

e-Touchless Noiseless

Presence sensor with touchless gesture detection

e-Touchless OnOff is a presence sensor which acts as a switch or as a pushbutton without human contact and allows the control of opening/closing doors, raise/lower blinds, switching on/off lights or connect any kind of load, without having to press or touch the mechanism. The device can be configured to operate as a presence detector or as a gesture switch or pushbutton. The device can be configured to operate as a presence sensor or as a gesture switch or pushbutton. In pushbutton mode the device has a delay timer to disconnect the output after a certain time.

The device is configured using the NFC wireless technology using the EConfigurator APP, available for Android in Google Play Store.

Product description

The device **e-Touchless Noiseless** is a presence sensor with an optocoupler output, that can be used for multiple applications thanks to the wide variety of functions available. The device can be configured to operate in gestural mode or by presence detection:

- In gestural mode operates over the output each time the gesture of pressing the pushbutton of the mechanism is performed, but without touching the device. Every press gesture is recognized by the device, and acts over the output depending on the function configured.
- In presence detection mode operates over the output if an object or person is detected in the configured range, even if it is not moving, keeping the output active while there is a detection.

The device can be configured to operate as a switch or a pushbutton, providing thus two different operating modes:

- In switch mode, each detection changes the output state. This mode can be used to switch on and off lights, actuate over any kind of load, etc.
- In pushbutton mode, each detection changes the output state and this changes to the original position after a certain preconfigured time, between 1 second and 60 minutes. This mode can be used to actuate over a motorized door, switching lights using a delay time in passageways, stairs, toilets, etc.

The device has a touch button to perform the same detection functions, so that at any time the button can be manually pressed to act over the output.

Clean mode: A clean mode function is available and can be used to temporarily cancel the operating of the device during 60 seconds to clean the device. To do this, press one of the two lateral hidden pushbuttons (number 2 or 4) during 5 seconds. During the clean mode time, the led indicator blinks every second.

Device configuration

The device is configured through the front panel, using a mobile phone with Android operating system that with the NFC wireless technology, and with the EConfigurator APP that must be downloaded from Google Play Store. With the technology developed by E-Controls it is possible to configure the device even without being powered, which is specially useful if the commissioning process has to be done before installing the device.

The configuration of the device can be done without connecting the front panel to the device or also with the panel connected and the device powered.

How to create a new project

- Enable the NFC interface by pressing the NFC icon of the mobile phone.
- Launch the EConfigurator application by pressing over the APP icon. The first time the APP is used, it will request to connect to the device in order to continue. Place the phone over the front panel of the device to unlock the application and follow the configuration process.
- Press the "New project" button and select the device "e-Touchless Noiseless TK.502101-00X".
- Write the project name that will be saved in the mobile phone memory. After pressing "Accept", a new window appears with all the configuration parameters of the device and the default

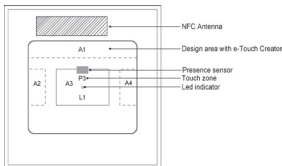
An led indicator in front of the device shows if the device detects presence. This function can be disabled through the configuration. The indicator is switched on briefly when power is applied to the device.

Assembling

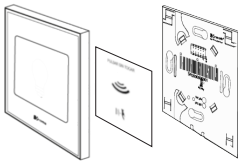
The device consists of three elements: A sensor panel, a predesigned label to insert into the sensor panel and an intelligent frame that includes the optocoupler output.

Through the e-Touch Creator application in www.e-controls.es it is possible to design a new label model to insert in the front sensor panel of the device.

Parts



Assembling

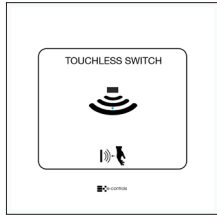


- values.
- Change any configuration parameter by pressing into the blue zone and write the new value.
- After all changes has been made, press the Save (Drive Icon) button in the top "Actions" menu. The project will be saved into the mobile phone memory.
- To download the project into the device, place the mobile phone NFC antenna next to the antenna of the device. When the APP finds the device, the icon with two arrows changes and the red line disappears. Without moving the mobile phone, press the two arrows icon to download the project into the device. The process will take 1 second and following this the device is reseted to apply the changes done. Remove the mobile phone when the APP shows the message.
- NOTE: If the device is not automatically reseted, disconnect the power and connect it again.
- Close the project by pressing the Cross icon in the "Actions" menu.

