



zenpro
SmartControl



Manual

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1. Device description

1.1 Technical data

DC Input	12 V DC
Power Consumption	1,6 W
Interfaces	Wi-Fi, Ethernet, ISM 433,92MHz
Battery to sustain clock	Battery CR1220
Casing protection level	IP20

Device description

Zenpro SmartControl Central Unit is a modern controller for roller shutters and other devices working in 433,92MHz frequency through mobile devices and PC. Zenpro expands the possibilities of the system by grouping of the devices, time events and allows for remote access through Internet.

1.2 Package contents



SmartControl
Central Unit



Power supply 12VDC



Antenna 433MHz

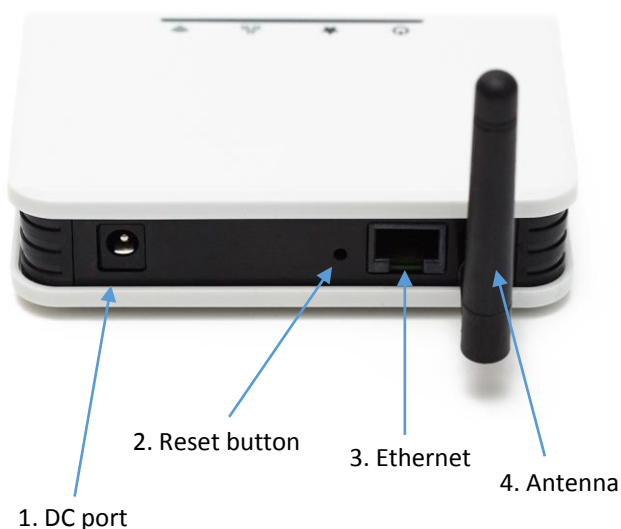


Ethernet
Cable



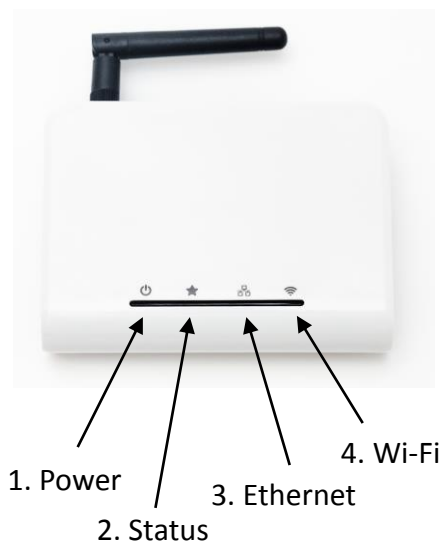
Device manual

1.3 Back Panel



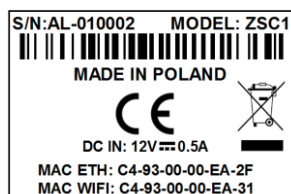
- 1. DC Port** – place where the power supply is connected. Supply voltage of 9-12 VDC is allowed.
- 2. Reset** – one short press of the reset button resets the Wi-Fi settings to default, holding the button for 5 seconds brings back the device to factory settings.
- 3. Ethernet connector** – allows to connect the device to LAN network or home router through Ethernet cable.
- 4. Antenna connector** – here connect the antenna provided in the package. The antenna is responsible for communication in the 433MHz band.

1.4 Led diodes on front panel



- 1. Power** – the diode is on when proper power supply is connected to the device.
- 2. Status** – the diode is on while the communication in 433MHz band takes place and provides additional status information.
- 3. Ethernet** – diode is on when the device is connected to the LAN through Ethernet cable
- 4. Wi-Fi** – diode is on when the Wi-Fi interface is on or the device is connected to the local Wi-Fi network.

1.5 Nameplate – serial number and MAC addresses



On the bottom of the device you can find a nameplate with following information.

- Device serial number example: S/N: ZN-010002
- MAC address of the Ethernet interface
- MAC address of the Wi-Fi interface

1.6 Modes of Work

A – The device provides it's own Wi-Fi network

- Central Unit provides own Wi-Fi network with SSID „SmartControl_SerialNumber“
ex. SmartControl-ZN-010325
- Default mode of work
- Allows to control of the devices without usage of the external router
- The device can act as a home Wi-Fi router
- No remote access, because lack of the Internet connection
- The „SmartControl“ Wi-Fi network is not encrypted by default. WPA-PSK2 encryption can be turned on in the mobile application in the settings tab.



B- The device is connected to home router through Ethernet cable

- The device is connected to the router through Ethernet cable
- Simplest way of configuration
- We can log into home Wi-Fi network to connect to the Zenpro device
- The „SmartControl“ Wi-Fi network may be turned off in the settings
- Remote access available



C – The devices connects to home router through home Wi-Fi network

- Central Unit is connected to home Wi-Fi network
- Allows for optimal placement of the device in home for maximum range of the 433MHz interface.
- Detailed description in chapter 4.5



2. First usage

2.1 Device initialization



1. After connecting the device to power supply, the Power diodes should be on. The status diodes will be blinking until the device will finish booting.



