DALIcontrol™

Overview

Lighting Control Overview

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RTC

- Inbuilt real time clock
- Automatic daylight savings adjustment
- Atomic clock synchronisation (NTS).

Triggers

Inputs

Configurable inputs with dynamic modes and multistaged override timers for:

- Push buttons and switches
- Daylight sensors
- Occupancy sensors
- RF receivers, etc.

Schedules

- Automatic time based events
- Sunrise and sunset with offset
- Repeat timers
- Linked timers with offset
- Holidays and holiday schedules.

Network

- Touch screen
- Computer with building monitor
- Linked controllers
- PDAs/smartphones
- SMS (text messages).

Actions

Direct Arc Level

- Direct ARC power control
- Logarithmic dimming curve with an arc power level of 0.1% to 100%.

DALI Commands

- Dimming commands: Min, Max, etc.
- Scenes with individual light levels
- Status reporting
- Configuration.

Extended Commands

- Conditional commands: Min_If_On, etc
- Controller commands
- Timed sequences.

Control Targets

Ballasts

Up to 64 ballasts (1 loop) or up to 128 ballasts (2 loops).

Groups

Up to 16 DALI Groups per loop + 48 extended Groups per loop.

Broadcast

Single loop or all loops.

Outputs

8 onboard outputs to drive relays.

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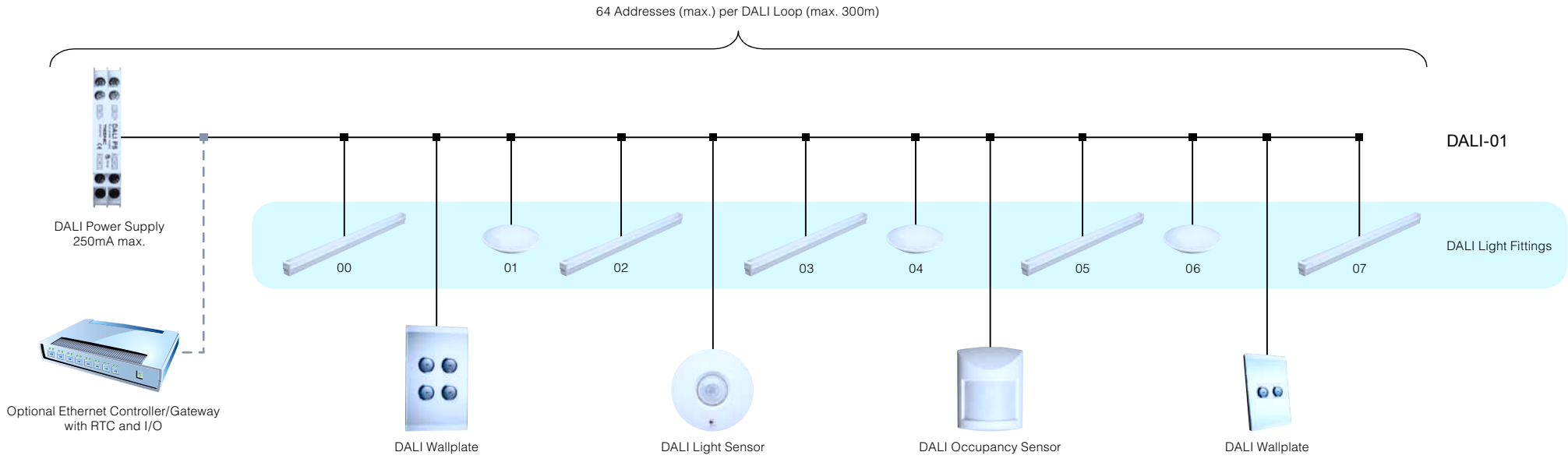
Schematic

Simple DALI Room Control Schematic



Notes:

- DALI is an international standard lighting control system. The schematic diagram shows a DALI network (DALI-01) powered by a DALI power supply.
- The eight light fittings (addressed from 00 to 07) can be any light fitting from any manufacturer fitted with DALI ECG (electronic control gear).
- DALI ECGs are available for FL and CFL lamps, discharge lamps, low voltage halogen lamps, incandescent lamps, LEDs, emergency lights, etc.
- The light fittings are controlled by DALI ECDs (electronic control devices) such as DALI wallplates and DALI sensors from any manufacturer, including DALI control's DC100 Series of DALI control devices.
- DALI can also control legacy light fittings including fixed output, analogue 1 to 10V and DSI dimmable fittings.

