switchbox LIGHT

user manual

control with µWiFi technology
from any place in the World

WIRELESS LOW - POWER SWITCH 230V

ability to control by voice commands with
Amazon Alexa i Google Home

SAFETY RULES

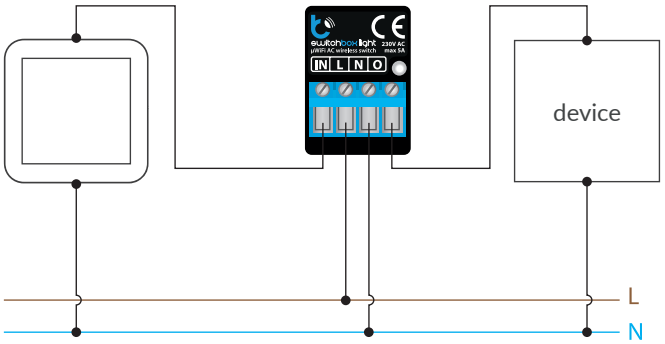
Do not connect the device to loads exceeding the permitted values.

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 PN-EN 50160, will result in the loss of the warranty.

CONNECTION DIAGRAM



1 INSTALLATION - BASICS

- Disconnect the installation supply voltage before installing the controller. Remember that any mounting works should be carried out when the mains voltage is disconnected (switch off the mains fuse or disconnect the power cord from the mains socket).
- The controller should be installed in a place protected against adverse environmental conditions, protected from third party access - in the flush box or inside the enclosure of the controlled device. Remember that metallic elements (wires, housing parts) have a negative influence on the range of the device, and consequently the comfort of use. It is recommended that the device be mounted in a stable and fixed position. Due to the operating voltage of the device it is necessary that the connectors of the controller be protected against accidental contacts or short circuits, which could cause electric shock or damage to the device.
- Read the diagram and then proceed to install the controller. Pay particular attention to the designation of the controller connectors. Start with power wires - phase L (usually brown) and neutral N (blue). Then, connect the load. If you only want a local control with a wall switch, connect the wall push-button according to the diagram. To control using only your phone or Tablet, it is not necessary to install the wall push-button.
- After making sure that the device is connected in accordance with the diagram and that there are no metal components near the controllerwhich may accidentally cause short-circuit, start the device by turning on the power (turning on the mains fuse or connecting the power cord to the power outlet).

2 FIRST START

- Download the **free wBox application**. If you have an Android mobile device, you will find the application in the Play Store. For iOS devices the application is in the App Store.
- By using your mobile phone or tablet, connect it to the device wireless network. To do this, enter to your smartphone or tablet settings, then go to setting of the WiFi network and find the network name „switchBox_LIGHT-xxxxxxxxxx" where xxxxxxxxxx is the serial number of the device. Connect to this network.
- Open the wBox application. A device will appear at the top of the screen. To add it to the application, click on "+" on the right side of the name. To pre-configure the controller, click on the default device name.

  You can also set the configuration using the web browser of your phone / tablet. After connecting to the wireless network of the controller, turn on the browser and go website www.blebox.eu
- Test the work of the controller, by clicking the ON / OFF button, paying attention to the behavior of the connected load. If you have connected a wall push-button, check its work. In the default configuration of the controller, for a mono-stable push-button, holding down the push-button should cause that the load turn on, releasing the pushbutton will turn off the load. To change this behavior, go to the settings (the "Settings" icon in the upper right corner of the screen) and then in the "Actions" section edit the default action. For example, to alternately turn the light on / off each time the monostable button is pressed choose the action type as "Change state" and select "Rising edge" as the trigger.

3 OTHER DEVICE SETTINGS

- Go to the configuration ("Settings" icon in the upper right corner of the screen). In the "Main configuration" section, you can change the name of the device that is displayed in the wBox application. The "Status LED enabled" option allows you to turn off the built-in LED on the device.
- Setting the "Enable event log" option to "Yes" will cause the device to record events (e.g. sending the notification set in the "Actions" section) in the BleBox cloud system. This allows the history of the events to be viewed later also when the controller is offline.
- Also check the selection in the "State after restart" option, which determines how the controller behaves after a restart caused by, for example, a power failure. You can choose whether the load should be on, off, remain as before the restart (if it was off then it has to continue off), or take the opposite state.
- Setting the value in the field "Switch on for time" will cause an additional "Switch on for time" button to be displayed on the control screen. Each press of the button counts down the set time after which the load will be turned off.

