 3500K, 40 = 4000K, 50 = 5000K)

Congratulations on your purchase of the NEXTLamp 4ft. linear retrofit kit. We trust that you will find the experience of using our LED lighting products to offer a new paradigm in linear lighting.

This installation guide provides important information regarding the installation and operation of NEXT Lighting's NEXTLamp™ and LED Driver products, collectively the retrofit kit.

Product Summary



NEXTLamp 2ft. T12/T8 LED Linear Retrofit Kit Order Codes

Retrofit Kit Model Number	Description	Retrofit Kit Contents	Qty	Part Numbers
NL48-UNV1-18-835-00-001	3500K 4ft. T12/T8 retrofit kit lamp and driver series	NEXTLamp	1	NL48-21-835-00-001
		LUC-024S056DSP	1	LUC-024S050DSP
NL48-UNV1-18-840-00-001	4000K 4ft. T12/T8 retrofit kit lamp and driver series	NEXTLamp	1	NL48-21-840-00-001
		LUC-024S056DSP	1	LUC-024S050DSP
NL48-UNV1-18-850-00-001	5000K 4ft. T12/T8 retrofit kit lamp and driver series	NEXTLamp	1	NL48-21-850-00-001
		LUC-024S056DSP	1	LUC-024S050DSP
NL48-UNV2-43-835-00-001	3500K 4ft. T12/T8 retrofit kit lamp and driver series	NEXTLamp	2	NL48-21-835-00-001
		LUC-042D056DSM	1	LUC-042D056DSM
NL48-UNV2-43-840-00-001	4000K 4ft. T12/T8 retrofit kit lamp and driver series	NEXTLamp	2	NL48-21-840-00-001
		LUC-042D056DSM	1	LUC-042D056DSM
NL48-UNV2-43-850-00-001	5000K 4ft. T12/T8 retrofit kit lamp and driver series	NEXTLamp	2	NL48-21-850-00-001
		LUC-042D056DSM	1	LUC-042D056DSM
NL48-UNV3-65-835-00-001	3500K 4ft. T12/T8 retrofit kit lamp and driver series	NEXTLamp	3	NL48-21-835-00-001
		LUC-066T056DSM	1	LUC-066T056DSM
NL48-UNV2-43-840-00-001	4000K 4ft. T12/T8 retrofit kit lamp and driver series	NEXTLamp	3	NL48-21-840-00-001
		LUC-066T056DSM	1	LUC-066T056DSM
NL48-UNV2-43-850-00-001	5000K 4ft. T12/T8 retrofit kit lamp and driver series	NEXTLamp	3	NL48-21-850-00-001
		LUC-066T056DSM	1	LUC-066T056DSM

Each LED Driver in the above kits have independent output channels with each channel capable of providing power to a single NEXTLamp. LUC-024S050DSP has one channel and is intended to operate a single NEXTLamp.

The NEXTLamp retrofit kit is intended to replace either T12 or T8 fluorescent lamps in almost all luminaires. The lamp can be used with both unshunted and shunted tombstones to allow for worry free installation in all luminaires.

Luminaire Compatibility

NEXTLamp T12/T8 Retrofit Kits have been tested for compatibility within various traditional fluorescent luminaires including standard prismatic, parabolic, and volumetric luminaires. In addition, they have been tested in completely sealed waterproof luminaires and are compatible in fully recessed luminaires.