2. After approximately 60 seconds, the status diode will stop blinking. The device is ready to work.

2.2 Downloading Zenpro SmartControl mobile App

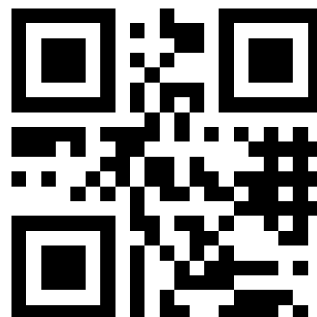
You can download the Zenpro SmartControl from the Google Play or the AppStore.

Type in the store browser: „Zenpro SmartControl“

Or use the QR-code below:

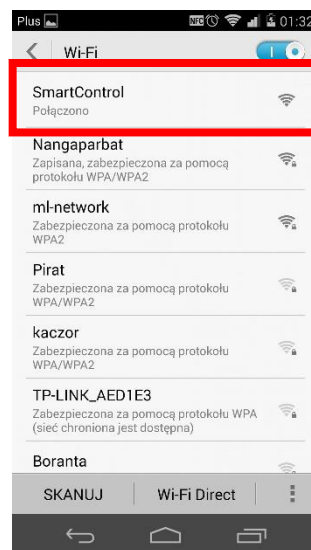


ANDROID

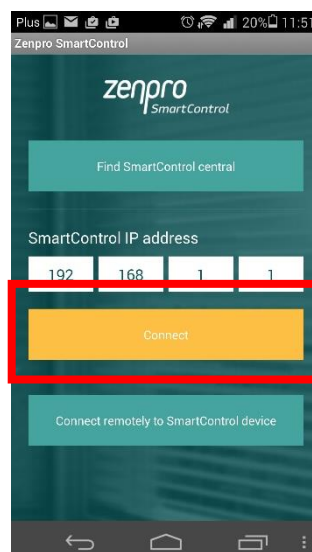
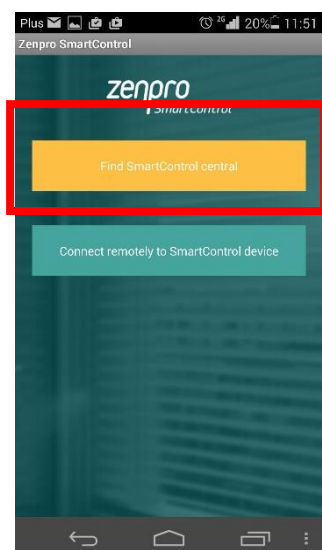


iOS

2.3 Connection through Wi-Fi network provided by the Zenpro SmartControl device

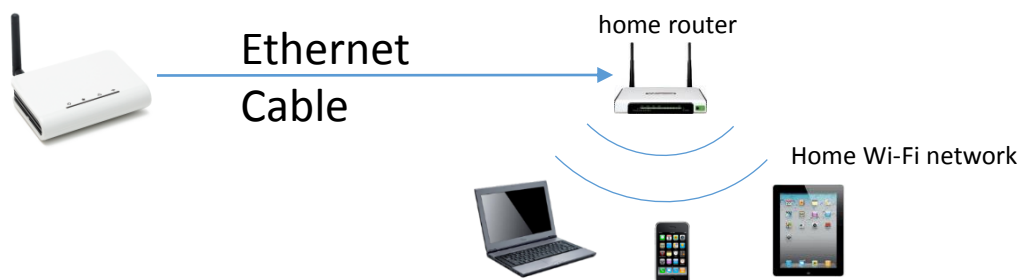


After finished initialization (when the status blink stops blinking). The device provides own Wi-Fi network with SSID „SmartControl_SerialNumber”. Using the mobile device (Smartphone or Tablet) we open the device settings , pick up the Wi-Fi settings and display the list of available Wi-Fi networks. An unencrypted Wi-Fi network „SmartControl_SerialNumber” should appear. Connect to the SmartControl network and then open the downloaded Zenpro SmartControl mobile App.

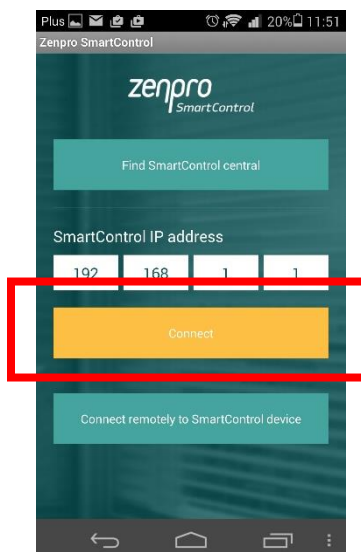
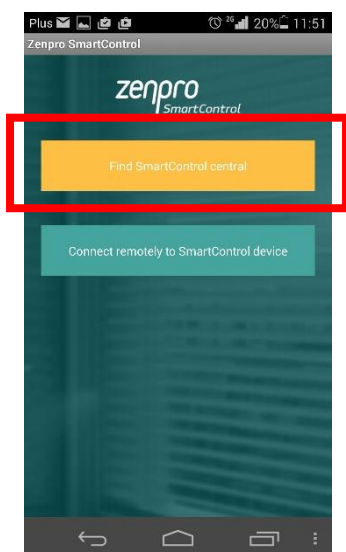


The app will display configuration screen. Press the search button to find the Central device IP Address. After successful connection tap the „Connect” button.