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Schematic

Floor Control Schematic

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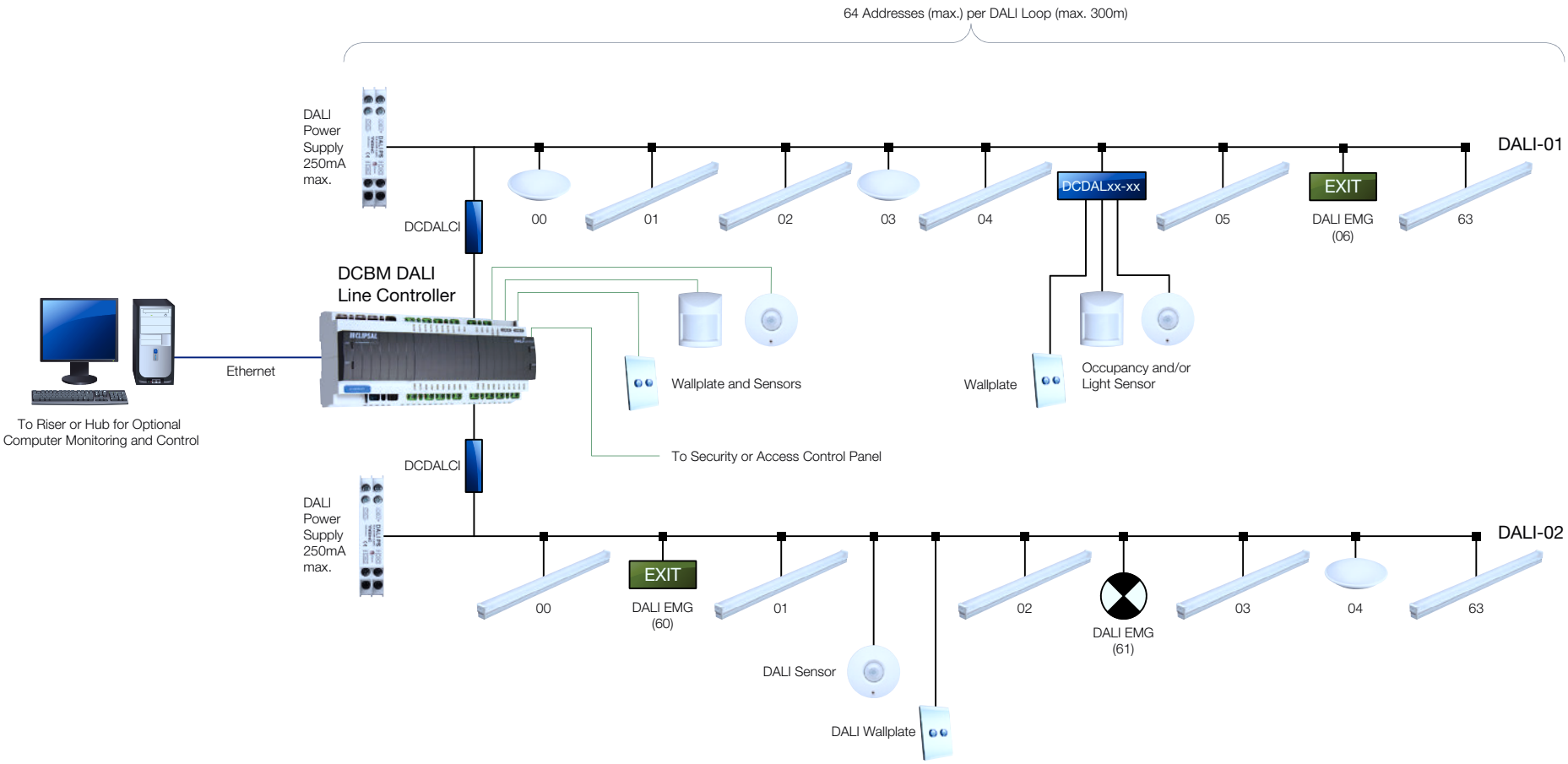

Notes:

- The controller manages up to two DALI networks. The controller includes scheduling, digital inputs, digital outputs and an RJ45 Ethernet network socket for computer monitoring and control.
- Inputs on the controller can be used for wallplates, sensors and interfacing to security and access control panels, etc.
- Each DALI network requires a DALI power supply and a DALI interface.
- The controller manages a DALI group based on inputs from standard switches and sensors.

