

Emerald Planet LED Tube Installation

This installation guide complies with

- **Australian Standard - AS/NZ 60598.2.1 : 2014 Amdt.1 2016**
- **VEET Compliant**

Emerald Planet LED T8 Tubes are designed to be compatible with magnetic ballasts without the need for rewiring. For this kind of '*Retrofit Installation*', all that is required is for the incumbent starter to be replaced with the supplied HRC fuse protected "LED Starter" and then the LED tubes replaced.

While it is possible to perform '*Retrofit Installations*' where magnetic ballasts are present, Emerald Planet recommends industry best practice to undertake '*Modification Installations*' whereby all ballasts and power factor capacitors (where present) are bypassed and removed from the light fitting.

Emerald Planet LED T8 & T5 tubes are not compatible with incumbent electronic ballasts and therefore these ballasts need to be bypassed and removed with the LED tube connected directly to 240V/50Hz power supply. This is referred to as a '*Modification Installation*'.

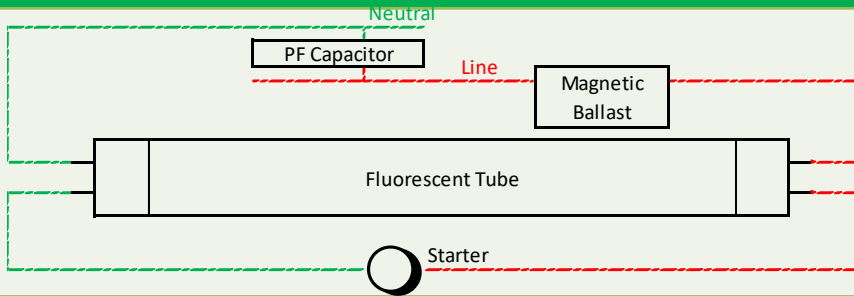
Emerald Planet LED T5 tubes are designed to only be wired directly to 240V mains power within a modified luminaire. An in-line HRC fuse is required to be installed. One fuse may protect up to 2 x T5 LED tubes.

In order to be compliant with AS/NZ 60598.2.1 : 2014 Amdt.1 2016, all luminaires must be protected by a 250V 0.5A HRC type fuse. This is built in to the "LED Starter" provided with all Emerald Planet LED T8 tubes. For electronically ballasted fixtures, T5 fixtures, or where no starter is present, Emerald Planet can supply additional in-line 250V 0.5A HRC fused fusible links.

For Wiring Diagrams covering all the available scenarios and options, please refer to the following pages.

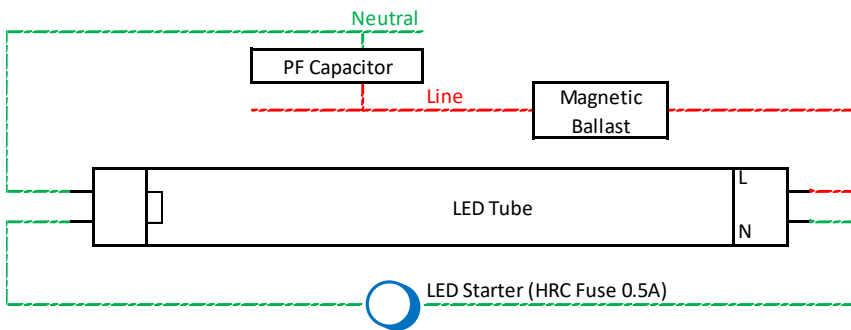
Disclaimer:- These instructions represent Emerald Planet's recommended installation methods for Emerald Planet Type A LED tubes. It is the responsibility of the installing electrician to ensure all wiring work is compliant with all local wiring rules and regulations.

Wiring Diagrams - Magnetic Ballast (Not Suitable for T5 tubes please refer to electronic ballast modification wiring diagram only)



Existing Wiring Diagram

Typical Fluorescent magnetically ballasted fitting

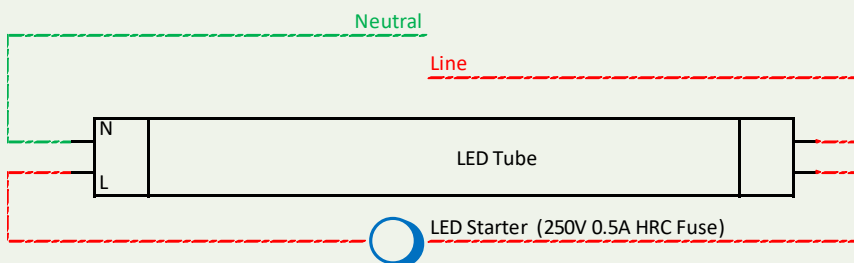


Retrofit Wiring Diagram (no wiring changes)

Note: This installation may affect power factor (PF)

* This installation satisfies all requirements of VEET Activity 34 as well as AS/NZ 60598.2.1:2014

*Note: in this wiring design it does not matter which way the tube is inserted.



