

## DALI-2 Smart Lighting Solution — DTP-2XX Series Touch Panel

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With the rapid development of digital lighting technology, DALI smart lighting has become the mainstream choice for commercial spaces, office buildings, and residential homes thanks to its standardized protocol, precise control, and flexible scalability. Beyond traditional lighting applications, the DALI system is increasingly being adopted in hospitals, educational facilities, exhibition halls, and smart factories due to its advantages in centralized management, energy monitoring, and zoned dimming. In the field of factory automation, by integrating sensors, central controllers, and automation equipment through DALI, a smart production lighting management system can be realized, which not only improves energy efficiency but also enhances safety and maintenance convenience.

MEAN WELL's newly launched DTP-2XX series touch panel has obtained DALI-2 certification and complies with IEC 62368-101/103/301/332 international standards, ensuring high compatibility and stability. This series offers rich control functions and an intuitive user interface, flexibly meeting the needs of different scenarios. Whether in commercial displays, smart buildings, factory automation, or industrial lighting control, it provides efficient, reliable, and scalable solutions to help users build smarter and greener lighting environments.

### 一、Product Features

- **Efficient Power Supply:** Powered directly by the DALI bus (9.5~22.5VDC), operating current <math><4\text{mA}@16\text{VDC}</math>. No additional power wiring is required, making installation easier while reducing energy consumption.
- **Flexible Control:** Each button supports short press, double press, and long press operations, which can be configured to control groups or specific lighting scenes (e.g., conference mode). Configuration can be easily managed via MEAN WELL's DLC-02 software



Figure 1: DLC-02 software configuration interface

- **User-Friendly Interaction:** Built-in toggle switch; button backlight brightness adjustable (high, low, or off); buzzer sound can be turned on or off to balance usability in dark environments with silent operation needs. Supports quick backlight switching and feedback functions (compliant with DALI IEC 62386-332 standard).

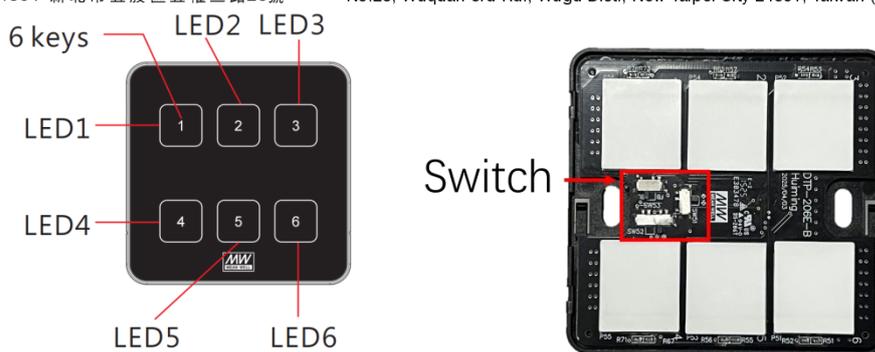


Figure 2: DTP-206-E touch panel

## 二、DALI-2 Smart Lighting System Architecture

The DTP-2XX series touch panel can be used with MEAN WELL's DALI-2 main controller (DLC-02) to build a complete DALI-2 smart lighting system, achieving more comprehensive and intelligent lighting control.