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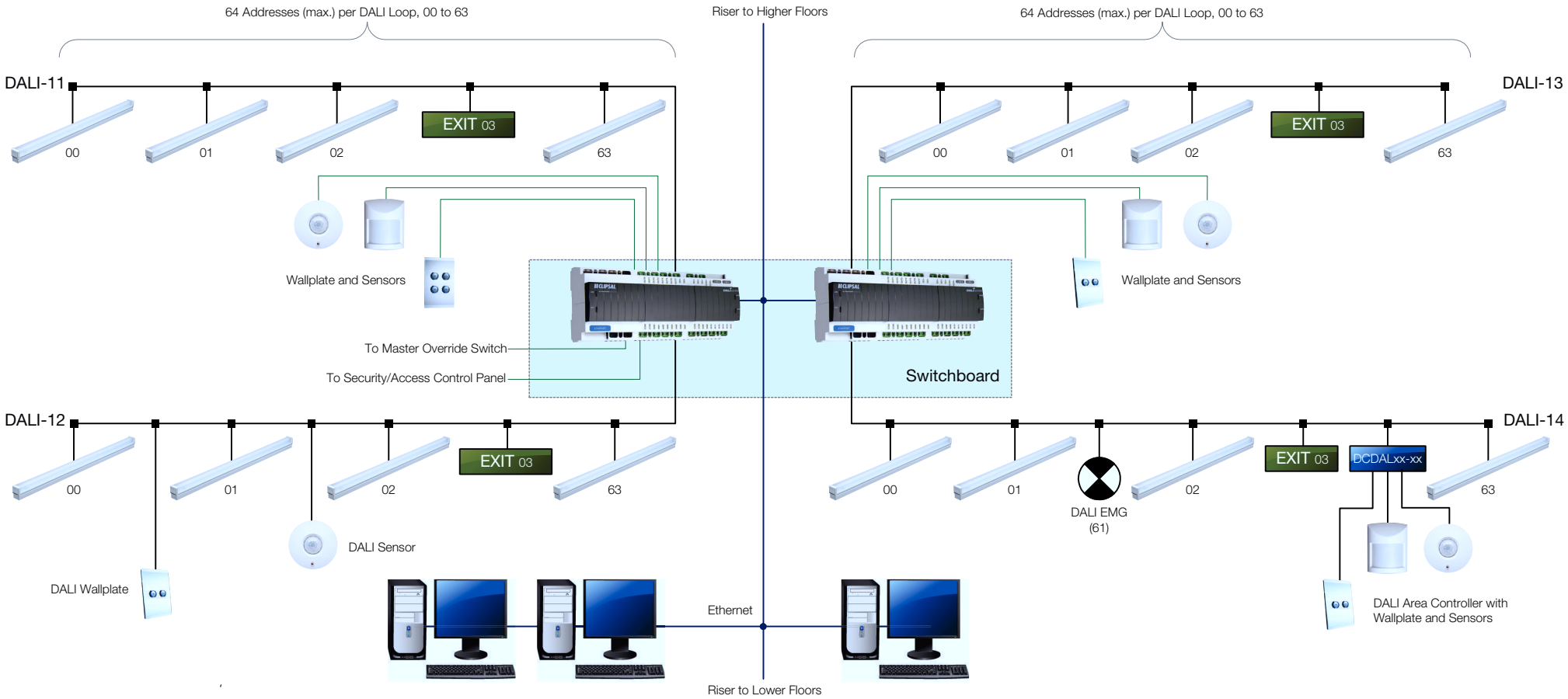
Schematic

Building Control Schematic



Notes:

- The controller manages up to two DALI networks and includes scheduling, digital inputs, digital outputs and an RJ45 Ethernet socket for computer monitoring and control.
- The switchboard contains controller/gateways, DALI power supplies and DALI interfaces.

