

DALI repeater

DALI interface



Product description

- _ For amplifying the DALI signal
- _ For extending the DALI line length from 300 to 600 m
- _ A star-type network with multiple DALI repeater's can be set up
- _ Power supply via DALI line
- _ For installation in switching cabinets
- _ 5 years guarantee (conditions at

<https://www.tridonic.com/manufacturer-guarantee-conditions>)

Note

- _ Because of the signal delay it is not possible to connect multiple DALI repeaters in series (no cascading)
- _ There is no increase in the maximum number of DALI units. A maximum of 64 DALI addresses can be configured in a DALI circuit (main and subordinate circuit)
- _ Because of the electrical isolation between the main circuit and the subordinate circuit an additional DALI power supply unit is needed for each DALI repeater

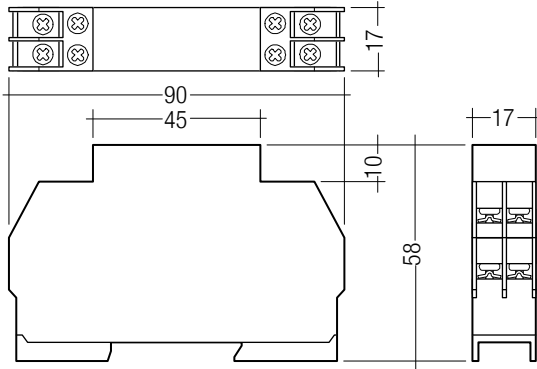
Website

<http://www.tridonic.com/86458401>



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**Ordering data**

Type	Article number	Packaging, carton	Weight per pc.
DALI Repeater	86458401	1 pc(s).	0.077 kg

Technical data

Supply via	DALI cable
Supply voltage ^①	9,5 – 22,5 V
Current draw for main control circuit (IN)	6 mA from DALI
Current draw for subordinate control circuit (OUT)	4 mA from DALI
Starting time	≤ 2 s
Input	DALI
Output	DALI
Operating temperature	0 ... +50 °C
Storage temperature t_s	-20 ... +70 °C
Housing material body	Polyamide
Type of protection	IP20
Protection class	II
Lifetime	up to 50,000 h
Guarantee (conditions at www.tridonic.com)	5 Year(s)

Approval marks**Standards**

EN 55015, EN 61547, EN 61347-2-11, EN 61347-1

① Uin acc. IEC 62386-101.

1. Standards

- EN 55015
- EN 61547
- EN 61347-2-11
- EN 61347-1

1.1 DALI note

Device is designed to be used in DALI installation and supports DALI standards.
 EN 60929 (DALI-0)
 EN 62386 (DALI-1)
 EN 62386-101 Ed.2 (DALI-2)

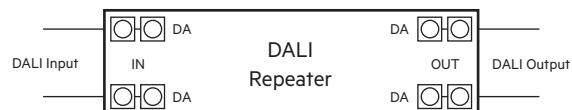
2. Common

- The DALI Repeater extends the maximum DALI control line from 300 to 600 m.
- The repeater amplifies the DALI signal.
- Electrical insulation between the main control circuit and the subordinate control circuit.
- In Single-Master applications star networks with multiple repeaters can be set up.

3. Installation

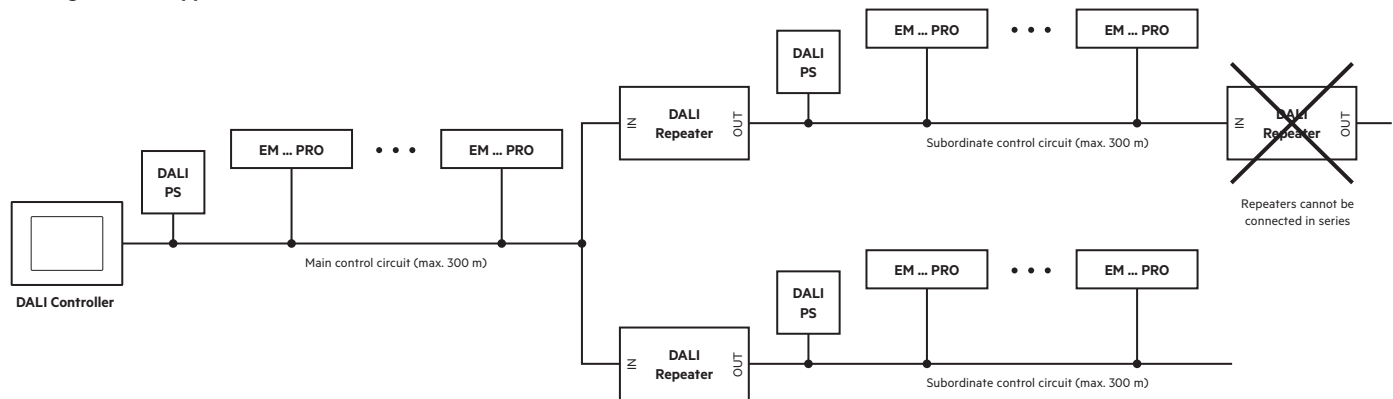
- Because of the signal delay it is not possible to connect DALI repeaters in series (no cascading) – see note relating to the wiring diagram.
- There is no increase in the maximum number of DALI units. A maximum of 64 DALI addresses are possible in one DALI circuit (main and subordinate circuit).
- The distribution of the DALI units is optional.
- Particular notice has to be taken of the not allowed cascading, if more than one DALI control is connected to the DALI circuit.
- An additional DALI PS/PS1 is needed for each subordinate circuit.
- The DALI signal is not SELV. The installation instructions for low voltage therefore apply.
- The length of the DALI control line after the DALI repeater must not exceed 300 m (for a cable cross-section of 1.5 mm²) or the drop in voltage must not exceed 2 V.

