




Click the button and download our [free wBox app](#):



User Manual



SAFETY RULES

-  Connect according to the diagram shown in the manual. Incorrect connection may be dangerous and may result in damage to the controller and loss of warranty.
-  **DANGER!** Risk of death due to electric shock (even when the device is switched off); voltage may be present at the outputs. All installation work must ALWAYS be carried out with the power supply disconnected.
-  Connecting the device to a power supply that does not meet the quality requirements specified in standards EN 50081-1, EN 50082-1, UL 508, and EN 60950 will result in loss of warranty.

1 INSTALLATION - BASICS

The connection diagrams can be found at the end of the manual

- Before starting the panel installation, disconnect the power supply to all affected circuits. Please note that all installation work must be carried out only when the power supply is completely disconnected (e.g., by switching off the appropriate circuit breaker in the electrical distribution board).
- The panel should be installed in a shaded location, away from direct sunlight falling on the screen (UV radiation and high temperatures may adversely affect display readability and reduce the device's lifespan).** The installation site should also be protected against accidental mechanical damage. Please note that metal elements (e.g., reinforced concrete structures or metal construction components) can reduce the device's radio signal range, which may directly affect communication stability and overall user experience.
- Flush mounting (recessed):** First, prepare a suitable mounting hole in the wall or target surface. A ready-to-use template to facilitate precise cutting of the hole can be found at the end of this manual. When printing the template, make sure to select 100% scale (actual size) in the printer settings. The hole should be slightly larger than the electronics enclosure to avoid damage when recessing the screen. Next, properly connect the red (+) and black (-) power supply cables of the panel to a 12-24 V DC power supply. Finally, remove the protective film from the self-adhesive tape and mount the device by gently pressing along the edges of the screen.
- Surface mounting (using a frame):** For this type of installation, use the dedicated mounting frame (optional accessory), which allows the device to be installed on any flat surface or directly on a standard 60 mm flush-mounted junction box. First, screw the frame to the surface or junction box, route the power cables from the 12-24 V DC power supply, and connect them properly to the panel (red: +, black: -). Finally, mount the panel by placing it on the magnets integrated into the frame - without using double-sided adhesive tape. To remove the screen, use the suction cup included in the frame kit.
- After ensuring that the device has been connected according to the diagram and that no metal elements near the controller could accidentally cause a short circuit, power on the device by supplying voltage (turn on the circuit breaker, switch on the power supply).
- After turning on the power, the message "Polishing the pixels" will appear on the screen, and then the home screen will be displayed. Pressing the "Get started" button located in the center will display information about the need to download and use the wBox application for further configuration.
- At the bottom of the screen, a Wi-Fi connection status bar is visible - during the initial installation or if no connection is configured, it displays the

message "WiFi ready for setup". Entering an incorrect network password or a connection drop will display the message "WiFi connection failed". After a successful network connection, the message "WiFi connected" will appear and then disappear after a moment.

- Detailed information on topics such as pairing devices with the panel and operating the panel can be found in the following sections of this manual.

2 FIRST START-UP

- Download the free wBox app. If you have an Android device, you can find the app on the Play Store. For iOS devices, the app is available on the App Store.
- Using your mobile phone or tablet, connect directly to the device's access point. Follow these steps:
 - Disable mobile data:** To avoid communication issues, temporarily turn off cellular data in your device settings.

- Connect to the device: Go to the Wi-Fi settings on your smartphone or computer, then find and connect to the network named ""controlPanelM-xxxxxxx"" (where ""xxxxxxx"" is the unique serial number of your device).

- Maintain WiFi connection: Your operating system (Android/iOS) may notify you that the network provides no Internet access. In this case, select "Keep connection", "Use anyway", or "Stay connected". This is essential to proceed with the device configuration.

- Open the wBox app. The device will be visible on the main screen. To add it to your account in the app, select "Add device to account." If you are an installer and do not want to assign the device to your account, choose "Use once only".

3 WIFI CONNECTION AND SERVICE (AP) SETTINGS

QUICK INSTALLATION GUIDE
first configuration of the BleBox controller

Scan the QR code or click the link below to access the quick installation guide.



