Single DALI Subnet Router (905)

The 905 Single DALI Subnet Router uses an Ethernet connection (10/100 Mbps) to connect to and control a local DALI network.

Basic functionality is available 'out-of-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 constant light functionality. Further automation can be achieved through scheduled events. Integration with other building systems can be achieved using OPC or HelvarNET I/O functions.

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

Key Features

- Each 905 router supports a total of 64 DALI devices
- Up to 100 routers may be networked together
- 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 (910/920)
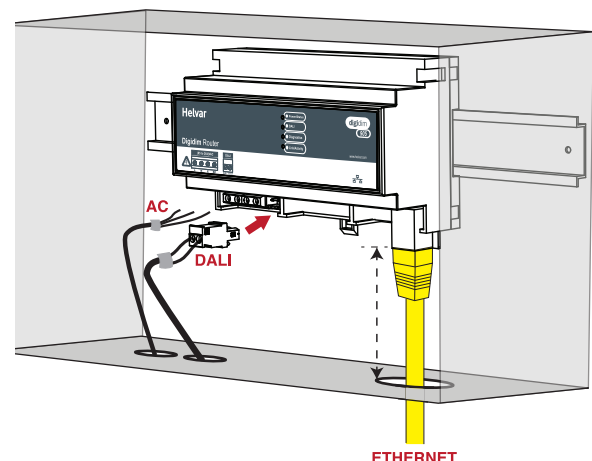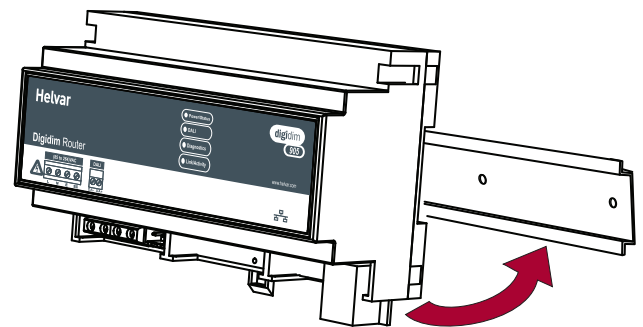- Integration with other Building systems

Applications

- Hotel Rooms and Suites
- Hospital Consultation Rooms and Wards
- Meeting Room Suites / Boardroom
- Class Rooms and Lecture Theatres
- Residential
- Individual areas (see above) can be networked together to allow Central Control.

Installation Notes

- For installation in a restricted access location only.
- Isolate the mains supply before installation.
- The external mains supply must be protected.
- External protection must not exceed 6 A MCB.
- All DALI and mains cabling must be 230 V mains rated.
- Install the unit horizontally to allow for heat dissipation.
- Any enclosure must provide adequate cooling ventilation.
- Please refer to the 905 Digidim Router Installation.

Installation

Technical Data

Connections

Mains cable:	Solid core up to 4 mm² Stranded up to 2.5 mm²
DALI cable:	2-wire mains rated, 0.5 mm² – 2.5 mm² Recommended: 1.0 mm² – 1.5 mm² Maximum length: 300 m @ 1.5 mm²
Ethernet:	1 × RJ45 10/100 Mbps, Cat 5E up to 100 m (Auto MDI/MDI-X crossover)

Power

Mains supply:	85 VAC – 264 VAC; 45 Hz – 65 Hz
Power consumption:	13 VA (DALI subnet fully loaded)
Power circuit protection:	6 A MCB maximum. The external supply must be protected.

Supply

DALI:	250 mA (current limited)

Mechanical data

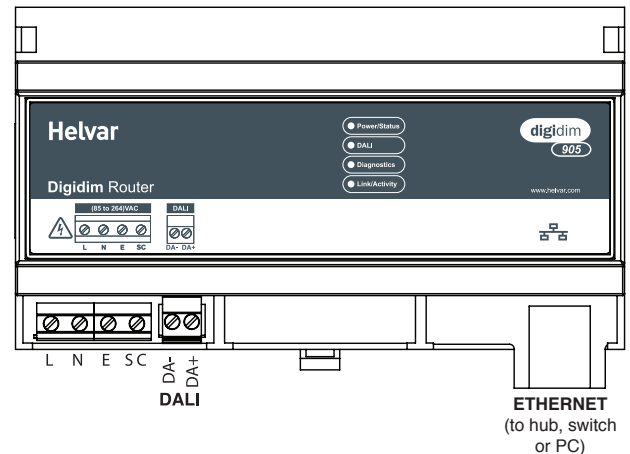|	
Dimensions:	9U – 160 mm × 58 mm × 100 mm
Weight:	250 g
Mounting:	DIN Rail – keep mains and DALI wiring separate from Ethernet cable
IP code:	IP30 (IP00 at connectors)

Operating conditions

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

Conformity and standards

DALI data transfer:	DALI standard IEC 62386, with Helvar extensions
EMC emission:	EN 55015
EMC immunity:	EN 61547
Safety:	EN 60950
Isolation:	4 kV
Environment:	Complies with WEEE and RoHS directives

Inputs / Outputs

Dimensions