# of Lamps Per Luminaire	Min. Luminaire Dimension, Length x Width x Height mm. (in.)
1	1200 (48) x 114 (4.5) x 80 (3.2)
2	1200 (48) x 114 (4.5) x 80 (3.2)
3	1200 (48) x 600 (24) x 80 (3.2)
4	1200 (48) x 600 (24) x 80 (3.2)

Installation Materials Required

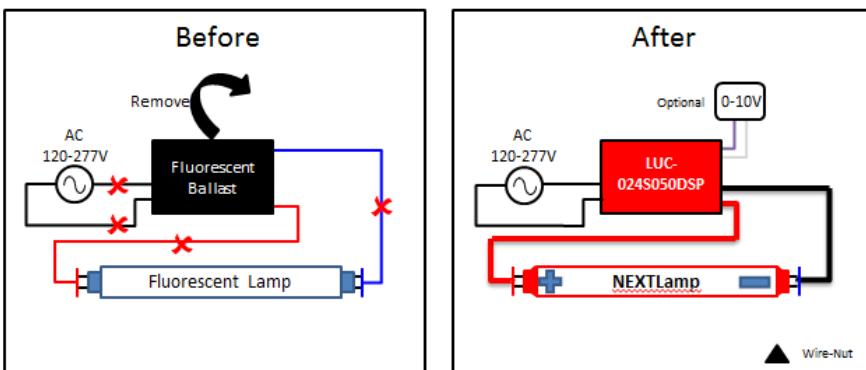
- NEXTLamp T12/T8 Lamp: NL48-21-8YY-00-001
- LED driver: LUC-024S050DSP, LUC-042D056DSM or LUC-066T056DSM
- Luminaire Retrofit Kit Label
- Wire nuts (supplied by installer)

Retrofit Installation Instructions (One or Two Lamp Luminaire)

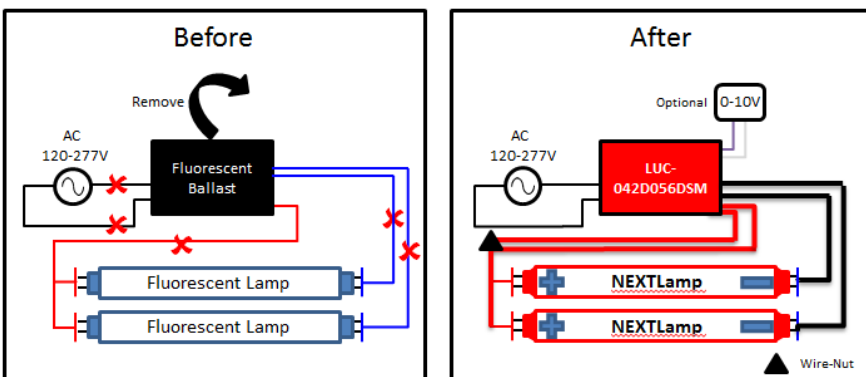
1. **Switch off the power to the luminaire or verify that it is disconnected before beginning the installation.**
2. Open luminaire diffuser, lens, etc. if applicable and remove the existing fluorescent lamp(s).
3. Open or remove the cover for the ballast and wiring channel.
4. Cut all wires connected to the ballast. Cut wire within 12 inches of the existing ballast. The input line voltage wires and wires providing power to the tombstones will be re-used during installation of the LUC-024S050DSP, LUC-042D056DSM or LUC-066T056DSM LED Driver.
5. Remove or bypass the starter (if present). **STARTER MUST BE REMOVED BEFORE NEXTLAMP INSTALLATION.**
6. Remove any fastening devices used to mount the ballast to the luminaire (save the fastening devices for installation of the LUC-024S050DSP, LUC-042D056DSM or LUC-066T056DSM LED Driver). Slide the ballast out from any mounting clips and remove the ballast.
7. Mount the LUC-024S050DSP, LUC-042D056DSM or LUC-066T056DSM LED Driver to the luminaire using the same holes and fasteners as were previously used to mount the fluorescent ballast.
8. On the output side of the LUC-024S050DSP, LUC-042D056DSM or LUC-066T056DSM LED Driver, connect the red common V+ wire(s) to the yellow (or red) common line(s) of the luminaire. If only one yellow (or red) common line of the luminaire is present, connect both red common V+ wires to the yellow (or red) common line of the luminaire.

