

Wiring and Installation

All light fittings are to be wired in compliance with the DALI Standard.

A single DALI Line has the following constraints:

- The maximum cable length using a cross-section of 1.5mm² is 300m.
- The maximum number of addressable DALI units is 64.
(Devices that take a DALI short address such as ballasts, transformers, emergency lighting units, etc.)
- The maximum permitted line current is 250mA.
- The sum of the current consumptions of all the DALI units from the DALI Line must not exceed the nominal current of the DALI power supply used.
- The DALI voltage range at the DALI power supply must be between 11.5V and 22.5V; a typical value is 16V.

In order to provide ease of modification and expansion DALI Lines shall comprise a five-wire 240V rated soft-wiring system equal to Moduline M3 5-pole cabling system.

The cable shall have the following characteristics:

Marking	Conductor Size	Wire Colour	Description
N	2.5 mm ²	Blue	20A Neutral Conductor
Earth Symbol	2.5 mm ²	Green/Yellow	Protective Earth
L	2.5 mm ²	Brown	20A Active Conductor
DA-	1.5 mm ²	Grey	DALI Control Wire
DA+	1.5mm ²	Orange	DALI Control Wire

Luminaires shall be connected to the DALI Line via a 5-core fly lead and T-connector. The 5-core fly leads are to be made to suit but shall have a minimum length of 1.5m.

Emergency Luminaires shall be connected to the nearest DALI Line and be powered by the DALI active conductor to minimise cabling and installation costs.