



WIKĘD SMART controller for **WIKĘD** locks
and LED backlights

ATTENTION

Connect the device according to the diagram presented in the manual. Improper connection may be dangerous and result in damage to the controller and loss of warranty.

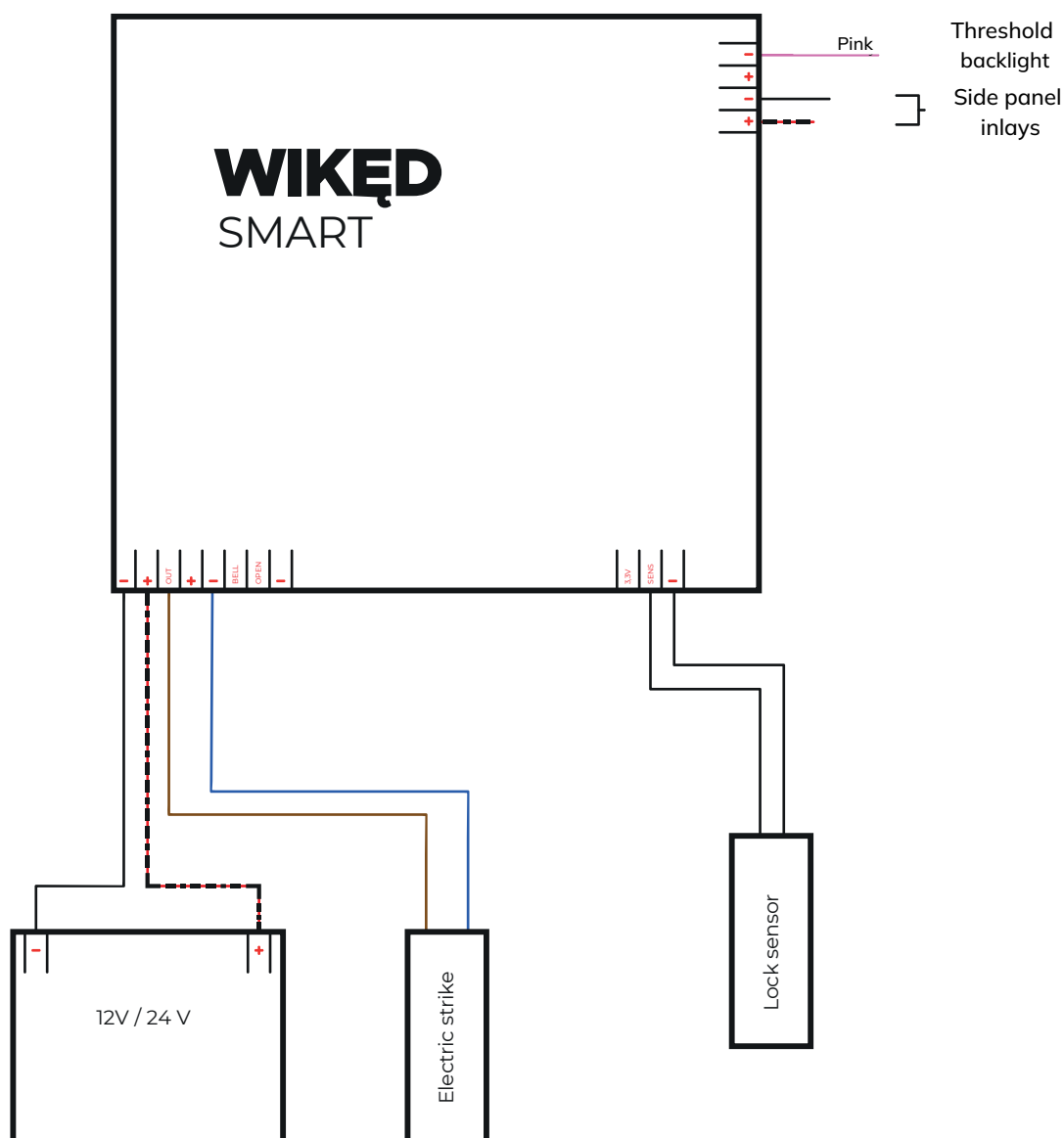
SAFETY RULES

DANGER!

Danger of death or injuries due to electric current (even when the device is turned off), voltage may be present at the outputs. All installation work should ALWAYS be performed with the disconnected power circuit.

Connecting the device to a power supply that does not meet the quality requirements specified in the EN 50081-1, EN 50082-1, UL508 and EN60950 standards will void the warranty.

