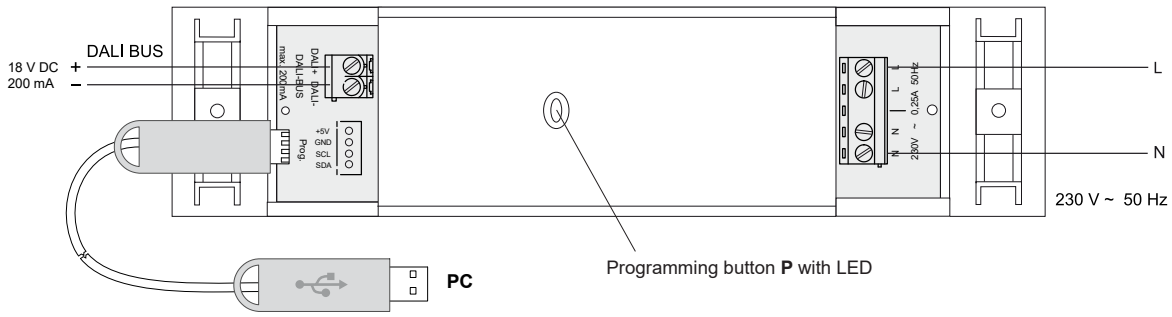
EN RGD03 Easywave-DALI Gateway with bus power supply

Connection diagram



Wire cross-section power supply:
at least 1.5 mm² with 8 mm outside diameter

Model

RGD03E5002A01

Technical Details

Frequency:	868.3 MHz
Modulation:	FSK
Coding:	Easywave
Power supply:	230 V ~ 50 Hz
Power consumption:	8 VA
Current consumtion:	60 mA
Output current DALI:	200 mA max
Output voltage DALI:	18 V DC
Operating temperature:	-20 °C to +60 °C
Dimensions (w/l/h):	45/210/32 mm
Weight:	162 g
Connecting cable:	2,5 mm² max
System requirements:	Windows Vista, 7, 8, 10 from USB 1.1 5 MB hard disk

Scope of Delivery

Easywave-Dali-Gateway RGD03, adhesive pads, operating manual,

Intended Use

This device may only be used as a Gateway between Easywave transmitters and DALI aktors (DALI: Digital Adressable Lighting Interfaces).

The manufacturer will not be liable for damage caused by improper or inappropriate use.

Safety Advice

Before connecting and use this device, please read these instructions carefully!

Note: The electrical installation and programming must be performed by a licensed and qualified electrician. Failure to observe this requirement presents a risk of electric shock or fire!

Observe any applicable laws, standards and regulations as well as manufacturer instructions pertaining to the devices being connected!

Have any malfunctioning devices inspected by the manufacturer!

Do not perform unauthorized modifications to the device!

Caution! The RGD03 has an integrated DALI power supply. It may not be used additional DALI power supplies on the bus! The current consumption of all DALI devices connected to the bus must not exceed 200 mA in total!

Function

The Easywave DALI Gateway RGD03 enables DALI end devices to be controlled by up to 32 Easywave transmitters.

A maximum of 200 mA can be provided on the bus for DALI devices.

It may not be used a second power supply on the same bus.

When using one-button modes (see below), it is possible to pair up to two DALI addresses or two DALI groups, and to control them using previously set functions.

When using two-button modes, it is only possible to control one address or group with a single function.

Functions are allocated to the Easywave button codes as follows:

- **One-button modes:**
  Button code A **or** C: Function 1
  Button code B **or** D: Function 2
- **Two-button modes:**
  Button code A+B **or** C+D: Function 1

It is not possible to use the button codes A+B and C+D simultaneously!

It is possible to simultaneously control all devices on the DALI bus (broadcast) in any mode.

It is possible to pair the RGD01 with up to 32 Easywave transmitters to control the devices. All paired transmitters trigger the same function(s).

Available functions:

- DIM two-button operation
- ON/OFF two-button operation
- DIM one-button operation
- ON/OFF one-button operation
- Open SCENE
- SKIP through scenes
- DEAD MAN'S SWITCH one-button operation.

The function "DIM two-button operation" is configured as a factory preset for broadcasting to all DALI devices on the bus.

This enables the gateway to be used on the DALI bus without any prior programming using the "RGD03 Configurator". The gateway only needs to be paired with the Easywave transmitters to enable wireless control.

The set-up cable RGD-ACC-01 (including "RGD03 Configurator") is required to modify function and address allocations. This is not included with the product and must be ordered separately.

