

920 Application Controller

The 920 Application Controller uses an Ethernet connection (10/100 Mb/s) as a network backbone to seamlessly combine DIGIDIM/ DALI, SDIM and DMX networks.

Basic functionality is available out of the box without any programming. Helvar's Designer software allows for advanced configuration and functional programming of the router.

The system provides energy-saving features via presence detection and daylight harvesting. Further automation can be achieved through scheduled events.

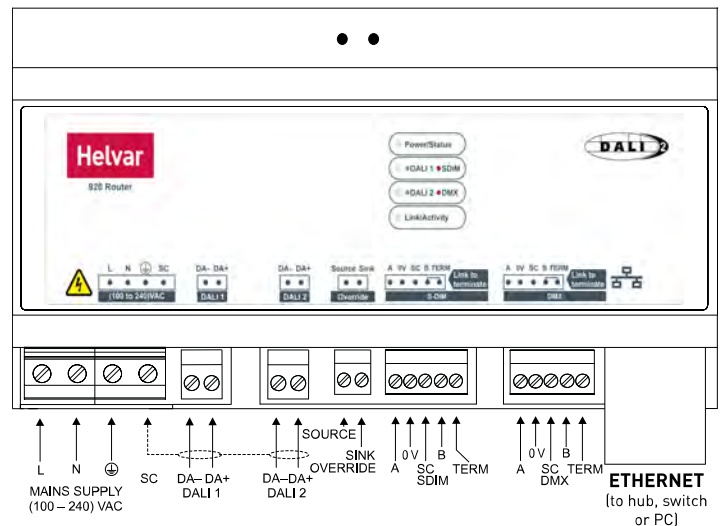
A PC can be connected to the system for diagnostics and logging purposes if required, but there is no need for PC control in daily operation, as all data is stored within the system itself. The elimination of a central controller ensures that no single point of failure can cause a total system shutdown.



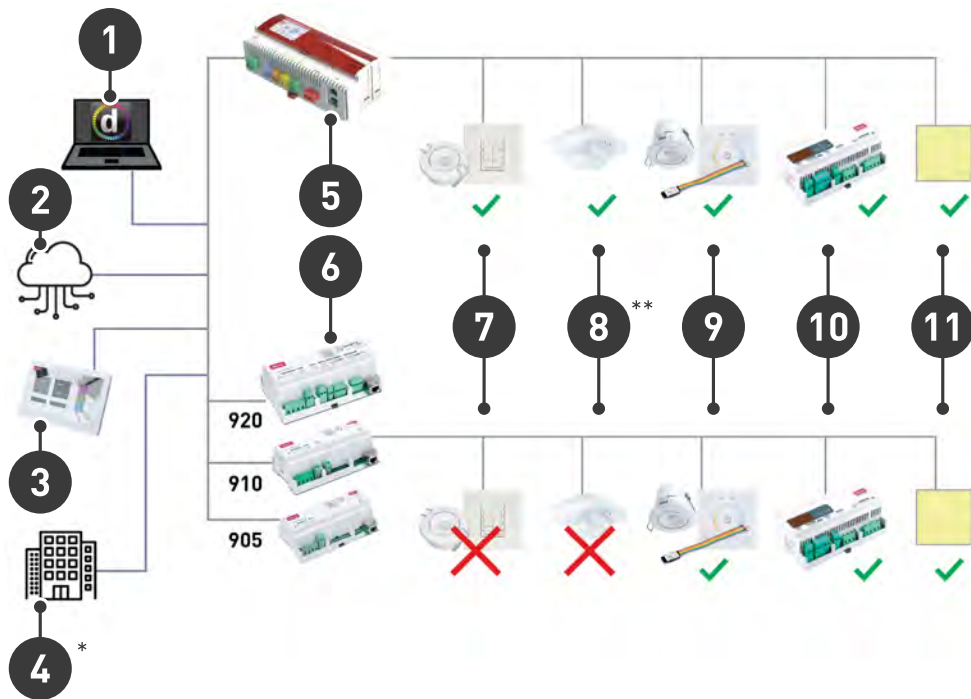
Key Features

- Support for 128 DALI devices (64 DALI devices on each subnet)
- Certified DALI-2 Single Master - DALI-2 Lighting (Control Gear), not DALI-2 controls (Control Devices)
- Built-in real-time clock
- Can be networked together to form large scalable systems
- Provides local as well as central control if required
- Compatible with other Helvar routers (905/910/950)
- Integration with other building systems
- Universal supply input