For additional information about the EConfigurator APP, go to www.e-controls.es to download the application user manual.

Instruction sheet

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Device configuration parameters

The device has multiple configuration parameters that are explained below:

- Function type:** In switch mode, the output changes its state at every detection. In pushbutton mode, the output is switched on by detection, and is automatically switched off after a certain time from the last detection.
- Output state in stand-by mode:** The output can be configured as normally open or normally closed.
- Switch off delay time:** 1 second to 60 minutes. Valid only for pushbutton mode.
- Enable detection sensor:** Enable/disable the operating of the detection sensor.
- Detection Led state in stand-by mode:** Defines the state of the detection led indicator when the device is not detecting presence.
- Enable detection Led indicator:** Enable/disable the detection led in case does not want to

Product installation

Preliminary considerations to take into account when installing the product

- Direct sunlight over the sensor or reflections produced by glass can affect the operation of the device.
- The sensibility of the sensor at distances greater than 1,20 m may be more affected by sunlight.
- Leave a safe distance with any nearby object around the detection field of the device.

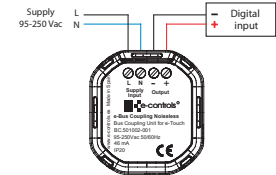
Installation process

- Disconnect the mains power.
- Connect the device following the installation drawing.
- Insert the front label in the panel through the side slot.
- Remove completely the protective film of the front panel.
- Assemble the plastic frame on the touch switch paying attention that the ventilation slots will be in the lower and upper left side.
- Insert the panel into the holes of the front connector on the bus coupling unit, until the white clips of the touch switch match the ones of the bus coupler, and press until the frame will be firmly fixed to the wall and pressed by the keypad.
- Apply power to the device and check that any of the blue leds blinks.
- Proceed to configure the device according to the steps defined in the "Configuration" section.

Technical features

Supply Power	Operating voltage	95-250 Vac - 50/60 Hz
	Maximum rated current (without touch switch)	46 mA
Gestural/presence detection sensor	Technology	Laser
	Class	1
	Detection angle (X, Y)	15°
	Detection range	2,5 m.
Touch switch	Type	Capacitive
	Number of pushbuttons	1
	Number of touch zones	1
Aesthetic	Custom design through e-Touch Creator website	
LED indicators	Quantity	1
	Colour	Blue
	Functions	LED brightness dimmable 0-100%
Output	Type	Optocoupler
	Maximum voltage between contacts	60 Vdc
	Maximum current	10 mA
	Stand-by state	NO (configurable NO/NC)
	Switch off delay time (for pushbutton mode)	1 sec. to 60 min.
	Terminals	5
Wireless communication	Technology	NFC
	Standard	ISO/EIC 15693
	Reading speed	Up to 53 Kbit/s
	Data security	64-bit password
Mechanical features	Dimensions (with frame)	.86 x 86 x 8,5 mm
	Depth flush mounting enclosure	34 mm

- blink when presence is detected.
- Detection type:** Defines the detection mode by presence (detection of an object at a certain distance) or gestural (detection by hand movement).
- Minimum detection distance:** Defines the minimum detection distance in presence mode.
- Maximum detection distance:** Defines the maximum detection distance in presence mode.
- Gesture hand minimum movement:** defines the detection sensibility in gestural mode. Less travel, more sensitive.
- Enable clean mode:** Enable/disable the clean mode function of the front panel.
- Led intensity level:** Defines the light level intensity of the front panel detection led.
- Touch buttons sensitivity:** Configures the sensibility of the front touch button.



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.

Weight	140 g
Installation	Flush mounting
Front panel	Methacrylate
Colour	White or Black
Protection degree (assembled)	IP20
Temperature	
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	10% to 90% RH at 50°C
Standards	
Automatic electrical controls for household and similar use	EN 60730-1
CE conformity	
Low voltage directive	2006/95/EC
Electromagnetic Compatibility Directive	2004/108/EC
Marking	CE
Security	
Standard	EN 60730-1
IEC protection	Class II
EMC	
Emission	EN 61000-6-3
Immunity	EN 61000-6-1
NOTES:	
1) The device is not designed to be part of a security system.	

Ordering numbers

- e-Touchless Noiseless White,** Presence sensor with touchless gesture detection, white TK.502101-000
- e-Touchless Noiseless Black,** Presence sensor with touchless gesture detection, black TK.502101-002

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.

