

1.1.9 Drivers for LEDs

LEDs need to be run at a controlled current to ensure proper operation. To provide this drivers are used. Most drivers take mains power and provide a constant current output. However, it is possible to control some drivers so that the output current is varied and so that the LED may be dimmed. In more complex systems it is possible to dim three different channels separately, so that when red, green and blue LEDs are used together it is possible to make colour changes. Most LED drivers can maintain their constant current output over a range of voltages so it is often possible to connect a number of LEDs in series on one driver.

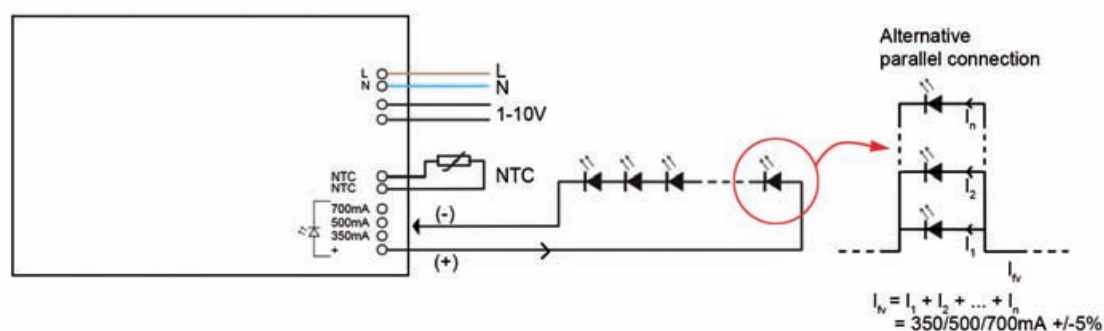


Figure 126
System sketch of LED with current constant driver on 1-10V dimming.

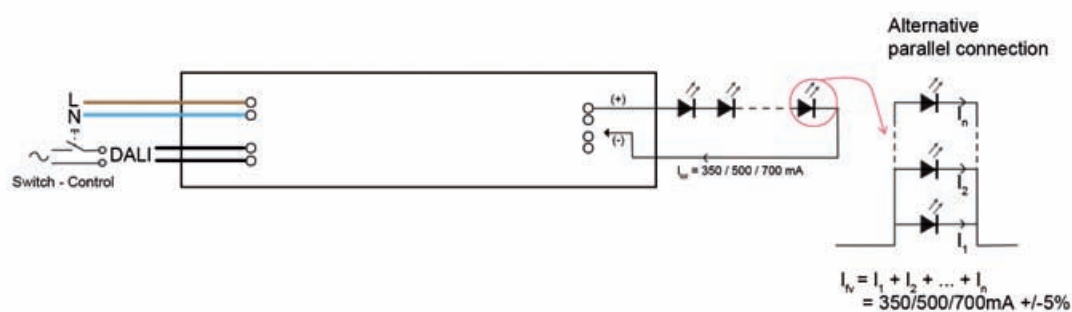


Figure 127
System sketch of LED with voltage constant driver on DALI dimming.