9. Connect the black V- wire(s) from the LUC-042D056DSM output to the blue wire for the luminaire tombstones. If there are two or more lamps, connect black V- wires to the wires of the luminaire, one to each tombstone.
10. On the input side of the LUC-024S050DSP, LUC-042D056DSM or LUC-066T056DSM LED Driver, connect the black wire to the live wire that supply's power from the AC Mains (90-305V compatible). Connect the white wire on the input side of the LUC-024S050DSP, LUC-042D056DSM or LUC-066T056DSM LED Driver to the mains neutral.
11. Affix the Luminaire Retrofit Kit Label (included in the lamp packaging) on the luminaire near the positive end (the end that the LUC-024S050DSP, LUC-042D056DSM or LUC-066T056DSM LED Driver's red wire(s) are connected to). The label will provide polarity guidance when installing the NEXTLamps.
12. If dimming is desired, connect the violet and grey wire from the 0-10V dimming output with a compatible 0-10V dimming source. If dimming is not desired, cap the violet and grey dimming leads each with a wire.
13. Close the wiring and Driver/Ballast compartment cover on the luminaire.
14. Install NEXTLamps as appropriate for your luminaire using the same method used for conventional fluorescent tubes. The NEXTLamps have positive polarity indicators on one end of each lamp. The end with the positive, plus sign, should be inserted into the tombstone that is connected to the red positive output wires from the LUC-042D056DSM. This end should be indicated by the Luminaire Retrofit Kit Label that was previously installed.
15. If applicable, close or replace the lens or louvers per luminaire manufacturer's instructions.
16. Switch on the power.

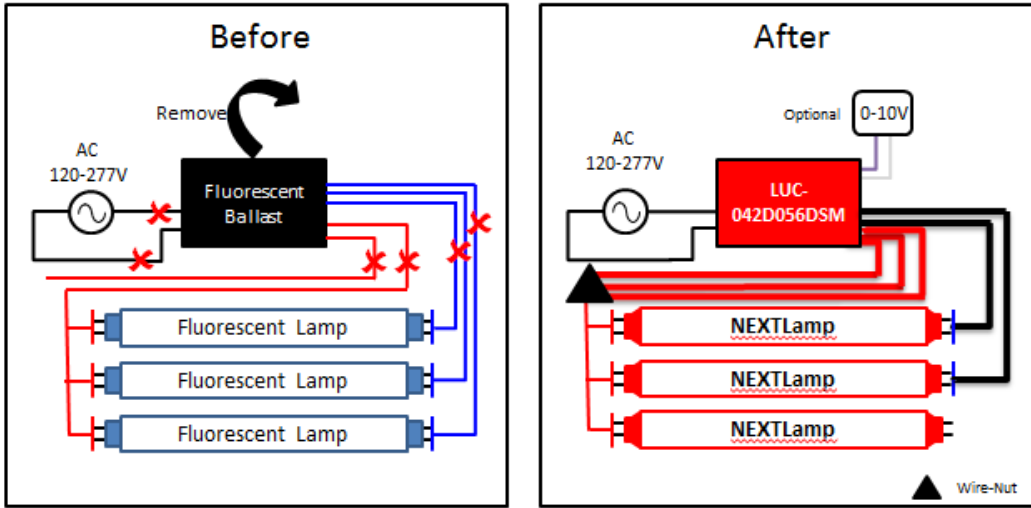
One Lamp Installation (NL48-UNV1-18-8YY-C1)