2.3 . Connection to home router with Ethernet cable

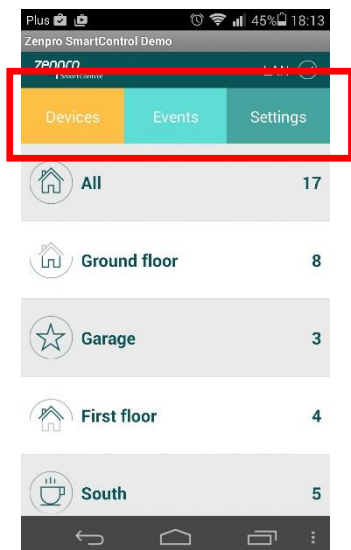


1. Connect the Ethernet cable provided with the device to the port on the back of the device and to the home router.



2. Next connect your mobile device to home Wi-Fi network (don't use the „SmartControl” Wi-Fi network). Turn on the Zenpro SmartControl mobile App a use the „Search” button. After successful search, type the „Connect” button – the device is ready to use.

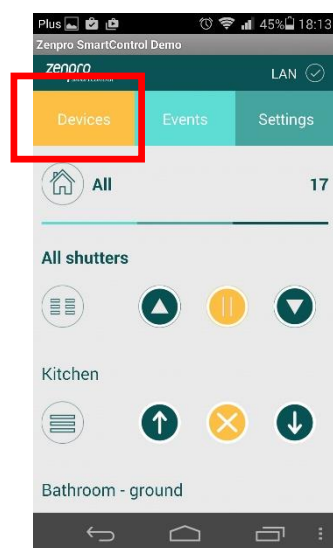
3. Mobile App – view description



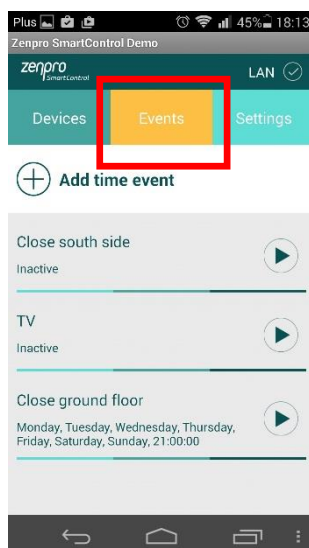
1. Mobile application has three main views.

- **Devices** – allows to control the devices and groups of the devices added to the system.
- **Events** – configuration, adding and running time events
- **Settings** – allows to change the device settings like Wi-Fi and remote access settings, and add devices and groups of devices into system.

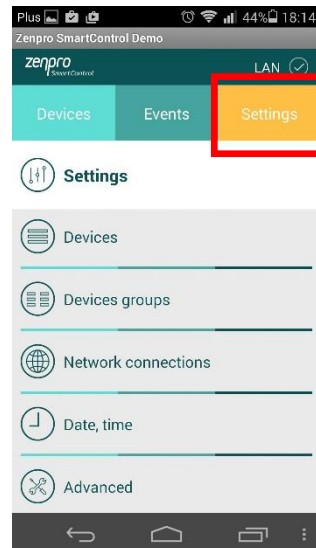
2. Switching between screens can be done by swiping the screen from side to side or pressing the tabs.



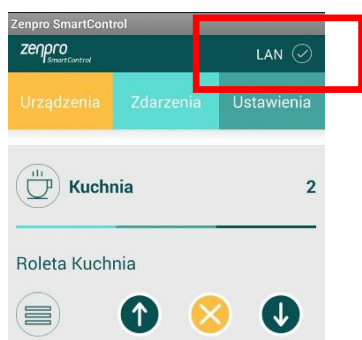
Devices



Events



Settings



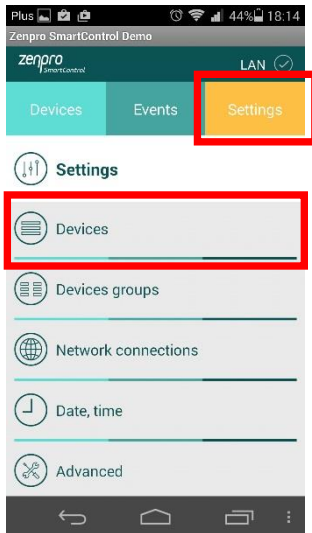
Status bar

Gives information about the Central Unit status.

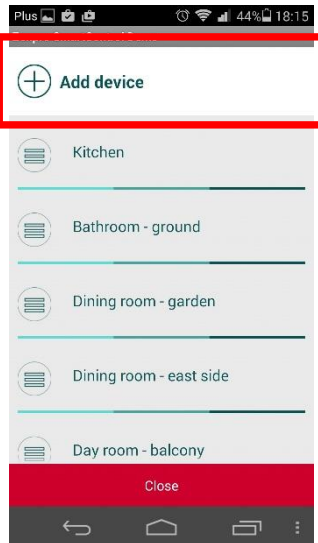
- **LAN** – device is connected to LAN
- **NET** – connection through Internet
- **OK** – the command was successfully done
- **Work** – The mobile device is waiting for a confirmation from the Central Unit.

