

e-Touch Flexi 2R-4P

Multifunctional touch switch with 4 buttons, 4 touch zones and 4 led indicators

e-Touch Flexi is a multifunctional touch switch product family for lighting control, curtains and motorized blinds control or for any other control requirement in an installation. The touch keypads are completely customizable and it is possible to define the design of any pushbutton and any touch zone of the panel using the e-Touch Creator web page in www.e-controls.es, being able to combine any colour for the pushbutton with icons or texts that clearly define each touch zone.

The **e-Touch Flexi 2R-4P** model consists of 4 buttons arranged on a 2x2 grid with 1 touch zone on each button that can be configured with any control function. Each button has one led indicator to signal different functions.

e-Touch Flexi is combined with any bus coupling unit of the e-Bus Coupling family products, that provides the necessary control for the desired communication protocol and is configured through the EConfigurator APP available for Android in Google Play Store.

Product description

The **e-Touch Flexi** touch switch allow to perform any lighting control function in an installation, like switch on, switch off, light dimming and scene control, with a simple press on any touch zone. Control of motorized curtains or motorized blinds is also possible through additional devices for motor control.

The **e-Touch Flexi** panels are connected through a connector located on the back side, to a bus coupling unit, called e-Bus Coupling, that provides the communication protocol to the building management system. Different bus coupling units are available for the most used communication protocols for building automation, thus being able to combine any touch keypad with any bus coupling unit.

Keypad customization tailored to each project

Through the e-Touch Creator website in www.e-controls.es, it's possible to define the aesthetic of each of the pushbuttons, being possible to choose an icon or a text for each touch zone as well as the colour, for the pushbutton background and for the icon or text. It's also possible to

Function settings for each touch zone

This touch switch has 4 buttons arranged in a 2x2 grid with one touch zone on each, that can be configured with the desired function. Depending on the type of bus coupling unit selected, the touch switch can do some functions or others, based on the protocol selected and the functions defined in the communications standard of every protocol.

In order to properly configure each touch zone it is necessary to know the number of each pushbutton. The following image shows the figures that define each touch zone:

- If a DALI 2 bus coupling unit ref. BC.080001-001 or BC.582001-001 is selected to operate with a DALI controller, it is necessary to use manufacturer tool of the DALI controller to do the configuration of each pushbutton function. To do this, each pushbutton number will be used to assign to each instance of the DALI bus.
- If a MASTER bus coupling unit is selected, like the model e-Bus Coupling DALI Master ref. BC.581002-001 or the model e-Bus Coupling 0-10V ref. BC.501001-001, it is necessary to use the APP EConfigurator tool to configure the functions of each touch zone.

Touch switch LED indicators functions

This touch switch has one led indicator on each key, that performs different functions depending on the type of bus coupling unit used.

The functions available for the Led indicators are:

- Pressing a key: When pressing a pushbutton, the touch switch front led indicator of the key lights up indicating that the pushbutton has been pressed.
- Correct initialization of the device: When de device powers up, the led indicators starts a switch on/off sequence from left to right and top to bottom, indicating that the device is properly configured.
- Cleaning mode: When entering in cleaning mode, the led indicator nr. 1 flashed briefly every second during the 60 seconds cycle that lasts the cleaning mode.
- Configuration conflict: The led indicators starts a switch on/off sequence opposite to the

Instruction sheet

EN



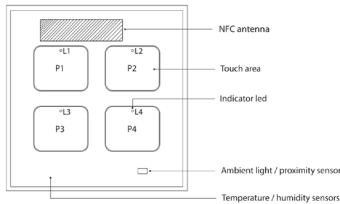
add images or pictures for every touch zone, making the device a completely flexible product and adaptable to any project.

Once the touch switch is finished, it's possible to send the design through a form to E-Controls for printing, or also download the design to print by anyone. The following examples show different designs:



previous one, this means, from right to left and bottom to top, indicating that the bus coupling unit has been previously configured with another touch switch model. In this case it must be reconfigured again for this touch switch model.

- Installation error: If a touch switch is configured for one bus coupling unit model and afterwards is connected to another bus coupling unit model, the led indicator nr. 1 will flash rapidly during 10 seconds at the moment of powering the device or every time that a touch zone is pressed, indicating an installation error. In this case, it must be reconfigured again or have to be connected to the correct bus coupling unit.
- Receiving a "Wink" command: The led indicator nr. 1 blinks at a rate of one second during 30 seconds. This case is relevant for a DALI bus coupling unit configured through a DALI controller.



Proximity and brightness sensor

The touch switch includes a proximity and brightness sensor that provides different functions:

- Auto switch off scene led: Depending on the bus coupling unit, it is possible to configure the led indicators to stay switched on to signal scenes or states. For this case it is possible to configure the led indicators to turn off automatically when the room becomes dark, to avoid disturbing them.
- Cleaning mode function: The cleaning mode function allows you to lock the operating of the touch switch temporarily in order to clean the panel. To do this, the proximity sensor must be covered for 5 seconds with the finger until the led indicator 1 flashes. In this state the touch switch is locked during 60 seconds so it can be cleaned without sending commands.