4 ACTIONS

- Actions are settings for additional controller behaviors and interactions between controllers. The saved action reacts to the change of the controller input (e.g. button press, temperature change), after this the defined operation will be performed, such as:
  - drive an output of this controller (e.g. on the light)
  - drive an output wirelessly on another controller on the same WiFi network (e.g. turning on the light in another room)
  - send a PUSH notification to the phone (for example, when the set temperature is exceeded)
- The types and the number of inputs and outputs depend on the controller used. By defining multiple actions with the same trigger (e.g. type of button press), you can control many different devices at the same time, eg. a short press of the button will turn off the lights in all rooms.
  Another example is, a short press of the wall button will turn the light on, a long press will turn it off.

- One, the simplest, exemplary action is a factory set. It allows you to control the controller output using a bistable button - if you use eg. a monostable (bell) button, its modification is necessary.
- When editing actions, as “Action type” select one of the options: “Switch on”, “Switch off”, “Toogle state”, “Direct”, “Invert” or “Switch on for time” when you want to set the action for the physical output.
- Then set “Trigger” as a one of the options, like: “Short click”, “Long click”, “Trailing edge”, “Leading edge”, “Edge”. Not all options are available for certain types of actions.
- If you want to control another device from the wBox series as “Action type” select “Control another device”. Click on the “Select device” button. The controller will search the network for compatible devices and display them in a list. Select the device you want to control and click the “Select” button. If the device is not listed you must use the general API control method described further.
- Then in the “Call API” field enter the API command that the driver will call.
- The most popular API commands for shutterBox and wLightBox are presented below. It was assumed that the IP address of the device which will be controlled is: 192.168.1.123

  Opening the window by the shutterBox: http://192.168.1.123/s/u

  Closing the window by the shutterBox: http://192.168.1.123/s/d

  Turn on the ouptut of switchBox: http://192.168.1.123/s/1

  Turn off the output of switchBox: http://192.168.1.123/s/0

  Toogle the output of switchBox: http://192.168.1.123/s/2
- If the device was not on the found list or you want to control another device in the network, select “Call URL” as “Action type”.
- In the “URL” field, enter the API command preceded by the http protocol prefix and the IP address of the wBox device which will be controlled. The IP address can be found in the device settings. Caution! All the controllers must be in the same subnet, usually the subnet of a home router.
- Confirm the entry with the “Save” button.
- A detailed description of how to control other controllers of the wBox series is available in the “Extended instructions for wBox devices”, while all the technical documentation API of the wBox controllers is available at: http://technical.blebox.eu

5 NOTIFICATIONS

- The controller allows you to display a system notification on a phone with the wBox application installed on the particular trigger, e.g. for a short click.
- Notifications are added similarly to “Actions” - as “Action type” select “Notification”, fill in the remaining fields of the form and confirm with the “Save” button.
- In order for the notification to be displayed on the phone it is necessary to allow the controller to display notifications. Go to the main menu of the wBox application, to the “Notifications” tab. Then go to the settings (the “Settings” icon in the upper right corner of the screen). Find the device on the list and select “Action notification” from the drop-down list next to the device name. You can also select other types of available notifications or µPortal notifications. Confirm the change of preferences with the “Save” button in the upper right corner of the screen.
- If notifications are not displayed despite their configuration check in the phone system settings (Android / iOS) whether the wBox application is authorized to display system notifications.