4. System configuration

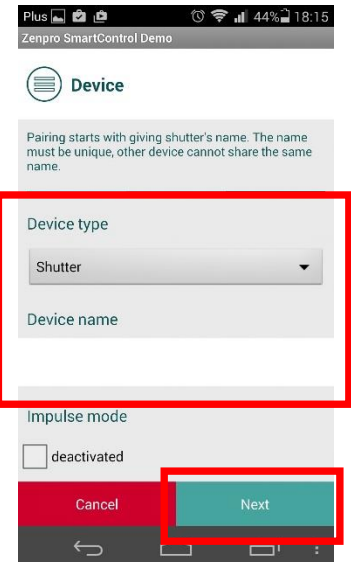
4.1. Adding devices to the system



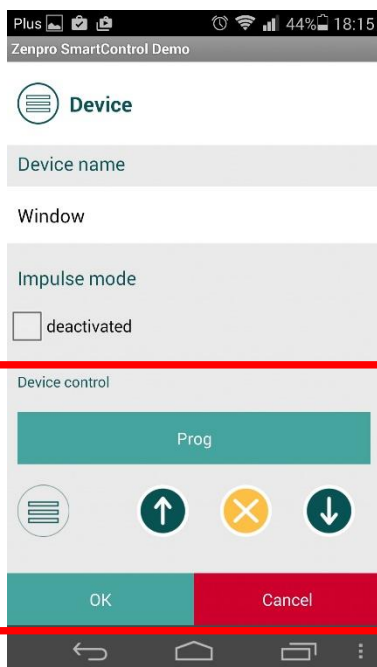
Go to „Settings” tab, then „Devices”.



Pick the „Add device” option



Choose the type of the device you want to add the type in the name and use „Next” button.



The function button will appear on the screen. The buttons works similar to buttons on the traditional remote control. The device we would like to add to the Central Unit has to put in to programming mode with use of the traditional remote or by switching off and on the powers supply. Next we use the buttons in the mobile app the same way we use traditional remote we would like to add.

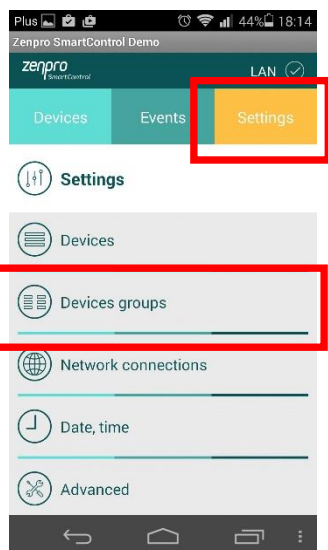
Example:

For radio controlled Roller Shutter motor, we take a traditional remote already added to the motor and we press the „PROG/P2” button. The motor will respond by emitting sound and moving up and down, press the „PROG/P2” button again – the motor will respond with sound. Then in the mobile app press the „Prog” button – motor will respond with sound and up and down move. The device is added.

You can verify whether the device was added properly with use of the buttons:



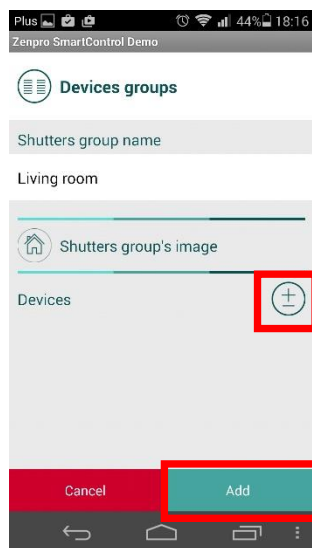
4.3. Adding groups of the devices



Go to „Settings” tab next „Devices groups”.



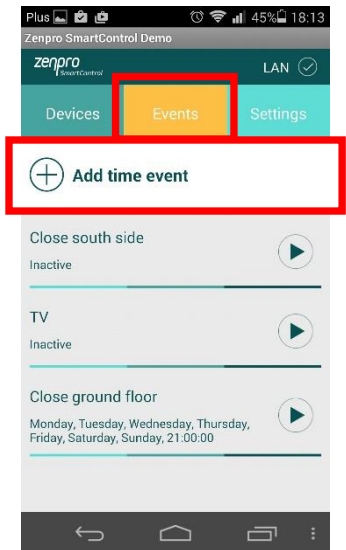
Use the „Add devices group” Button.




Type in the unique name of the group, choose the picture of the group and pick up the devices that will be added to the group (group can't be created without devices added). When finished press the „Add” button on the bottom of the screen. You can see your group in the „Devices” tab.

4.4. Creating Events.

In the „Events” tab you can define time events. Example: You want your window roller shutters to open at 7 am and close 10 pm automatically.



The screenshot shows the 'Events' tab selected in the app. A red box highlights the 'Add time event' button at the top of the list.