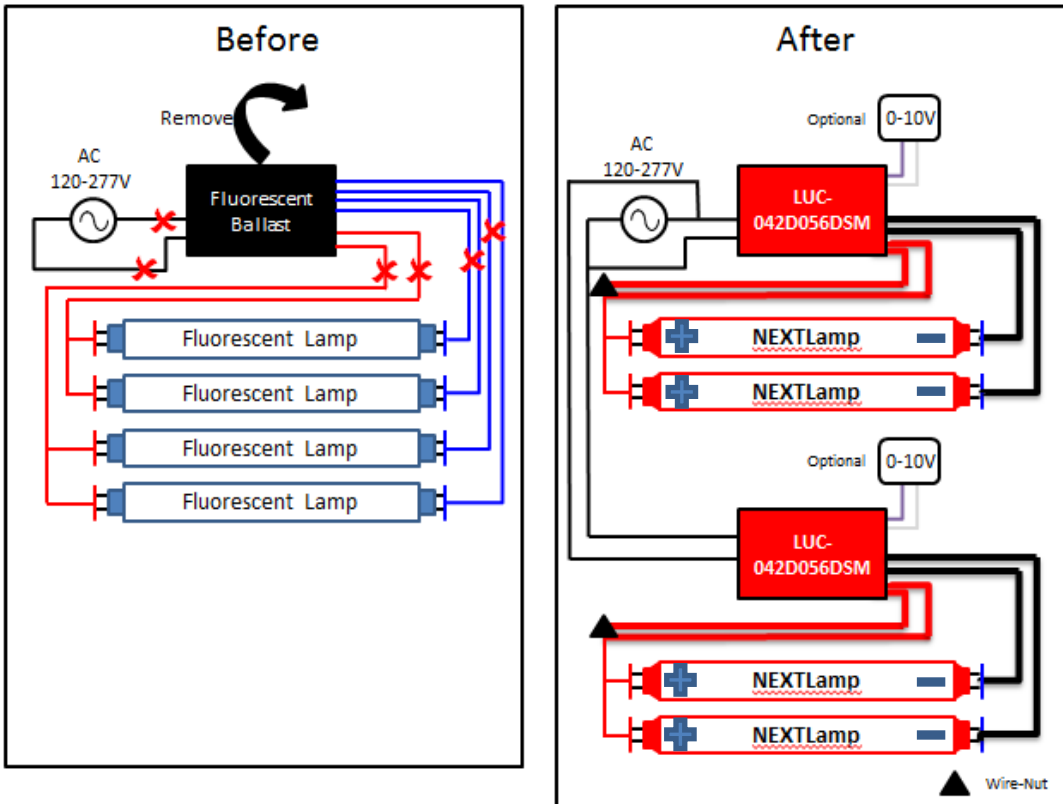
Two Lamp Installation (NL48-UNV2-43-8YY-C1)



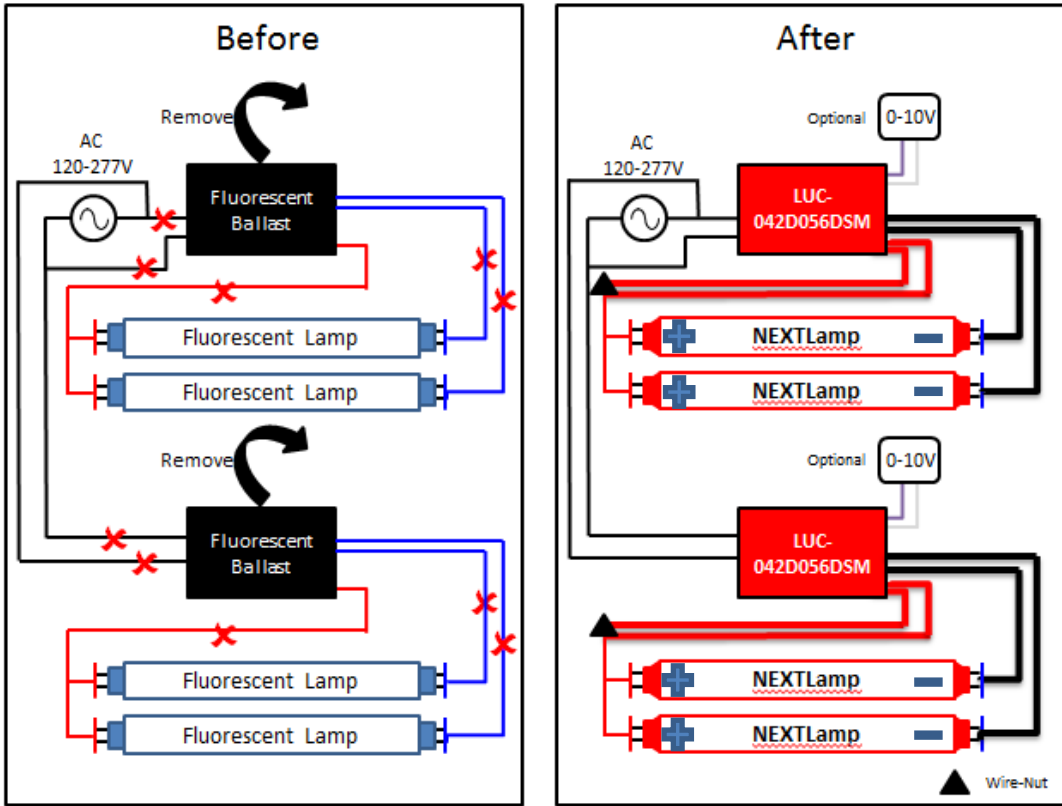
Three Lamp Installation (NL48-UNV3-65-8YY-C1)