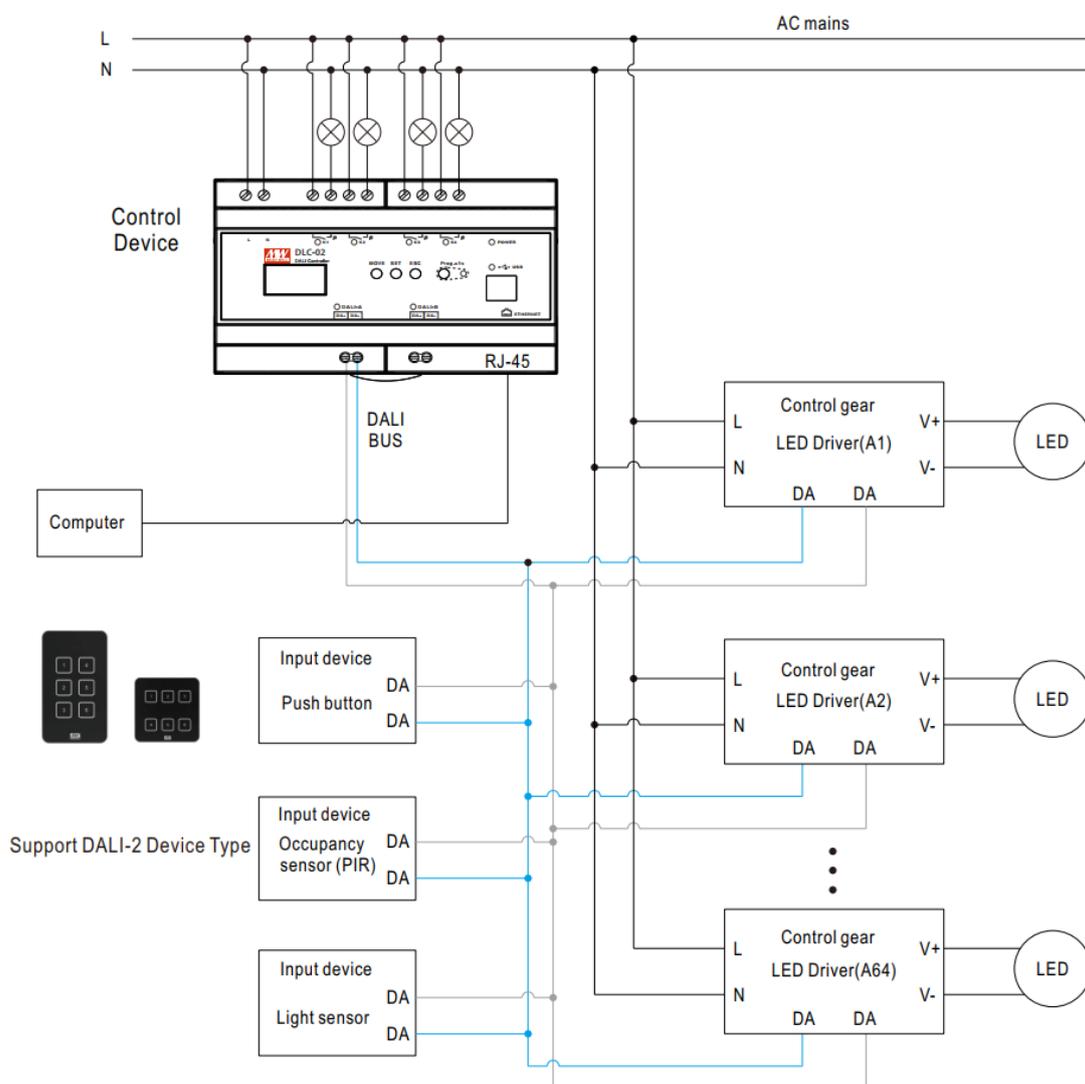


Figure 3: DALI-2 smart lighting system architecture

- System Composition: The DLC-02 serves as the core controller, connected with DTP-2XX touch panels, LED drivers, and various DALI sensors (such as PIR motion detectors and light sensors) to form a collaborative system.



- **Configuration & Expansion:** The DLC-02 controller has a built-in DALI bus power supply with two independent DALI bus channels, each supporting up to 12 input devices. Functions of the DTP-2XX series panels can be configured using MEAN WELL's DLC-02 software.
- **Functionality:** Provides control over DALI luminaires including on/off, color temperature, color, color, brightness, scenes, groups, schedules, and event triggers. It meets diverse daily lighting control needs. For example, different lighting scenes (e.g., office mode, rest mode) can be set via the touch panel, or integrated with sensors to achieve smart control such as "lights on when people arrive, lights off when people leave."

MEAN WELL's DTP-2XX series DALI-2 touch panels, with excellent performance and versatile applications, when used with the DLC-02 controller, provide efficient and intelligent lighting control solutions for offices, shopping malls, smart homes, and more. They are the ideal choice within the DALI smart lighting system.

For related products and application requirements, please contact MEAN WELL distributors or technical staff. Stay tuned for updates on MEAN WELL's online exhibition hall for product information and solution courses.