General touch switch configuration functions

Through the APP EConfigurator of E-Controls and the NFC proximity wireless data transfer technology, it is possible to configure the device. To do this, download the APP from Google Play Store and install it in a mobile phone with an Android operating system.

Product installation

NOTE: For the installation of the bus coupling unit, read the instruction sheet of the device selected.

- Disconnect the power supply of the bus coupling unit to which the touch switch will be connected.
- Assemble the plastic frame on the touch switch paying attention that the ventilation slots are in the lower and upper left side.
- Clip the touch switch e-Touch Flexi into the holes of the front connector on the bus coupling unit, and press until the frame will be firmly fixed to the wall and pressed by the keypad.
- Apply supply power to the device and check the front led indicator flashes.
- Configure the device according to the bus coupling unit selected.
- Remove the front protective film of the device.

Technical features

Touch switch + bus coupling unit selected (see note)

With e-Bus Coupling DALI (BC.080001-001)	7.5 mA / 20 mA
With e-Bus Coupling DALI Mains (BC.582001-001)	1.5 VA / 1.8 VA
With e-Bus Coupling DALI Master (BC.581002-001)	3.0 VA / 3.0 VA
With e-Bus Coupling Modbus RS485 (BC.672002-001)	8.5 mA / 11 mA
With e-Bus Coupling 0-10V (BC.501001-001)	11.5 VA / 11.5 VA
With e-Bus Coupling KNX (BC.090001-001)	6.5 mA / 9 mA

NOTE: First value: Current consumption with all sensors active, the led permanently turned on and communicating. Second value: Current consumption with all sensors active, all led permanently turned on and communicating (in devices with communication bus). In DALI Master and 0-10V devices it is only possible to switch on one led at the same time.

Touch switch

Type	Capacitive
Number of buttons	4
Number of touch zones	4

Aesthetic

Custom design through e-Touch Creator website

LED indicators

Quantity	4
Colour	Blue
Functions	LED brightness dimmable 0-100%

Temperature sensor

Sensor type	Digital
Resolution	±20 °C
Measuring range	-10 °C to +60 °C

Humidity sensor (optional)

Sensor type	Digital
Resolution	±2 %
Measuring range	0 % to 99 %

Wireless communication

Technology	NFC
Standard	ISO/EIC 15693
Reading speed	Up to 53 Kbit/s
Data security	64-bit password

Proximity sensor

Technology	Infrared radiation silicon photodiode
Wavelength	950 nm
Detection range	10 mm

The configuration of the touch switch can be done without powering the device, and even without removing it from the packaging, making the configuration process extremely easy.

The configuration parameters available on the device are:

1. Auto switch off scene leds: Enable / disable the auto switch off of the led indicator when the room becomes dark. By default this function is enabled.
2. Cleaning mode: Enable / disable this function. By default this function is enabled.
3. Led intensity: Brightness level front led intensity can be adjusted between 0 and 100%. By default is at 60%.
4. Touch switch sensitivity pushbuttons: Adjust the sensitivity of the touch zones between 4 possible values: low, medium, high, very high. By default is at high.

NOTE: In case of configuring the device powered, when bringing the phone near the device, some unwanted pushbutton press may be detected that interacts with the installation.

Caution

- Disconnect the device from the power supply before mounting or moving it.
- Do not leave cables peeled or turned around the device.
- Do not connect the device with the hands wet.
- Do not open or hole the device.
- Keep the device and cables away from humidity and dust.
- Clean the front cover with a water moisture soft cloth.

Brightness sensor

Sensor type	Visible radiation silicon photodiode
Measuring range	0 to 1000
Resolution	12 bits
Bandwidth	450 to 950 nm
Wavelength peak	560 nm

Mechanical features

Dimensions (with frame)	86 x 86 x 8.5 mm
Weight	45 g
Installation	Surface mounting
Front panel	Methacrylate Colour
Protection degree (assembled)	White or Black IP20

Temperature

Operating	0 °C to +50 °C (32 °F to 122 °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

Standards

Automatic electrical controls for household and similar use EN 60730

CE conformity

Low voltage directive	2006/95/EC
Electromagnetic Compatibility Directive	2004/108/EC

Marking

Security

Standard	EN 60730-1
IEC protection	Class III
EMC	
Emission	EN 61000-6-3
Immunity	EN 61000-6-1

Ordering numbers

e-Touch Flexi 2R-4P White, touch switch 4 buttons, 4 touch zones, 4 leds, white TP.020400-000
e-Touch Flexi 2R-4P Black, touch switch 4 buttons, 4 touch zones, 4 leds, black TP.020402-000

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.