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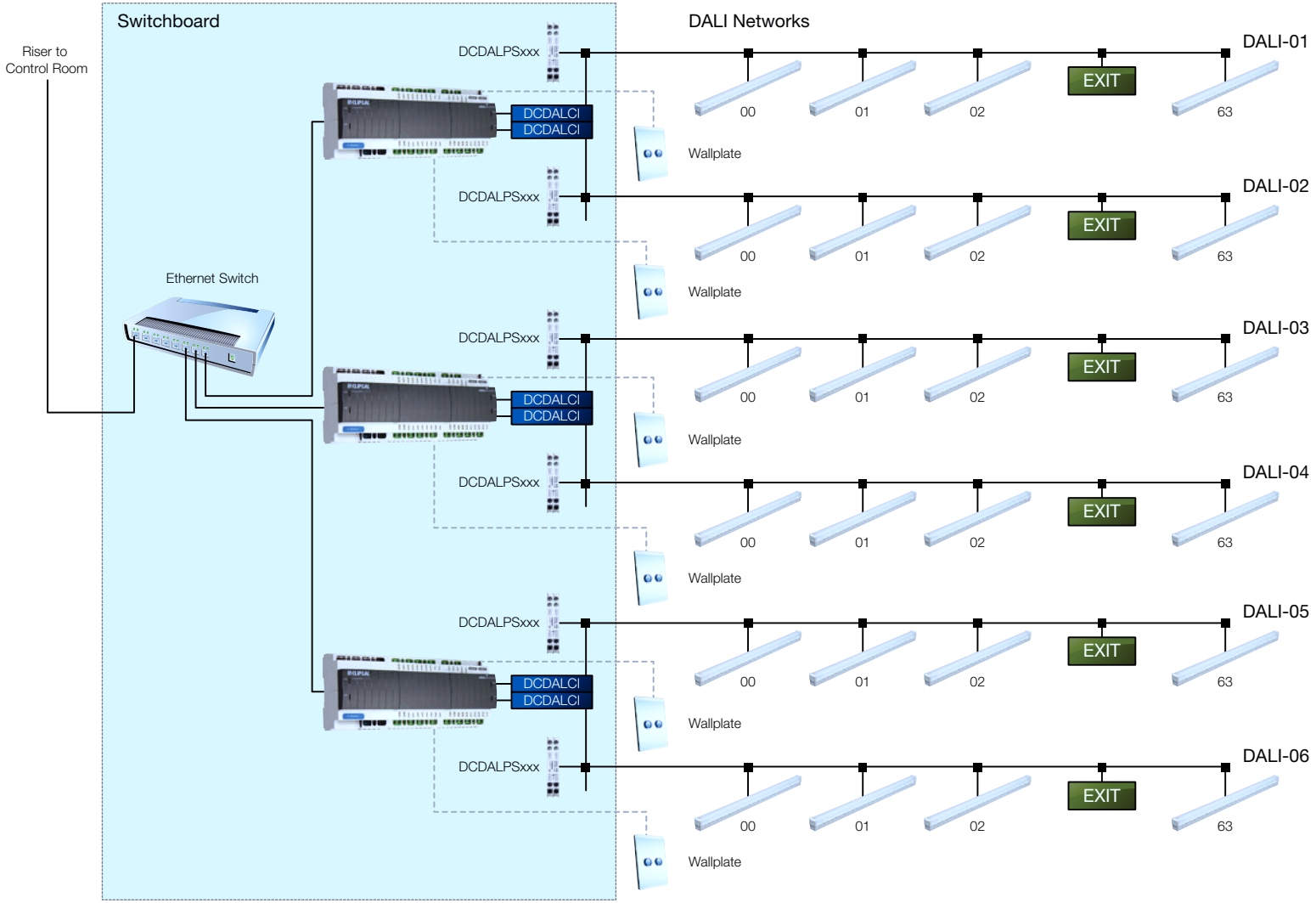
Schematic

Typical Switchboard Schematic



Notes:

- The controller manages up to two DALI networks. Each controller includes scheduling, inputs, outputs and an RJ45 Ethernet socket for computer monitoring and control.
- Each DALI network requires a power supply and an interface.
- Power supplies for the controller and Ethernet switch are not shown in the schematic diagram. Refer to wiring diagrams for full details.

