

433 MHz



In order to fully explore available functions of YOODA SMART CONTROL UNIT (YSC_UNIT) please take a moment and read this manual before using the device.
All devices work on 433 MHz frequency.

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1. Safety rules



1. Before connecting or starting control unit please read this manual.
2. Device needs to be connected to the internet according to specific parameters.
3. Control unit should not operate in places with high humidity (bathroom, sauna etc.).
4. Control unit should not be places next to sources of high temperature (radiator, fireplace, furnace etc.).
5. Control unit should not be placed within the reach of children.
6. Control unit should not be covered. It's recommended to leave at least 10 cm of free space over and on the sides of the device.
7. Before cleaning or conservation control unit should be disconnected from power source. Unit is not water resistant and should be protected from any liquids or any other potentially harmful substances.
8. Unit should not be opened. Do not attempt to repair the unit yourself - only manufacturer or authorized retailer can perform any modifications or repairs.
9. Control unit should not be placed next to a strong magnetic field, as it can cause permanent damage to the device.
10. Control unit cannot be operated in explosive areas or where it is legally prohibited.
11. To protect the unit during a thunder storm power supply should be disconnected.
12. Control unit should not be connected to power supply that do not met all technical requirements.
13. Control unit should be protected from vibrations and shakes.
14. Control unit needs to be protected with a password - see point 2.3.



This symbol found on the apparatus indicates that the apparatus must be placed in a separate collection facility for electronic waste and not disposed with household waste. Instead, it should be handed over to an applicable collection point for the recycling of electrical and electronic equipment.

Allowing for specialized collection point to handle used device will allow for raw materials to be recycled and will have positive impact on the natural environment.

2. YSC unit description

2.1 Technical information



1. Can control YOODA and CORTINO brand devices with smartphones, tablets and computers.
2. Allows to create and manage groups of devices.
3. Allows to create scenarios (combination of set actions to different devices) and determine the time of automatic activation.
4. Can generate own Wi-Fi network or work in local Wi-Fi network (wireless or by Ethernet connection).
5. Control unit can be set and controlled by dedicated app available for Android and iOS.
6. Encrypted network connection.

1. Interface:
Wi-Fi, Ethernet, ISM 433 MHz

5. Protection degree:
IP 20

2. Memory:
up to 255 devices

6. Dimensions:
110 x 80 x 27 mm

3. Power consumption:
1.6 W

7. Power supply:
Input: 230 V / 50 Hz
Output: 12 V DC lub 5 V DC
according to label on the control unit

4. Setting memory:
CR1220 battery

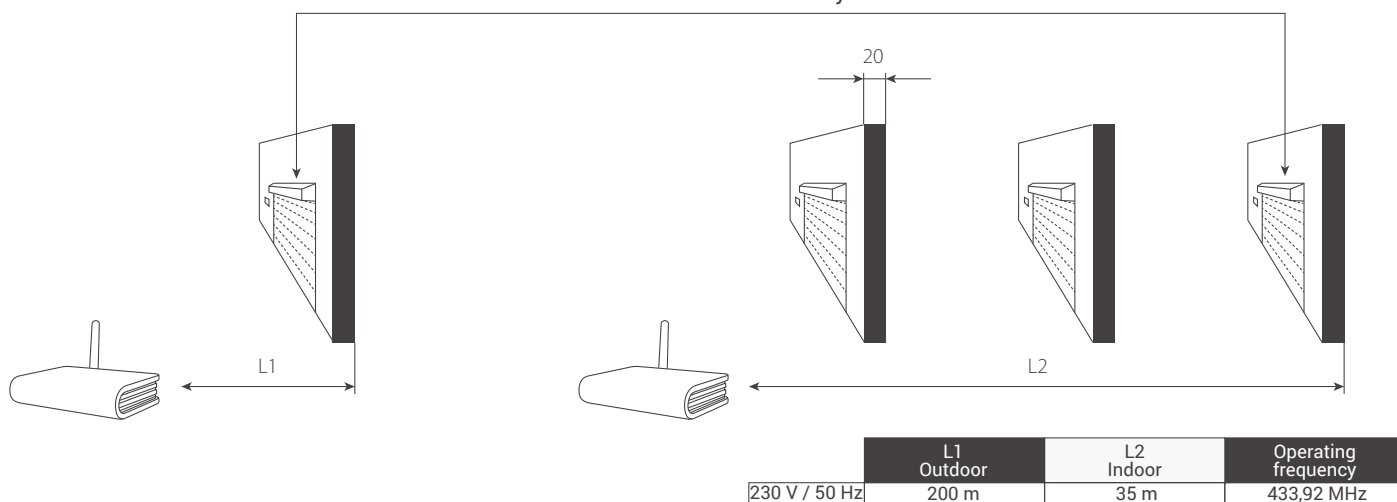


Warning! Voltage and current should correspond with parameters declared by the manufacturer. Not complying with this regulations may result in damaging the control unit.



Radio signal range is a variable value and can differ from declared values depending on conditions in which device operates. Possible sources of changes in range are building construction, interference caused by other radio transmitters etc.

