

# Digital Lighting means DALI-2

The IEC 62386 Digital Addressable Lighting Interface (DALI) controls communication standard was released around thirty years ago and is the international standard for professional digital lighting communication and control. After many minor ongoing upgrades, the substantially improved and expanded version is known as DALI-2.



## WHAT IS DALI-2?

An established feature of the DALI digital protocol over other approaches is the ability for each device to be individually addressed via 2-way communication. DALI-2 introduces many improvements in features and has a strong focus on device interoperability, including new standards for control devices. DALI-2 devices are backward compatible with existing DALI systems, but new systems need to be DALI-2 throughout. DALI-2 has grown fast to already become one of the most popular lighting control protocols.



## DALI ORGANISATION

DALI-2 is managed by the Digital Illumination Interface Alliance (DiiA) a global consortium for DALI-based smart connected lighting. DiiA now operate a product certification program for DALI-2 luminaires, control gear, sensors and devices. The DALI-2 certified product registration scheme informs lighting specifiers and contractors that products have been tested and certified, and they can be confident of integration and interoperability.

## DALI-2 APPLICATIONS

DALI-2 market sectors include energy saving and productivity improving solutions for emergency lighting, smart commercial lighting,

and smart road lighting. Effective and flexible smart lighting control is the business-case backbone, but many other devices can be included in the system with minimal additional costs or complications.

## DALI-2 ADVANTAGES

The smart lighting systems future is definitely digital, delivering many advantages:

- Digital dimming for reduced energy consumption
- Circadian control with tunable white light
- Reprogramming without hard-wiring changes
- Simplified system cabling and installation
- Automated testing and maintenance diagnostics

- Automated self-commissioning of asset databases
- Automated asset management functions

## ONGOING PROGRESS

Internationally standardised IEC 62386 DALI-2 lighting solutions provide the foundation and future for professional sector smart lighting applications. The DiiA is very active developing wider product specifications and the IEC is progressively adopting these as IEC international standards. This has extended to D4i, an intra-luminaire subset of DALI-2 that expands the capabilities to wider smart building and infrastructure Internet of Things (IoT) monitoring and diagnostics.

Lighting Council New Zealand is the industry association for lighting manufacturing, importing, and distribution companies in New Zealand, and associated lighting industry participants. [www.lightingcouncil.org.nz](http://www.lightingcouncil.org.nz)

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