Four Lamp Installation with One Ballast (Two NL48-UNV2-43-8YY-C1)



Four Lamp Installation with Two Ballasts



Dimming

NEXTLamp T12/T8 Retrofit kit designed to be compatible with 0-10V dimming systems for enhanced control over your working/living environment. This capability also enables greater energy savings compared with conventional fluorescent lamps. To implement dimming control of the NEXTLamps, connect the grey and purple wires on the output side of the LUC-042D056DSM to the 0-10V output of any control system as shown in the replacement diagrams above.

Replacement Lamps and Drivers

Replacement lamps and drivers can be ordered directly from NEXT Lighting or an approved distributor. An approved distributor list is available on our website at www.nextlighting.com. Direct replacement orders can be placed through our headquarters at:

NEXT Lighting
One Market Street
Spear Tower, Suite 3600
San Francisco, CA. 94105
(415) 821-6000

Installation Notes

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SUITABLE FOR DRY AND DAMP LOCATIONS

THIS DEVICE IS NOT INTENDED FOR USE WITH EMERGENCY EXITS

OPERATING TEMPERATURE OF THE LAMPS AND DRIVERS IS TO BE MAINTAINED BETWEEN -20°C - 45°C (-4°F – 113°F) TO COMPLY WITH ALL SAFETY AND WARRANTY REGULATIONS

THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED

WARNING – RISK OF FIRE OR ELECTRIC SHOCK. LED RETROFIT KIT REQUIRES KNOWLEDGE OF LUMINAIRE ELECTRICAL SYSTEMS. IF NOT QUALIFIED, DO NOT ATTEMPT INSTALLATION. CONTACT A QUALIFIED ELECTRICIAN.

WARNING - RISK OF FIRE OR ELECTRIC SHOCK. THE ELECTRICAL RATING OF THESE PRODUCTS ARE 100-277VAC, THE INSTALLER MUST DETERMINE WHETHER THEY HAVE 100-277 V AT THE LUMINAIRE BEFORE INSTALLATION.

WARNING – RISK OF FIRE OR ELECTRIC SHOCK. INSTALL THIS KIT ONLY IN THE LUMINAIRE THAT HAVE THE CONSTRUCTION FEATURES AND DIMENSIONS SHOWN IN THE PHOTOGRAPHS AND/OR DRAWINGS.

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

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

WARNING – RISK OF FIRE OR ELECTRICAL SHOCK. DO NOT ALTER, RELOCATE, OR REMOVE WIRING, LAMP HOLDERS, POWER SUPPLY, OR ANY OTHER ELECTRICAL COMPONENT. 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.

THE RETROFIT KIT IS ACCEPTED AS A COMPONENT OF A LUMINAIRE WHERE THE SUITABILITY OF THE COMBINATION SHALL BE DETERMINED BY CSA OR AUTHORITIES HAVING JURISDICTION.