

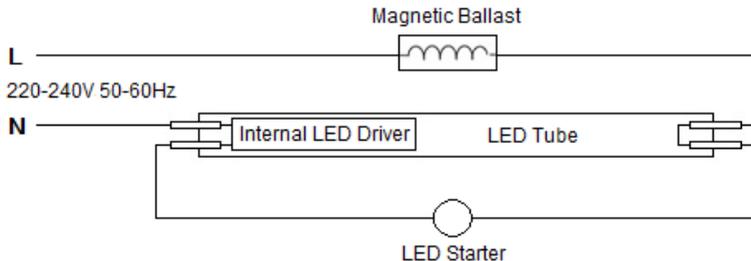
LED Tube Installation Instructions

Please read these instructions thoroughly before use and retain for future reference.

- The existing fitting must be switched off and isolated at the mains before commencing electrical work. If in doubt consult a qualified electrician.
- It is the responsibility of the converter to ensure the fitting continues to meet safety requirements following any rewiring.
- For maximum energy savings, remove any capacitors and bypass the ballast.
- It is not necessary to remove capacitors and bypass magnetic ballasts for the LED Tubes to work but results in the maximum efficiency.
- Electronic high frequency ballasts must be bypassed.
- The LED Tube has Live and Neutral pins at the end of the LED tube marked "Input" connected to the internal driver. The pins at the opposite end are isolated from the input and are connected to each other for circuit continuity.
- The LED Tube is unlikely to work with any existing fluorescent tube emergency power supply.

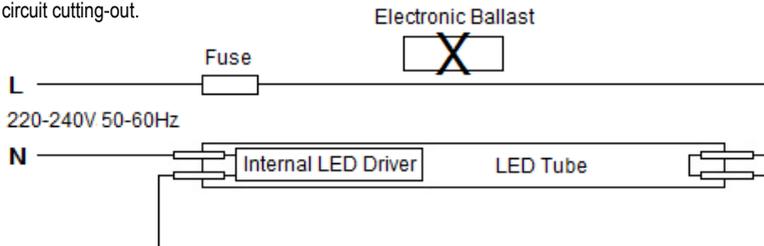
Magnetic Ballast:

- Remove the starters and any power factor capacitors. The capacitors may be left in place but the energy savings will be less.
- Replace the starters with the LED starters – these are fused links.
- Plug the LED Tube directly into the lampholder. The orientation is not important.



Electronic Ballast (High Frequency) Conversion:

- The electronic ballast is not required so it must be removed or bypassed.
- The LED starter is not required.
- Wire the Live (L) and Neutral (N) as per the diagram below. This allows the LED Tube to be inserted either way around.
- Wire multiple LED Tubes in parallel.
- A 1A fuse may be added to allow discrimination in the event of a fault in a single luminaire and prevent the whole circuit cutting-out.



An indelible warning label should be added, visible when changing the lamp, showing the substance of: **Warning - not for use with fluorescent lamps, use only Kosnic LED Tubes**



The Waste Electrical & Electronic Equipment Regulations (WEEE) require that products bearing this symbol must not be disposed of with household waste as they may contain substances harmful to the environment. The Local Authority can provide advice on recycling.