<https://blebox.eu/start>

- Go to the WiFi settings ("gear" icon in the top right corner of the screen, under the "Connection" section), where you can connect the device to your home WiFi network to control the controller locally or from anywhere in the world. To do this, select the network name from the list of available networks and tap "Connect". If required, enter the WiFi password. While the device is connecting to the home network, your phone or tablet may temporarily disconnect from the device's network.
- You can also configure the network settings using a web browser. After connecting to the controller's wireless network, open a browser and go to www.blebox.eu.
- After reconnecting your 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 will report any issues with the WiFi or Internet connection and their possible causes. If the network is functioning correctly, both fields will display "Connected".

- To communicate with the device from outside your local WiFi network, from anywhere in the world, via the wBox app, the device automatically connects by default to the BleBox cloud service. The remote access system is fully encrypted and secure, with data transmitted through European servers of reputable companies. It is possible to disable remote access – click the “Configure” button and toggle the switch for “Remote Access”. Note that disabling “Remote Access” will prevent using the controller outside the local network and will also result in loss of access to historical data (including charts) and push notifications to your smartphone. We recommend keeping this feature enabled (it is the default setting).
- Enabling the “Event Log” option allows for the automatic recording of device activity in the BleBox cloud. The system logs events such as notifications defined in the “Actions” section, as well as the history of the controller’s connections and disconnections from the network. This feature provides access to the full operational history of the device at any time, even when the controller is currently offline.
- After completing the WiFi network configuration, you can disconnect from the device’s network and connect your phone or tablet directly to your home WiFi network. Control via the wBox app will work the same as when your phone or tablet is connected to the device’s network. If you leave the local network, for example by leaving home or switching your phone to mobile data, the wBox app will indicate this as “Remote Mode”. In this case, you will have access to the device’s data, but for security reasons, the settings options will be unavailable.
- In the “Service Connection (AP)” section you can change the name and set a password for the WiFi network broadcast by the device. Keep in mind that changing the network name or password may cause an immediate disconnection from the device after clicking the “Save” button, so you will need to reconnect to the WiFi network.
- It is also possible to completely disable the access point broadcast by the device. To do this, move the “Access Point” slider to the off position and confirm your choice by clicking the “Save” button.
- **Warning!** If the controller does not have a stable connection to the WiFi network (“WiFi Client Status: CONNECTED”, with no error warnings), it will not be possible to re-enable the access point – in this case, the only solution is to reset the controller to factory settings. Disabling the access point is recommended only after the controller has been fully configured and you have confirmed that the entire system is functioning correctly.

4 DEVICE SETTINGS

- On the main control screen, which displays icons representing the lock status, screen timeout, and the number of configured devices, navigate to the device settings (gear icon in the top right corner).
- In the “Name and Icon” section, you can change the default device name displayed in the wBox app. This allows you to assign a custom, more descriptive label, for example: “Main Panel,” “Kitchen Panel,” “Sauna Control,” “Office,” “Wellness & Spa Area,” etc.
- In the “Device settings” section, you can turn off the buzzer sound or change the screen brightness within a range of 0 to 100%.
- There is also a “Screen Lock Mode” tab. Three options are available: “Disabled” (default), “Manual”, and “Automatic”. Selecting the “Disabled” option completely deactivates the panel lock function. “Manual” or “Automatic” mode adds a new button to the control screen – it appears on the slide-out tab after pressing the “three dots” located on the right side of the screen, allowing you to manually lock the panel and require a PIN entry at any time. The “Automatic” option activates the lock screen every time after screen timeout. In the “Lock PIN” tab, you can view the current PIN code and change it. The code can consist of 4 to 6 digits (the default PIN is: 1234).
- The last tab, “Screen timeout”, allows you to change the time after which the screen will go blank. The available range is from 10 to 3600 seconds (1 h).

5 ADDING DEVICES TO THE PANEL

- The panel allows you to control BleBox devices and display their data, such as temperature, humidity, or energy consumption. A list of devices supported by the panel is provided below:

The list of devices supported by the panel can be found at the end of the manual.

- Navigate to settings by clicking the gear icon in the top-right corner of the screen, then select the “Panels” tab. This section is initially empty – to add a new panel, click the “Create first panel” icon located in the center of the screen. If panels have already been added, a “+” icon will appear in the top-right corner; tapping it allows you to add another panel.

