

**ENG** Instructions manual eBLUE 0-10V/DALI

eBLUE 0-10V/DALI is a wireless control unit for LED, FLUO, HID and halogen control gears with 0-10V, 1-10V or DALI dimming interface. The control output can be configured either as analog 0-10V (and 1-10V) or digital Standalone DALI control interface (default configuration).

When the output is configured as Standalone DALI, eBLUE 0-10V/DALI acts both as a controller and as a power supply making it possible to connect directly to an LED driver with DALI interface without the need for an external DALI power supply. This so called Standalone DALI makes it possible to implement multi-channel lighting systems with adjustable color (RGB) or color temperature (Tunable White), while keeping the wiring and number of components at their minimum.

eBLUE 0-10V/DALI does not comply with IEC 60929 and therefore is not designed to be connected to an existing DALI network. The module can be used only in a closed system, i.e. as a part of a lighting system which is not connected to an external DALI network.

eBLUE 0-10V/DALI is controlled wirelessly with Casambi smartphone and tablet applications using Bluetooth 4.0 protocol. Devices form automatically a secure wireless mesh network so that a large number of fixtures can be controlled from any point. No external gateway module is needed. eBLUE 0-10V/DALI can be controlled also from a standard on/off wall switches.

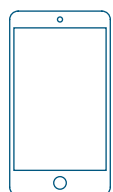
**Installation**

Make sure that the mains voltage is switched off when making any connections. Use 0,75-1,5 mm<sup>2</sup> solid or stranded conductor electrical wires. Strip the wire 6-7 mm from the end.

Insert the wires to the corresponding holes and tighten the connector screw. Make sure to connect the input and outputs correctly. Mains input connector is marked with letters L and N with an arrow pointing inwards, while the mains output connector is marked with letters L and N with an arrow pointing outwards. The low voltage output is marked with + and - symbols.

If you install eBLUE 0-10V/DALI into a heat sensitive environment (i.e. inside a luminaire or in a ceiling outlet box above a luminaire), make sure that the ambient temperature does not exceed the specified maximum value.

**App download**

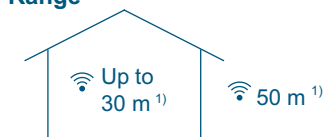


Compatible devices:

- iPhone 4S or later
- iPad 3 or later
- iPod Touch 5th gen or later
- Android 4.4 KitKat or later devices produced after 2013 with full BT 4.0 support



**Range**



eBLUE uses mesh network technology so each eBLUE 0-10V/DALI acts also as a repeater. Longer ranges can be achieved by using multiple eBLUE units.

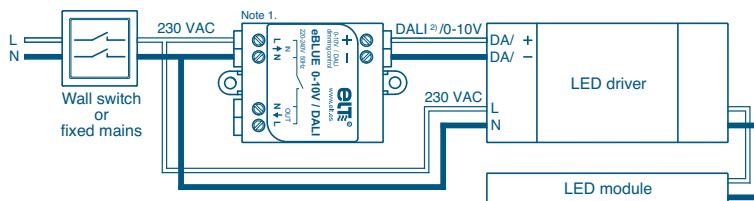
1) Range is highly dependant on the surrounding and obstacles, such as walls and building materials.

Minimum required hole if mounted on metal.

**Wiring diagram**

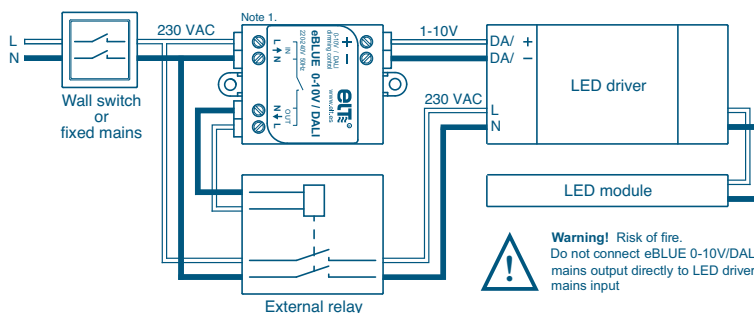
**Directly powered** (recommended for DALI or 0-10V control gears)

Suitable for drivers that can be switched off via control interface



**Powered through external relay** (recommended for 1-10V control gears)

Suitable for drivers that cannot be switched off via control interface

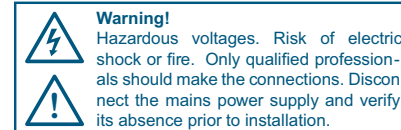
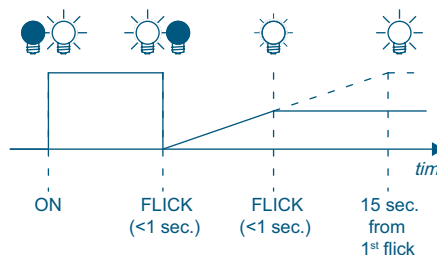


Note 1. eBLUE 0-10V/DALI is a built-in class II device. Use double insulated wires or an external mounting box if the device is not mounted inside another insulated device.

Note 2. eBLUE 0-10V/DALI and its DALI interface do not meet the requirements of IEC 60929. Connect only directly to a DALI controllable LED driver. Not to be connected to an existing DALI network. Connect only one LED driver (DALI or 0/1-10V driver) to one eBLUE 0-10V/DALI.

**Dimming without app**

1. Turn lights on from a wall switch.
2. Quickly flick the wall switch off and back on (max.1 sec.). The light level starts to increase gradually.
3. Flick the switch again at desired dim level. The selected level is saved automatically.
4. If the second flick is not done within 15 sec. the light intensity reaches its maximum level.
5. Flicking the switch can also be used to switch between predefined scenes.



**Technical data**

**Input**

Voltage range:	220-240 VAC
Frequency:	50 Hz
Max. mains current:	0,6 A

**Mains Output**

Output relay:	SSR on phase line
Voltage range:	220-240 VAC
Frequency:	50 Hz

**0-10V Output**

Voltage range:	0-10 VDC
Maximum number of drivers connected:	1 pc

**DALI Output**

Voltage range:	9-12 VDC
Maximum number of drivers connected:	1 pc

**Radio transceiver**

Operating frequencies:	2,4...2,483 Ghz
Maximum output power:	+4 dBm

**Operating conditions**

Ambient temperature, ta:	-20...+50°C (Iout 0 A)
	-20...+40°C (Iout 0,6 A)
Max. case temperature, tc:	+70 °C
Storage temperature:	-25...+75 °C
Max. relative humidity:	0...80%, non-cond.

**Connectors**

Wire range, solid & stranded: 0,75-1,5 mm<sup>2</sup>  
14-22 AWG

Wire strip length: 6-7 mm  
Tightening torque: 0,4 Nm/4 Kgf.cm/2,6 Lb-In

**Mechanical data**

Dimensions:	56,5 x 35,8 x 22,3 mm
Weight:	48 g
Degree of protection:	IP20 (indoor use only)
Protection class:	Built-in Class II

**Dimensions**

