

- GB/IE/MT** The English version of the installation instruction and safety information can be found at the following location:
- DE** Die deutsche Version der Installationsanleitung und Sicherheitsinformationen finden Sie in folgendem Verzeichnis:
- FR/LU** La version française des instructions d'installation et informations de sécurité est disponible à l'adresse suivante:
- IT** La versione italiana del manuale di installazione e sicurezza può essere reperita nella seguente sezione:
- ES** La versión española de las instrucciones de instalación y la información sobre seguridad puede encontrarse en la siguiente ubicación:
- PT** A versão em Português das instruções de instalação e das informações de segurança pode ser encontrada na seguinte localização:
- RO** Versiunea în limba română a instrucțiunilor de instalare și a informațiilor de siguranță pot fi găsite la:
- PL** Polską wersję instrukcji instalacji oraz informacje dotyczące bezpieczeństwa można znaleźć w następującej lokalizacji:
- CZ** Návod k montáži a bezpečnostní informace v češtině najdete zde:
- SK** Slovenskú verziiu montážnej príručky a bezpečnostných inštrukcií nájdete na nasledujúcej lokalite:
- HR** Hrvatska verzija priručnika za ugradnju i sigurnosnih informacija nalazi se na sljedećoj lokaciji:
- RS** Verziju uputstva za instalaciju i informacija o bezbednosti na srpskom jeziku možete pronaći na sledećoj lokaciji:
- SI** Slovenska različica navodil za namestitev in varnostnih navodil se nahaja na naslednji strani:
- HU** A telepítési útmutató és a biztonságai információk magyar nyelvű változata az alábbi címen található:
- NL/BE** De Nederlandse versie van de installatie-instructies en veiligheidsinformatie kan op de volgende locatie worden gevonden:
- DK** Den danske version af installationsvejledningen og sikkerhedsoplysninger kan findes på følgende placering:
- FI** Asennusohjeiden ja turvallisuustietojen suomenkielinen versio löytyy seuraavasta paikasta:
- NO** Den norske versjonen av installasjonsinstruksjonene og sikkerhetsinformasjonen finnes under:
- SE** Ni hittar den svenska versionen av installationsanvisningarna och säkerhetsinformationen på följande plats:
- EE** Eestikeelse paigaldusjuhendi ja ohutusnõuded leiate aadressilt:
- LV** Uztādīšanas instrukciju un drošības informāciju latviešu valodā var atrast šeit:
- LT** Lietuvišką diegimo instrukciją ir saugos informaciją versiją galima rasti šioje vietoje:
- GR/CY** Μπορείτε να βρείτε την ελληνική εκδοχή των οδηγιών εγκατάστασης και των πληροφοριών ασφάλειας στην εξής τοποθεσία:
- RU** Русскую версию инструкции по установке и технике безопасности можно найти здесь:
- UA** Українська версія інструкції зі встановлення та інформація щодо безпеки знаходяться за такою адресою:
- BG** Българската версия на инструкциите за инсталация и информация за безопасност могат да бъдат намерени на следния адрес:
- ARAB** يمكن إيجاد النسخة العربية من إرشادات التثبيت ومعلومات الأمان على الموقع التالي:
- TR** Montaj talimatı ve güvenlik bilgilerinin Türkçe sürümü, aşağıdaki konumda bulunabilir:

The English version of the installation instruction and safety information can be found at the following location:

tungsr.com/installations

tungsr.com

EMEA:
TUNGSRAM Operations Kft.
Váci út 77.
H-1044 Budapest
Hungary

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LED T8 Tubes (CCG / Mains compatible)

LED T8 Tubes of equivalent dimensions are suitable to replace 16/18W 2ft (600mm), 32/36W 4ft (1200mm) and 51/58W 5ft (1500mm) fluorescent T8 lamps in luminaires containing standard non-shunted G13 (medium bi-pin) lamp holders.