- When adding a panel, select “Device panel” in the “Type” tab, and then go to the “Settings” tab.
- Next to the “Select device via” field, click the edit icon to display a list of two available options. Selecting the “Select from device list” option will make the “Select device” button appear. Pressing it will display a list of supported devices assigned to the account. If a device is not visible, it means it is either not supported or active filters need to be disabled (e.g. “active home”). After selecting the correct controller, a verification process will check if local communication with the selected device is possible.
- If a communication verification error occurs while the device is located in the local network, the “IP Address” option should be used. This situation may occur in large networks that use a subnet mask broader than the standard one (e.g., covering more than the last octet). After selecting this option, a field will appear where the IP address of the added controller should be entered. Finally, confirm the changes by clicking the “Save” button.
- **Warning!** All controllers must be located within the same local network, and the “wireless client isolation” (AP Isolation) option must be disabled in the AP/router settings. Additionally, selecting the “IP address” option should be preceded by reserving (locking) the IP address of the added controller in the router settings.
- The added controller will appear in the “Panels” tab. The visible order of the devices corresponds to the order shown on the panel screen. Pressing the arrows icon allows you to change this order. From this tab, it is also possible to modify the settings of the added panels or completely remove them.
- In the “Panels” tab (top-right corner) as well as on the main screen of the wBox application (at the bottom), the number of configured devices is displayed. The maximum number of devices that can be added to a single panel is 10.

6

SCREEN OPERATION

- On the left side of the screen, there is a list of added devices, which can be scrolled using a gesture (up/down) or by using the arrows located at the top and bottom of the visible list.
- Selecting a device from the list will display the most important measurement information or a panel with the most important control functions of that device. Advanced control options are available only in the wBox application. Some controllers offer more than one control panel (e.g., wLightBox). To navigate between them, you can use the arrows (left/right) next to the controller name or swipe the screen using a gesture.
- Selecting a device from the list will display the most important measurement information or a panel with the most important control functions of that device. Advanced control options are available only in the wBox application. Some controllers offer more than one control panel (e.g., wLightBox) – to navigate between them, you can use the arrows (left/right) located at the top next to the device name or swipe the screen using a gesture.

Available Colours



TECHNICAL SPECIFICATIONS

supply voltage	12 - 24 V DC
power consumption in idle mode	< 1 W
maximum energy consumption	< 4 W
protection type	short circuit, reverse polarity
power connection	integrated cables 2 x 0.5 mm ² , 15 cm long
screen size	5.0"
resolution	800 x 480 pixels
matrix type	IPS (glossy coating)
panel type	capacitive, multi-touch
brightness	manually adjustable
screen saver	automatic dimming; configurable time
screen lock	automatic or manual; unlocked with a configurable PIN; can be disabled
touch signal	haptic (vibrations when touched) and sound (built-in buzzer)
mounting method	flush/recessed installation - the screen is glued into the mounting hole using integrated self-adhesive tape
accessories/other mounting methods	framePanelM - surface-mounted frame, mounted to a wall or electrical installation box Ø 60mm
housing	front made of tempered glass; back of the screen covered with a metal cover; control electronics in a plastic cover

available colours	white, black
dimensions	134 x 90 x 12 mm
protection level	IP20
Operating temperature	from 0°C to +40°C
humidity	from 20% to 80% RH (no condensation)
operating system	none - dedicated firmware
maximum number of supported BleBox devices	10
way of communicating with devices	local Wi-Fi network (the panel and the controlled devices must be in the same local network)
API	open https://technical.blebox.eu/
communication standard	µWiFi, compatible with WiFi, 802.11 b/g/n
radio frequency	2.4 GHz
transmission type	bi-directional, encrypted
mode	direct connection (as Access Point), Wi-Fi connection via a stan- dard router, connection with access from any location in the world (requires only access to the Internet)
encryption	WPA2-PSK and authenticated encryption with associated data (AEAD)
compatible devices and systems	iOS (e.g. iPhone, iPad), Android, macOS (ARM processors labeled M1 or newer)

ADDITIONAL INFORMATION

FIRMWARE UPDATE

To update the controller's firmware, connect it to your home WiFi network (see the "WiFi Connection Settings" section) with Internet access. Then go to the settings, to the "Details, Update, and Help" section, and click the "Check for Update" button. If a newer version is available, the button will change to "Download New Firmware." Click it and wait approximately 1 minute, without closing the interface or performing any other actions. The device will download the latest firmware and then restart. The device ID, hardware version, and firmware version can be viewed in the device details.

