Helvar

DALI, S-Dim, DMX Network Router

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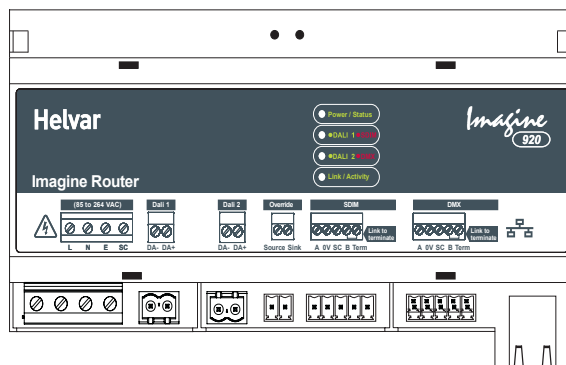
A PC can be connected to the system for diagnostics and logging purposes, if required, but all data is stored within the system itself so there is no need for PC control in daily operation. The elimination of a central controller ensures no single point of failure can cause a total system shutdown.
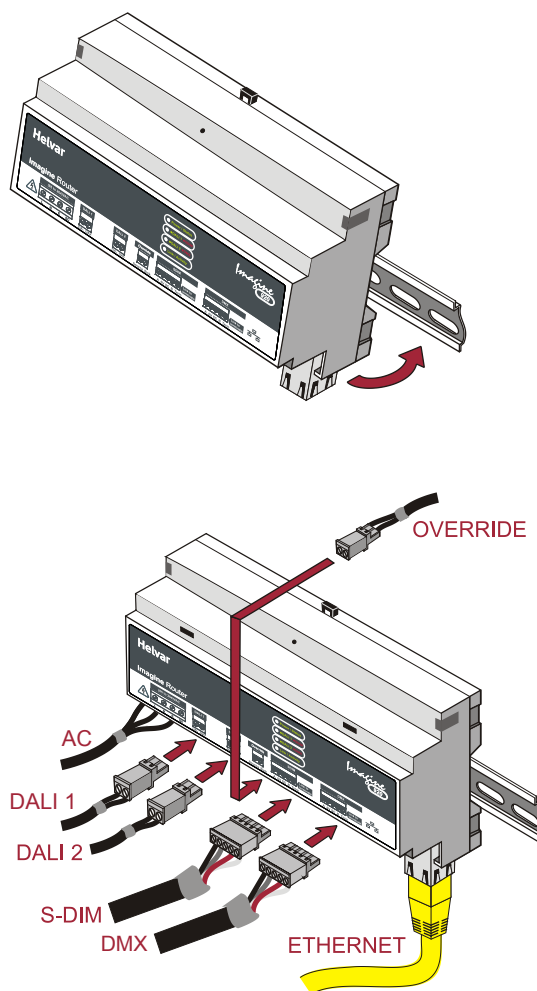

Key Features

- 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 252 DMX addresses 'In' or 'Out'

Installation

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

Technical Data

Connections

Mains cable:	Solid core up to 4 mm^2; Stranded up to 2.5 mm^2
DALI cable:	0.5 mm^2 - 1.5 mm2 (max. 300 m @ 1.5 mm^2)
Override:	Source: 3 V, 50 mA / Sink: Max. 28 V, 50 mA
S-DIM and DMX cable:	Low loss RS485 Type (multi-stranded, twisted and shielded), 3 or 4 cores + Screen 0.22 mm^2 to 1.5 mm^2, max. length 1000 mm
Ethernet:	1 x RJ45 10/100 Mbps, Cat 5E up to 100 m (Auto MDI/MDI-X crossover)

Inputs / Outputs

Power

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

Supply

DALI:	2 x 250 mA (current limited)

Mechanical Data

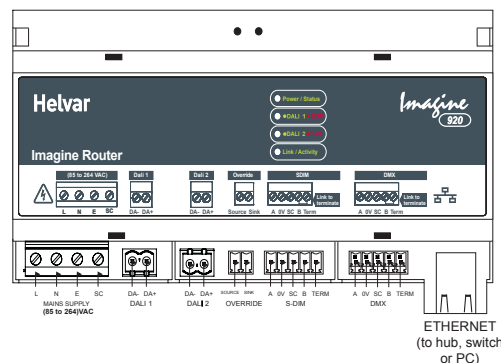|	
Dimensions (mm):	9U – 160 (L) x 100 (H) x 58 (D)
Weight:	260 g
Mounting:	DIN Rail: keep Mains and DALI wiring separate from Ethernet, Override, S-DIM and DMX cables
IP rating	IP 30 (IP 00 at connectors)

Dimensions

Operating Conditions

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

Conformity & Standards

DALI data transfer:		DALI standard IEC60929, with Helvar extensions
EMC	**Emission:**	EN 55 015
	Immunity:	EN 61 547
Safety		EN 60 950
Isolation:		4 kV
Environment:		Complies with WEEE and RoHS directives

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