BEFORE YOU BEGIN

to install the LED T8 tube, please read the entire installation guide carefully. Ensure that package includes: installation guide, warning label to be attached to luminaire, LED T8 tube and LED T8 starter (TUNGSRAM LED T8 StartFIX).

Product is not intended to be used with dimmers and emergency light luminaires. Condition of the sockets of the luminaire should be checked and if damaged replace with one of the exact configuration and rating. Should anyone modify the luminaire the technical and safety requirements of the converted luminaire are the sole responsibility of the party doing the conversion and shall comply with the local applicable safety and regulatory laws (i.e. LVD) and standards (i.e. IEC 60598).



WARNING Risk of fire or electric shock.

Disconnect power before installation of the product.

LED Retrofit installation must be done by a qualified electrician only and all safety instructions must be followed to avoid a risk of injury or property damage. Only TUNGSRAM LED T8 starter (TUNGSRAM LED T8 StartFIX) should be used with the TUNGSRAM LED T8 tubes. Do not disassemble this product and replace any LED or other internal components. When the light source reaches its end of life the whole tube shall be replaced.

Note: Caution label with the following warning shall be placed onto the fixture in a location where readily visible by the user during re-lamping and after installation. "Caution Risk of Injury or Damage: This luminaire has been modified and can no longer operate a fluorescent lamp. Only use the replacement TUNGSRAM LED T8 lamp type or contact manufacturer for more information."

Retrofit / Magnetic ballast system:

For applications where magnetic ballast (CCG) is installed please follow the procedure below



1 Turn power off by disconnecting the supply voltage.



2 Remove current fluorescent lamps (Fig. 1a, Fig. 2a) . Dispose of them properly based on local regulations.



3 Find and remove existing fluorescent starter (Fig. 1a, Fig. 2a).



4 Insert TUNGSRAM LED T8 StartFIX into existing fluorescent starter location (Fig. 1b, Fig. 2b).

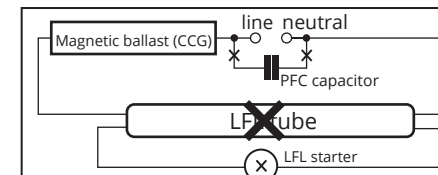


Fig. 1a Remove LFL starter and PFC capacitor from the circuit

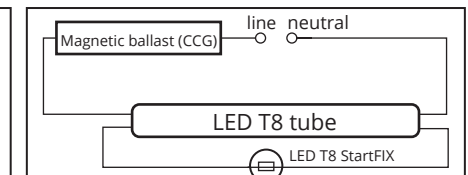
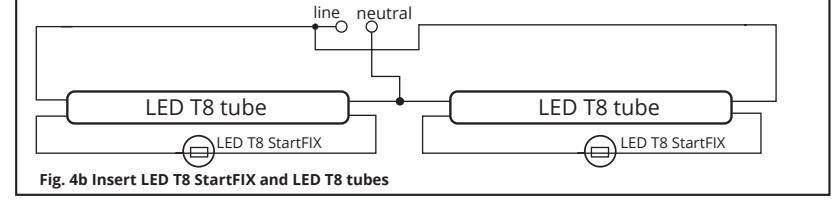
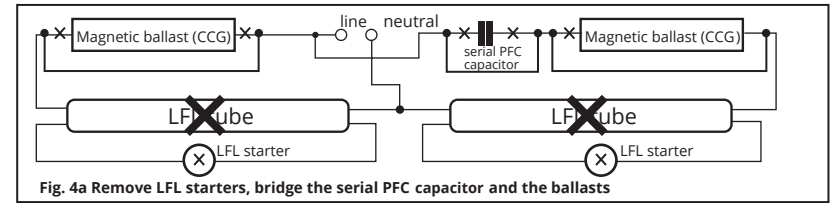
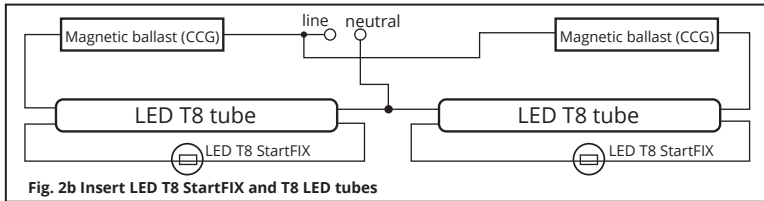
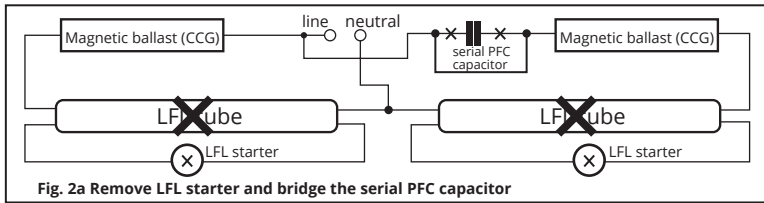


