# Load Bypass Device

## Improved dimming performance for problematic LED and CFL lamps

www.diginet.net.au




## Range

MMBP

## Overview

The Diginet Load Bypass Device is designed to provide improved dimming and switching performance of some problematic LED and CFL lamps. The device can overcome the following issues which are occasionally seen when controlling some LED or CFL light sources via electronic dimmers, switches, timers or sensors:

- When switched off, the LED/CFL lights flicker, pulse on/off or do not switch off completely
- When switching on, the LED/CFL lights have difficulty turning on and the dimmer indicators flicker or pulse.

These issues can be encountered when controlling some LED/CFL lighting loads with the following control devices:

- Non-separately switched 2-wire (Active, Load) dimmers, electronic switches, timers or sensors
- Some 3-wire (Active, Load, Neutral) electronic dimmers, electronic switches, timers or sensors
- Mechanical air gap switches. Although not typical, some electronic load types, such as non-dimmable CFLs, can be sensitive to the off-state leakage current associated with mains wiring capacitance. Therefore, even when controlled with a mechanical air gap switch the lights can occasionally be seen to flicker when switched off.

The Load Bypass Device is wired in parallel with the load and can be retrofitted to existing lighting installations.

## Features

**Allows up to 4 Diginet LEDsmart+** devices to be added to a circuit without impacting load compatibility

**Small and light-weight** enabling easy retrofit and new installation

**Line powered** – draws only 2mA from a DALI Line

**Independent** of maximum connected load

**Supplied with** pre-terminated leads

**Crimped terminations** on lead for reliable connection to load

**Shunts leakage current** away from the connected lighting load

**Intrinsically** thermally and electrically safe

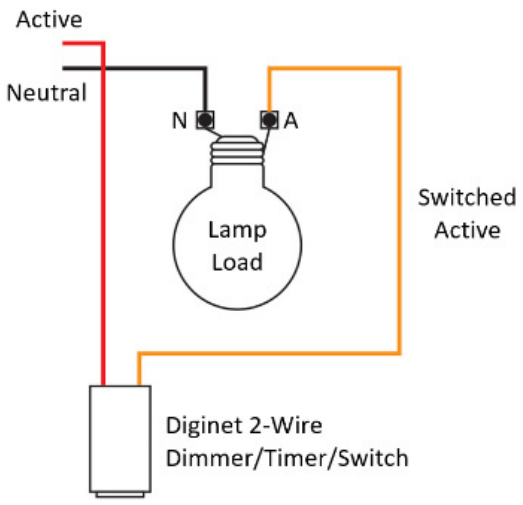
## Specifications

| Parameter | Specification |
|---|---|
| **Operating Voltage** | 220-240Vac 50Hz |
| **Power Dissipation** | 100mW (Note: The device power dissipation is independent of the connected lighting load power) |
| **Max Ambient Temperature** | $t_a$max = 70°C |
| **Operating Humidity** | 10% - 95% RH, non-condensing |
| **Standards Compliance** | AS/NZS CISPR15:2011<br>AS/NZS 61347-2-11:2003<br>IEC 61347-2-11 |
| **Dimensions** | 49mm x 15mm x 11mm |
| **Weight** | 25g |
| **Connection Lead Type** | Two core, double insulated, crimped ends<br>Switched Active and Neutral connections |
| **Connection Lead Length** | 300mm |
| **Maximum wiring length** | The load bypass device is independent of the wiring length |
| **Maximum Load** | The load bypass device is independent of load connected to the control device(s) |

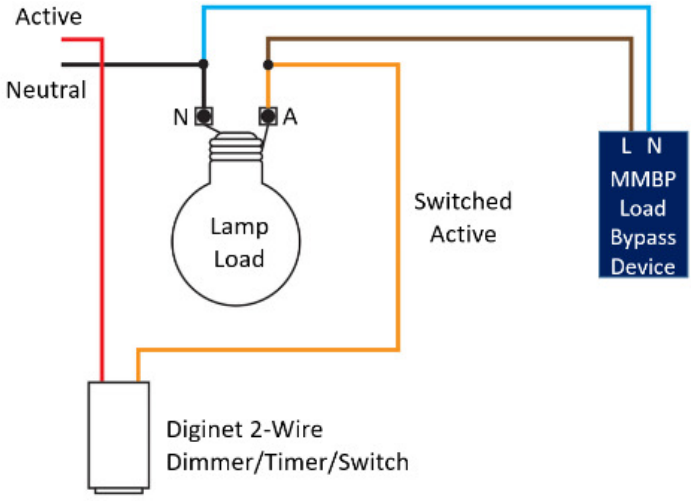
## Wiring

The Load Bypass Device is wired in parallel with the load (across the switched Active and Neutral). It is typically connected as shown in the diagrams below.

### 2-wire dimmer example

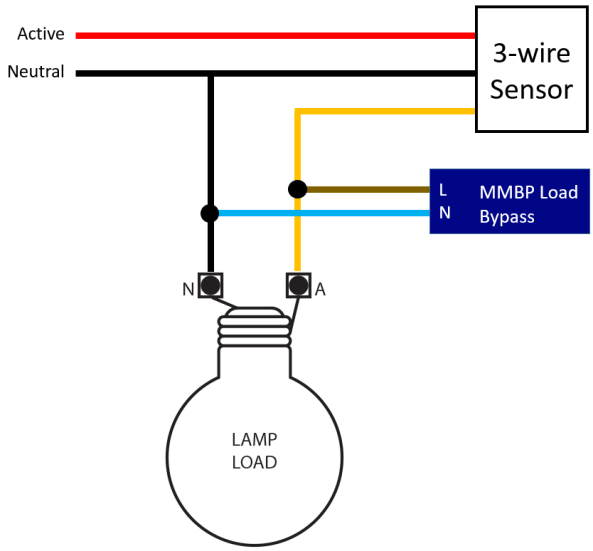



Before Load Bypass Device Installation




After Load Bypass Device Installation

## 3-wire sensor example




## Approvals & Compliance

IP20

**CONTACT INFORMATION**

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