

DGOZ-DPSM - RAPIX DALI-2 Miniature Power Supply

Suitable for use in small DALI systems with up to 50 mA current draw.

Product summary and capabilities

Each DALI line in an installation requires a dedicated DALI power supply for correct operation of a DALI system.

DALI products may include conventional DALI lighting, emergency lighting, RGB colour changing control gear, switches, sensors and interface devices. Each of these DALI devices draw power from the DALI line which must be provided by a DALI power supply.

This DALI Power Supply has been expertly designed for small size and to deliver current for small systems. The guaranteed load current is 40 mA, with a maximum supply of 50 mA.

This device provides power for one DALI line that may contain lighting control gear and control devices.

Suitable for small DALI and DALI-2 systems.

Important notes and safety information



WARNING – Electric shock may result in serious injury or death. Follow all warnings in this guide and on the product. Work in accordance with the latest electrical safety practices.

- The Miniature DALI Power Supply requires a mains supply connection.
- The installer must be suitably qualified and should work in accordance with standard safety procedures for mains-powered electrical equipment.
- DALI system wiring is only single insulated from mains. **Treat DALI wiring the same as mains wiring.**
- There are **no user serviceable parts** inside the power supply. Do not attempt to disassemble or operate the device with any covers removed.
- This DALI power supply is for **indoor use only**.
- Consult manufacturer instructions for ballasts, LED drivers and other DALI equipment that may be connected to the DALI lines.

Installation and Wiring



A DALI Line cable has two conductors that are not polarity sensitive. DALI Line cabling must be double-insulated and mains rated.

Connection of the mains wiring and DALI wiring must be made inside a wall-box, or similar location that retains insulation integrity.

The DALI power supply output is tolerant of accidental connection to mains power.

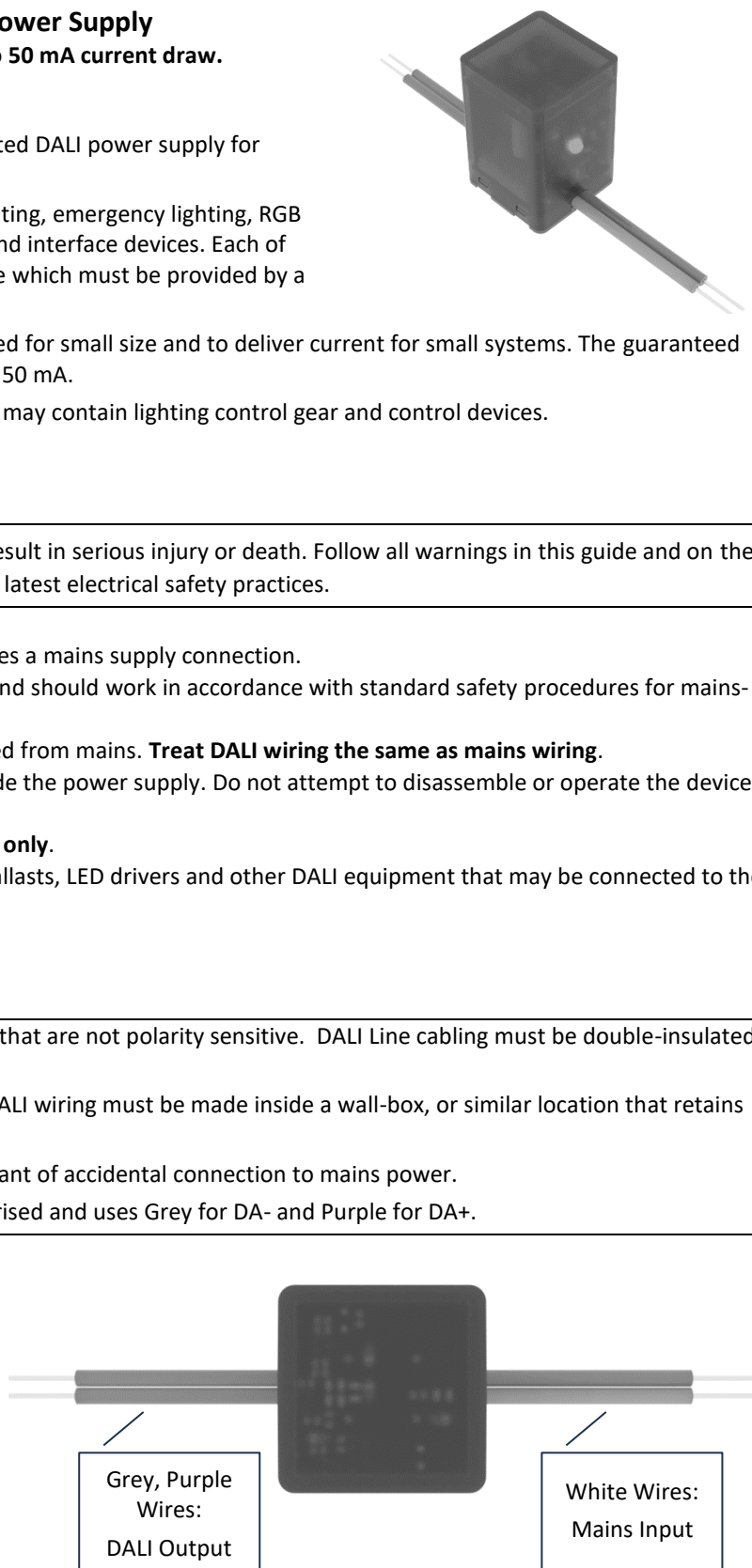
The DALI power supply output is polarised and uses Grey for DA- and Purple for DA+.