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

Before contacting our service, if it is possible, prepare the "Service key" of the given controller available in its settings, in the "Details, update and help" tab. By clicking the icon, the key will be copied to the phone's clipboard. Prepare also the "Installation key" of the wBox application, available in the main application menu, in the "Settings" tab.

Factory reset manual is available at:

<http://blebox.eu/start/reset>

The controller reconfiguration manual is available at:

<http://blebox.eu/start>

Warning: Restoring factory settings resets the controller configuration but does not unlink it from the user accounts it is assigned to. If the owner (the first user who added the device to their account) removes the controller, it is removed from all other users as well.

To remove the controller from your account in the wBox app: open the main menu, go to "Manage devices", select the controller, and click "Remove device." Alternatively, sign in to portal.blebox.eu, go to "Devices," select the controller, open "Actions" (top right), and click "Remove device." If you are not the owner, this removes the controller only from your account.

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

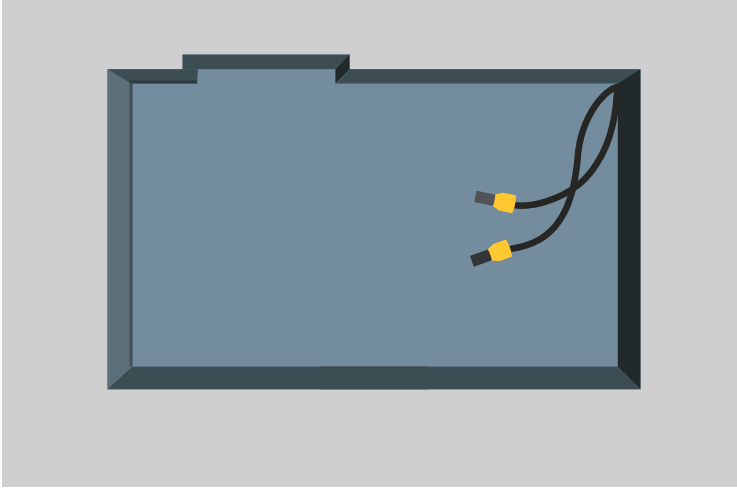
made in Europe

Electrical connection diagram

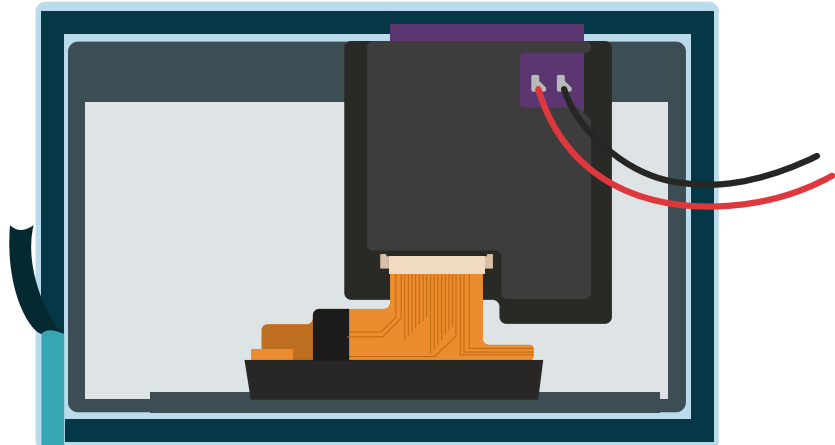


Recessed mounting diagram

1. Connect the screen cables to the power supply



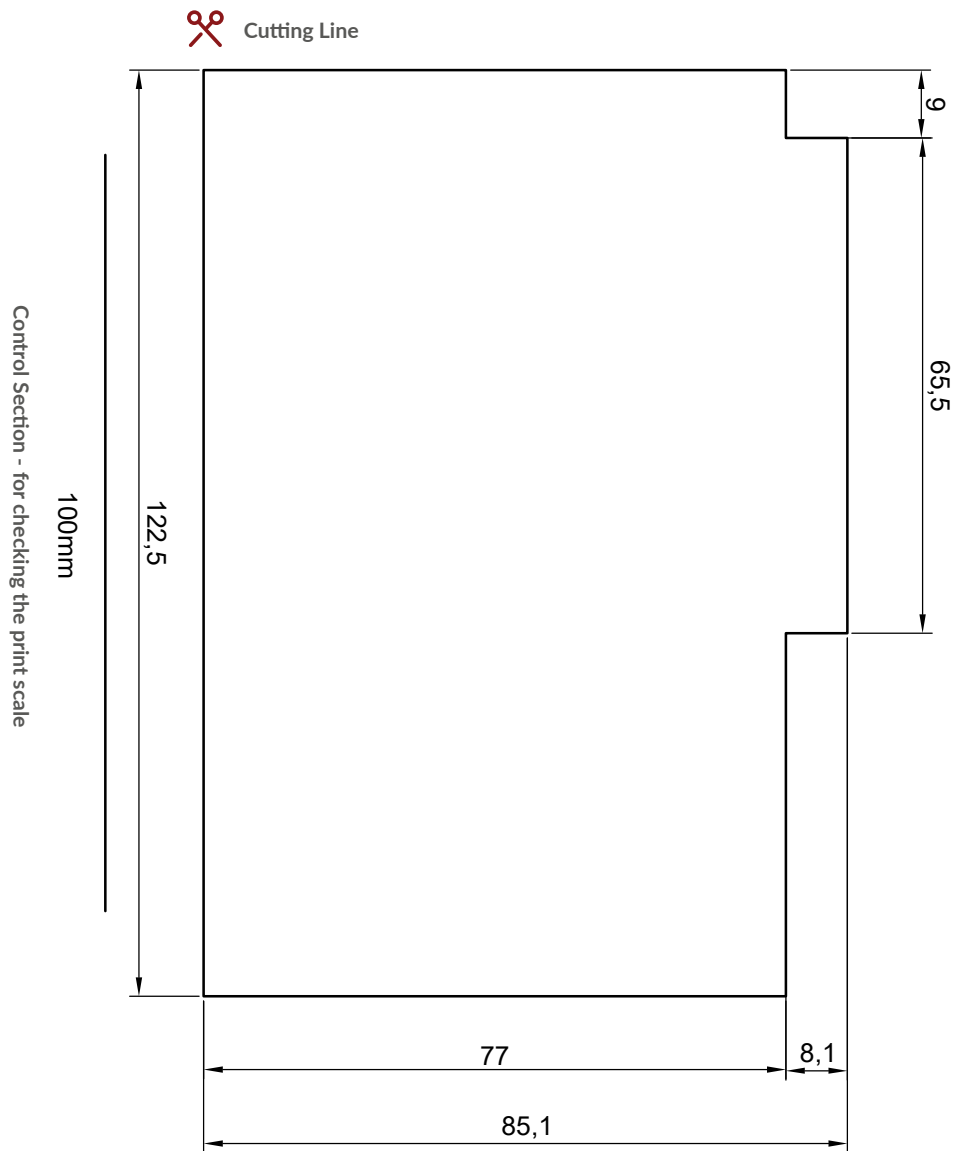
2. Peel off the protective film from the mounting tape