Roller shutter with remotely controlled motor



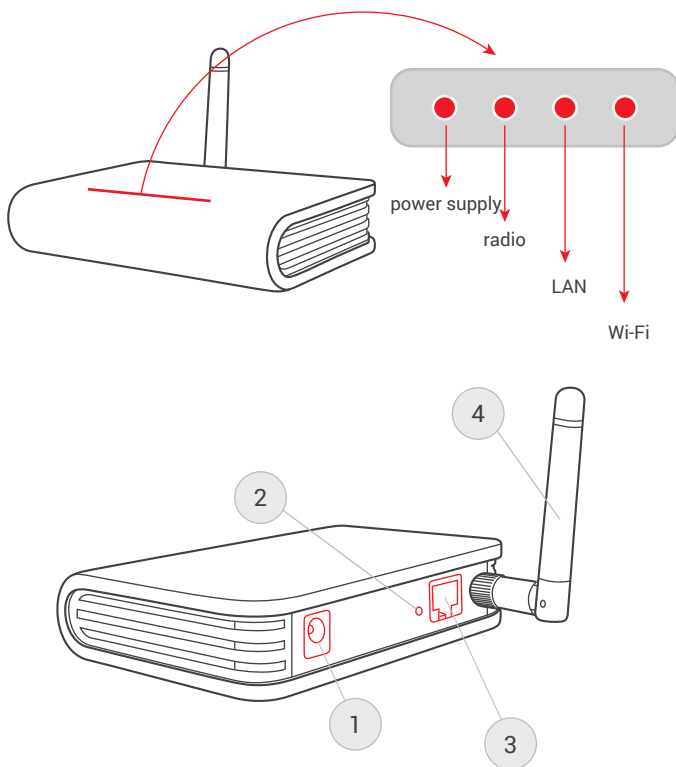
At the bottom of the control unit you will find rating label with detailed information:

- a) control units serial number S/N,
- b) MAC address of Ethernet and Wi-Fi interface,
- c) CE labelling,
- d) power supply.



2. YSC unit description

2.2. Construction



LED diodes (front):

1. Power supply
 - light up diode informs if the control unit is connected to power source.
2. Radio
 - diode lights up whenever radio is activated.
3. LAN
 - diode lights up when control unit is connected by Ethernet interface.
4. Wi-Fi
 - diode inform on work status of Wi-Fi interface.

Panel (back):

1. Power supply input
 - entry for power supply cable.
2. Reset button
 - pressing RESET button will result in deleting all Wi-Fi setting of the control unit; pressing and holding for 5 seconds will result in restoring factory settings.
3. Gniazdo Ethernet
 - allows to connect the control unit to LAN network or router by using Ethernet cable.
4. Antena
 - antenna should be bolted to the antenna connection; antenna works in 433MHz operating frequency.

2. YSC unit description

2.3 Working mode



YOODA SMART CONTROL unit can work in one of the three modes. Work mode can be changed after creating first connection of control unit through app: *Settings > Network connections > Wireless network connection*



Warning! Control unit in default settings does not require password for connection, which allows for unauthorised users to set connection and control programmed devices. For safety reasons we recommend setting control units password (see section 5.7 of this instruction). Please remember, that control unit password is independent from Wi-Fi network password and has to be set individually - these are two different passwords.

1. Control unit generates own Wi-Fi network

- This is the default mode, that activates after first startup.
- Allows to control programmed devices without the necessity to connect to other Wi-Fi network or to router.
- Control unit generates own Wi-Fi network named 'SmartControl-UnitsSerialNumber'
- instruction of connection can be found in section 3.3.
- Generated Wi-Fi network is unprotected. Encryption method, name of the network and password can be changed in the app: *Settings > Network connections > Wireless network connection*.
- In this mode distant remote control is possible if control unit is connected by Ethernet cable to the internet source (directly or by router).

2. Control unit uses existing Wi-Fi network

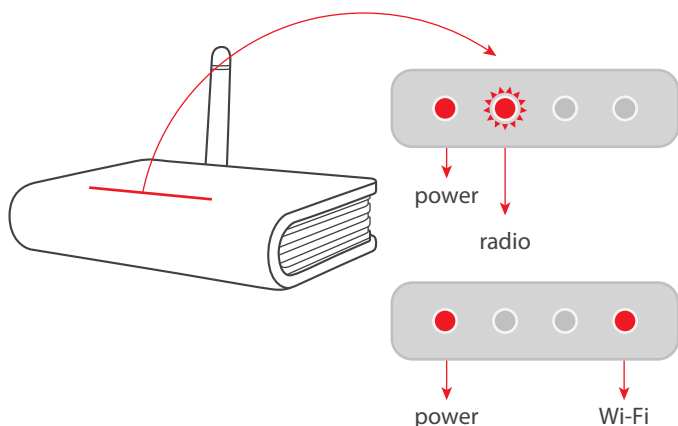
- Easiest way is to connect control unit to working router using Ethernet cable.
- To connect app on mobile device with control unit can be done by logging into local Wi-Fi network - see section 3.4.
- Other way includes connecting to control units Wi-Fi network - see previous paragraph.
- Network generated by control unit can be switched off.
- This work mode allows distant remote control – see section 5.7.

3. Control unit connects remotely to local Wi-Fi network

- This mode allows for control unit to be placed in the middle of the building so that optimal radio signal range can be achieved.
- Mode requires to set remote connection parameters of the control unit with local Wi-Fi network (see section 5.6.).
- Network generated by control unit can be switched off.
- This work mode allows distant remote control – see section 5.7.

3. First start-up

3.1 Initialisation



1. After unpacking the control unit mount the antenna and connect the unit to power source. 'Power supply' diode should light up steady as long as the energy supply is uninterrupted. 'Radio' diode will be flashing until device initialization is finished.

