



950 Application Controller

The 950 is a certified DALI-2 Multi Master Application Controller capable of controlling DALI-2 Lighting (Control Gear), DALI-2 Controls (Control Devices) as well as Helvar's unique range of loads and controls which also connect to the DALI-2 network.

Control and power up to four DALI-2 networks with the 950 Application Controller. Scale up to large and complex projects by networking multiple Imagine Application Controllers together using standard TCP/IP Ethernet connection.

Programming can be carried out using Helvar's Designer software. All programming data is stored within the system itself eliminating a central point of failure and the need to always program with the latest saved configuration file.



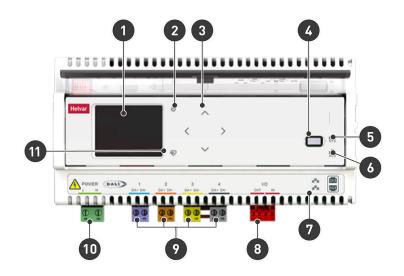
Key Features

- DALI-2 Certified Multi-master application controller
- Support for 512 DALI devices (128 per subnet consisting of 64 lighting and Helvar DigiDim services + 63 DALI-2 Controls (Control Devices). Address 128 reserved for Application Controller)
- Built in display for DALI network testing and alerts
- Built-in real-time clock
- Can be networked together to form large scalable systems
- Compatible with other Helvar Application Controllers (905, 910, 920 and 945)
- Integration with other building systems
- LightOverTime Circadian Rhythm Control
- No central database required for system operation
- Hybrid connectivity to ActiveAhead wireless system via Node Link 5611





Connections



- 1. Display
- 2. Power On Indicator
- 3. Navigation buttons
- 4. Do not use. USB-C for developer purposes only
- 5. SYS Indicator
- 6. AUX Indicator
- SYS and AUX and Ethernet connectors SYS for lighting system network AUX for developer purposes only
- 8. I/O Port (currently not in use)
- 9. DALI Connectors
- 10. Mains connections
- 11. System Heartbeat

Note: The 950 Application Controller has been designed not to require an earth connection.

Note: Where DALI cable has screen, terminate to cabinet earth.

Network limits and design recommendations

Absolute limits (DALI / DALI2) Recommended (DALI / DALI2)

Power:240 mA guaranteed, 250 mA max220 mA maxCable length:300 m250 m max

Cable type: Mains rated 1.5 mm², mains rated

Addresses: 64 Lighting (Control gear) and DigiDim 55 max control gear and Digidim devices,

Keep under 220 mA

63 DALI-2 controls (Control devices)

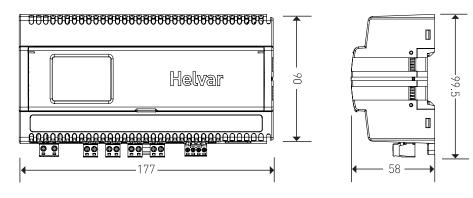
DALI-2 and/or Digidim control devices: 15

max; Keep under 220 mA

Product compatibility: Use recommended DALI-2 controls and application controllers only.

Recommended max 1 DALI repeater per subnet.

Dimensions (mm)







Technical Data

Connections

Mains: Solid up to 2.5 mm²

Stranded up to 2.5 mm²

DALI: 0.5-2.5 mm², Max. length: 300 m @

1.5 mm²

 $2 \times RJ45 \ 10/100 \ Mb/s$, CAT 5E up to Ethernet:

100 m (Auto MDI/MDI-X crossover)

Sys for Lighting System Network

Aux for developer purposes only

Electrical data

Mains supply: 230 VAC, 50/60 Hz

110 VAC, 50/60 Hz

24 W (All DALI subnets fully loaded) Power consumption:

12 W Heat dissipation:

Fusing: Max. 16 A miniature circuit breaker

DALI output supply

DALI-OUT current: 4 × 240 mA (quaranteed)

4 x 250 mA (maximum)

Variants

950: 230 V version

950-110V: 110 V version

Operating and storage conditions

0 °C to +40 °C Ambient

temperature:

Relative humidity: Max. 90 %, noncondensing

-10 °C to +70 °C Storage

temperature:

Real Time Clock 36 hrs in nominal

environmental conditions backup:

Mechanical data

Dimensions: 177 × 99.5 × 58 mm (10U)

Weight: 460 q

Mounting: DIN Rail

Colour, body / lid: White (RAL 9003) / Translucent

red (RAL 3027)

Enclosure: Polycarbonate

IP20 (IP00 at connectors) IP rating:

Display: Colour display 320 x 240 px

Conformity and standards

C€ LK Conformity:

DALI: DALI-2 Application controller

(Multi Master) IEC 62386 Parts

101 and 103

EN 55015, EN 61000-6-3 EMC emission:

EMC immunity: EN 55035, EN 61547

Safety: EN 61347

Environment: Complies with WEEE, RoHS

and REACH directives.

Note: See DALI Alliance Website for full detail of supported parts https://www.dali-alliance.org/

products.

Compatibility

Designer: 5.7.0 or later

Note: To ensure complete DALI-2 compatibility, use only with Helvar recommended DALI-2 controls

(Control Devices).