Fig. 1b Insert LED T8 StartFIX and T8 LED tube



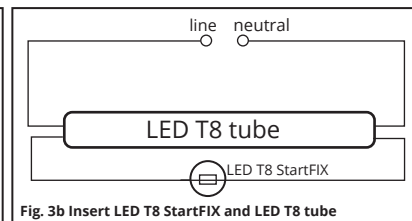
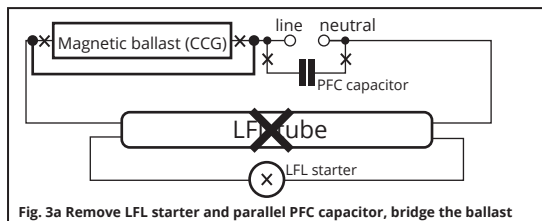
- 5 Place warning label found in LED lamp package to ensure that the user understands that the system now uses LED tubes and the luminaire cannot operate fluorescent lamp any more.
- 6 Check G13 socket for damage. If damaged replace with one of the exact configuration and rating. Insert LED T8 lamp (Fig. 1b, Fig. 2b).
- 7 Turn power back on and check for proper operation.

- 5 Place warning label found in LED lamp package to ensure that the user understands that the system now uses LED tubes and the luminaire cannot operate fluorescent lamp any more.
- 6 Check G13 socket for damage. If damaged replace with one of the exact configuration and rating. Insert LED T8 lamp (Fig. 3b, Fig. 4b).
- 7 Turn power back on and check for proper operation.

Direct wire:

For applications where use of magnetic ballast (CCG) is not intended please follow the procedure below

- 1 Turn power off by disconnecting the supply voltage.
- 2 Remove current fluorescent lamps (Fig. 3a, Fig. 4a) . Dispose of them properly based on local regulations.
- 3 Find and remove existing fluorescent starter (Fig. 3a, Fig. 4a).
- 4 Insert TUNGSRAM LED T8 StartFIX into existing fluorescent starter location (Fig. 3b, Fig. 4b).



This lamp is designed for general lighting service (excluding for example explosive atmospheres).

This lamp may not be suitable for use in all applications where a traditional fluorescent lamp has been used. In cases of doubt regarding the suitability of the application the manufacturer of this lamp should be consulted.

Note: LED T8 tube will not work with shunted lamp holders. Final compliance/inspection to local standards/regulations of the luminaire is the responsibility of the luminaire manufacturer or installer.

- Lamps suitable for 50 Hz or 60 Hz operation
- Dimming not allowed
- Lamp not suitable for emergency operation
- Lamp to be used in dry conditions or in a luminaire that provides protection
- TUNGSRAM LED T8 StartFIX LED replacement starter
- Processing of electric and electronic equipment at the end of their service life. This symbol indicates that the product must not be processed with household waste. It must be brought to an electric and electronic waste collection point for recycling and disposal. Please contact your municipality, local waste disposal centre or the store where the product was purchased.