2. After about 60 seconds, when 'Radio' diode stops flashing, control unit is ready for work.

3. First start-up

3.2 Downloading app and changing language



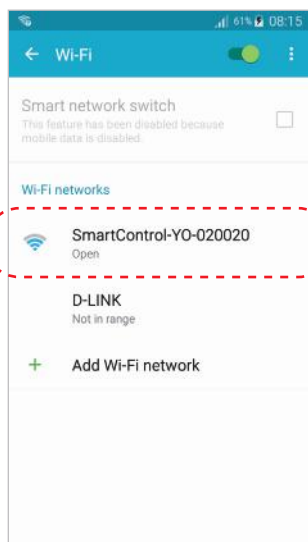
To operate control unit properly dedicated app needs to be downloaded and installed on the device. Using Google Play or App Store search 'yooda smart control' phrase or use QR code below.



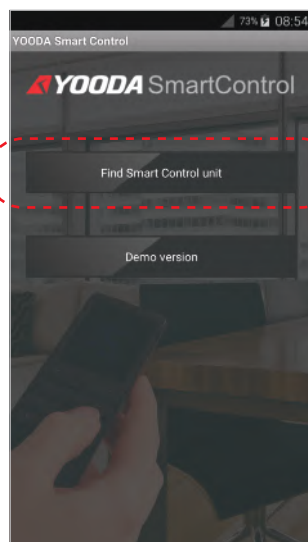
Language of the app can be changed. When app is started for the first time it will automatically set to the language of the device (or English, if it's unavailable). To change the language (in regular mode or in DEMO mode) go into 'Setting' and then 'Language'.

3. First start-up

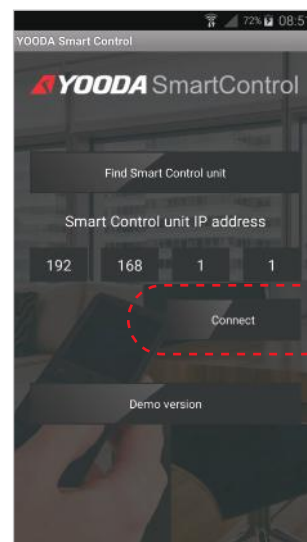
3.3 Connecting to Wi-Fi



After connecting control unit and finished initialization it will automatically generate own Wi-Fi network named 'SmartControl_SerialNumber'. Using mobile device (smartphone, tablet etc.) search and connect to unprotected SmartControl network.



After running the app, network configuration screen will appear. Press 'Find Smart Control Unit' for automatic IP address setting.



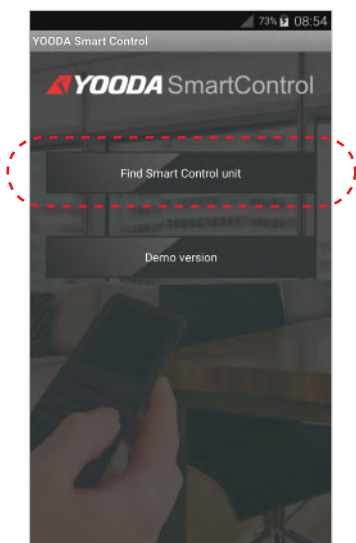
After finding control unit choose 'Connect'.

3. First start-up

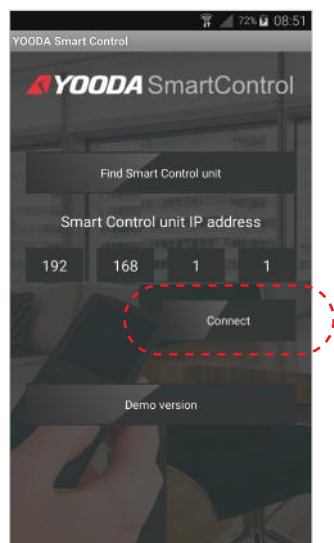
3.4 Connecting by Ethernet cable



1. Included Ethernet cable should be plugged into back panel of the control unit and to free output slot in working router. If your router's LAN is set to IP address: 192.168.1.x, then before connecting the ethernet cable, disable wireless connection in your control unit: Settings > Network connections > Wireless network configuration
3. To return to the default mode in which the control unit provide its own wireless network press briefly the "reset" button on the back of the unit



After connecting control unit to router by Ethernet cable run app and select "Find SmartControl Unit". Than choose Wi-Fi network generated by the router (not by the Smart Control unit).

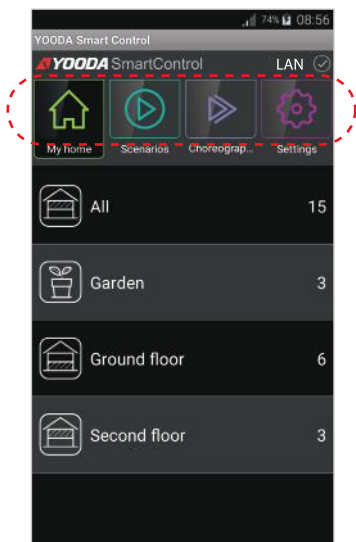


After successfully connecting to the network, control unit is ready to work.

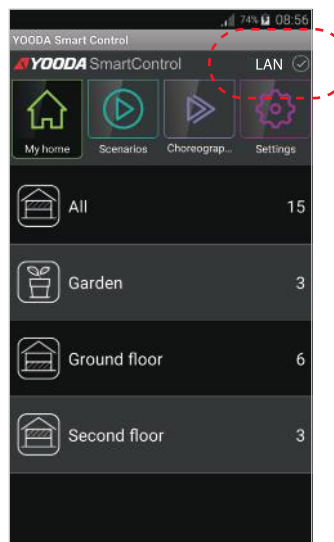
4. Mobile app - interface description



Due to the changes introduced in the system functions and various sizes of mobile devices presented screenshots are only illustrative.