3. Place the screen in the prepared hole

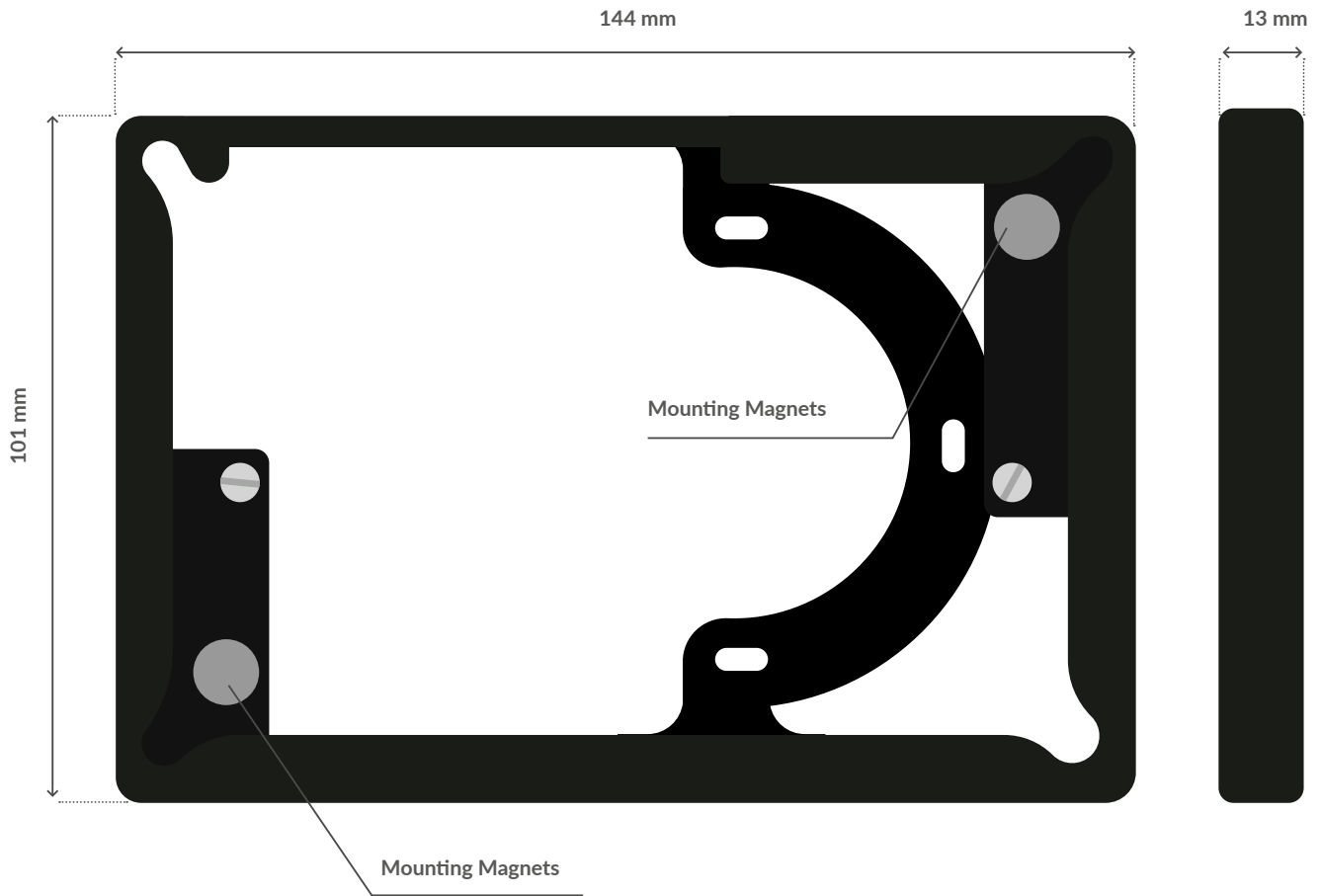


Recessed Mounting Template



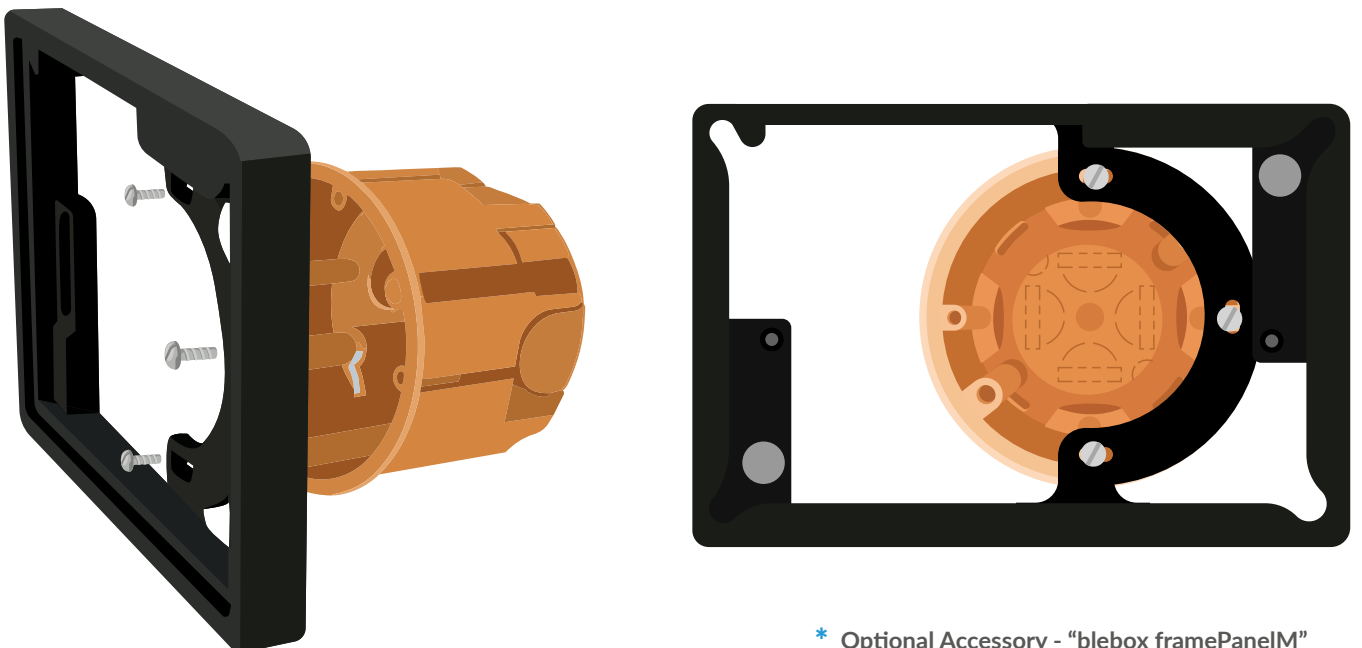
Surface Mounting Diagram

1. Dimensions and Description of the framePanelM Accessory



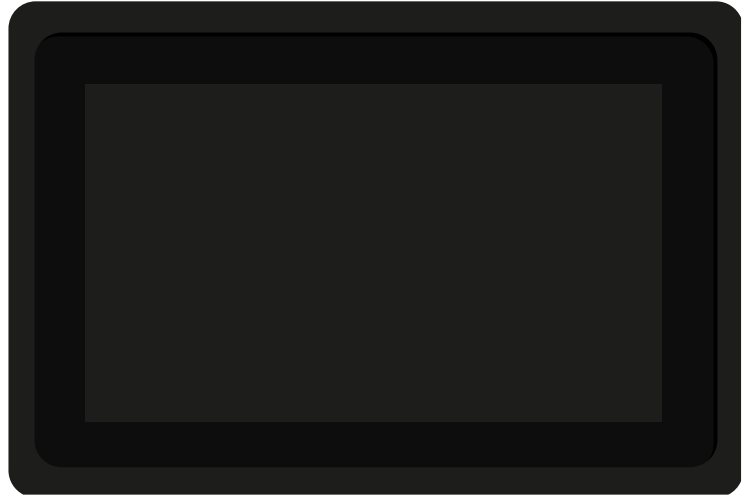