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Wiring

BM-DALI Controller Wiring Overview

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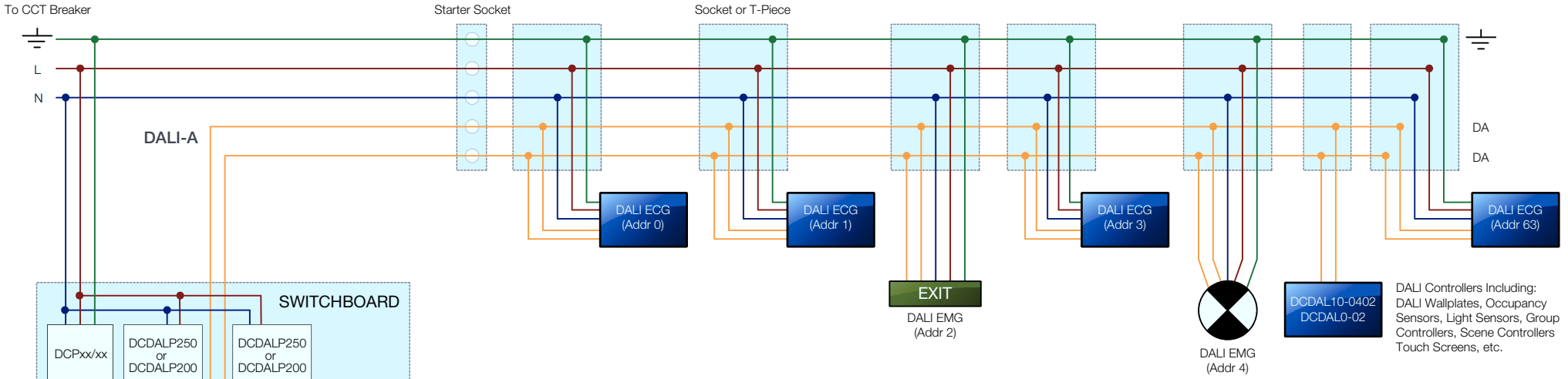

Notes:

- The diagram depicts a typical wiring layout for a DALI line.
- The DCPxx/xx power supply provides d.c. power for BM-DALI line controllers and for sensors connected to BM-DALI inputs.
- The DCDALP200 or DCDALP250 are current limited, DIN rail mount DALI power supplies.
- One DCDALP200 or DCDALP250 is required per DALI line.
- The DCDALCI is the DALI communications interface for the BM-DALI line controller.
- One DCDALCI is required per DALI line.
- Each DALI line can support up to 64 DALI ECG's addressed from 0 to 63.
- DALI ECGs are available for FL and CFL lamps, LV halogen, HID, LEDs, emergency fittings, fixed output, DSI and 1 to 10V analogue fittings, etc.
- The computer and other Ethernet equipment is optional and can be used to monitor and control the system.
- DALI lines must be wired to the DALI standard and to local regulations.

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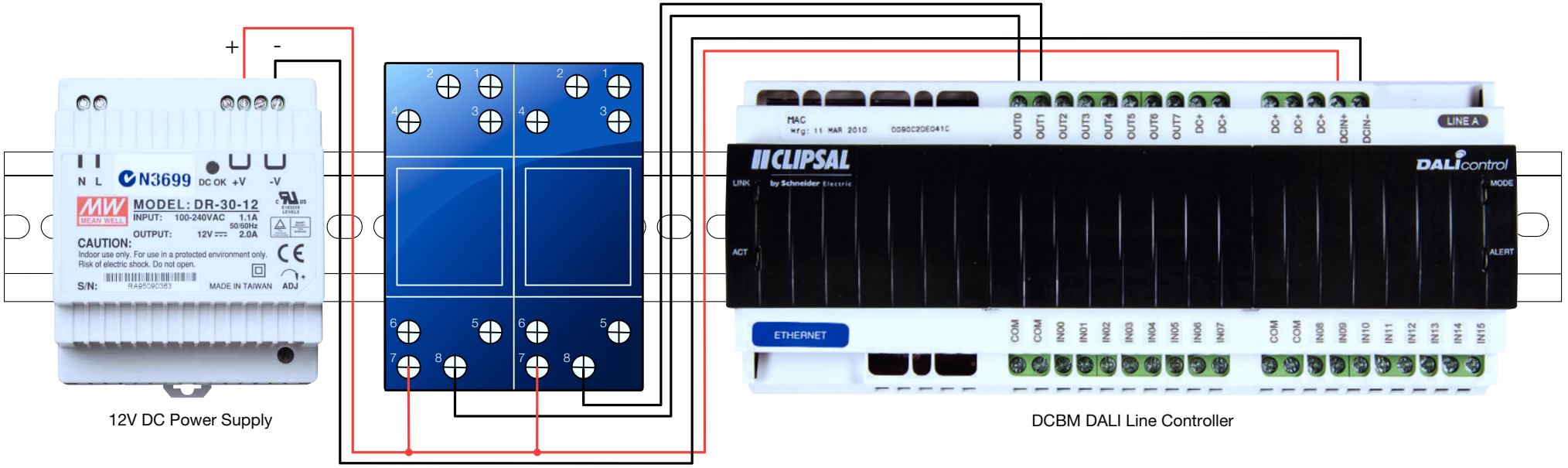
Wiring