Inputs and Outputs



Examples Solution Diagram



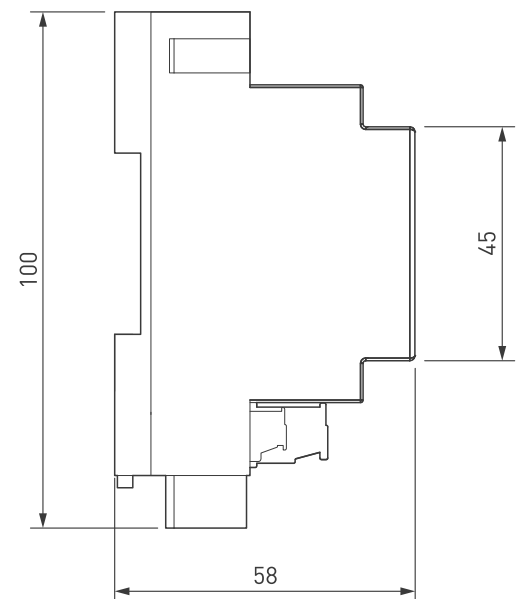
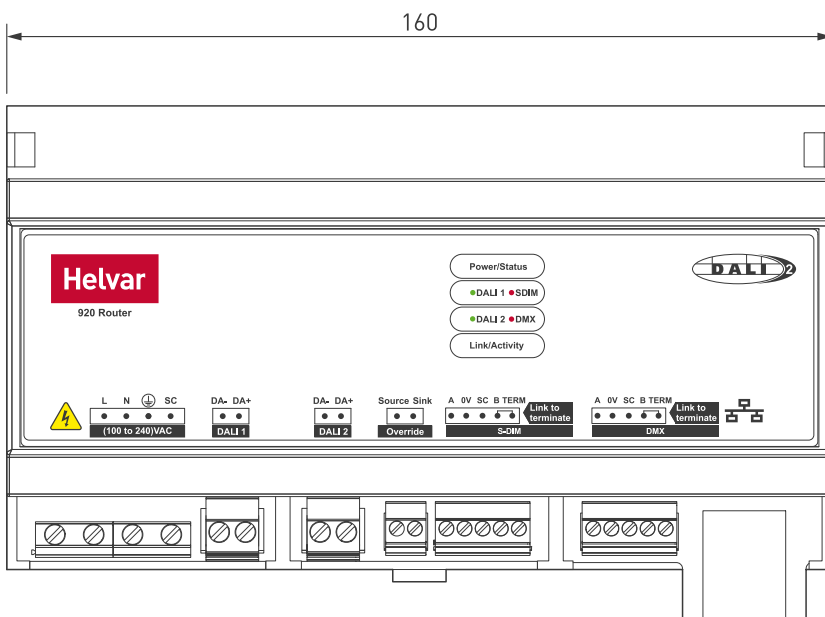
1. Programming Software
2. Helvar Insights
3. Touch Panels, Apps AV Integration
4. Building Integration*
5. 950 Application Controller
6. Other Application Controllers
7. Helvar DALI-2 (D2) Controls
8. Other DALI-2 Controls**
9. DigiDim Controls
10. Load Controllers
11. DALI/DALI-2 Lighting

* = Gateways required

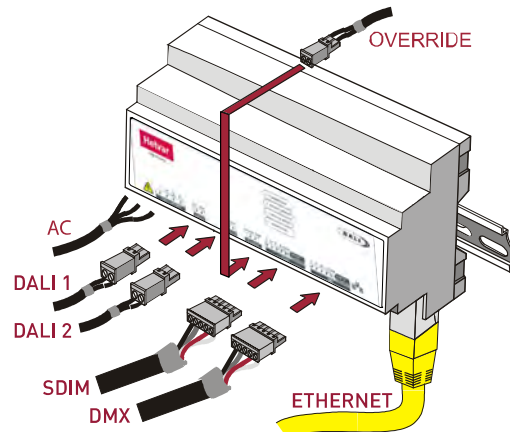
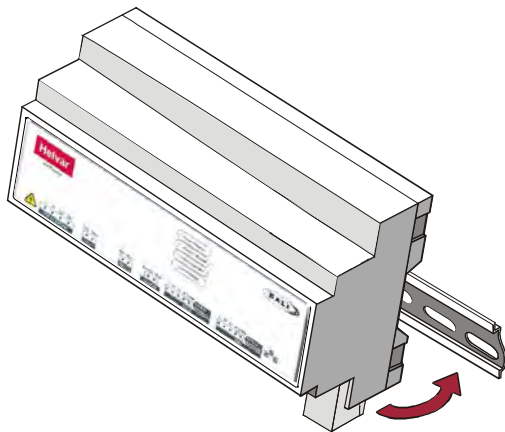
** = Product dependent, ask local Helvar representative

Compatibility: DALI and DALI-2 Lighting (Control Gear), DigiDim Controls, NOT DALI-2 (D2) controls (Control Devices)

Dimensions (mm)



Installation



Technical Data

Connections

Mains cable:	Solid up to 4 mm ² Stranded up to 2.5 mm ²
DALI cable:	0.5–2.5 mm ² , Max. length: 300 m @ 1.5 mm ²
Override (OVR):	Source: 3 V, 50 mA Sink: max. 28 V, 50 mA
SDIM/DMX:	Low-loss RS485 Type (multi-stranded, twisted and shielded), 3 or 4 cores + screen 0.22–1.5 mm ² , Max. length: 1 km
Ethernet:	1 × RJ45 10/100 Mb/s, Cat 5E up to 100 m (Auto MDI/MDI-X crossover)

Electrical data

Mains supply:	100–240 VAC, 50/60 Hz
Power consumption:	23 VA (DALI subnet fully loaded)
Power circuit protection:	External protection max. 10 A. Earth mandatory.

DALI output supply

DALI-OUT current:	2 × 240 mA (guaranteed) 2 × 250 mA (maximum)
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Operating and storage conditions

Ambient temperature:	0 °C to +40 °C
Relative humidity:	Max. 90 %, noncondensing
Storage temperature:	–10 °C to +70 °C

Mechanical data

Dimensions:	160 × 100 × 58 mm (9U)
Weight:	260 g
Mounting:	DIN Rail. Keep mains and DALI wiring separate from Ethernet cable.
IP code:	IP30 (IP00 at connectors)

Conformity and standards

Conformity:	
DALI data transfer:	DALI-2 Application Controller (Single Master) parts 101, 103
EMC emission:	EN 55032 Class A
EMC immunity:	EN 55035
Safety:	EN 61347-2-11
Environment:	Complies with WEEE and RoHS directives.