

Distribution box controls the light switch



Article Overview

A distribution box routes electricity from the main supply to individual circuits, including lighting circuits, and uses circuit breakers or fuses to safely control and protect the lights.

Role of the Distribution Box

A distribution box, also called a DB box, fuse box, or breaker panel, is the central hub of an electrical system that distributes power to different circuits within a building, including lighting circuits . It ensures that electricity flows safely and efficiently while protecting wiring and devices from overloads, short circuits, or faults . Each lighting circuit is typically connected to a dedicated circuit breaker or fuse inside the distribution box, which can disconnect power if a problem occurs .

Components Involved in Lighting Control

Key components in a distribution box that control lighting include:

- **Circuit Breakers/Fuses:** Automatically cut off electricity to a lighting circuit in case of overload or short circuit, preventing damage and fire hazards .
- **Busbars:** Conduct electricity from the main supply to individual breakers, ensuring organized distribution .
- **Switches and Relays:** Some distribution boxes integrate switches, contactors, timers, or smart actuators to allow automated or remote control of lights .
- **Terminal Blocks:** Provide secure connection points for wiring from the distribution box to light switches and fixtures

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Typical controls include a main switch connecting to a distribution board, which then connects to sub-mains and sub-distribution

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The information includes lighting level information for each channel, by which it controls which dimmer circuits come up and go out

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How a 3-Way Light Switch Works A pair of three-way light switches control one or more light

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v) Switches and Indicators: Some distribution boxes have switches to control circuits and

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Distribution board

A distribution board (also known as panelboard, circuit breaker panel, breaker panel, circuit breaker, electric panel, fuse box or DB

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Light switch

Two light switches in one box. The switch on the right is a dimmer switch. The switch box is covered by a decorative plate. The first

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