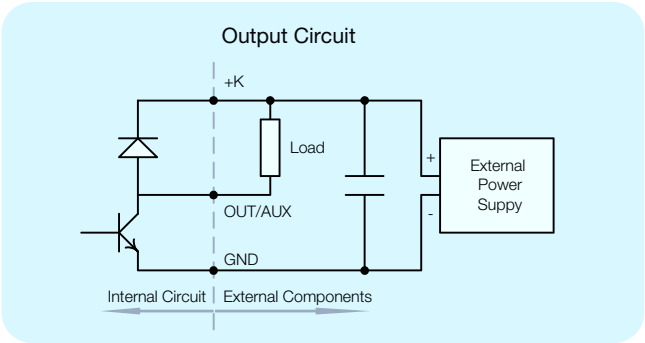
BM-DALI Controller Digital Outputs



12V DC Power Supply

Plug Relay and Base
(typical H72 x W28 x D67mm each base)

DCBM DALI Line Controller



Notes:

- The DCBM DALI line controller has eight internal digital outputs; OUT 0 to OUT 7. Each output can sink 200mA.
- When using the digital outputs to switch inductive loads it may be necessary to power K with a separate power supply.
- Relay base terminals (arrangement shown is for PTF08A):
  1. Contact 1 Normally Closed
  2. Contact 1 Normally Open
  3. Contact 1 Common
  4. Contact 2 Normally Closed
  5. Contact 2 Normally Open
  6. Contact 2 Common
  7. Coil
  8. Coil

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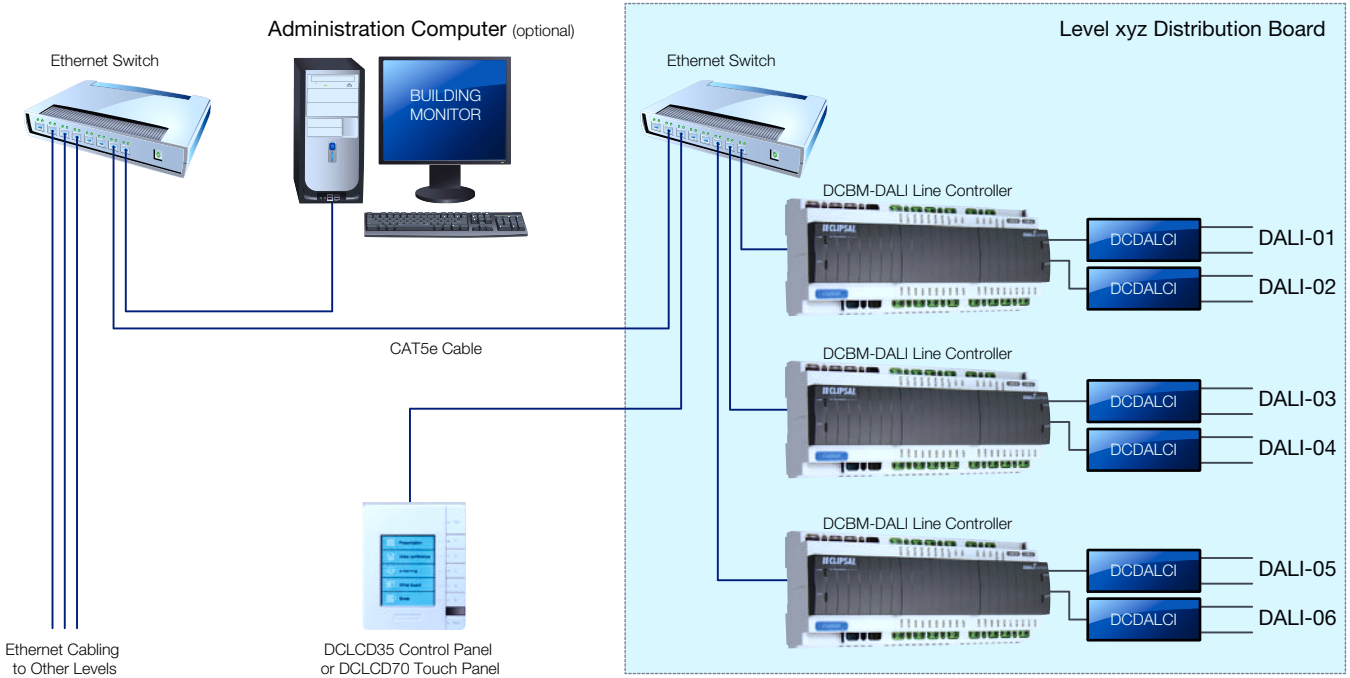
Wiring