The 'Time event' configuration screen shows the following fields:

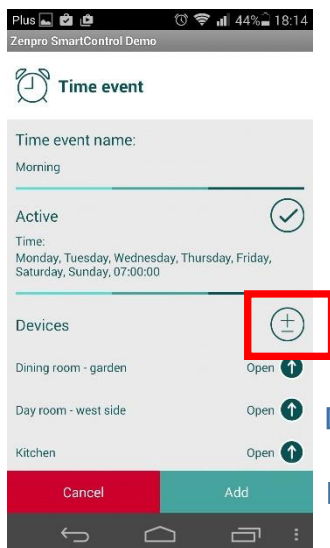
- Time event name:** Morning
- Active:** Checked (indicated by a checkmark icon)
- Time:** Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday, 07:00:00
- Devices:**
 - Dining room - garden: Open (up arrow icon)
 - Day room - west side: Open (up arrow icon)
 - Kitchen: Open (up arrow icon)

At the bottom are 'Cancel' and 'Add' buttons.

Annotations with arrows:

- Pointing to the 'Time event name' field: Type in a name for the Event.
- Pointing to the 'Active' checkbox: Check the Active option, and choose the time and days of the week when the device should work.

To add new Event to the „Events” tab and use the „Add Event” button.



The screenshot shows the 'Time event' configuration screen with the 'Add device' button (a plus icon in a circle) highlighted with a red box.

Annotations with arrows:

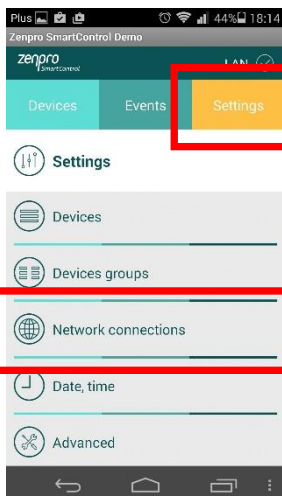
- Pointing to the 'Add device' button: The add devices which will take part in the Event.
- Pointing to the device list: You can pick the action for each device by pressing the small icon on the right.
- Pointing to the 'Add' button: To confirm press the „Add” button on the bottom.

4.5. Connecting the Central Unit to home Wi-Fi network.

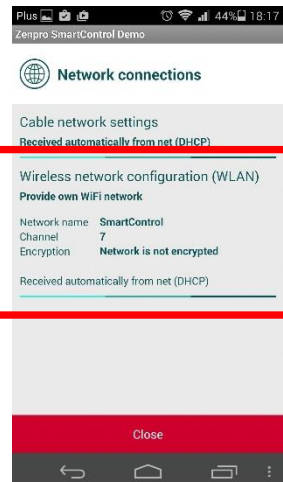


The device by default provides it's own Wi-Fi network. To connect the device to home Wi-Fi network and to the Internet, make following steps described below.

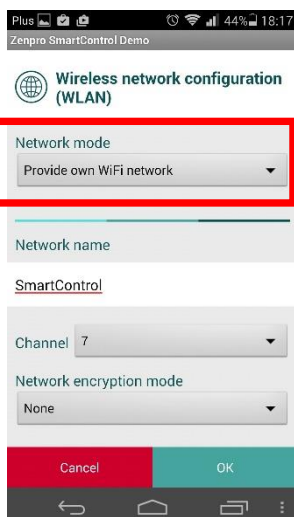
Changing the mode of work



In the „Settings“ tab go to „Network Connections“



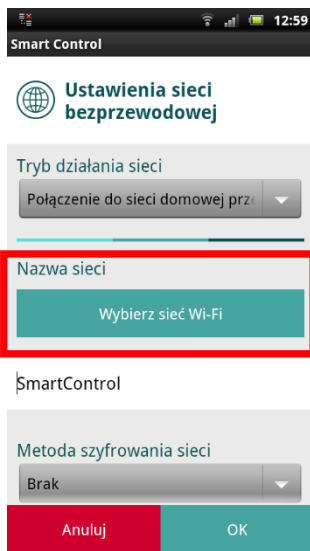
Next go to the Wi-Fi settings.



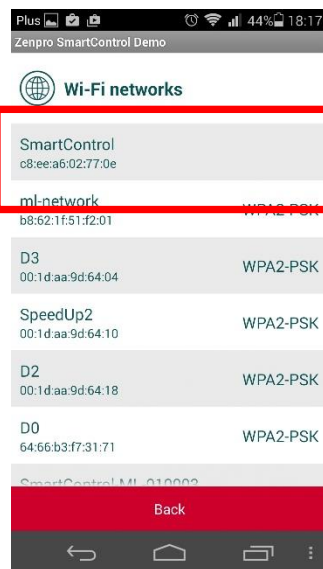
Change the mode of the Wi-Fi network.



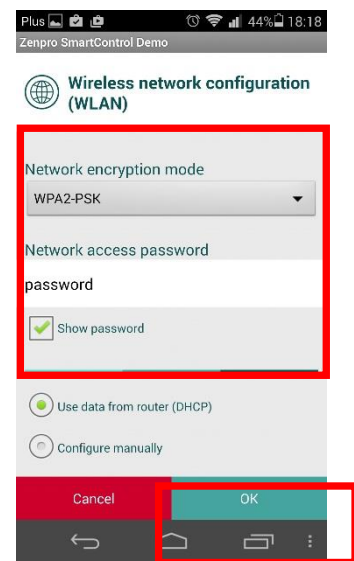
Check the „Connect to home Wi-Fi network“ option.



