

Output range 1-10V:

control characteristic:

DALI 0 (=OFF) correlates with a voltage below and a clear gap to 1V (<0,8V).

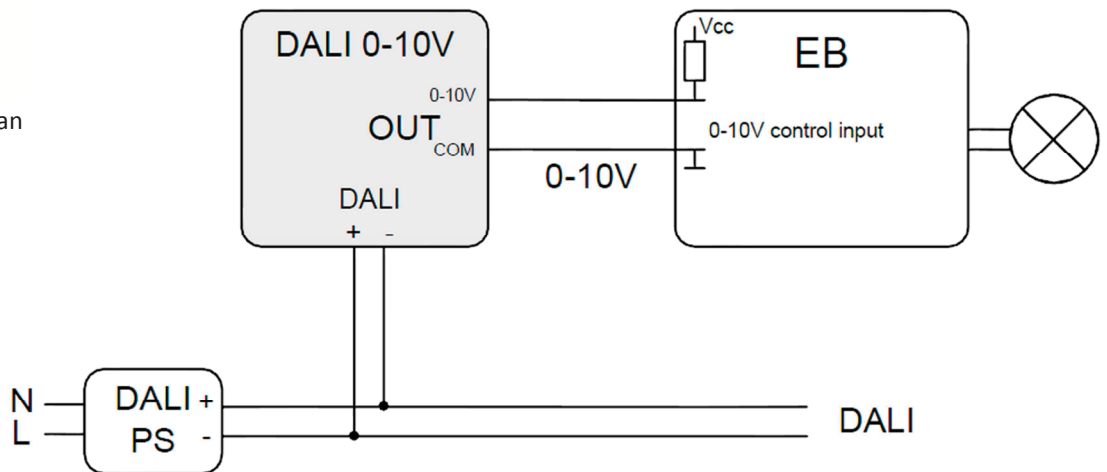
DALI 1-254 is transformed to 1V-10V output voltage

- linear
- - - logarithmic (default setting)

□ DA
□ DA

□ COM
□ 0-10V
OUT

connection plan



typical structure

Connection

The interface is supplied directly via the DALI signal line. It must not be connected to the mains. The current consumption is typically below 3mA. For supplying components on a DALI line the installation of a DALI power supply (DALI PS) is necessary.

The voltage output supports sinking currents up to 1mA. The terminals allow cross sections of the connection wire from 0.5 to 1.5 mm².

Function

The DALI 0-10V interface converts the desired DALI dim level in a corresponding output voltage. Two types of conversion curves are available (according to DALI DT5). The DALI direct arc power level [1-254] is linearly or logarithmic converted to the output signal [1V-10V]. The relationships are clearly represented by the control characteristic diagram. The maximum output current is 1mA (current sink).

DALI instruction set

The DALI 0-10V module is based on the standard for DALI control gear (IEC 62386-102) and device type 5 extension (IEC 62386-206). With few exceptions the entire instruction set defined by the DALI standard is supported. For changing dimming curve DALI commands for device type 5 are implemented.

Commands and functions referring to the SYSTEM FAILURE LEVEL are not supported. This parameter is used as the dim level that should be applied on the output in case of a DALI line outage. Since the DALI 0-10V is a bus powered device there is no possibility to apply a specific predefined signal on the output without being under power. In the case of a DALI-line outage 100% are applied on the output.

Auto Calibration Mode

On power up the DALI 0-10V converter is evaluating if the calibration values for the output values are still correct or if a recalibration is required. A calibration will last up to 2 minutes. The auto calibration routine can be deactivated and manually triggered via DALI-Cockpit software tool. During the calibration the device does not react to any dimming commands. The DALI Cockpit provides information if the device is in normal operation or if the auto calibration is running.