

# INSTRUCTIONS

## T5HE/U6 & DRIVER TYPE C



RAB Lighting is committed to creating high-quality, affordable, well-designed and energy-efficient LED lighting and controls that make it easy for electricians to install and end users to save energy. We'd love to hear your comments. Please call the Marketing Department at 888-RAB-1000 or email: [marketing@rablighting.com](mailto:marketing@rablighting.com)

DRI-30T5HE-2L-DIM  
 DRI-60T5HE-4L-DIM  
 T5HE-10-24P-8xx-EXT  
 T5HE-11-36P-8xx-EXT  
 T5HE-13-48P-8xx-EXT  
 T8-15-U6GC-8xx-EXT



### IMPORTANT

#### READ CAREFULLY BEFORE INSTALLING LAMPS. RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE.

RAB lamps must be wired in accordance with the National Electrical Code and all applicable local codes. Proper grounding is required for safety. 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.

#### WARNINGS:

- Risk of fire or electric shock. LED Retrofit Kit installation requires knowledge of luminaire electrical systems. Installation should be performed only by a qualified electrician in accordance with the National Electrical Code and relevant local code.
- Risk of fire or electric shock. Install this kit only in the luminaires that have 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 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.
- To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.
- Risk of fire or electric shock. Luminaire wiring and electrical parts may be damaged when drilling for installation of LED retrofit kit. Check for enclosed wiring and components.

#### CAUTION

- Check the Max. case temperature of the fluorescent lamp ballast before replacement. The temperature shall be below or equal to the maximum case temperature (194F/90C) of the external driver. The external driver shall be mounted at the same location as the ballast.
- Disconnect power at the source before installation, inspection or removal. Do not simply switch off fixture.
- This item is rated at 120-277V. Installer must determine whether line voltage 120-277V is available at the luminaire before installation.
- Not intended for use with emergency exit fixtures or emergency exit lights.
- RAB LIGHTING T5 EXT tubes and drivers are sold separately. This lamp is RAC input. Do not operate LED tubes without corresponding compatible driver (refer to compatibility table below).
- Do not use if product is damaged.
- Suitable for use with shunted and non shunted lamp holders.
- Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.
- \*This luminaire has been modified to operate RAB LIGHTING T5 EXT LED lamps\* shall be marked on the retrofit luminaire where readily visible by the user during normal maintenance including re-lamping.
- Risk of fire or electric shock. Do not open or modify. No user serviceable parts inside.
- Installers should not disconnect existing wires from lamp holder terminals to make new connections at lamp holder terminals. Instead installers should cut existing lamp holder leads away from the lamp holder and make new electrical connections to lamp holder lead wires by employing applicable connectors.
- SUITABLE FOR DRY AND DAMP LOCATIONS ONLY.
- Complies with Part 15 of FCC. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received including interference that may cause undesired operation.
- SUITABLE FOR "TYPE IC" OR "TYPE NON-IC" LUMINAIRES.
- No external weight or mechanical force should be applied to tube or components.
- THE RETROFIT ASSEMBLY IS ACCEPTED AS A COMPONENT OF A LUMINAIRE WHERE THE SUITABILITY OF THE COMBINATION SHALL BE DETERMINED BY UL OR AUTHORITIES HAVING JURISDICTION.
- ONLY USE THE CONTROL PROVIDED WITH OR SPECIFIED BY THESE INSTRUCTIONS TO CONTROL THIS LAMP. THIS LAMP WILL NOT OPERATE PROPERLY WHEN CONNECTED TO A STANDARD (INCANDESCENT) DIMMER OR DIMMING CONTROL.
- The minimum lamp compartment dimensions are described below:

Model Number		TSHE-10-24P-8XX-EXT	TSHE-11-36P-8XX-EXT	TSHE-13-48P-8XX-EXT	T8-15-U6GC-8XX-EXT
Lamp Compartment Dimensions	Length	24"	35-13/16"	47-5/8"	24"
	Width	24"	24"	24"	24"
	Height	2"	2"	2"	3-1/8"
Maximum Lamps in Luminaire		4	4	4	2
Lampholder-to-Lampholder Spacing		4-5/16"	4-5/16"	4-5/16"	2"

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### COMPATIBILITY TABLE

LED Lamp Model	LED Lamp Model	DRI-30T5HE-2L-DIM	DRI-60T5HE-4L-DIM
T5HE-10-24P-8XX-EXT		1 lamp/ 2 lamps	3 lamps/ 4 lamps
T5HE-11-36P-8XX-EXT		1 lamp/ 2 lamps	3 lamps/ 4 lamps
T5HE-13-48P-8XX-EXT		1 lamp/ 2 lamps	3 lamps/ 4 lamps
T8-15-U6GC-8XX-EXT		1 lamp/ 2 lamps	3 lamps/ 4 lamps

### 0 - 10V DIMMER COMPATIBILITY

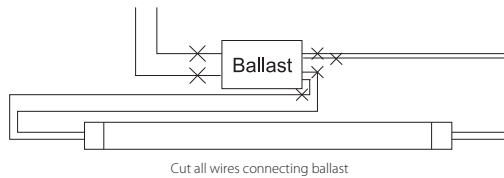
Brand	Series	Model	Load(w)
Lutron	Nova	NTSTV-DV	960W
	Nova	NFTV	/
	Diva	DVSTV	960W
	Diva	DVSCTV	1000W
Leviton	illmatech	IP710-LFZ	1200W

