

## DALI repeater

Extension of DALI cable length

### 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-year guarantee

### 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 insulation between the main circuit and the subordinate circuit an additional DALI power supply unit is needed for each DALI repeater



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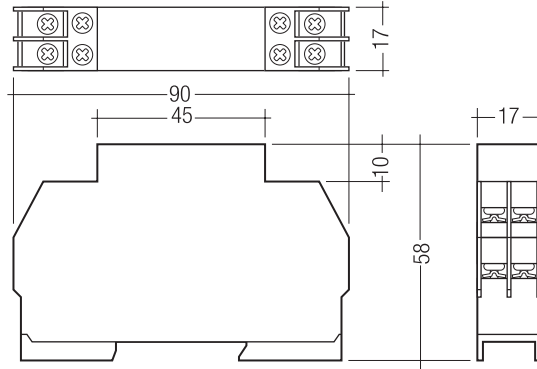


## DALI repeater

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### Technical data

Supply via	DALI cable
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 ts	-20 ... +70 °C
Housing material	Polyamide
Type of protection	IP20
Protection class	SK 2



### Ordering data

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

## 1. Standards

EN 55015: 2000  
 EN 55011/1998 + A1/1999  
 EN 61547: 1995 + A1: 2000  
 EN 61000-6-2/2001  
 EN 61000-3-2/2000  
 EN 61000-3-3/1995 + A1/2001  
 EN 60730

### 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)

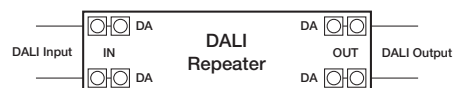
## 2. Common

- With the DALI Repeater the maximum wire length of the DALI control line can be extended from 300 m 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 (e.g. to optimise the use of e-touchBOX)

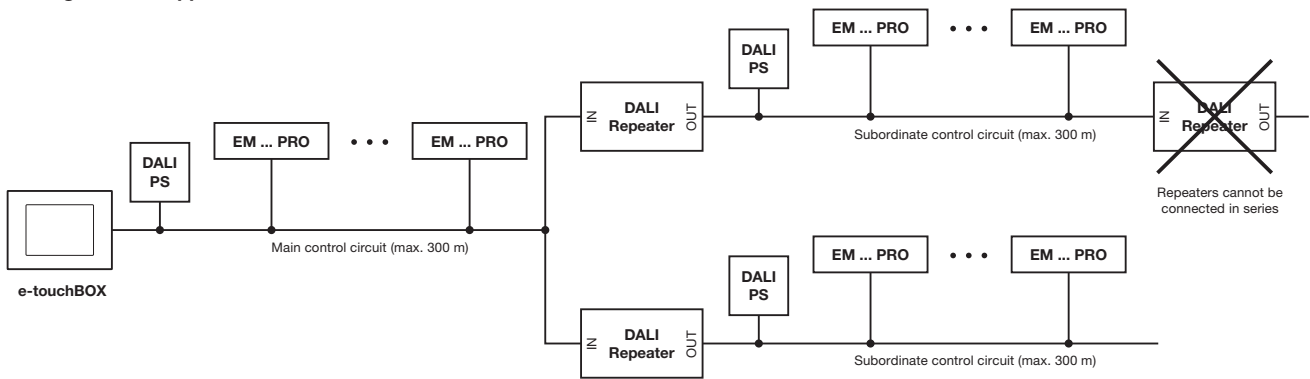
## 3. Installation

- 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 units can be configured in a DALI circuit (main and subordinate circuit).
- There is no restriction on how the DALI units are distributed
- 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 mm<sup>2</sup>) or the drop in voltage must not exceed 2 V.

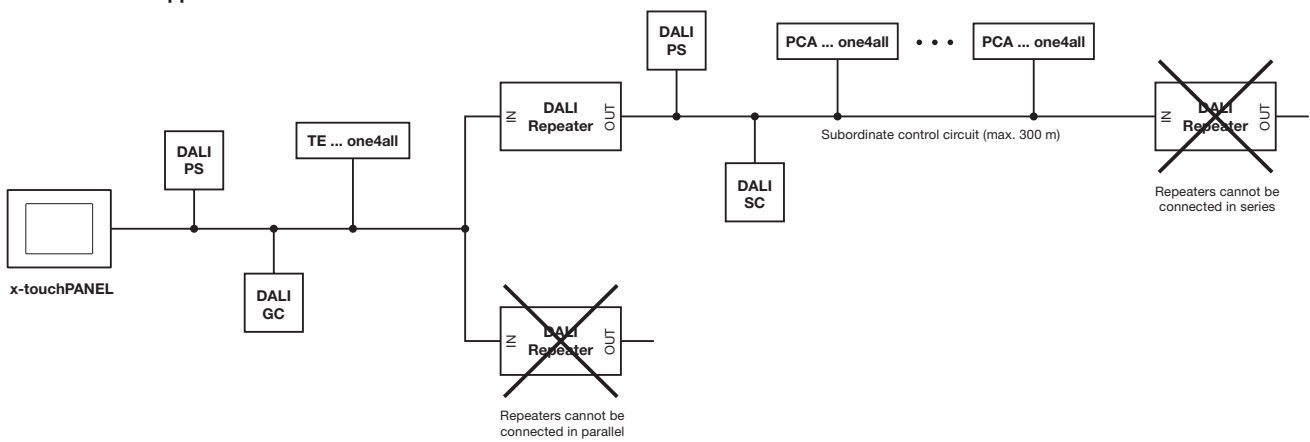
### 3.1 Connection diagram



### 3.2 Single-Master application



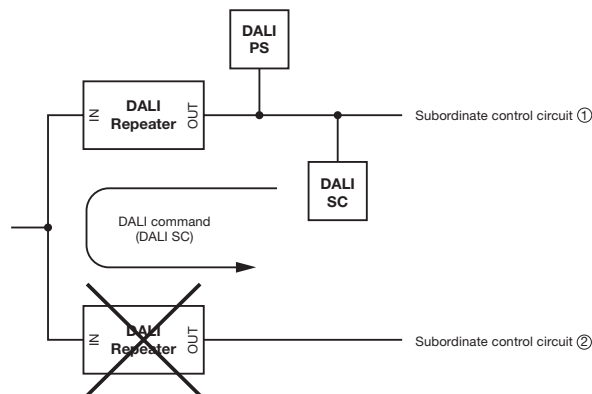
### 3.3 Multi-Master application



#### Attention

No star network possible, due to DALI actors in the subordinate control circuit. This would cause a not allowed cascading.

For example the DALI command of the DALI SC in the subordinate control circuit ① passes two repeaters to the subordinate control circuit ②.



## 4. Miscellaneous

### 4.1 Additional information

Additional technical information at [www.tridonic.com](http://www.tridonic.com) → Technical Data

Guarantee conditions at [www.tridonic.com](http://www.tridonic.com) → Services

Life-time declarations are informative and represent no warranty claim.  
No warranty if device was opened.