WIKĘD SMART CONNECTION DIAGRAM WITH ELECTRIC LOCK AND LED ELEMENTS



WIKĘD SMART

LED 1
LED 2

Threshold backlight
Side panel inlays

Lock sensor

12 - 24V

12V automatic lock
or
24V electromotive lock

GREEN
WHITE
BROWN
YELLOW
PINK
GREY

HANDLE BACKLIGHT
THRESHOLD BACKLIGHT

Wiring details: The diagram shows a 12-24V power source connected to the device. A lock sensor is connected to the device and the lock. The device has two LEDs (LED 1 and LED 2) and a Threshold backlight. The Threshold backlight is connected to the lock. The device also has a Side panel inlay. The lock is a 12V automatic lock or a 24V electromotive lock. The wires are color-coded: GREEN, WHITE, BROWN, YELLOW, PINK, and GREY.

INSTALLATION - BASICS

Before installing the controller, disconnect the voltage in the powered circuit. Remember that all installation work should be performed with the power supply disconnected (switching off the fuse of the mains installation of the power supply circuit or disconnecting the power supply from the socket). The controller should be installed in a place protected against unfavourable environmental conditions and protected from third party access - in a flush-mounted box or inside the casing of the controlled device. Remember that metal elements (cables, casing parts) negatively affect the range of the device and, consequently, the comfort of use. It is advisable that the device be mounted in a stable and stationary position. Due to the operating voltage of the device, it is necessary that the connectors in the controller are protected against accidental contact or short circuit, which may result in electric shock or damage to the device.

Read the diagram and then proceed to install the controller. Pay special attention to the polarity markings of the connectors. Depending on the type of lock used, connect the 12V or 24V DC power supply to the 12-24V DC terminals, taking into account the correct polarity. Then connect the lock. The electric strike should be connected to the LOCK terminals: OUT and \ominus , and the electric lock to the OUT, \oplus and \ominus terminals.

To open the door using the optional monostable (bell) switch, connect the switch circuit between the OPEN input and \ominus . Such a switch is most often used as an exit button from a building or property. You can also connect an additional button to activate other functions (e.g. turning on the LED backlight or controlling another device) - connect it between the BELL and \ominus inputs.

The controller allows you to receive feedback on the closing (locking) status of the door. To do this, connect the electromechanical limit switch (micro-switch) circuit between the SENSE and \ominus inputs, and if a Hall sensor is used, connect it to the 3.3V, SENSE and \ominus terminals of the controller. The controller has two additional outputs enabling control of the LED backlight. If you have LED strips, connect them to the appropriate LED terminals 1 and 2, paying attention to the polarity. After making sure that the device has been connected in accordance with the diagram, turn on the device by turning on the power supply (switching on the fuse of the mains installation of the power supply circuit or connecting the power supply to the socket).

Attention! If a power supply with too low current capacity (power) is used, unexpected incidents may occur when opening the bolt/electric strike, such as blinking of the LED backlight or even restarting the controller. An adequate power supply must be provided to meet the starting current of the electric lock motor or electric strike coil.

FIRST LAUNCH

Download the free application, wBox. If you have an Android device, you can find the applications in the Play Store. For iOS devices, the application is available in the App Store. Using your mobile phone or tablet, connect to your device's wireless network. To do this, enter the smartphone or tablet settings, then the WiFi network configuration and find the network called "doorUnitBox-xxxxxxxxxx", where xxxxxxxxxxxx is the serial number of the device. Connect to this network. Turn on the wBox application. The device will be visible on the main screen. To add it to your account in the application, select "Add device to account". If you are an installer and do not want to assign the device to your account, select "Use only once".

FIRST LAUNCH

You can also perform the configuration using the phone/tablet's web browser. After connecting to the controller's wireless network, turn on the browser and go to the website: www.blebox.eu.

WIFI CONNECTION AND SERVICE CONNECTION (AP) SETTINGS

Go to the WiFi network settings ("Settings" icon in the upper right corner of the screen, "Connection" section), where you can connect the device to your home WiFi network to be able to control the controller through it or from anywhere in the world. To do this, select the network name from the list of available networks and press "Connect". If required, enter your WiFi password. When connecting the device to the home network, the phone/tablet may be disconnected from the device's network.

After reconnecting the phone to the controller's WiFi network, check the "WiFi Client Status" and "Remote Access Status" fields. The controller is equipped with a network connection monitoring system which, in the event of problems with connecting to the WiFi network or the Internet, will report the problem and its possible causes. If the network is working properly, both fields will show "Connected".

In order to communicate with the device from outside the local WiFi network, from anywhere in the world, via the wBox application, the device automatically connects to the BleBox cloud system service by default. The remote access system is fully encrypted and secure, and data is transmitted through European servers of renowned companies. It is possible to disable the remote access service - after clicking the "Configure" button, switch the switch next to the "Remote access" option. Remember that disabling "Remote access" will result in no access to the controller from outside the local network and no support for notifications and external integration systems, hence we recommend leaving this option enabled (default setting).