App has 5 main tabs:
MY HOME
controlling devices and group of devices,
SCENARIOS
adding, editing and turning on created time scenarios,
CHOREOGRAPHY
adding, editing and turning on created choreography
SETTING
adding and editing devices, adding and editing groups of devices, changing control unit settings (work mode, connection settings, password) and changing language,
YOODA SHOP
Website with Yooda products



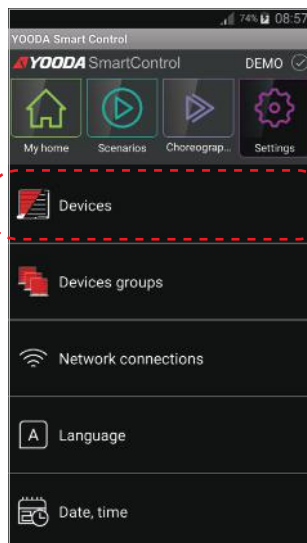
Status bar informs us on work mode.
LAN
control unit works in local network,
NET
remote access service, connection to internet,
DEMO
app is in demo mode,

5. Configuration and work mode

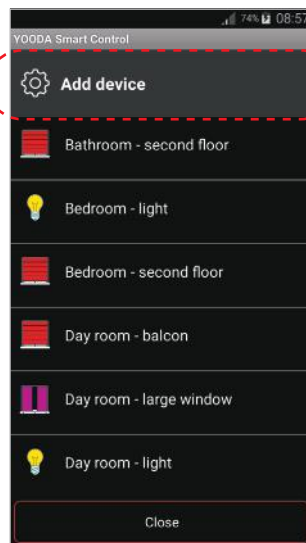
5.1 Adding devices



Information on how to add radio receiver can be found in instruction of that device.



In the 'Settings' tab press 'Devices'.



Tap 'Add device'.



Choose type of the device and specify its name, then press 'Next'.



Using programming button 'Prog' and controlling buttons add device using instruction of the radio receiver.

5. Configuration and work mode

5.2 Controlling devices

Controlling of the devices can be performed by using controlling buttons. There are 4 types of control depending on the device.

1. Standard control



Control is performed via three buttons – 'UP', 'STOP', 'DOWN'. This mode is best to control roller shutters or roller blinds, horizontal blinds, projection screen, roller gate etc

2. Horizontal control



Control is performed via three buttons – 'OPEN', 'STOP', 'CLOSE'. (e.g. curtains, awnings or pergolas).

3. On / off control



Device is controlled by two witches - 'ON' and 'OFF', e.g. lighting, power socket.

4. Step-by-step control



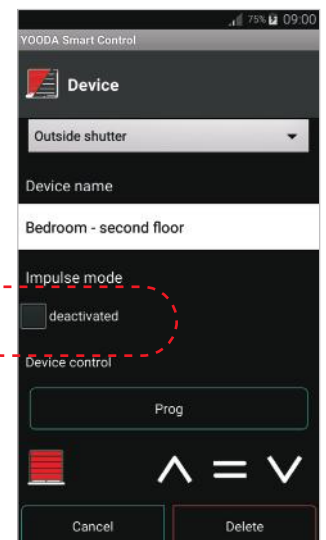
Device is controlled with a single switch, e.g. sectional garage door, up and over garage door, double-leaf garage door, sliding gate, garden watering system.

5. Impulse control

Some devices, such as roller blind and horizontal blind, can be controlled using impulse mode. Before choosing this type of control device needs to be set to impulse as it is described in its instruction. Activating impulse mode changes control buttons.



Control buttons will be sending amount of impulses equal to the length of uninterrupted time of button being pushed. Motor works as long as the button is being pushed. Pushing button longer than for 2 seconds will result in moving the shade to its limit position.



Recently performed action is marked in the app.



As radio receivers can be controlled with different devices with app, recently performed action may not represent the state of the radio receiver status.



Homescreen widgets are available for devices with Android system.

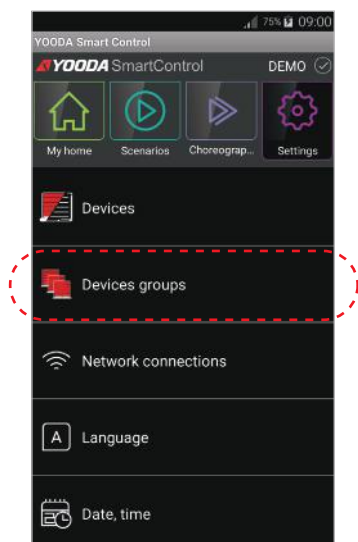
Widgets allow to control different devices even more easily without the need to run the app. Whidgets can automatically switch between local network and remote access service. You can control the size of the widget for your convenience - e.g. when driving into the garage less focus is needed to control the app.

To create a widget, hold your finger on the homescreen of your mobile device. Depending on your Android system version, add a widget from the popup window or open a list of available applications and go to the widgets tab. Click on the "YOODA Smart Control" widget and then select the device or scenario to be operated by the widget. You can create several widget for your favorite devices or scenarios.

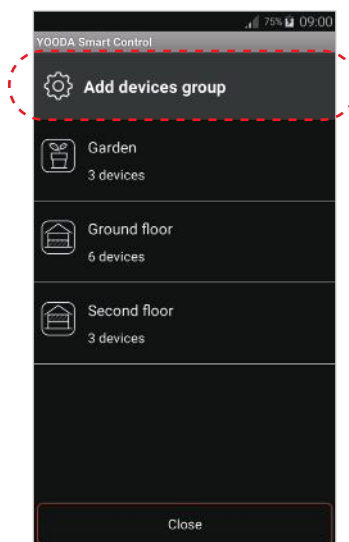
To change widget's size press and hold it for a while, than drag its borders.