### INSTALLATION

- Read all WARNINGS before continuing this section.
- Make sure POWER IS TURNED OFF at the source to the location at which you are installing the product.
- Remove lens, cover and fluorescent tubes. Cut away all wires connecting the ballast and remove the ballast if necessary. (fig. 1)
- Attach the LED driver to the fixture using existing ballast mounting holes and screws if present. If necessary, use self-tapping screws to create new holes and mount the LED driver.
- Follow wiring diagrams for number of lamps. (fig. 2-9)
- For 0-10V dimming circuits, connect the incoming grey and purple wires to the LED driver's grey and purple wires using wire nuts (not provided). If no 0-10V dimming circuit is present, cap off the grey and purple wires.
- Visibly affix the "Modification Sticker" to the fixture and reinstall housing cover and lens if applicable.
- Return power back to the source and installation is complete.

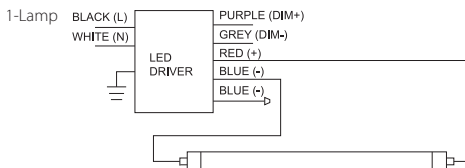
### WIRING DIAGRAM

fig. 1



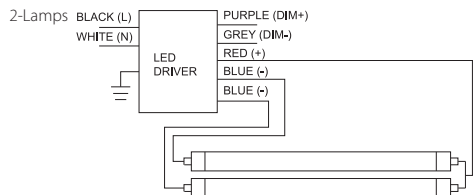
#### Double-ended Installation

fig. 2 Retrofit with One Lamp



For shunted & non-shunted lamp holders  
Not polarity sensitive, lamps can be wired at either end

fig. 3 Retrofit with Two Lamps



For shunted & non-shunted lamp holders  
Not polarity sensitive, lamps can be wired at either end

# INSTRUCTIONS



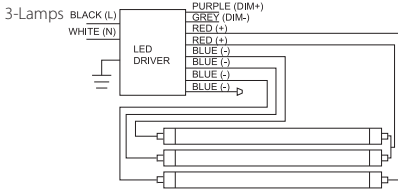
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### WIRING DIAGRAM

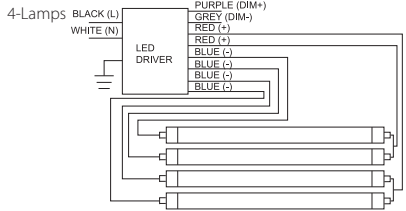
#### Double-ended Installation

fig. 4 Retrofit with Three Lamps



For shunted & non-shunted lamp holders  
Not polarity sensitive, lamps can be wired at either end

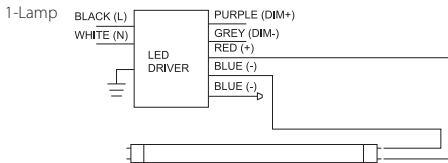
fig. 5 Retrofit with Four Lamps



For shunted & non-shunted lamp holders  
Not polarity sensitive, lamps can be wired at either end

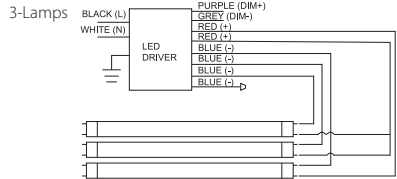
#### Single-ended Installation

fig. 6 Retrofit with One Lamp



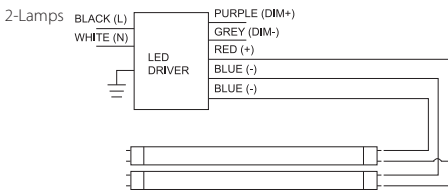
For non-shunted lamp holders only  
Not polarity sensitive, lamps can be wired at either end

fig. 8 Retrofit with Three Lamps



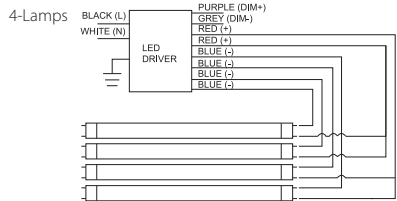
For non-shunted lamp holders only  
Not polarity sensitive, lamps can be wired at either end

fig. 7 Retrofit with Two Lamps



For non-shunted lamp holders only  
Not polarity sensitive, lamps can be wired at either end

fig. 9 Retrofit with Four Lamps



For non-shunted lamp holders only  
Not polarity sensitive, lamps can be wired at either end

**Note:** These instructions do not cover all details or variations in equipment nor do they provide for every possible situation during installation, operation or maintenance.



#### Easy Answers

[rablighting.com](http://rablighting.com)  
Visit our website for product info

Tech Help Line  
Call our experts: 888 722-1000

e-mail  
Answered promptly - [sales@rablighting.com](mailto:sales@rablighting.com)

Free Lighting Layouts  
Answered online or by request

T5HE/U6 DRI-IN-0421

RAB WARRANTY: RAB's warranty is subject to all terms and conditions found at [rablighting.com/warranty](http://rablighting.com/warranty).