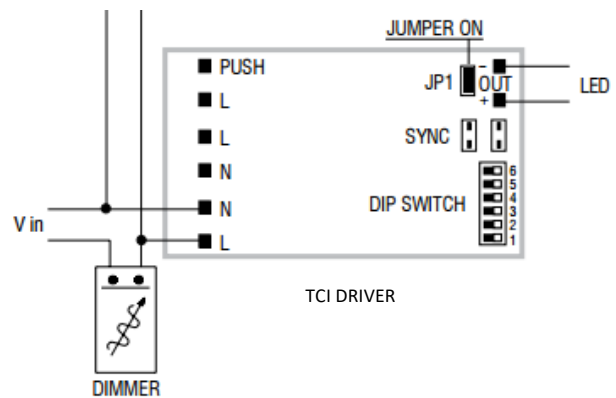


## DIMMING OPTIONS

Understanding the different dimming types is critical to the success of any lighting project.

### Phase-Cut Dimming (Trailing Edge/Leading Edge)

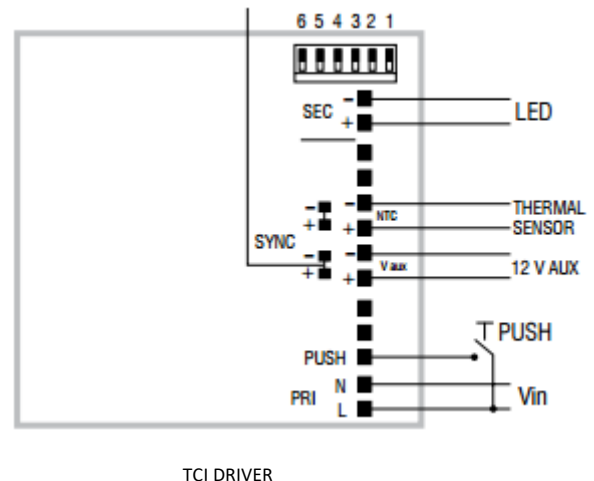
The most basic form of dimming, originally developed for incandescent loads. This is your typical domestic type dimmer. No additional wiring other than standard 2C+E. The dimmer simply “chops” or “cuts” the voltage signal going to the light fitting. Dimmer is simply added to the Active line.



- No extra wiring is required.
- Standard Trailing Edge/Universal Dimmer can be used.
- Available in out-puts ranging from 350mA – 750mA

### Push DIM

Is one of the simplest types of dimming available on the market, and is suitable for use in small to medium sized installations. No low voltage cables or no digital controllers are required - Each downlight requires a standard 2C+E plus a 1 or 2 Core Switch wire, a “normally open” type push button switch is required to operate a Push DIM system. Don’t mix different Push DIM drivers on the same circuit.

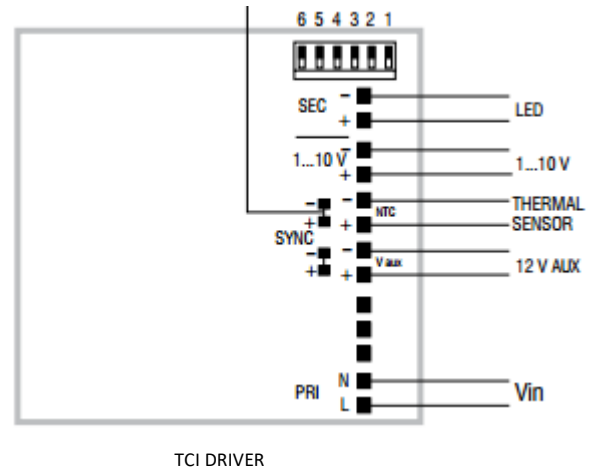


- Additional 1-2 Core Switch wire is required.
- Dimming occurs through the use of a “normally open” type push button switch
- Available in out-puts ranging from 350mA – 1400mA

## 1-10V Dimming

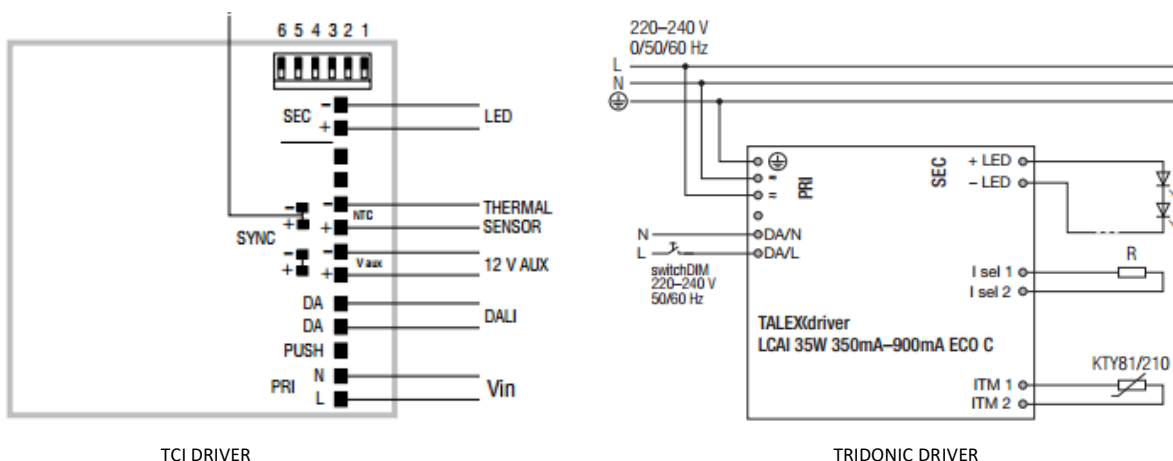
1-10V (Analogue) Dimming uses an analogue signal rather than a digital signal. It is a universal protocol, so all 1-10V drivers operate in the same manner. Each downlight requires a standard 2C+E plus two control lines to carry the low voltage signal (polarity sensitive). You will also require a potentiometer (or some other 1-10V Dimming controller).