Modification Wiring Diagram

Bypass and remove any Ballast & PF Capacitor and install HRC Fused LED Starter.

- This installation satisfies all requirements of VEET Activity 34 as well as AS/NZ 60598.2.1:2014

WARNING

NOT FOR USE WITH ANY FLUORESCENT LAMP. FOR USE ONLY WITH TYPE A LED LAMPS

Fuse Replacement Rating: 250V 0.2A max HRC type only. Max. 2 tubes per fuse.

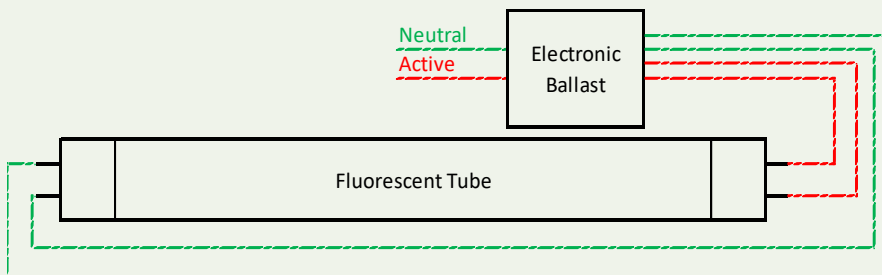
Contact emeraldplanet.com.au for replacement LED tubes

In all modified luminaires the included Warning label MUST be prominently affixed to the luminaire

Warning: The manufacturer of the original luminaire will no longer be responsible for the compliance of the modified product. Any modifications to the original luminaire may alter the safety aspects of the original luminaire; hence compliance assessments of the original luminaire may no longer be applicable to the modified luminaire.

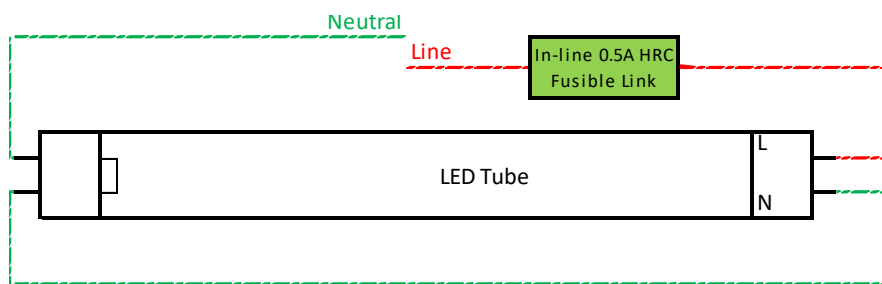
Multiple modifications to the luminaire are not recommended. Please refer to Emerald Planet's recommended installation methods for Emerald Planet Type A LED tubes. It is the responsibility of the installing electrician to ensure all wiring work is compliant with all local wiring rules and regulations.

Wiring Diagrams - Electronic Ballast (Valid for both T8 and T5 LED tubes)



Existing Wiring Diagram

Typical Fluorescent
Electronically ballasted
fitting



Modification Wiring Diagram

Re-wire as per diagram and
install In-Line HRC Fusible Link.

* This installation satisfies all
requirements of VEET Activity 34
as well as AS/NZ 60598.2.1:2014

*Note: in this wiring design it does not matter which way the tube is inserted.

WARNING

NOT FOR USE WITH ANY FLUORESCENT LAMP. FOR USE ONLY WITH TYPE A LED LAMPS
Fuse Replacement Rating: 250V 0.2A max HRC type only. Max. 2 tubes per fuse.
Contact emeraldplanet.com.au for replacement LED tubes

In all modified luminaires the
included Warning label MUST be
prominently affixed to the
luminaire

Warning: The manufacturer of the original luminaire will no longer be responsible for the compliance of the modified product. Any modifications to the original luminaire may alter the safety aspects of the original luminaire; hence compliance assessments of the original luminaire may no longer be applicable to the modified luminaire.

Disclaimer:- These instructions represent Emerald Planet's recommended installation methods for Emerald Planet Type A LED tubes. It is the responsibility of the installing electrician to ensure all wiring work is compliant with all local wiring rules and regulations.