5. Configuration and work mode

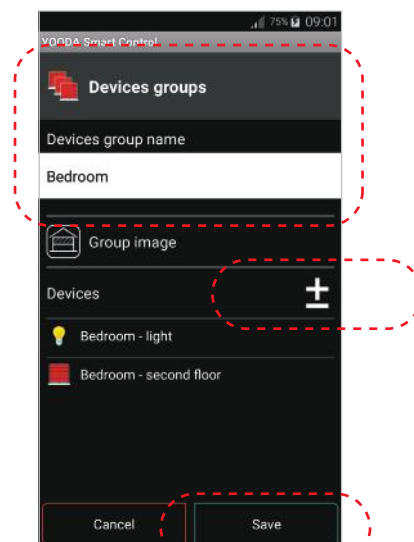
5.3 Creating groups



In the 'Settings' tab press 'Devices groups'.



Press 'Add devices group'.



Specify name of the group, select preferred image and add devices into the group. Select 'Save' to save the settings after configuration.

5. Configuration and work mode

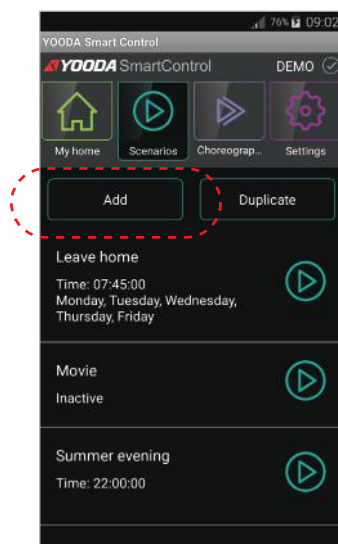
5.4. Creating and activating scenarios



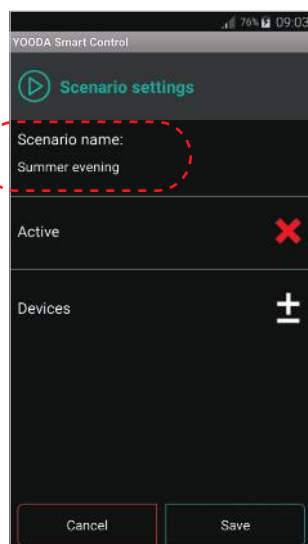
By creating scenario user selects different devices already added to the app and chooses its action when scenario is beeing run (e.g. roller shutter - close, TV - turn on, lights - turn off, etc.).



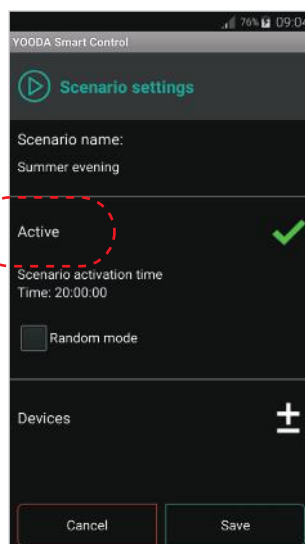
Scenario can be activated at any time **manually** or it can be started **automatically**, cyclically at a specific time, if it was determined and switched to **active**. For scenario to work correctly, accurate date and time has to be set for the control unit. Date can be set by choosing 'Date, time' in the 'Settings' tab.



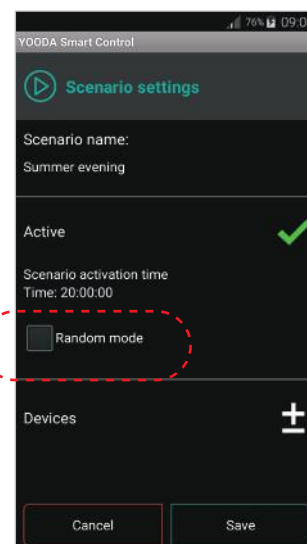
To add new action click 'Add scenario' in the 'Scenarios' tab.



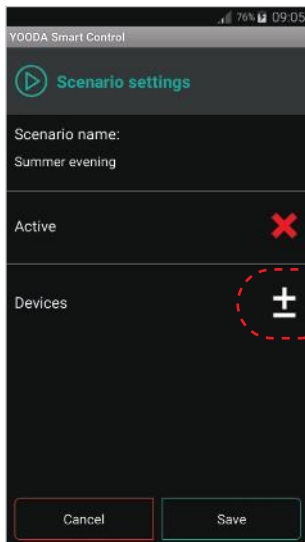
Enter name of the scenario.



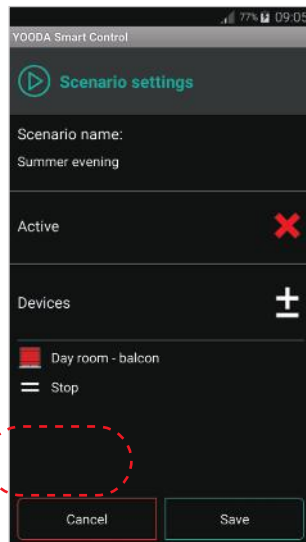
Activate scenario, then specify the time of when the event should work.



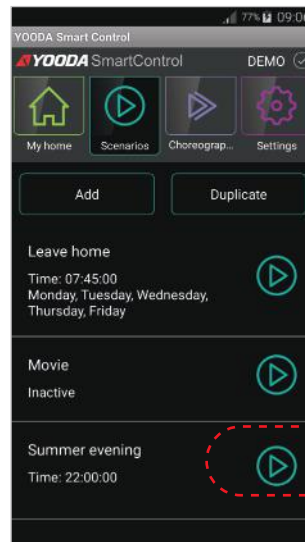
By selecting random mode, the active scenario will run at random time within ± 15 minutes of the set activation time.