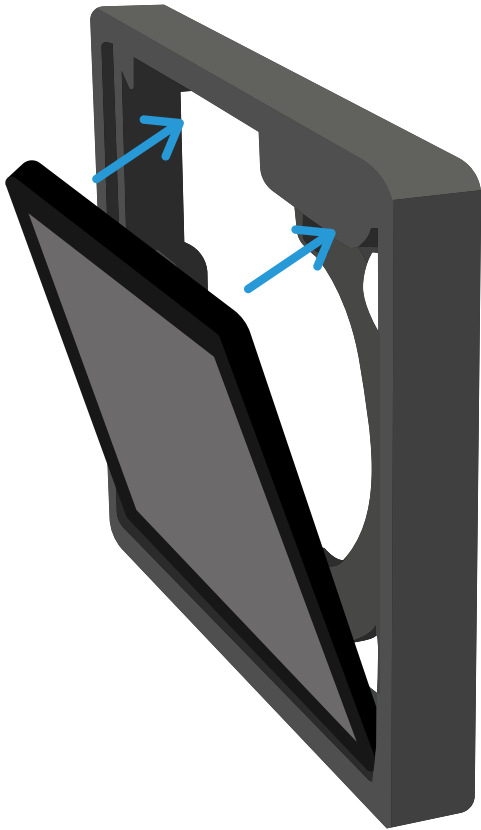
* Optional Accessory - "blebox framePanelM"

2. Mounting the framePanelM to a Ø 60mm electrical box



* Optional Accessory - "blebox framePanelM"

3. Mounting the controlPanelM to the framePanelM frame



* Optional Accessory - "blebox framePanelM"