

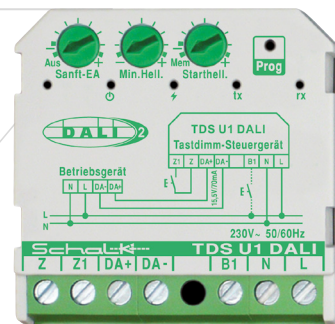


Push-button dimmer control unit DALI with integrated power supply TDS U1 DALI (flush-mounted version)

Compact, easy-to-install DALI-2 certified control unit with integrated power supply, for the conversion of tactile commands into DALI protocols (broadcast mode). Short press = switch ON/OFF, longer press = dim UP/DOWN. Suitable for lamps with dimmable DALI ballast.

Special features TDS U1 DALI

- ▶ DALI-2 certified single-master control device
- ▶ dims suitable DALI control gear units
- ▶ integrated DALI power supply (maximum 70mA) for powering up to 35 DALI control gear units
- ▶ can be used independently of the installed switch series
- ▶ for broadcast operation (central telegram)
- ▶ no DALI programming tool required



Light timer switches,
dimmers

General information

Suitable DALI lamps can be easily dimmed with the push-button dimmer control unit.

The settings for soft on/off, minimum brightness and start brightness make programming superfluous. The behaviour after mains interruption can be set ("OFF" or "ON with start brightness").

Thanks to the compact housing dimensions, the TDS U1 DALI can be mounted directly in the installation boxes behind a push-button of any switch series.

Functional description

Short push-button action at input Z1 (potential-free) or B1 (230V AC) switches the lighting on or off, long push-button action dims the lighting up or down. The dimming direction changes automatically with each long key-press.

Additional functions

Function "discretet dim-on"

If the key is pressed for a long time when the device is switched off, the dimmer switches on and dims up from minimum brightness.

Function "Behaviour after mains interruption"

The behaviour after mains interruption can be individually adapted by a simple programming procedure. You can select between two settings by briefly pressing the programming button several times:

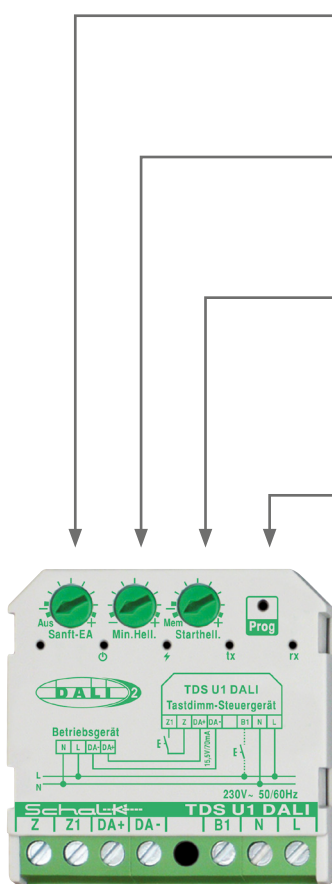
- ▶ Mode 1 / LED "rx" lights (○ ○ ○ ○ ●):
Lighting switches to the start brightness preset in the TDS U1 DALI.
- ▶ Mode 2 / LED "tx" lights (○ ○ ○ ● ○):
Lighting remains off.

Info

To accept a changed setting, press the programming button for more than 2s. If there is no user interaction for 10 seconds, the programming process is otherwise terminated automatically (without saving the change).

Controls and indicators

Light timer switches
Dimmers



Adjuster for soft on/off ("Sanft-EA"):
Setting range 0 - 8s
Setting the switch-on and switch-off speed ("ramp slope"). In the "Off" position, the "Soft On/Off" function is deactivated.

Adjuster for minimum brightness ("Min.Hell"):
Adjustment range 1% - 70%
As soon as the adjuster is pressed, the lighting is activated and the minimum brightness can be set as desired.

Adjusts the start brightness ("Starthell."):
Adjustment range 1% - 100%
As soon as the adjuster is pressed, the lighting is activated and the minimum brightness can be set as desired.
In the "Mem" mode, the TDS U1 DALI always switches on with the brightness last set.

Programming button ("Prog"):
Setting "Behaviour after mains interruption"
Mode 1: Switching on with preset start brightness
Mode 2: Lighting remains off.

LED's:
Operation LED (⊕ " "):
Indicates the operating status of the device.

Status LED (⚡ " "):
Indicates an error condition.

Transmit LED ("tx"):
The LED is lit while the TDS U1 is sending DALI protocols on the DALI bus.

Receive LED ("rx"):
The LED is lit while the TDS U1 is receiving DALI protocols on the DALI bus.