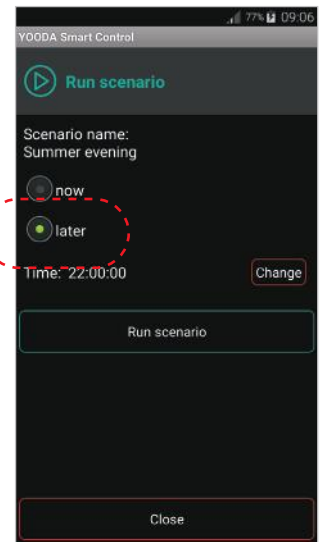
Add devices for the scenario.



After choosing devices specify its actions and save scenario by clicking 'Save'.



After creating new scenario it can be activated manually by clicking on the 'Play' button placed next to the name of the time event.



Manually by running the script, we can run it immediately or set a one-time automatic activation at a specified time (timer mode).

5. Configuration and work mode

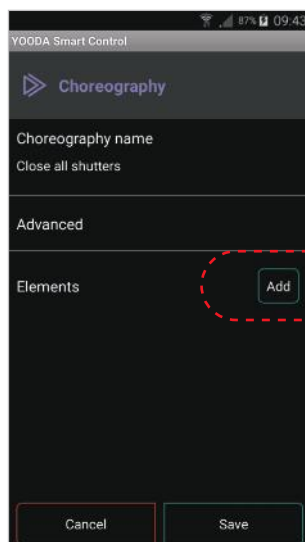
5.5. Creating and activating Choreography



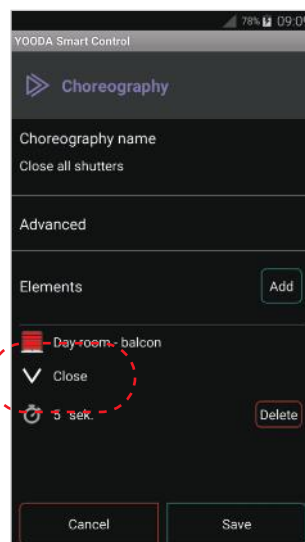
Choreography like a scenario allows you to run multiple devices. However, for each device you can set the activation time of the selected control command (since choreography started). It allows you to get interesting and aesthetic effects (e.g. sequent lighting of light sources in time intervals). In addition, each device can participate in a sequence of commands repeatedly (e.g. you can start closing the roller blind and stop it in the selected position after a few seconds).



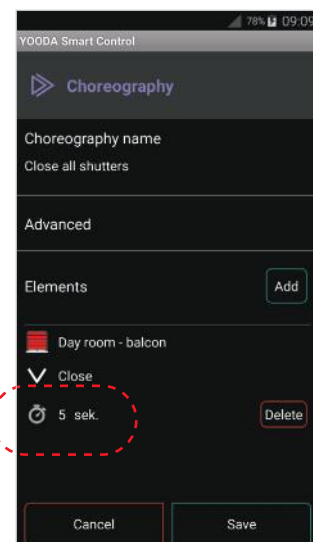
The choreography element is a command sent to the selected device at a certain time. An example could be opening the roller blind in the third second.



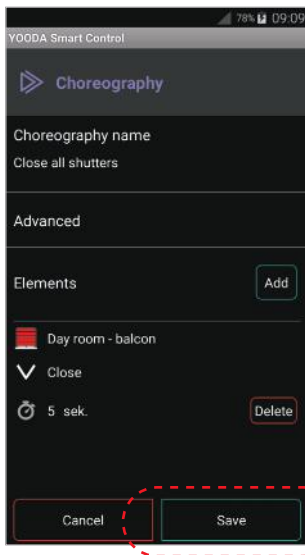
First step to create choreography is to add device.



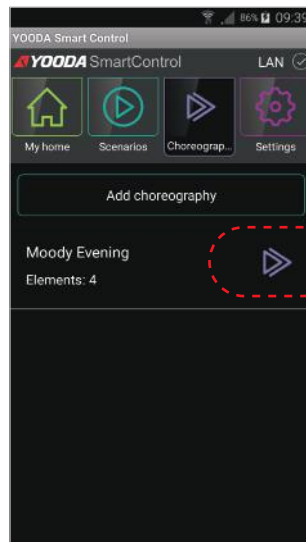
Select control command by clicking its name or symbol.



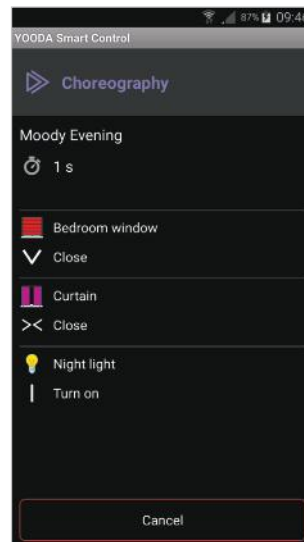
Click the clock icon to set the activation time of the command from the moment the choreography starts. Edited element can be repositioned to fit in the appropriate order on the elements list



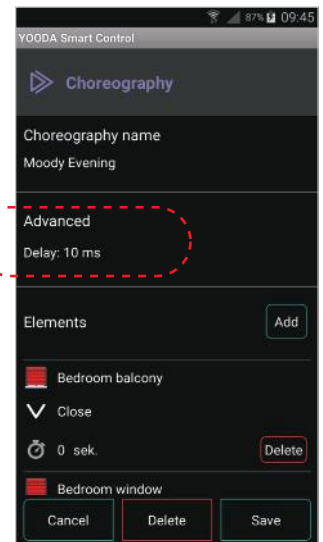
Changes in choreography should be saved by clicking the button at the bottom of the screen.