3.1 Connection diagram

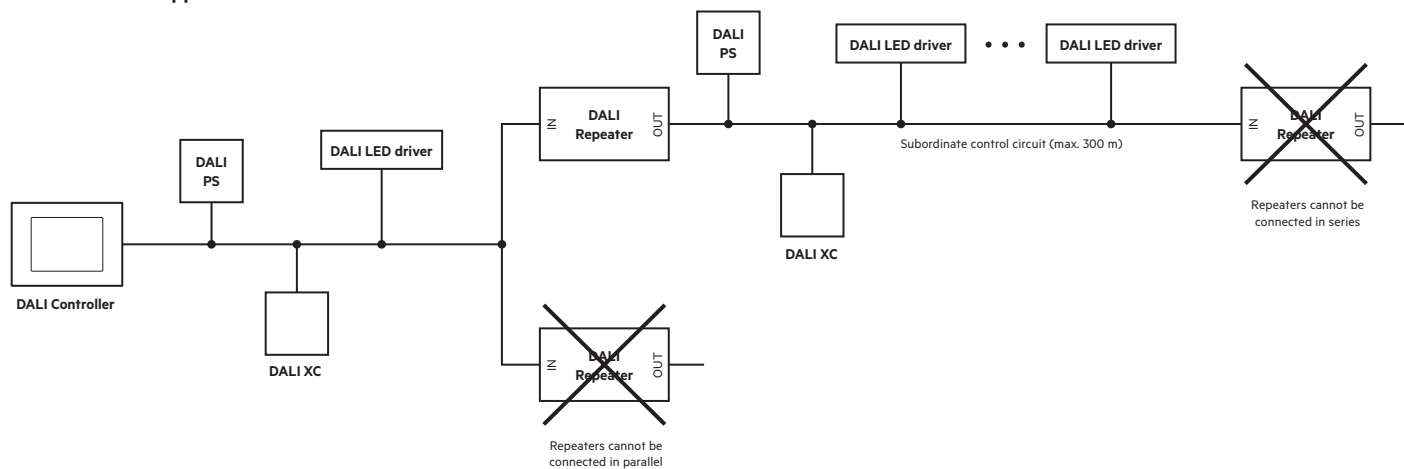


Wire size for solid wire	0.05 – 2.5 mm ² (AWG20 – AWG14)
Wire size for stranded wire	0.05 – 2.5 mm ² (AWG20 – AWG14)
Wire size using wire end ferrule	0.25 – 1.5 mm ²
Stripping length	7 mm / 0.27 inch
Locking torque	0.5 Nm
Release of wire	Open screw

3.2 Single-Master application

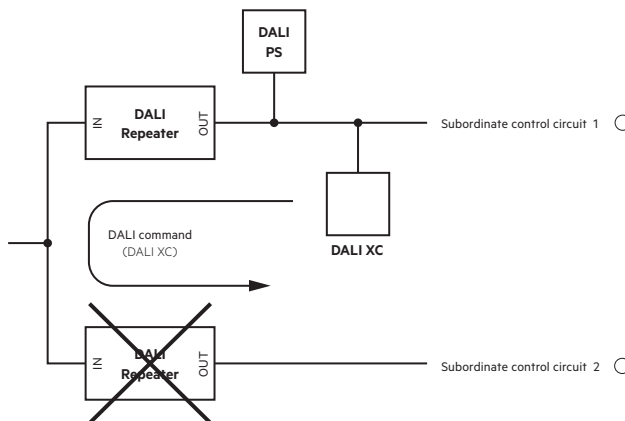


3.3 Multi-Master application



Attention

Due to DALI actors in the subordinate control circuit, a star network is not permitted. This would cause a not allowed cascading of DALI Repeaters. For example: The DALI command of the DALI XC in the subordinate control circuit ① passes two repeaters to the subordinate control circuit ②.



4. Miscellaneous

4.1 Disposal



According to the WEEE directive return old equipment at appropriate collection facilities.

4.2 Additional information

Additional technical information at www.tridonic.com → Technical Data

Guarantee conditions at www.tridonic.com → Services

Lifetime declarations are informative and represent no warranty claim. No warranty if device was opened.