

e-Bus Coupling DALI Master

Bus coupling unit DALI Master for e-Touch touch switch products
e-Bus Coupling DALI Master is a bus coupling unit with all the functions included to do a direct control of DALI luminaires without adding any additional controller or Gateway. The device is used to connect any touch switch of the family **e-Touch Flexi** or **e-Touch Panel** to the DALI lighting control bus to do the control functions of switch on, off, dimming or scene control per luminaires, groups or all luminaires in the bus.
 The bus coupling unit is powered directly at mains and includes a DALI power supply that provides current for the bus operation.
 The device is configured directly by NFC with the **eConfigurator** APP, available for Android in the Play Store.

Product description

e-Bus Coupling DALI Master is a bus coupling unit DALI master that includes all the lighting control functions like switch on, switch off, light dimming and scene control, over one luminaire, a group of luminaires or all the luminaires connected to the DALI bus. The device is including the control for single colour luminaires, with temperature control, RGB or RGBW type, with or without dimming, and is used in combination of any touch switch **e-Touch Flexi** or **e-Touch Panel** to connect over the DALI bus. The coupling unit is powered directly at mains and is including an internal DALI power supply to power the communication bus and the luminaires connected to the bus, so that it's not necessary to add any other element for its operation. The device is configured through the wireless NFC technology with the **eConfigurator** APP, available for Android in Google Play Store.

Lighting Control Functions

The device includes all the functions to control the luminaires connected to the DALI bus. The following list shows the lighting control functions available:

- Switching on and off.
- Light dimming (increment, decrement).
- Set a light level.
- Reproduce a lighting scene
- Adjust the colour temperature (more cold, more warm)
- Set a colour temperature.
- Set a colour temperature and a light level
- Set an RGB colour and a white colour (RGBW)
- Set an RGB colour, a white colour and a light intensity
- Dim any RGBW colour separately

NOTE: Temperature colour functions and RGB functions operate using driver type DT8.

All the explained functions can be executed using one of the three following control functions:

- Over all luminaires connected to the bus (Broadcast)
- Over a group of luminaires previously defined (Group)
- Over a single luminaire (Short Address)

In order to do the control over a group of luminaires (Group) or over a single luminaire (Short Address) it is mandatory to previously configure the luminaires using a DALI configuration tool available in the market through any DALI driver manufacturer.

Switch off timer

The device is including a timer to configure lights to automatically switch off.

"State" Led indicator

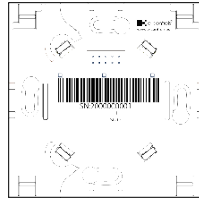
The device has a led indicator in front of it marked as "State" that indicates the operating state of the device. When the touch switch is not connected to the bus coupling unit, the led indicator flashes every 5 seconds, indicating that it works correctly.
 When powering the device and the bus coupling unit has detected a touch switch connected to it, the led indicator will light up during 2 seconds and then will blink when transmitting or receiving DALI messages. This sequence can be seen if the touch switch is mounted temporarily without the frame.

"SL" Led indicator

The device has a led indicator in the side of the box, marked as SL, that shows the DALI bus activity.

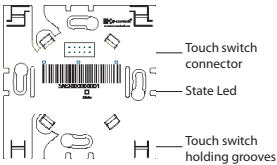
Instruction sheet

EN

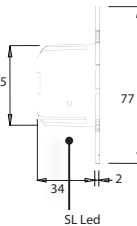


INS101852002010

Front view



Lateral view



Assembly



Device configuration in the DALI bus

The device is configured through the **e-Touch** switch, using a mobile phone with Android operating system that has the NFC wireless technology, and with the **eConfigurator** APP available in Google Play Store.

The technology developed by E-Controls allows configuring the device even without being powered. This is especially useful if you want to configure the device before installing it. To do this, the project configuration should be done using the **eConfigurator** application and it will be downloaded over a touch switch. After this the touch switch will be connected to the coupling unit and power will be applied. In this moment the touch switch will transfer all the project to the coupling unit to operate.

In order to configure the functions of every button, follow the steps indicated in the **eConfigurator** user manual.