6 ACCESS POINT AND WIFI NETWORK SETTINGS

- Once you turn on the controller for the first time, you can proceed to its further configuration. Being connected to the WiFi network emitted by the device, in the control panel of the wBox application select the device, then go to “Settings” (icon at the top-right corner of the screen).
- You can change the name of the device that is displayed in the wBox application. In addition, you can change the name and password of its generated WiFi network. Remember that changing the network name or password will disconnect the device immediately after you click the “Save” button, so re-connect to the device using the newly assigned network name and password.
- You can add the controller to your home WiFi network to control it through this home network or from anywhere in the World. To do this, in the “Connect” settings section, select a network name from the list and press “Connect”. If is required, enter the WiFi network password. During the connection of the controller to your home network, the phone / tablet may disconnected from the network. In this case, you will need to reconnect your phone / tablet to the controller network.
- Please remember that in order to control the device outside the local WiFi network, from anyplace in the World by using the wBox application, the option “Remote access enabled” in the controller settings must be set to “Yes”.
- Once you’ve finished configuring the WiFi network, you can disconnect your phone/tablet from the controller network and connect your mobile device directly to your home WiFi network. The control from the wBox application will work the same way as when the phone / tablet is connected to the controller network. If the user leaves the local network, for example, leaving home or using the mobile data, the wBox application will signal this state as “Remote mode”. In this case, the devices can be controlled, but for security reasons settings are not available.

TECHNICAL SPECIFICATIONS

supply voltage	230V AC
energy consumption	< 1W
number of control outputs	1
type of control outputs	relay
maximum load	5A
maximum power	1150VA (1150W for resistive load e.g. heater)
number of inputs	1
type of inputs	logical, pushbutton, short circuited to N, configurable
supported switches	monostable (push-button),bistable (traditional, cross switch) not-illuminated
dimensions	25 x 39 x 24 mm
protection level	IP20
housing	made of polyurethane composition not containing halogens, self-extinguishing for thermal class B (130°C)
mounting method	in the flush-mounted box (deepen or double), on the receiver - eg. lamps, radiator, etc.
communication standard	µWiFi, compatible with WiFi, 802.11g
radio frequency	2.4 GHz
transmission type	bi-directional, encrypted
API	open
mode	direct connection (as Access Point), Wi-Fi connection via a standard router, connection with access from any location in the world (requires only access to the Internet)
compatible devices and systems	Apple iPhone, Apple iPad, iPad Mini, Android, computers and mobile devices supporting HTML5
encryption	WPA2-PSK and authenticated encryption with associated data (AEAD)
controller operating temperature	from -20°C to +50°C

TECHNICAL SPECIFICATIONS

LOCATION AND TIME OF THE DEVICE, SCHEDULE

The controller has the ability to work according to a given schedule. To make this possible, set the device's time. Go to settings in the "Device time" section, click "Change timezone". Then select your region and location from the list, confirm your selection clicking the "Save" button. The device will synchronize its time with the server time (if the controller is in a WiFi network with access to Internet) or it will download time from the phone / tablet. It is recommended that the controller is always connected to a WiFi network with Internet access so that it can automatically synchronize its clock.

To be able to control devices using the local sunrise and sunset, you must also select the location of the controller. You can specify the location of the device using a smartphone or tablet. In the section "Device location", click "Set locations". Browser will ask whether to share locations - allow. In the "Coordinates" field, should appear the approximate coordinates of your location. If the "Set locations" button blinks red with the word "Error", or the "Coordinates" field did not change the value from "Not set" to numeric data, a failurehas occurred during the location download. You should make sure that the phone / tablet has a GPS module and that the sharinglocation service is enabled on the phone.

Adding schedule entries can be performed by clicking the "Add item" button in the "Schedule" section of settings. You can select the days in which the task will be performed, the type of entry (at a specific time, or relative to sunrise / sunset - only having a correctly set location) and set the parameters of the task. The set tasks will be visible as a list, individual entries can be edited or deleted.

SOFTWARE UPDATE

To update the software in the controller, connect it to your home WiFi network (see "Access Point and WiFi settings" section) which is connected to the Internet. Go to "Settings" (icon at the top-right corner of the screen) and click the "Get new firmware" button in the final section on settings. Wait about 1 minute, do not close the interface and don't perform other actions. The device will download the latest software. The software version number, hardware version and device identifier can be read at the bottom of the settings screen.

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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