Set-up

The device is designed for horizontal installation in false floors or false ceilings (suspended ceilings).

1. Take off the end caps of the housing.
2. **Caution! Observe the valid electrical regulations. Electrical installation may only be carried out by a qualified electrician.**
   Switch off the DALI Bus without voltage and connect the supply voltage according to the connection diagram.
3. Connect the RGD03 to the DALI bus using the DALI terminals.
   Note that no further DALI power supplies may be connected to the DALI bus!
4. Switch the supply voltage back on. After connection, the gateway is ready for operation. The LED is off. The gateway supplies power to the DALI bus and all connected DALI devices (max. 200mA).
5. Programming the Easywave transmitters to be used with the gateway.
6. (optional) Program the functions and pairing of the RGD03 using the set-up cable and Configurator.
7. Attach the device by means of enclosed adhesive pads at the installation site.

Caution! Make sure there is no interference with the wireless connection. Do not mount the device in a distribution box, in metal casings, in direct proximity to large metal objects, on the floor or close to it.

Installation of the RGD03 Configurator

Insert the AutoRun CD "Easywave DALI Gateway" into your CD drive.

Start the installation program for the RGD03 Configurator and follow the instructions in the Setup menu.

The installation files can also be downloaded from our website: *www.eldat.de/produkte/schnittstellen/rgd03e_en.html*

Programming transmitter

1. Press on the RGD03 the button **P** for < 1.6 seconds. The LED will flash slowly.
2. Within 30 seconds, push a button for the transmitter to be paired. The LED will light up for 4 seconds and then go out. The transmitter is now paired.
   Repeat the process if necessary for other transmitters to be paired.
   If no buttons are pressed for 30 seconds during the programming process, the gateway will automatically switch back to operating readiness.

Deleting individual transmission codes

1. Press on the RGD01 the button P for > 1.6 seconds. The LED will flash quickly.
2. Press a button for the transmitter to be deleted.
   The LED will light up for 4 seconds and then go out. The transmission code is deleted.

Delete all transmission codes

1. Press on the RGD01 the button P for > 1.6 seconds. The LED will flash quickly.
2. Press the button P again for > 1.6 seconds.
   The LED will light up for 4 seconds and then go out. All transmission codes are deleted.

RGD03 Konfigurator

Connect to the RGD03

1. Connect the PC/laptop using the set-up cable RGD-ACC-01 to the RGD03. To do this, plug the 4-pin plug into the „prog“ Socket (reverse polarity protected) of the RGD03 and the USB plug into a free USB port on your PC.
   The RGD03 must be powered during the entire configuration!
2. Click on the “Connect” button in the “RGD03 Configurator”.
   A green tick must appear after “USB Dongle” and “DALI Gateway”!
3. Click on “Import” to import the current gateway configuration.

Setting language

You can use the menu item “Language” to switch between English and German at any time.

The language set in the operating system is used by default.

Configuration DALI function

There are two areas available in the program window (“Function 1” and “Function 2” for setting their respective modes and the address of the devices to be controlled.

One or both functions are available depending on the selected mode.

One-button operation:

If a mode with one-button operation is selected for “Function 1”, a different one-button function object can be used for “Function 2”.

Allocation of button codes:

Function 1: Button code A **or** C

Function 2: Button code B **or** D

Two-button operation:

If a mode with two-button operation is selected for “Function 2”, this means that there is no other function object available. The corresponding buttons are greyed out because both transmitter buttons are required for the first function.

Allocation of button codes:

Function 1: Button code A+B **or** C+D

Create the desired configuration by selecting the desired modus in the corresponding drop-down menu and then setting the DALI address of the devices to be controlled by this function. The configuration can be modified at any time without the transmission codes needing to be rememorized.

Once you have created the configuration, click on “Export” to export the data to the RGD01 gateway. The configuration process is now complete and you can disconnect the USB cable from the gateway.