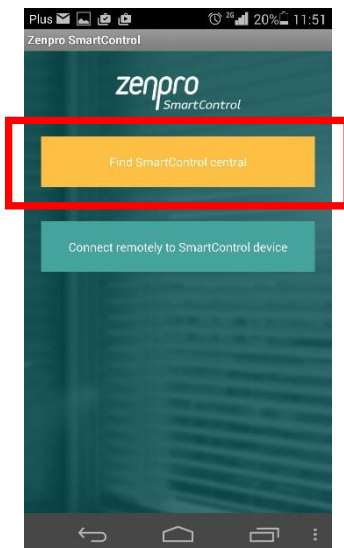
Pick up your home Wi-Fi network from the available list.



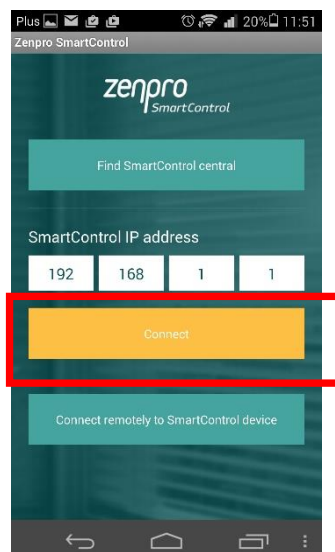
Next pick up the encryption method and type in password. When you finish use the „OK” button on the bottom.



At this moment the Central Unit will stop providing it's own Wi-Fi network and try to connect to the home Wi-Fi network. You need to connect your mobile device to the same home Wi-Fi network you connected the Central Unit.



After connecting to home Wi-Fi network use the „Search” button



After the Central Unit IP is found use the „Connect” button.

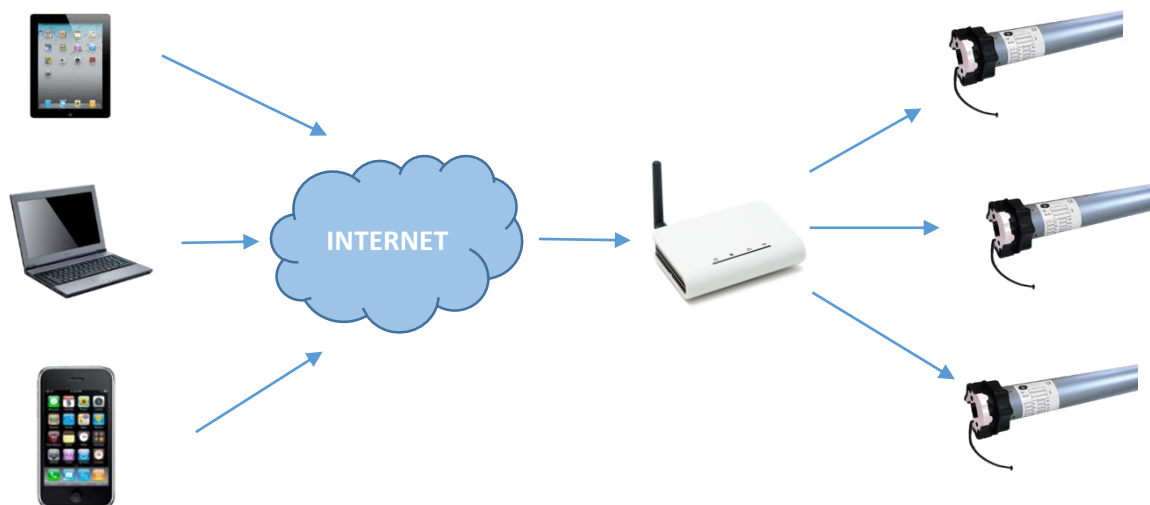
If the search for the Central Unit failed (ex. Wrong Wi-Fi password was typed) you can reset Wi-Fi settings and provide the „SmartControl” Wi-Fi network again by pressing the Reset button on the back of the device. Reset will be acknowledged by the blinking of the status diode.