- Additional 2-Core LV control cable is required.
- Dedicated 1-10V interface or potentiometer is required to control this driver
- Available in out-puts ranging from 350mA – 1400mA



## DALI

Digital Addressable Lighting Interface – DALI – is a universal protocol (IEC 62386), designed to allow varying manufacturers products to all work on the same system. So it doesn't matter whose light fitting you are using, if it is DALI it will work on a DALI controlled system. Up to 64 light fittings can be controlled per DALI line, buildings can have multiple DALI lines. Wiring to a DALI downlight requires a standard 2C+E, plus two DALI control lines (not polarity sensitive).

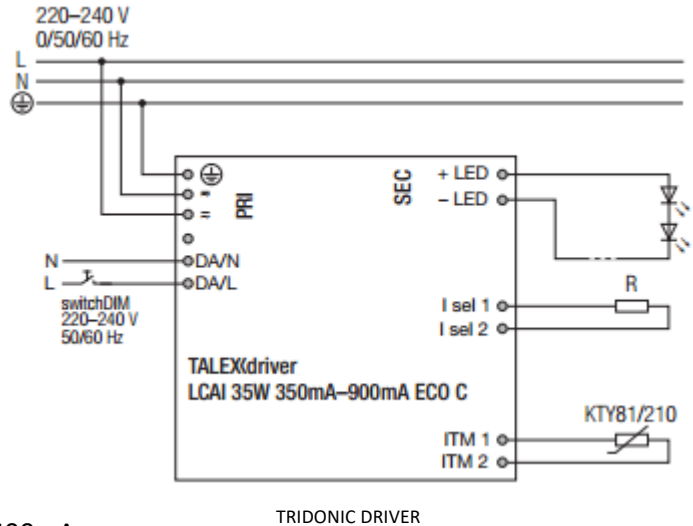


- Additional 2-Core control cable is required.
- Dedicated DALI interface or Control System is required to control this System
- Available in out-puts ranging from 350mA – 1400mA

### DSI

Digital Serial Interface – DSI – is a proprietary protocol of Tridonic. It was largely the precursor to the DALI system. Unlike DALI each fitting is not addressable, so each circuit must be controlled as a whole in the same manner. Again, each downlight requires standard 2C+E plus two DSI control lines (not polarity sensitive).

- Additional 2-Core control cable is required.
- Dedicated Control System is required to control this System
- Available in out-puts ranging from 350mA – 1400mA



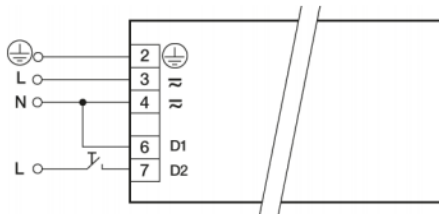
TRIDONIC DRIVER

### Switch DIM

Switch DIM is a proprietary term of Tridonic’s, and essentially allows simple dimming through push button control, no low voltage cables or no digital controllers are required - Each downlight requires a standard 2C+E plus a 1 or 2 Core Switch wire, a “normally open” type push button switch is required to operate a Switch DIM system. Don’t mix different Push DIM/Switch DIM drivers on the same circuit.

#### Four-pole wiring

Configuration:

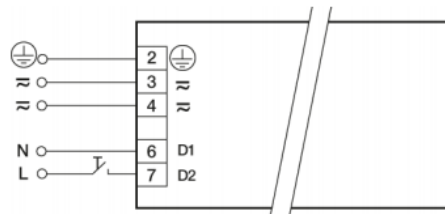


Phase (L), neutral (N), earth (PE), control line (L')

TRIDONIC DRIVER

#### Five-pole wiring

Configuration:



Phase (L), neutral (N), earth (PE), control line (L), neutral (N)

TRIDONIC DRIVER

- Additional 1-2 Core Switch wire is required.
- Dimming occurs through the use of a “normally open” type push button switch
- Available in out-puts ranging from 350mA – 1400mA