To run a choreography click icon next to its name.



Choreography elements will appear and the timer will activate commands at the appropriate time.



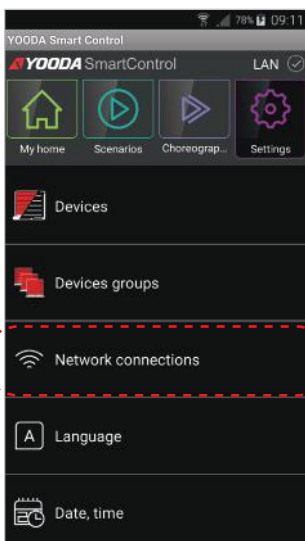
Due to external factors it may happen that some devices may not receive commands set to the same activation time. In this situation, return to editing choreography, click on "Advanced" and then "Delay" in order to increase the delay between control signals.

5. Configuration and work mode

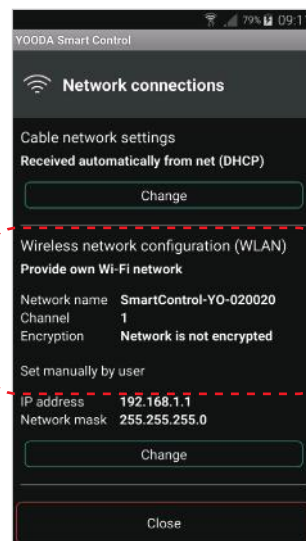
5.6 Connecting YSC unit to local Wi-Fi



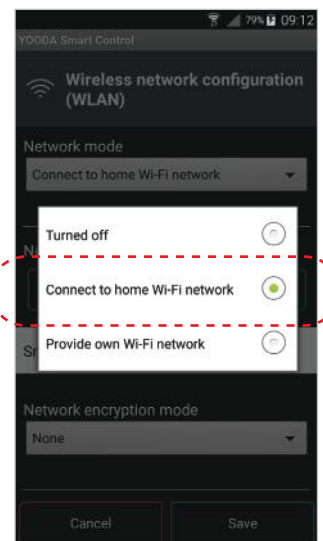
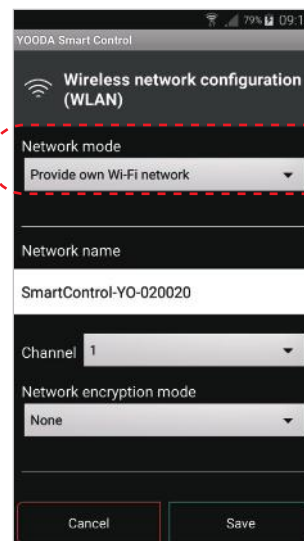
1. After running control unit for the first time, in its default mode, it generates own Wi-Fi network that we can log into. After that there's a possibility to connect unit to other, already existing, Wi-Fi network.
2. For returning the control unit to default mode press briefly 'Reset' button on the back panel of the control unit.
3. To change the mode, take the following steps:



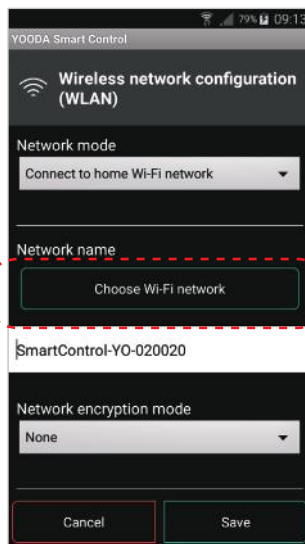
In the 'Settings' tab press 'Network connections'.



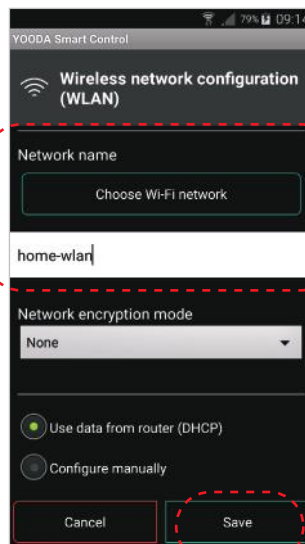
Press 'Wireless network configuration'.



Change network mode to 'Connect to home Wi-Fi network'.



In Android system choose network using 'Choose Wi-Fi network' button. In iOS enter name of the network.

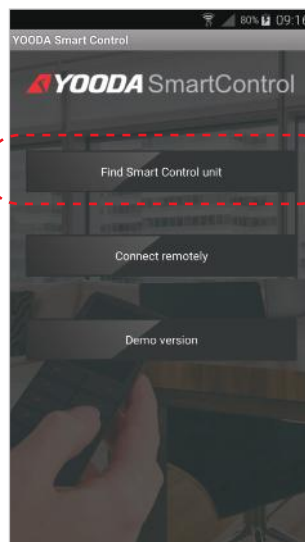


We choose the encryption method, enter the password of the selected network and click "OK".