Reset button

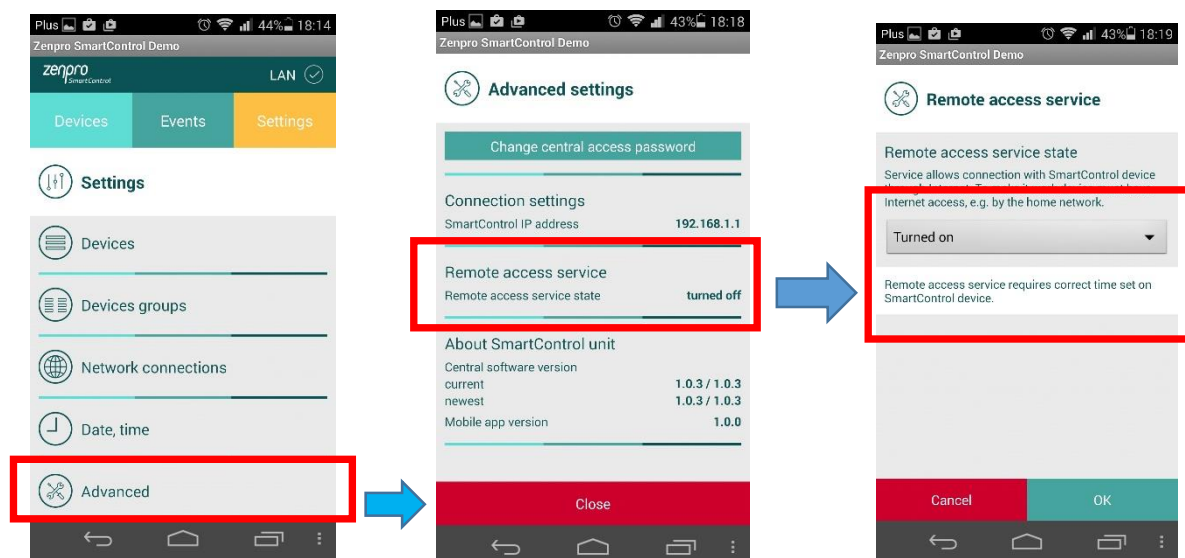
4.6. Remote access

Remote access service is used when the mobile device is out of reach of the home Wi-Fi network. To proper work of the remote access it's required that the device has to connection to the Internet through the home router.



Remote access requires:

- Internet access through home Wi-Fi/LAN network
- Proper time set up (due to SSL encryption certificates)
- Remote access service has to be turned on

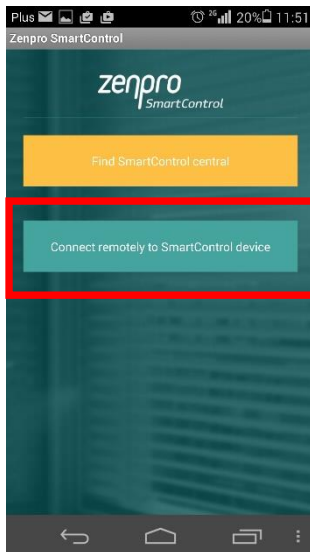


Go to the „Settings” tab, and then go to the „Advanced”

Go to the „Remote access tab”

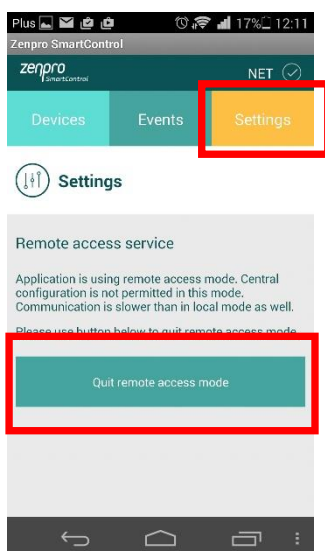
Check the „On” option.

Connection through the remote access



While you are away from your home Wi-Fi network, the connection screen will appear. Use the „Remote access” button. The mobile app will connect to the device through Internet.

Going back from remote access to local access

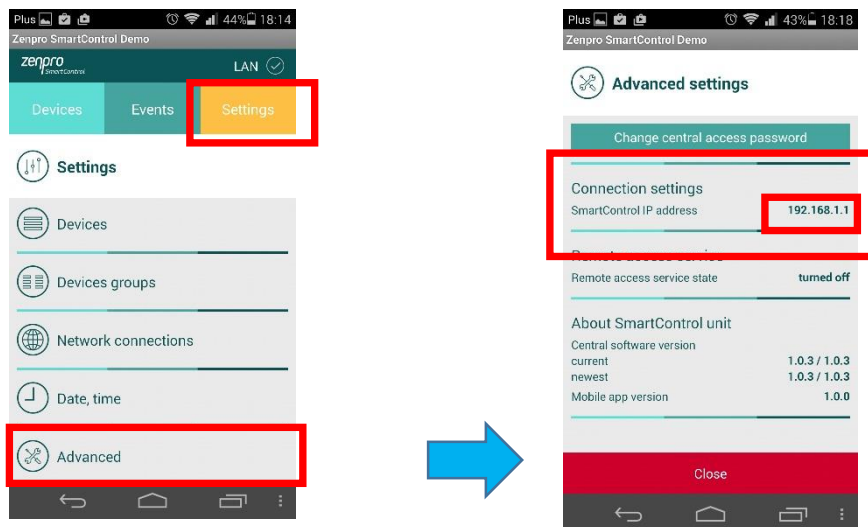


The remote access has some latency comparing to local access. To turn the remote access off and go back to local access go to the settings tab (settings are not showed in remote access mode). Use the „End the remote access” button.

5. Access through the PC web browser

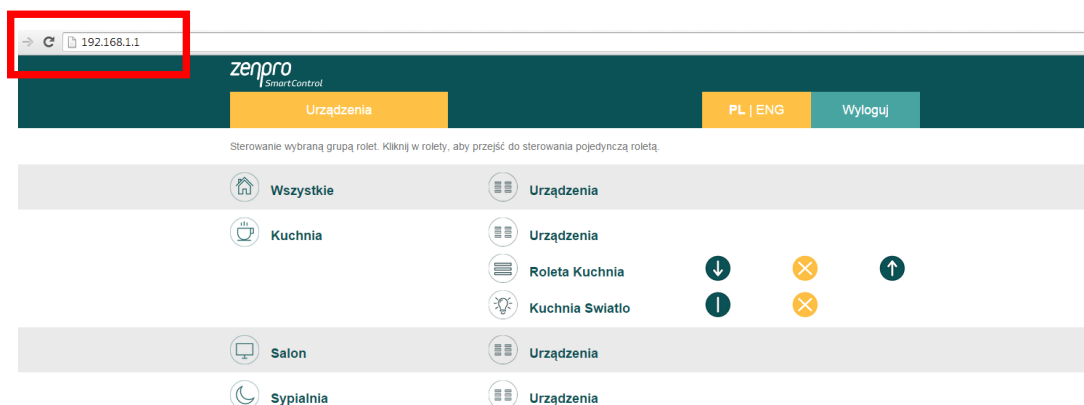
The Central Unit and the PC has to be in the same Wi-Fi/LAN network!!!!!!!