Available modes (operation modes)

DIM two-button operation

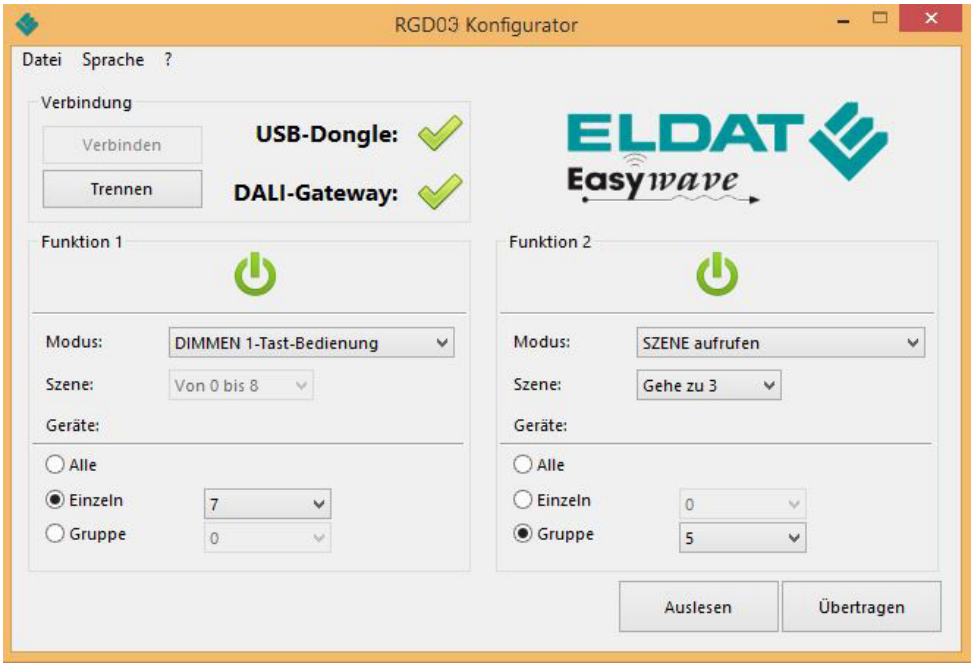
This mode enables the brightness of DALI devices to be dimmed or increased.

A short press of the button switches the supplied devices on to 100% or switches them off to 0%.

Holding down the button will dim or brighten the supplied devices.

ON/OFF two-button operation

The controlled DALI devices are selectively switched ON or OFF.



DIM one-button operation

The controlled DALI devices are alternately dimmed or brightened using the very same transmitter button.

A short press of the button switches the supplied devices ON to 100% or switches them OFF to 0%.

Holding down the button will alternately dim or brighten the supplied devices.

ON/OFF one-button operation

The DALI devices are alternately switched ON or OFF using the very same transmitter button.

Open SCENE (one-button)

A scene that is stored in the DALI device is triggered. The desired scene (0–15) must be set in the drop-down menu “Scene”.

SKIP through scenes (one-button)

Each press of the button skips ahead by one scene within a pre-defined scene range.

This range is set in the drop-down menu “Scene” and generally begins with Scene 0, ending at a maximum of Scene 15.

DEAD MAN‘S SWITCH one-button operation

The paired DALI devices are switched on as long as the button is held down (max. 36 seconds).

Pairing

When using a mode with one-button operation, each of the two control objects (“Function 1” and “Function 2”) can control their own DALI address.

When using a mode with two-button operation, it is only possible to use “Function 1”, which in turn allows only one (1) DALI device to be controlled.

It is not possible to use two-button operation modes for “Function 2”.

It is possible to control either ALL devices (broadcast), individual devices or groups of devices.

To this end, select the relevant item in the “Devices” section, then select the desired address or group in the corresponding drop-down menu.

Individual devices can be controlled in the address range 0–63.

Groups can be controlled in the range 0–15.

Configuration Save and Load

You can use the menu item “File” to save the current configuration on the PC or laptop or import a previously saved configuration into the “RGD01 Configurator”.

Please note that a loaded configuration must first be exported to the gateway by clicking on “Export” before it becomes active.

Disposal

Waste electrical products not be disposed of with household waste!

Dispose of the waste product via a collection point for electronic scrap or via your specialist dealer.

Put the packaging material into the recycling bins for cardboard, paper and plastics.

Warranty

Within the statutory warranty period we undertake to rectify free of charge by repair or replacement any product defects arising from material or production faults.

Any unauthorized tampering with, or modifications to, the product shall render this warranty null and void.

Conformity

Hereby, ELDAT EaS GmbH declares that the radio equipment type RGD01 is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: www.eldat.de

Customer Servic

If the device does not work properly despite proper handling or in case of damage, please contact the manufacturer or your retailer.

ELDAT EaS GmbH
Schmiedestraße 2
15745 Wildau
Germany
Phone: + 49 (0) 33 75 / 90 37-310
Fax: + 49 (0) 33 75 / 90 37-90
Internet: www.eldat.de
E-Mail: info@eldat.de

UM164536B_0123 EN