

## user manual

"INVISIBLE" SWITCH - ELECTRIC DEVICES TOUCHLESS CONTROL (12-24V)

### **SAFETY RULES**



Do not connect the device to loads exceeding the permitted



Connect only in accordance with the diagram presented in the manual. Improper connections may be dangerous, it can damage the controller, and loss of the warranty.



DANGER! Risk of electric shock! Even with the device turned off, the outputs may be live. All assembly work should be ALWAYS performed with the disconnected power circuit.



The installation of the device to a power mains that does not meet the quality requirements defined by EN 50081-1, EN 50082-1, UL508, EN 60950, will result in the loss of the warranty.



## **INSTALLATION - BASICS**

- Disconnect supply voltage circuit before installing the controller. Remember that any mounting works should be carried out when the main voltage is disconnected (switch off the mains fuse or disconnect the power supply from the socket).
- The controller should be installed in a place protected against adverse environmental conditions, protected from third party access. It is recommended that the device be mounted in a stable and fixed position.

- Familiarize yourself with the diagram and then proceed with the installation
  of the controller. Pay special attention to the designation of the controller
  connectors. Start by connecting the power wires: (+) (red or black with a
  white dotted line) and (-) (black).
- Connect the LED strip (paying attention to the polarity). The device is equipped with two stripes of double-sided adhesive tape on the bottom side. Before sticking the controller, clean and dry the the surface where it will be adhered. Remove the protective film, adhere in the chosen place and hold for a few seconds. When choosing the mounting location, remember that the device detects the hand only from the side of the adhesive tape.



The device should be adhered to a non-conductive surface, eg furniture board, tile, etc. If the device is not stably fixed or mounted near metal elements, it may not work properly.

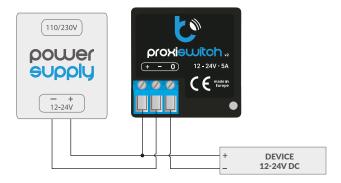
 Each time the power source is connected, the device performs the autocalibration process within the first 15 seconds. During this time, do not place your hand or any conductive objects near the device, as this will affect the calibration process.



If during the normal operation the device reacts incorrectly, force the auto-calibration process by disconnecting and reconnecting the power supply to the controller. Remember that after connecting the power supply do not put your hand near the controller for the first 15 seconds!

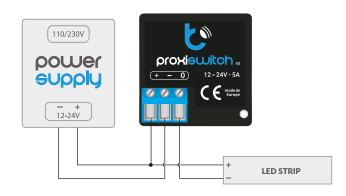


General diagram of connection to the 12-24V DC device:

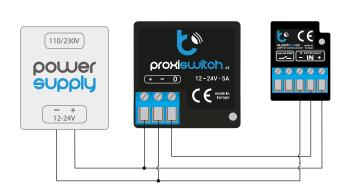


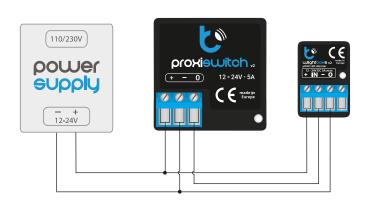
Touch button - proxiSwitch v2 + switchBoxDC:

General scheme of connection to the LED strip 12-24V DC:



Touch button - proxiSwitch v2 + wLightBoxS v2:







- To turn on / off the LED strip, close your hand to the controller.
- The device can operate in four operating modes:
  - 1. bistable without memory after switching on the power supply, the output is switched off, each time you close your hand, the output changes. When the power supply is disconnected and reconnected, the output will always be off.
  - 2. bistable with memory after switching on the power supply, the output state depends on the state before the power loss (the last state is remembered 5 seconds after its last change). Each time you close your hand, the output state changes.
  - 3. monostable NO after turning on the power, the output is in off state. It turns on when you close your hand.
  - 4. monostable NC when the power is turned on, the output is also on. It turns off when you close your hand.
- To change the operating mode of the device, follow the steps below:
  - 1. turn on the power, wait 5 seconds until the LED starts flashing; immediately disconnect the power.
  - 2. turn on the power, wait 10 seconds until the LED starts flashing; immediately disconnect the power.
  - 3. turn on the power, wait 15 seconds until the LED starts flashing; immediately disconnect the power.
  - 4. turn on the power. Select the mode by placing your hand close the controller. Each time you close your hand, the number of LED flashes indicates the selected mode.
  - 5. wait 10 seconds after the last movement until the LED starts flashing; immediately disconnect the power.
  - 6. after reconnecting the power supply, the device start to work in the newly selected mode.

TECHNICAL SPECIFICATIONS	
supply voltage	12-24V DC
energy consumption	<0,1W
maximum current	5A
maximum power	120W
status signaling	blue diagnostic LED
modes	bistable, bistable with state memory, monostable NO, monostable NC
detection range	depending on the material: plexiglass, solid wood, plywood, chipboard - 3cm,  metal - detection with the entire surface,
	honeycomb panels - no detection
maximum detection time in monostable mode	8 sec
autocalibration	at startup and every 15 seconds
sensor	proximity, capacitive sensor

mounting method	under the surface of nonconductive, adhesive tape
housing	made of polyurethane composition not containing halogens, self-extinguishing for thermal class B (130 °C)
dimensions	38 x 38 x 19 mm
protection level	IP20
controller operating temperature	from -20 to + 50°C

## ADDITIONAL INFORMATION

#### **HELP**

The latest versions of the manual, additional informations and materials about products are available on our website: blebox.eu

General questions: info@blebox.eu Service and technical support: support@blebox.eu

for more information visit our website

# www.blebox.eu

or send us an email to: info@blebox.eu support is available at support@blebox.eu

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