DCBM-DALI Line Controller Ethernet Overview



Notes:

- Ethernet network cabling must be completed to Ethernet standards.
- The Ethernet switch in the distribution board is not required if a separate Cat5. cable is run from the main switch to each DCBM DALI line controller.

DALIcontrol™

Wiring

Typical Switchboard Layout

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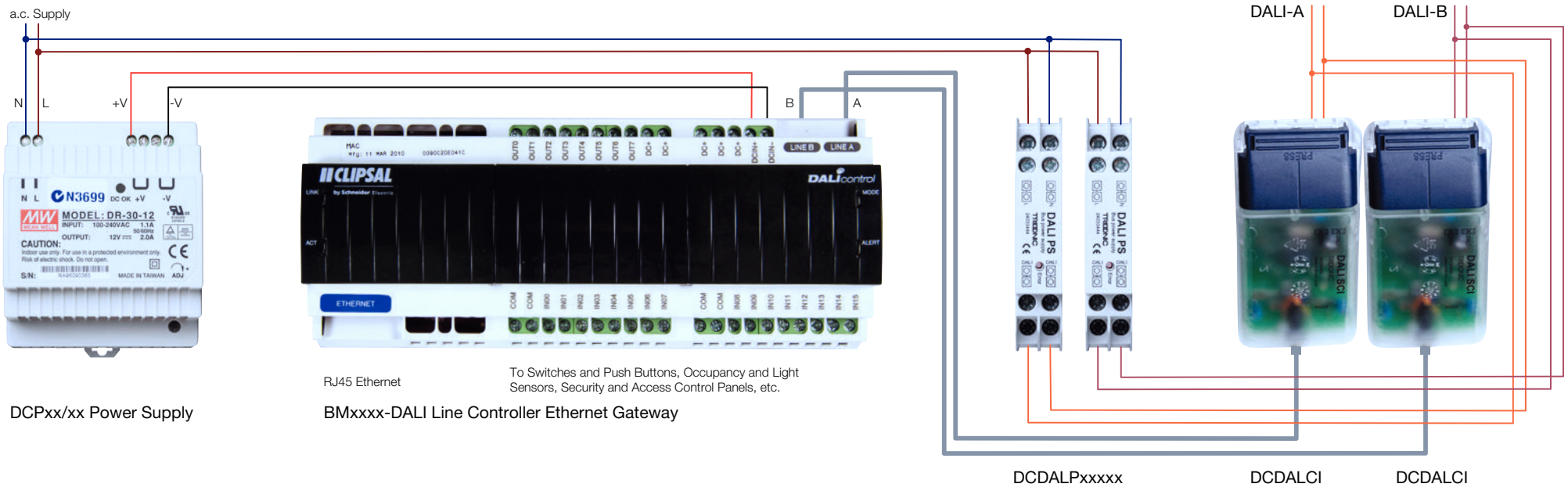

DCPxx/xx Power Supply

RJ45 Ethernet

BMxxxx-DALI Line Controller Ethernet Gateway

To Switches and Push Buttons, Occupancy and Light Sensors, Security and Access Control Panels, etc.