Enabling the "Event Log" option will cause the device to record events (e.g. about sent notifications set in the "Actions" section) in the BleBox cloud system. This allows you to later view the history of events, even when the controller is offline. After completing the WiFi network configuration, you can disconnect from the device's network and connect your phone/tablet directly to your home WiFi network. Control from the wBox application will work in the same way as when the phone/tablet is connected to the device's network. If you, as a user, leave the local network, e.g. by leaving home or connecting mobile data, the wBox application will signal this status as "Remote mode". In this case, you will have access to the device data, but for security reasons the setting options will be unavailable.

In the "Service connection (AP)" section, you can change the name and password of the WiFi network emitted by the device. Please note that changing the network name or password may disconnect you from your device immediately after clicking the "Save" button, so you should reconnect to the WiFi network. It is also possible to completely disable the access point emitted by the device. To do this, move the "Access point" slider to the off position and confirm your selection with the "Save" button.

Attention! If the controller does not have a stable connection to the WiFi network ("WiFi Client Status": "Connected", without any error warnings), it will not be possible to turn on the access point again - in this situation, the only solution is to reset the controller to factory settings. It is recommended to turn off the access point only after the controller has been completely configured and the entire system is working properly.

DEVICE SETTINGS

Go to the device settings ("Settings" icon in the upper right corner of the screen). In the "Name and icon" section you can change the name of the device under which it is displayed in the wBox application. In the "Device Settings" section you can, among others: turning off the LED built into the device.

In the "Position detection method" field, you can change the door opening/closing detection algorithm, depending on the nature of the current flowing through the inputs. In "Method 1", the door closing is detected if DC or AC current flows between IN1A and IN1B, but not between IN2A and IN2B. Similarly, the opening will be detected when there is no current flowing between the IN1A and IN1B connectors, and there will be current between the IN2A and IN2B connectors. In "Method 2", the door closing is detected if only DC current flows between IN1A and IN1B, and no DC current or AC current flows between IN2A and IN2B. Similarly, an opening will be detected when there is no direct current flow between the IN1A and IN1B connectors, and there is a direct current flow between the IN2A and IN2B connectors. Any other configuration of current flow is equivalent with the door opening. If you need to change advanced controller settings, click the "Show advanced" button. Additional options will develop.

In the "Gate output type" field, you can change the output state between normally open (NO - i.e. in the idle state, the output does not conduct) or normally closed (NC - i.e. in the idle state, the pair of contacts is closed and opens when the user presses the control button). It is also possible to adjust in the range of 0.1 sec. – 15 sec. pulse duration at the output after pressing the control button once. The "Close switch state inversion" option reverses the logic of showing the door closed/open state. Go to the additional interfaces settings, where you can change the settings of additional outputs that allow you to control the LED backlight. The "State after restart" option determines the state of the controller's LED output after a restart caused, for example, by a power outage. You can choose whether the backlight should be turned on, off, remain in the state before the restart (if it was on, it should remain on, if it was off, it should remain off), or the opposite state. Setting a value in the "Default timer value" field will display an additional "Turn on timer" button on the control screen. Each time it is pressed, the set time counts down, after which the LED backlight will turn off. Go to the main panel by clicking the arrow in the upper left corner. Test the operation of the controller - click on the padlock icon, which should open the door. If the door position sensor circuit is connected, note the closed status and changing icon.

ACTIONS

The controller allows you to send control commands to other wBox series controllers via the WiFi network, through the so-called API. The given action will be triggered by a specific type of trigger, e.g. a short press. When adding an action, in the "When" tab, select one of the options as "Trigger type". If you want to set the action to pressing a physical button, in the "Input" field, select the input number to which the button is connected (Input 1: "Bell", input 2: "OPEN").

In the "Execute" tab, select "Control another device" as "Result", confirm. Click on the "Select device" icon. The controller will search the network for compatible devices and display them in a list. Select the device you want to control. If the device is not on the list, you must use the general API control method described below, or update the software in the target driver. Then, in the "Call API" field, enter the API command that will trigger the controller. A detailed description of how to control wBox series controllers is included in the "Extended manual for wBox devices" and FAQ on the blebox.eu website, while full technical API documentation of wBox controllers is available at: <http://technical.blebox.eu>.

