

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-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



Standards, page 3

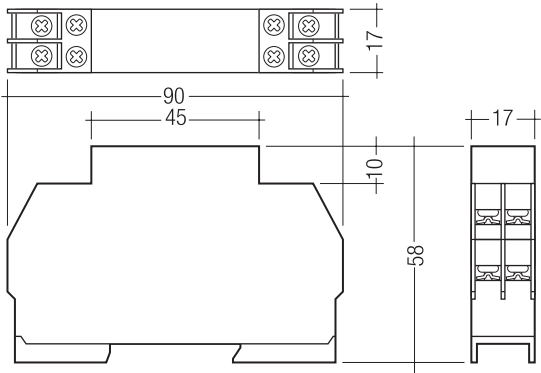
Wiring diagrams and installation examples, page 4



DALI repeater
DALI interface

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)

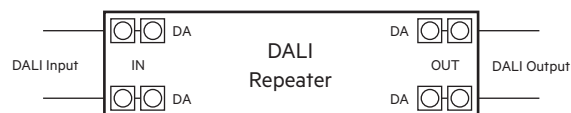
2. Common

- 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)

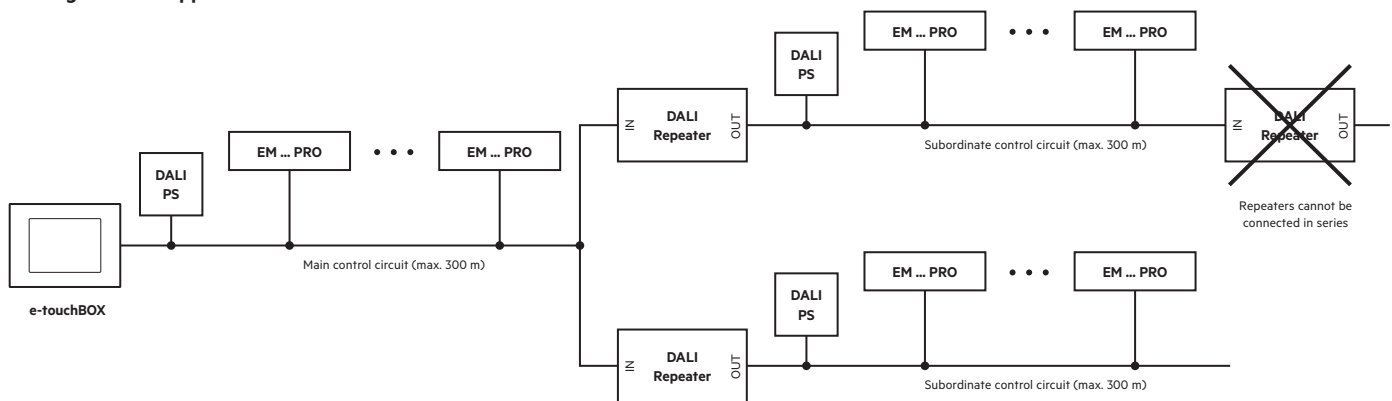
3. Installation

- 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 mm²) or the drop in voltage must not exceed 2 V.

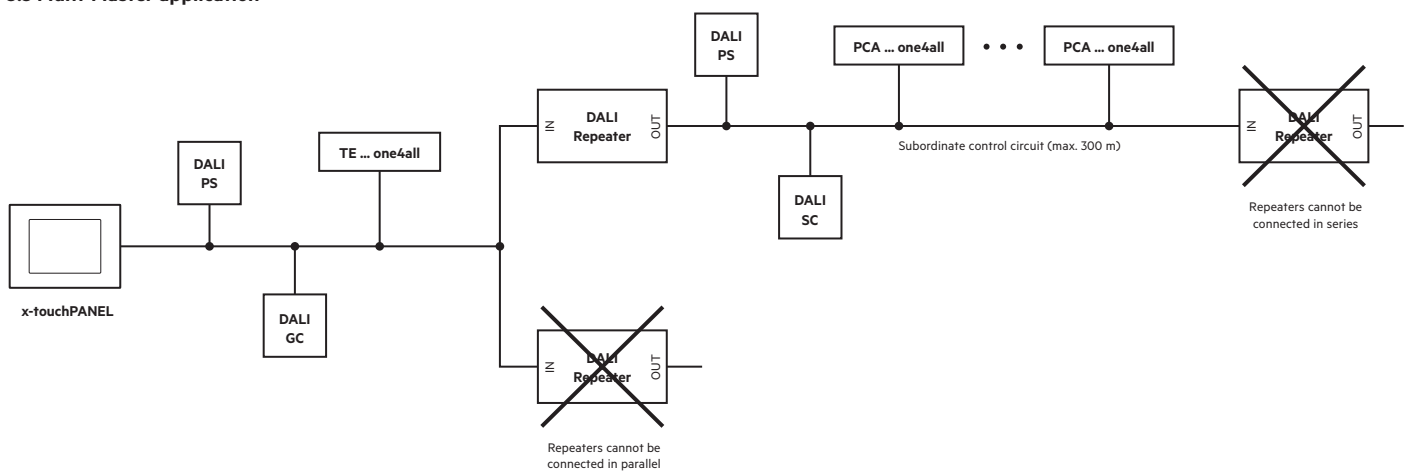
3.1 Connection diagram



3.2 Single-Master application



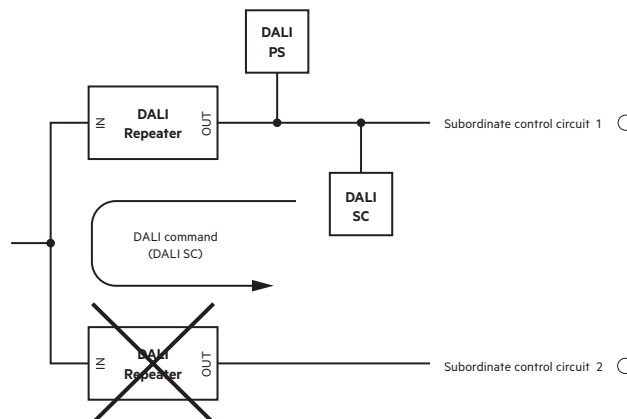
3.3 Multi-Master application



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 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

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