If you want to do a Group lighting control or a single luminaire control, a previous commissioning of the DALI luminaires with a standard tool has to be performed, using any standard DALI tool of any driver manufacturer of the market. The e-Touch switch will not be configured using this tool.

NOTE: The replacement of a touch switch requires reconfiguring the new e-Touch switch with the same project that was previously used to configure the last one.

Product installation

Read carefully the installation steps of the device explained below.

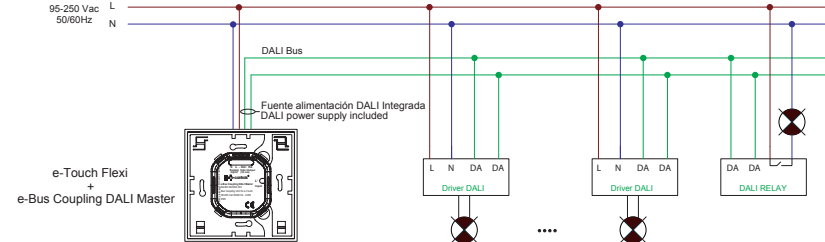
Important:

- In order to do the **e-Bus Coupling DALI** operational, any **e-Touch Flexi** or **e-Touch Panel** device must be connected to the device.
- Follow the recommendations of the DALI standard for the wiring installation in the building.

Mounting steps of the device:

1. Disconnect the mains power from the device.
2. Connect the bus coupling unit following the installation drawing.
3. Connect the DALI bus to the luminaires of the installation, taking care not to exceed the maximum current provided by the DALI power supply.
4. Fix the device to the enclosure with the screws. If an e-Touch Panel is going to be used, fix also the adapter provided with the touch switch, inserting the two notches of the adapter to the frame, so that the touch switch can be clipped with its four ends.
5. Assemble the plastic frame on the touch switch paying attention that the ventilation slots are

Installation drawing



Install the electrical protections and the corresponding cable according to the rules of every country.

Technical features

Supply Power	Operating voltage	95-250 Vac - 50/60 Hz
	Maximum rated current (without touch switch)	0,1 W
Power supply DALI Output	Type	Not isolated (*)
	Maximum DALI voltage	16,5 V
	Minimum DALI voltage	11,5 V
	Maximum output current	35 mA
	Shortcircuit current	50 mA
	Protected against overcurrents, overvoltages and overtemperature	
	(*) Note: Terminal "- DA" is internally connected to terminal "N".	
Communications	Technology	DALI
	Standard	IEC 62386
	Interface	DALI
	Communication speed	1200 bps
Auxiliary Input (actually not used)	Quantity	1
	Type	Phase contact
	Terminals	L
"State" Led indicator	Functionality	Device status
	DALI bus activity	Red
SL Led indicator	Functionality	DALI bus activity (blinking)
	Colour	Yellow
Temperature values	Operating	0°C to +50°C (32°F to 104°F)
	Storage	-20°C to +85°C (-4°F to +185°F)
Humidity (no condensation)	Operating	10% to 90% RH at 50°C
	Storage	95% RH at 50°C

Mechanical installation	Installation type	Flush mounting
	Enclosure	European universal
	Recommended mounting height	1 m or 1,5 m (depending on e-Touch model)
Mechanical features	Dimensions	.77x7x36mm
	Weight	65 gr
	Colour (frontal)	RAL 9016
	Enclosure material	PP
	Cable section	0,5 mm2 - 2,5 mm2 (14 AWG)
	Terminals	Screw type
	IEC protection	Class II
	Protection degree	IP20 (EN 60529:1991)
CE Conformity	Low voltage directive	2006/95/EC
	Electromagnetic Compatibility Directive	2004/108/EC
	Markado	CE
Applicable harmonized standards	Product standard	EN 60730-1:2011
	Electrical security	EN 60730-1:2011
	Electromagnetic compatibility	EN61000-6-3, EN61000-6-1

Ordering numbers

e-Bus Coupling DALI Master, DALI Master Coupling Unit for e-Touch Flexi & e-Touch Panel .BC.581002-001

The package of this product is considered as industrial packaging intended for professional use only. The manufacturer is not responsible of the incorrect installation or use of the product. Specifications are subject to change without notice.