To control your devices through PC you need to know your Central Unit IP address in the local network. You can check it through mobile app.

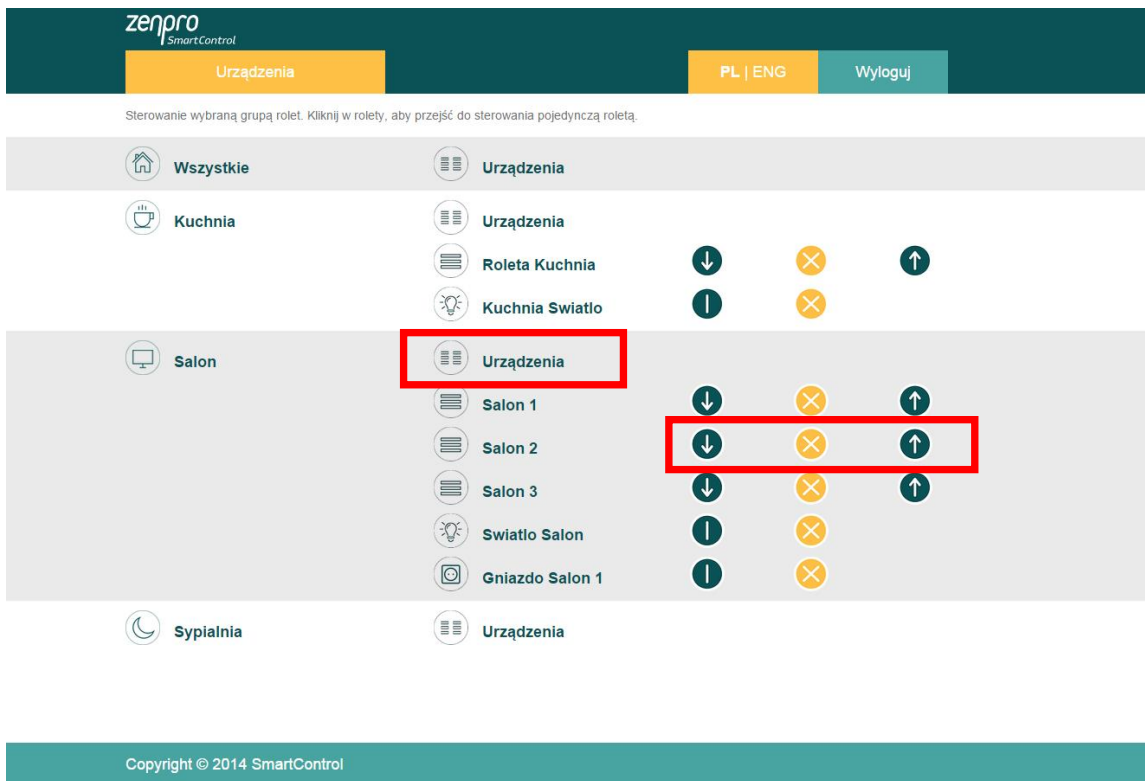


Go to „Settings” tab and then to „Advanced”

In the connection to the device tab IP address is displayed.



Type in the IP address in your web browser navigation bar. The PC has to be connected to the same network the Zenpro Unit is. SmartControl web page will appear.



You can control the devices by the „UP” „STOP” „DOWN” buttons. After clicking the Group name or icon devices added to the group will appear.

6. Physical Installation of the Device

- It's best to place the Central Unit in the center point of the home so the coverage of the 433MHz band will be biggest.
- The device can be placed on a desk, drawer or shelf. It can be also mounted to the wall with use of the mounting points on the bottom.

7. Safety precautions

1. Please get acquainted with the safety precautions before you use the device.
2. The device has to be connected mains consistent with parameters given in the manual.
3. Do not use the device while taking a shower or bath.
4. Do not place the device close to heat sources like heaters, radiators, chimneys, stoves and others.
5. Keep the device and accessories beyond the reach of children.
6. Do not cover the device. It's recommended to leave 10cm of space at sides of the device.
7. Before cleaning or maintenance unplug the device from mains. The device is not waterproof. Protect the device from dust, dump, water and other fluids.
8. Do not attempt to disassemble your device and try to repair it. Only qualified personnel should repair the device.
9. Do not place the device close to strong magnetic field, it can permanently damage the device.
10. Do not use the device in any areas with flammables and explosives.
11. Unplug the power cord during storms and thunders.
12. Do not use power supplies that don't meet safety regulations.
13. Protect the device from shocks and vibrations.