Dimensions (shown in mm)

Part Number	Height	Width	Depth
DCP12/30	93	78	56
DCP12/60	93	78	36
DCP24/30	93	78	56
DCP24/60	93	78	36
DCDALP200	90	17	58
DCDALP250	90	34	57
DCDALCI	100	50	30

Part Number	Height	Width	Depth
DCBM1-1608	92	216	63
DCBM2-1608	92	216	63
DCBM2-0808	120	140	54
DCBM2-1602	120	140	54

Notes:

- DCDALPxxxxx should be separated by spacers to allow air flow and avoid overheating.
- DCPxx/xx power supplies can power multiple BM-DALI line controllers and sensors, according to the accumulated load.

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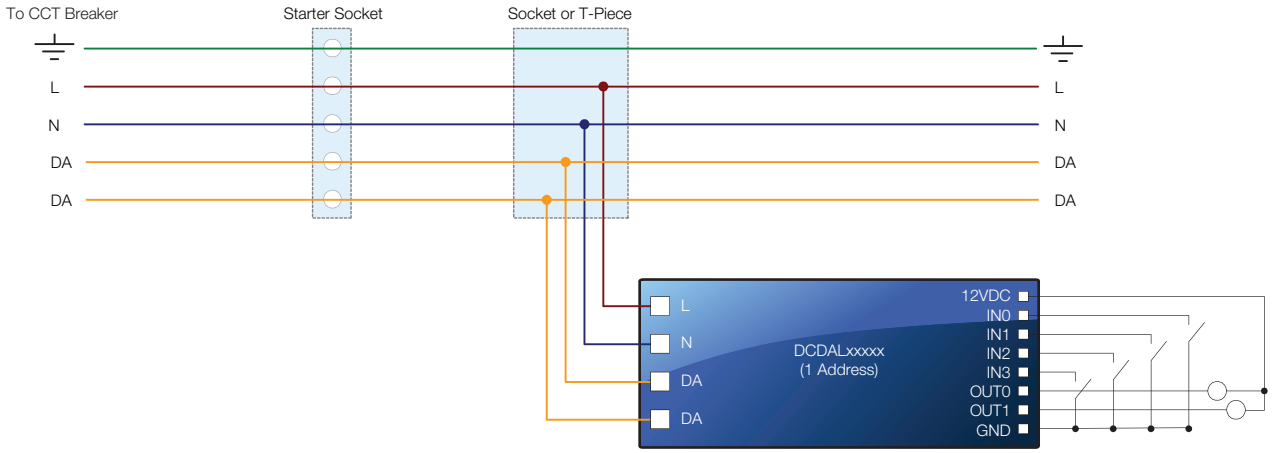
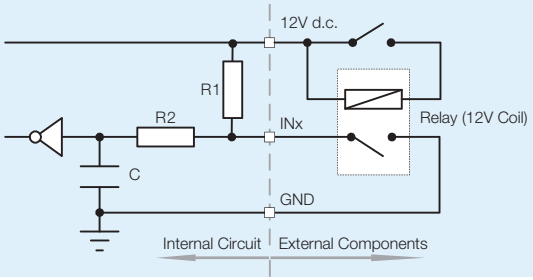
Wiring

DALI DCDALxxxxx Wiring Overview

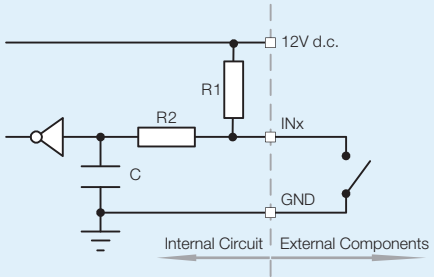


DALI Control DCDAL Series
DCDALIO-0402 Room Controller
DCDALO-02 2-Channel Output Module

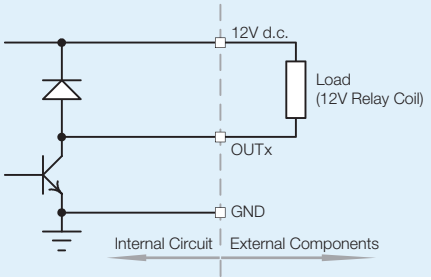
Input Circuit using 12V Relay



Input Circuit



Output Circuit



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