

RemPhos TOTALtUBE™ ballast compatible and line voltage LED TUBE

PRODUCT INSTALLATION AND SAFETY INSTRUCTIONS

Only Qualified Personnel Should Perform Installation of this Product.

Please Read and Save all Instructions and Warnings for Future Use.

- **WARNING** – Risk of fire or electric shock. LED Retrofit Kit installation requires knowledge of luminaires electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician.
- **WARNING** – 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.
- **WARNING** – To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.
- **WARNING** – To prevent any burning injury, do not make any physical contact until the tube cools down.
- **WARNING** – TOTALtUBE is **not** intended for use with emergency exit lights or emergency lights.

INTRODUCTION:

1. Compatible with most magnetic-ballasts-with-starters, and electronic ballasts.
--“Plug and play” easy installation: no need to remove the existing ballast.
Also compatible with line voltage from either single end input or double end input.
2. Low power consumption: extremely high LPW LED tube performance.
3. 50,000 hour life time. High reliability delivered by state-of-the-art engineering.
4. Safe operation: no UV exposure and contains no mercury.
5. Five year standard warranty.

PRODUCTS BENEFITS:

- A. High Quality Components:
 - a. All components are high quality to ensure LED tube performs as specified for long lifespan.
 - b. Electronics with Power factor Correction effectively increases power factor to exceed 0.9 and greatly decreases Total Harmonic Discharge to avoid wasted energy.
- B. Product Structure:

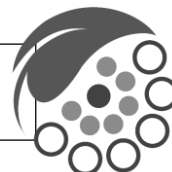
Precision, aluminum alloy lamp housing with streamlined design delivers thermal stability and maximizes light reflection through cover.
- C. Optical Design:

PC cover provides effective diffusion with efficient 90% light transmittance for uniform illumination.
- D. Certified Performance: DLC (some models), UL, FCC, CE, PSE, RoHS approval.

PRODUCT PARAMETERS:

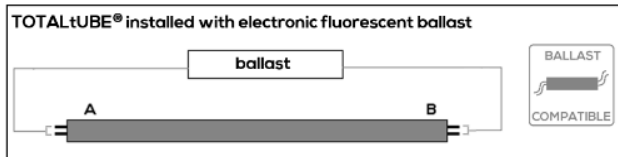
- a. Input voltage: 100-277Vac 50-60Hz G13
- b. Circuit protection: Over current protection, Over power protection, Short-circuit protection
- c. Working temperature: -25°C -- 40°C, Humidity: 5%--90%
- d. Non-dimmable
- e. Typical efficiency >88%
- f. Net weight: 2’= 230g (8.11oz), 4’= 350g (12.35oz).

Our #1 priority is “Personalized Customer Service”, if you have any questions or need help during your installation, please call us at (877) 99-REMPHOS or (877) 997-3674. One of our experienced technical support staff will be happy to assist you.

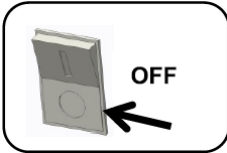


INSTALLATION:

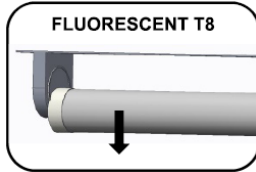
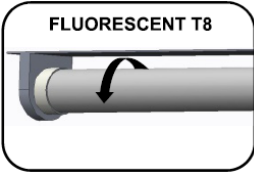
A. Installation with Ballast in-place: Always Disable Electrical Circuit before beginning.



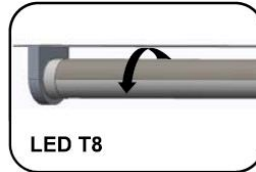
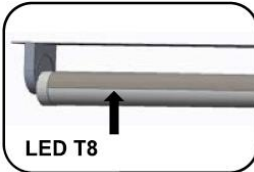
1. Ensure the branch electrical circuit breaker is off and the light switch is off.



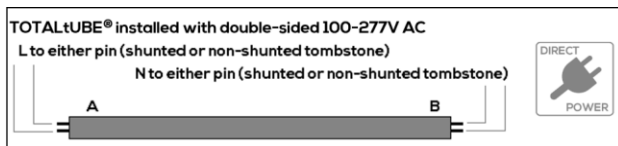
2. Remove existing fluorescent tube from fixture housing and dispose of properly.



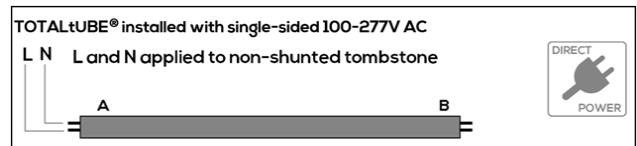
3. Install RemPhos TOTALtUBE into the existing housing (replace worn/broken tombstones, as needed). Rotate the tube 90 degrees to “lock into” the housing with the optical lens facing outwards.



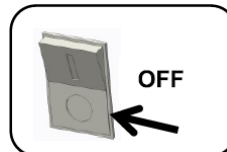
B. Installation without Ballast: Always Disable Electrical Circuit before beginning.



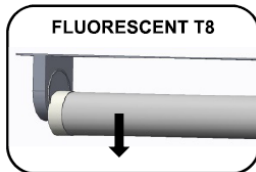
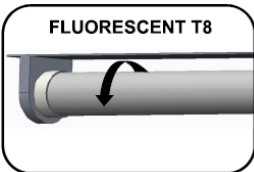
OR



1. Ensure the branch electrical circuit breaker is off and the light switch is off.



2. Remove existing fluorescent tube from housing and dispose of properly.



3. Remove the existing ballast or bypass the ballast by cutting the wires and capping them.
4. Wire line voltage output to **one side** of the fixture (Hot to one pin and Neutral to other pin).
Alternative: Wire line voltage output on both side of the fixture (Hot to one or both pin(s) and Neutral to one or both pin(s) on the other side).
5. Install TOTALtUBE into existing housing (replace worn/broken tombstones, as needed). Rotate the tube 90 degrees to “lock into” the housing with the optical lens facing outwards.