LED status indicator



LED indication	Description
⊕ ⚡ rx tx	
○ ● ○ ○	DALI bus overloaded (<12V) - no operation possible! (supp. Power supply necessary)
● ● ○ ○	Overvoltage on the DALI-BUS (>22V) - no operation possible!
○ ○ ○ ●	Mode 1 (when voltage returns: Device switches on with start brightness)
○ ○ ● ○	Mode 2 (when voltage returns: Device remains switched off)
● ○ ○ ●	Received DALI protocol
● ○ ● ○	DALI protocol sent
● ○ ○ ○	general operating status (standby)
● ● ○ ●	received DALI protocol undefined (lights up 5s after)
● ● ● ○	DALI bus occupied (lights up 5s after)
⊕ ○ ○ ○	Optical detent (adjuster has been actuated)

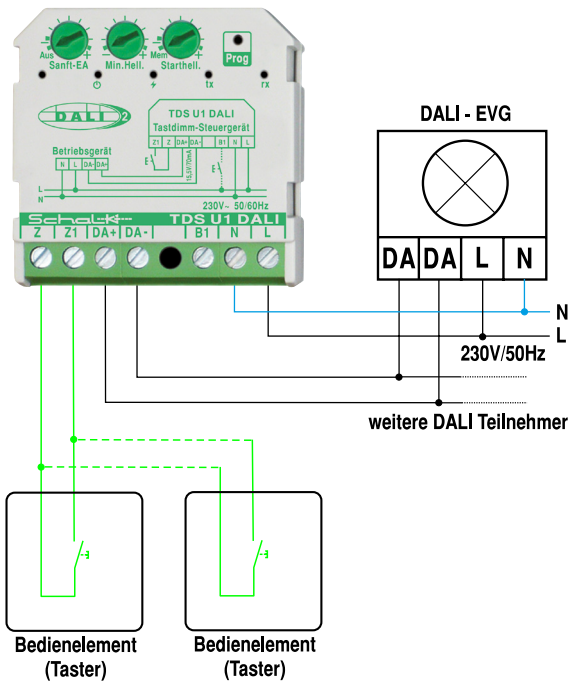
Legend:

- LED off
- LED lights red
- ⊕ LED flashes red
- LED lights up green
- ⊕ LED flashes green
- LED flashes alternately red/green

Connection examples

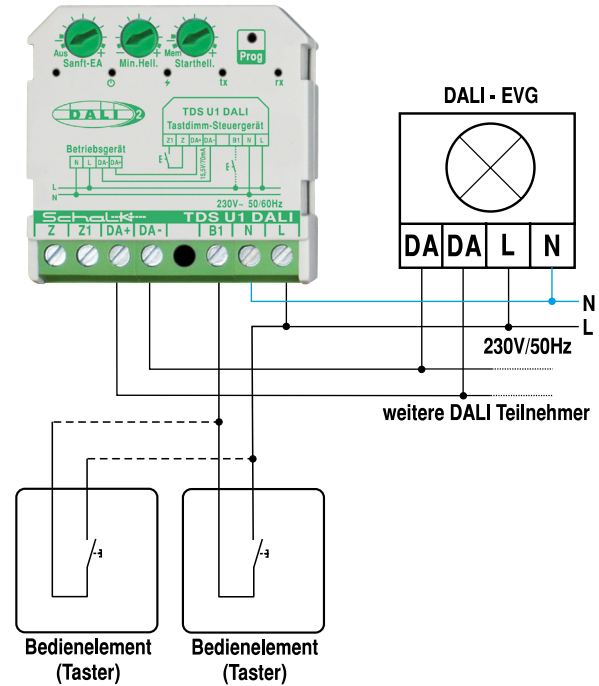
Standard connection

The push-button dimmer control unit TDS U1 DALI is operated via push-button input Z1 (potential-free push-button)



Connection optional

The use of the B1 input (230V AC) is advantageous for longer probe cables.



Light timer switches,
dimmers

Info

TDS U1 DALI is a single master application controller and cannot be combined with control units from other manufacturers! A TDS U1 DALI is able to supply up to 35 DALI devices (2mA each).

Technical data

Operating voltage:	230 V 50/60 Hz 10 %
DALI interface	15.5 V, 70 mA typ. (max 110 mA), DA+ / DA-
Start-up	1s
Current consumption	3 mA
Inputs	Z1 (potential-free, against Z) B1 (230V AC = operating voltage)
Number of possible DALI operating devices	max. 35
Ambient temperature	-10°C to +45°C
Insulation	Basic insulation 3mm according to IEC 60928
Connection terminals	Socket terminals with captive screws M3
Clamping range	0.5 mm ² - 2.5 mm ²
Strip length	6.5 mm - 7.0 mm
Screwing torque	0.50 Nm
Mounting orientation	arbitrarily
External dimensions	43 x 43 x 18,5 mm
Weight	35 g
RAL colour	grey 7035 / green 6029

Order data

Item no.	EAN	Type	Designation
TDSU1D9	4 046929 201131	TDS U1 DALI (230V AC)	Push-button dimmer control unit DALI (230V AC, FMD), integrated power supply