

DALI, S-Dim, DMX Network Router (920)

The 920 Imagine Router uses an Ethernet connection (10/100 Mbps) as a network backbone, to combine Digidim/DALI and S-DIM networks seamlessly together. 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. OPC server software enables interfacing to Building Management Systems (BMS).

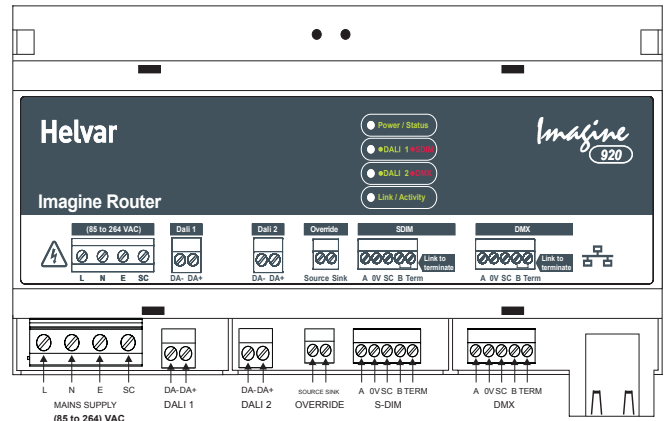
A PC can be connected to the system for diagnostics and logging purposes if required, but all data is stored within the system itself, so there is no need for PC control in daily operation. The elimination of a central controller ensures no single point of failure can cause a total system shutdown.

Key Features

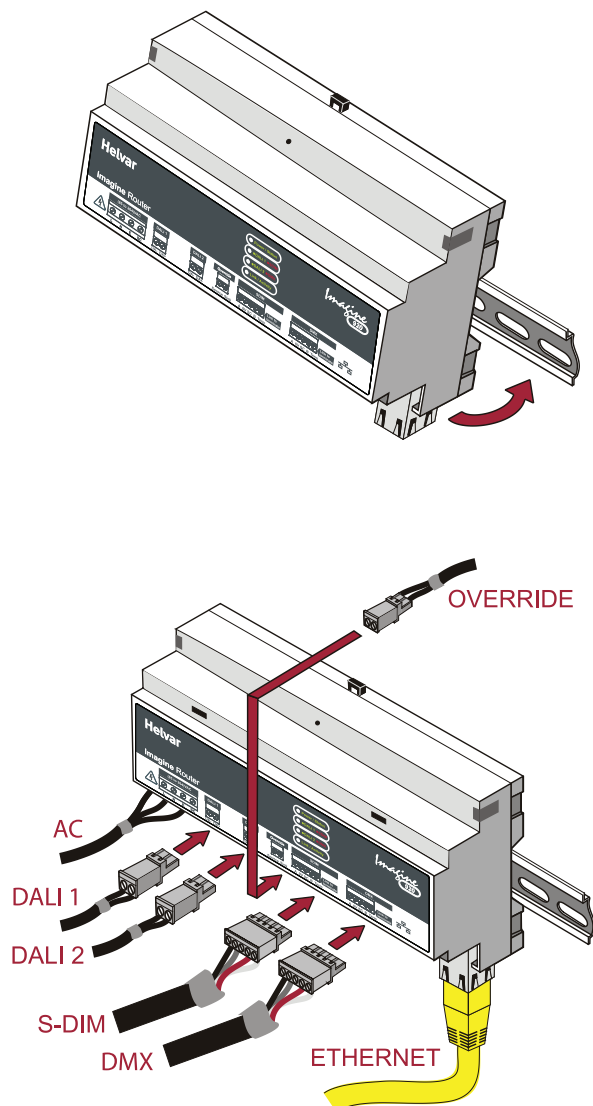
- Each router supports a total of 128 DALI devices (64 devices on each subnet)
- 250 mA power supply for each DALI subnet
- Up to 100 routers may be networked together
- Up to 12 800 DALI devices (16 000 groups) on a router system
- Industry standard protocols (TCP/IP and DALI)
- Built-in real-time clock
- Universal supply input
- Up to 252 S-DIM addresses
- Up to 512 DMX addresses 'In' or 'Out'

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
- Keep Mains and DALI wiring separate from Ethernet, SDIM and DMX cables
- Install the unit horizontally to allow for heat dissipation
- Any enclosure must provide adequate cooling ventilation
- Please refer to the 920 Imagine Router Installation Guide



Installation



Technical Data

Connections

Mains supply:	Solid core: up to 4 mm ² Stranded: up to 2.5 mm ²
DALI cable:	0.5 mm ² – 1.5 mm ² (max. 300 m @ 1.5 mm ²)
Override (OVR):	Source: 3 V, 50 mA / Sink: Max. 28 V, 50 mA
S-DIM/DMX:	Low-loss RS485 Type (multistranded, twisted and shielded), 3 or 4 cores + screen 0.22 mm ² – 1.5 mm ² , max. length 1000 m
Ethernet:	1 × RJ45 10/100 Mbps, Cat 5E up to 100 m (Auto MDI/MDI-X crossover)

Power supply

Mains supply voltage:	85 VAC – 264 VAC, 45 Hz – 65 Hz
Power consumption:	23 VA
Power circuit protection:	6 A MCB maximum. The external supply must be protected. Earth – mandatory

Supply

DALI:	2 mA × 250 mA (current limited)
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Mechanical data

Dimensions:	9U – 160 mm × 58 mm × 100 mm
Weight:	260 g
Mounting:	DIN Rail: keep mains and DALI wiring separate from Ethernet, Override, S-DIM and DMX cables
IP code:	IP30 (IP00 at connectors)

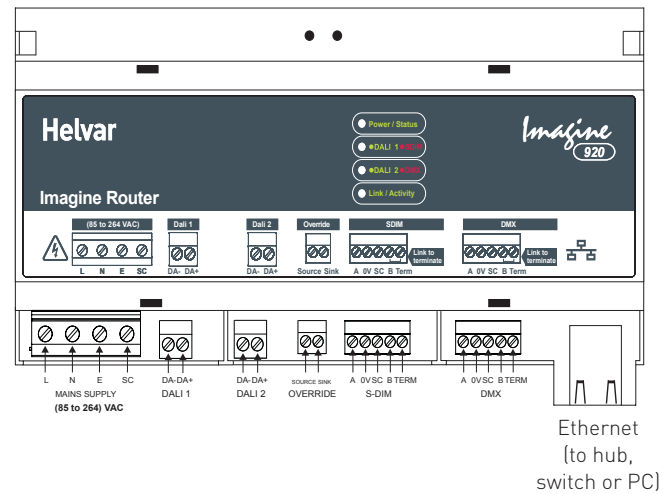
Operating and storage conditions

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

Conformity and standards

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

Inputs / Outputs



Dimensions (mm)

