

BL-201-40-868 UP TUNABLE WHITE, EnOcean-DALI-Controller

Light controller with fixed functionality: On / Off / Dim and color control of DALI DT8 luminaires / ballasts with a double rocker

Part nr.: 11968

Interfaces:

1x DALI Master, 1x EnOcean, supply voltage: 230 V AC



DALI

The **BL-201-40-868 UP TUNABLE WHITE** EnOcean-DALI-Controller provides one DALI master and an integrated DALI power supply for the direct connection of up to 17 DALI ballasts / luminaires (I_{out} max.= 34 mA), without a separate DALI power supply.

Also an EnOcean wireless transceiver is integrated. This allows the smart and easy integration and combination of DALI slaves/ballasts and wireless EnOcean technology. The device is supplied by 230 V AC line voltage.

With this device you can adjust color temperature and brightness with a wireless EnOcean double rocker:

Rocker A: Switch and Dim

Rocker B: Change color

Technical data

Interfaces

Type	DALI Master
Number	1
Output current	Max. 34 mA (17 ballasts)
Output voltage	Typ. 16V DC (+/- 5%)
Galvanic isolation	Yes

Type	EnOcean
Number	1
Transmit / Receive frequency	868.0 MHz / ASK
Occupied frequency band	868.0 – 868.6 MHz
Maximum transmission power	Typ. 3 dBm @ 868.300 MHz
EN 300200 receiver category	2

User interfaces

Service button	Yes, 1, at the side
Service LED	1x, red

Housing / connectors

Connection technology	Screw contacts, max. 1,0mm ² flexible with cable end sleeves, or 1,5mm ² inflexible
Housing	UL-V0, black, for in-wall housing

Power supply

Supply voltage	230V AC
Power consumption	Typ. 1.4W, max 2.0W

Environmental conditions

Operating temperature	+5°..+50°C
Storage temperature	-20°..+70°C
Humidity	10..95% rel. Humidity, non-condensing
Protection class	IP20

Dimensions and weight

Weight	40g
Dimensions	51 x 51 x 33 mm

Standards / approvals

CE	2014/53/EU RED directive 2011/65/EU RoHS directive
Approvals / tests	EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + AC:2011 + A2:2013 ETSI EG 203 367 DIN/EN 55032 EN/IEC 61000-4-2 EN/IEC 61000-4-3 EN/IEC 61000-4-4 EN/IEC 61000-4-5 EN/IEC 61000-4-6

Table of supported EEP (EnOcean Equipment Profile)

Ref. nr.	EEP	Description
1	F6-02-01	Light and Blind Control - Application Style 1
2	F6-02-02	Light and Blind Control - Application Style 2
3	F6-02-03	Light Control - Application Style 1

Short description

Supply voltage

The BL-201-40-868 UP TUNABLE WHITE is supplied with 230 V AC line voltage.

DALI Master

The BL-201-40-868 UP TUNABLE WHITE provides a DALI master according to the DALI specification. In addition, a DALI power supply is integrated. Up to 17 slaves ($I_{max} = 34 \text{ mA}$) can be connected to the controller without an additional DALI power supply.

EnOcean

The integrated transceiver of type TCM310 is used to communicate with EnOcean light switches (RPS Telegram).

Service button / Service LED

The BL-201-40-868 UP TUNABLE WHITE offers a service button to teach in one or more light switches. By the red service LED, several status information will be displayed (see below).

Controller functions

The controller allows up to 10 EnOcean wireless switches with double rocker to be teached in.

Push service button $\leq 1 \text{ sec.}$:	Sets BL-201-40-868 UP TUNABLE WHITE into learn-mode, service LED is steady on: EnOcean switch is pressed shortly: Switch is paired with the BL-202-40-868 UP TUNABLE WHITE
Push Service button $\geq 2 \text{ sec.}$:	Service-LED will turn on for $< 1 \text{ sec.}$: No more switch is paired with the BL-202
Push Service button $\geq 5 \text{ sec.}$:	DALI addressing Service-LED will turn on again for 1 sec.: DALI slaves will be addressed. First device found on the DALI line will be configured to address DALI short address 0. This procedure takes a view seconds, LED flashes.

Keypress / Rocker A short top:	Switch on all ballast on DALI line.
Keypress / Rocker A short bottom:	Switch off all ballasts on DALI line.
Keypress / Rocker A long top:	Brighten of all ballasts, with constant color temperature , until key is released or 100% is reached.
Keypress / Rocker A long bottom:	Dim off all DALI ballasts, with constant color temperature , until key is released.
Keypress / Rocker B short top:	Changes color temperature, colder, in steps of +30 Mirek
Keypress / Rocker B short bottom:	Changes color temperature, warmer, in steps of -30 Mirek
Keypress / Rocker B long top:	Changes color temperature, colder, continuously until released
Keypress / Rocker B long bottom:	Changes color temperature, warmer, continuously until released

Explanation / Color temperature in Mirek

Mirek is the unit for the color temperature used in DALI commands:

Mirek = 1.000.000 / color temperature in Kelvin).

Mirek	Kelvin
0	10000001
1	1000000
100	10000
1000	1000
10000	100
65534	15.259

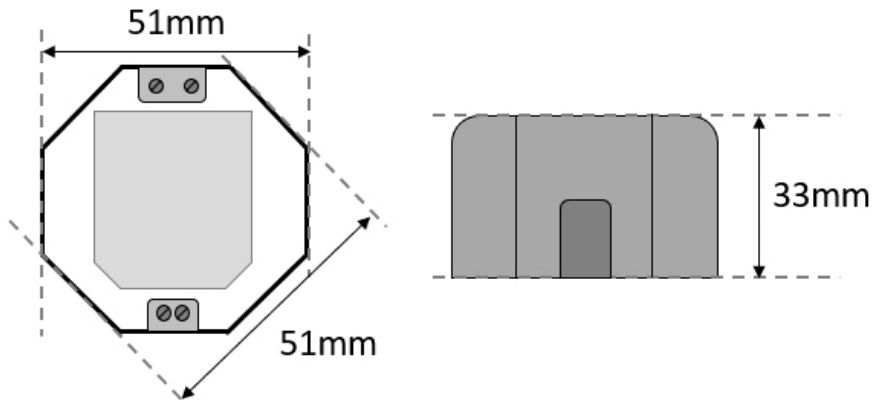
Controller startup / power cycle / color temperature limits

The default values for the upper and lower color temperature limits are set to the default values of **2700K** and **5000K** after power on.

In the next step, the BL-201-40-868 UP TUNABLE WHITE tries to read from DALI short address 0 the two ballast registers **COLOR TEMPERATURE TC WARMEST** and **COLOR TEMPERATURE TC COOLEST**. In case of success, these two values will be used for the limits instead of the default values.

If no ballast with DALI short address 0 will be found, the BL-201-40-868 UP TUNABLE WHITE will use the default values until the next power cycle.

Dimensions

**Ordering information**

Article text	Part number	Description
BL-201-40-868 UP TUNABLE WHITE	11968	EnOcean-DALI-Controller series BL-201 function: 1x Tunable White DT8 on double rocker, rocker A: ON/OFF/DIM, rocker B: color temp., 230V AC, 868MHz, UP housing

EU Declaration of Conformity

Hereby the DEUTA Controls GmbH declares that the radio equipment type **BL-201-40-868 UP TUNABLE WHITE** is compliant with the directive 2014/53/EU. You can download the complete EU Declaration of Conformity as a pdf-document on our homepage www.deuta-controls.de in the area Service/Downloads (Doc. EUDC2020_141).

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