ACTIONS

By default, the action will be triggered once when the set trigger condition is met. It is also possible to repeat the call of a given action cyclically by selecting one of the repetition options and setting the interval. If the device was not on the list of compatible devices found or you want to control another device on the network, select "Call URL" as the "Action type". In the "URL" field, enter the API command preceded by the http protocol prefix and the IP address of the wBox series remote controller that you want to control. The IP address can be found in the settings of your device.

Attention! All controllers must be in the same subnet, most often this is the subnet of a single home router. In the "Summary" tab, name the action, check its correctness and confirm the entry by clicking the "Save" button. The added action will be displayed on the list. By expanding its details, you can view, among others, the status of its last execution.

NOTIFICATIONS

The controller allows you to display a system notification on a phone with the wBox application installed, for a specific type of trigger, e.g. door opening. Notifications work only when the controller has stable Internet access and the "Remote access" option is enabled (default setting). Notifications are added similarly to "Actions" - fill in the form fields and in the "Execute" tab select "Notification" as "Result". 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, precisely to the "Notifications" tab. Then go to settings ("Settings" icon in the upper right corner of the screen). Find the controller in the list of devices, and then select "Action notification" from the drop-down list next to it. You can also select other types of notifications available in the driver or µPortal notifications. Confirm your change of preferences by pressing the "Save" button in the upper right corner of the screen.

If notifications do not appear despite configuring them, check in the phone system settings (Android / iOS) whether the wBox application has permission to display system notifications.

DEVICE TIME AND LOCATION

Go to settings, precisely to the "Time and location" section. In the "Device time" tab, select your region and location from the list and confirm the changes with the "Save" button. The device will synchronise its time with the NTP time server (if the controller is in a WiFi network with Internet access) or download the time from the phone/tablet. Because the controller does not have a battery backup for the clock system, the clock resets after disconnecting the power supply. Therefore, it is recommended that the controller is always connected to a WiFi network with Internet access so that it can automatically synchronise its clock. This is especially important in controllers that have the function of working with schedule.

You can determine the location of the controller using your smartphone or tablet. In the "Device Location" tab, click the "Set Location" button. The application will ask whether to share the location - allow it. The approximate coordinates of your location should appear in the "Coordinates" field. If the "Set Location" button flashes red with the text "Error" or the "Coordinates" field has not changed from "Not Set" to numerical data, a failure has occurred in retrieving the location. You should then make sure that the phone/tablet has a GPS module and that location sharing support for the wBox application is enabled on the phone.

DEVICE TIME AND LOCATION

Setting the location is particularly important in controllers that have a scheduled operation function, in which the schedule is based on sunrises and sunsets.

SCHEDULE

The controller can work according to a set schedule. Adding schedule entries is done by clicking the "Add schedule" button in the "Schedule" section of the settings. You can select the days on which a given task will be performed, the type of entries (at a specific time, or in relation to sunrises/sunsets - only if the location is set correctly) and set the task parameters. The set tasks will be visible in the form of a list, and individual entries can be edited, deleted or temporarily disabled.

REMOTE CONTROL

The device only works with uRemote, simpleRemote and inBox remote controls. Be safe! Our remote controls use the most effective cryptographic technologies used in banking, including: two-way key negotiation, acknowledgment communication and elliptic curve encryption. Pairing is a procedure aimed at creating a secure connection between the remote control and the controller. Detailed information about the pairing procedure is available in the user manuals for specific devices.

ACCESS MANAGEMENT

Return to the controller settings. In the "Access management" section, you can additionally create accounts for the controller users. This provides additional security for access to the controller. If you create users, the ability to add a controller to the wBox application, and thus control the drive, will only be available after entering the correct login and password. To add a new user, press the "Add user" button in the "Manage local access" section, and then in the new window, fill in the "Username" and "Password" fields and press the "Save" button. If at least one user account is added, the controller will require logging in each time the controller is added to the wBox application. Only after logging in to the controller, it will be possible to open the door.

HELP

The latest versions of the manual, additional information and product materials are available on our website: blebox.eu.

General questions: info@blebox.eu

Service and technical support: support@blebox.eu.

Before contacting our service team, if possible, prepare the "Service Key" for a given controller, available in its settings, in the "Details, update and help" tab. By clicking the icon, the key will be copied to your phone's clipboard. Also prepare the "Installation key" of the wBox application, available in the main application menu, in the "Settings" tab. Instructions for restoring the controller to factory settings are available at: blebox.eu/start/reset.

Attention! A factory reset does not remove the controller from the user account assigned to it. The controller must be removed from the account independently - select "Manage devices" from the main menu of the wBox application, then select the given controller and click the "Remove device" button. Alternatively, you can log in to the portal.blebox.eu system, go to the "Devices" tab, select given controller and select "Remove device" from the top-right "Actions" menu.



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