Connect **MAINS** to the **WHITE** wires.

Connect **DALI +** to the **PURPLE** wire.

Connect **DALI -** to the **GREY** wire.

Wires have marking labels attached to show their connections and the DALI polarity.



Operation and Indicators






The DALI Power Supply requires no configuration.

The unit has indicators that are visible through the enclosure to show normal operation and fault conditions.

Indicators

Green Indicator	ON	Mains power present
	OFF	No Mains power present
Blue Indicator	ON	Short circuit on the connected DALI line; or Overload condition – too many DALI devices or a faulty device(s) on the DALI line. FAULT NEEDS TO BE CHECKED AND CORRECTED.
	OFF	Normal operation – DALI idle
	BLINKING	Normal operation – DALI communication
Red Indicator	ON	Mains is connected to the DALI line. FAULTY WIRING NEEDS TO BE CHECKED AND CORRECTED.
	OFF	DALI output does not have mains connected.

Specifications

Parameter	Specification
Input voltage	90 – 240 V ac
Input power	2 W
Frequency	50/60 Hz
DALI line capacity	1
DALI line supply voltage	14-20 V dc
DALI line rated current	40 mA (guaranteed) / 50 mA (maximum)
DALI line mains tolerance	DALI output is tolerant of accidental connection to mains
Isolation	Single insulation > 1500 V ac (DALI line / mains supply)
Start-up time	< 20 ms
DALI connection type	Flying leads: purple (+) and grey (-) colour, 150 mm length
Mains connection type	Flying leads: white colour, 150 mm length
Ingress protection	IP30
Materials	Enclosure: Flame retardant Polycarbonate, UL 94V-0
Ambient operating temperature	0 to 50° C
Ambient storage temperature	-10 to 70° C
Humidity	0% to 95% RH non-condensing
Approvals	    

Ratings

This power supply should be loaded to a maximum of 80% of the rated current, ie 40 mA.

Loading this power supply to a full 50 mA leaves no headroom for DALI dynamic processes and is likely to cause poor operation. Overload condition is shown if the blue LED indicator is on continuously.

The ratings of DALI-2 products on a DALI line should be readily available in product literature. These rated currents can be added to determine total DALI current drawn on the DALI line.

When connected DALI devices are transmitting, this DALI power supply will source up to 50 mA.

Parallel Wiring for Increased DALI Current

If several power supplies are used in parallel, then:

- Do not use more than 5 power supplies in parallel, for a maximum 250 mA DALI current.
- Ensure all power supplies are wired with the same polarity.

Standards and Compliance

The product meets or exceeds the following Australian and International standards:

EMC and Electrical Safety Frameworks and Standards

AS/NZS CISPR 15:2011

EN 61000-3-2:2009

EN 61000-3-3:2013

EN 61547:2009

AS/NZ 61347.1:2002, EN 61347-1:2008+A1, A2

AS/NZ 61347.2.2:2007

EN 61347-2-11:2002

IEC 61347-2-13

DALI Standards and Compliance

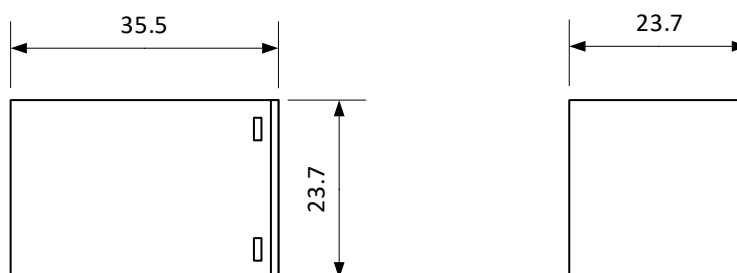
IEC 62386-101, Ed 2 (DALI-2)

EC Council Directives

2014/35/EU Low Voltage

2014/30/EU Electromagnetic Compatibility (EMC)

2015/864 Restriction of Hazardous Substances (RoHS) in Electrical and Electronic Equipment

Dimensions

Warranty

This product has a TWO YEAR warranty against manufacturing defects. The warranty applies from the date of purchase.

Refer to [ozuno.com](https://www.ozuno.com) for the full conditions for warranty and returns process. A summary of the process:

1. Contact the seller of the goods, or in their absence contact Ozuno to request a return goods authorisation.
2. When a return is authorised, the goods must be returned to Ozuno at the owners' expense for technical evaluation.
3. The warranty claim will be evaluated by Ozuno and accepted if the goods are found to be faulty or rejected if the fault was caused by conditions beyond the responsibility of Ozuno. Considerations of installation, removal, return, freight and testing are not the responsibility of Ozuno.

The Australian Consumer Law requires the inclusion of the following statement with this Warranty:

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

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