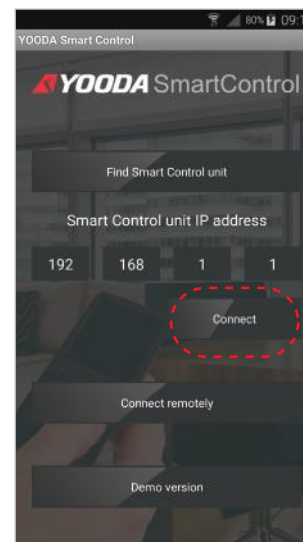


Choose network encryption mode, enter password and press 'OK'.

If the control panel has been wired to a home network before, it must be restarted (turn the power off and on) after changing the wireless settings.



After log in to the network, click "Search SmartControl control unit."



New IP address of Smart Control unit will be shown. Press 'Connect'.

5. Configuration and work mode

5.7 Remote access service



Remote access service should be activated when automated devices are to be controlled outside from the local Wi-Fi network. Reaction time of automated devices controlled using remote access, considering usage of staging servers, is longer than when using local Wi-Fi network.

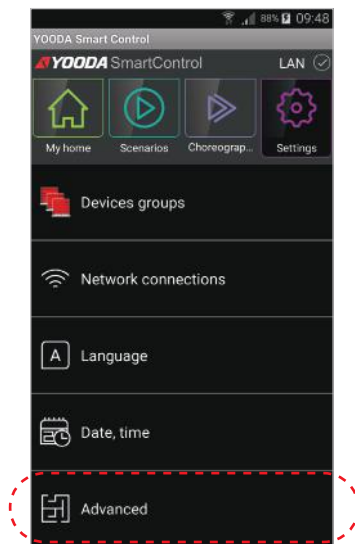


For remote access to work properly:

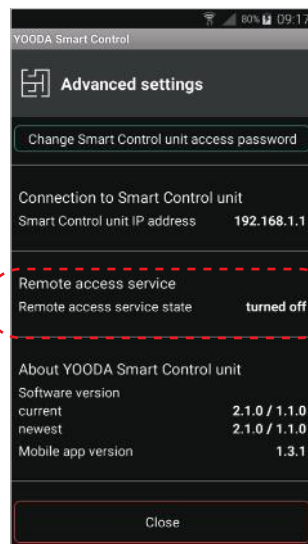
1. Smart Control unit needs to be connected to the internet.
2. Current time needs to be set on Smart Control unit.
3. Remote access service function needs to be activated.



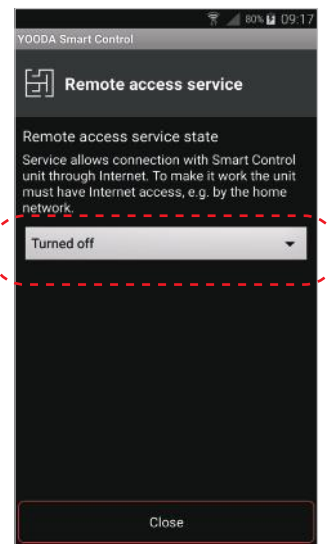
Restart the Smart Control unit every time after you change network connection settings and test remote control service again.



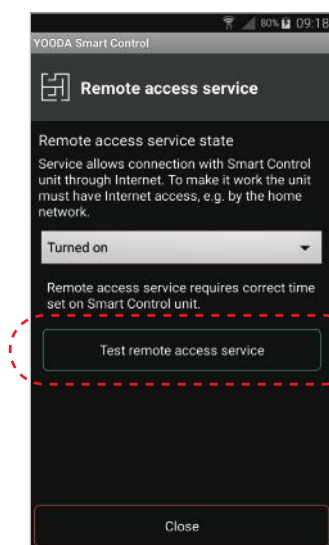
To activate remote access service choose 'Advanced' in 'Settings' tab.



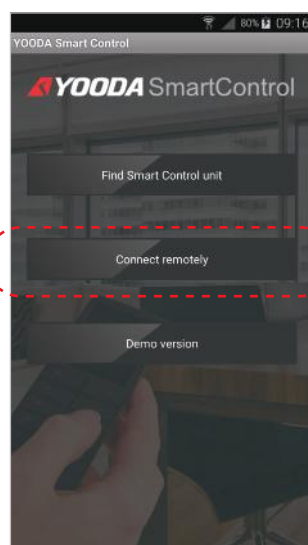
Run 'Remote access service' option.



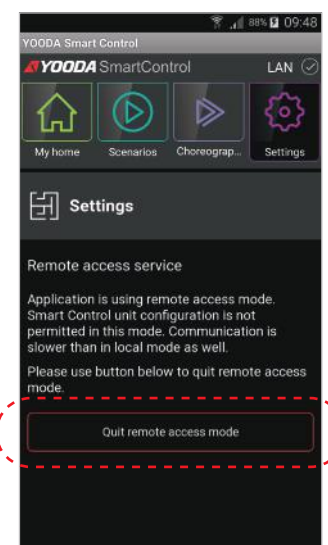
Choose 'Turned on' option to activate remote access function.



After entering 'Remote access service' again test activated function.



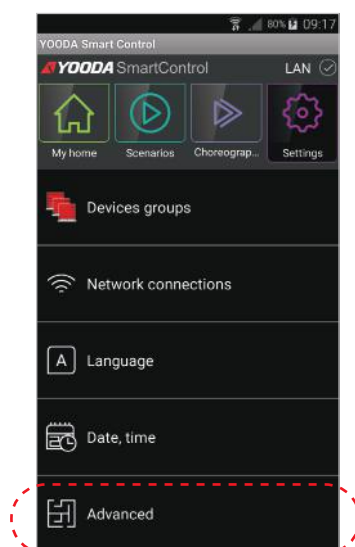
When controlling device is out of reach of local Wi-Fi network control unit search screen will be displayed. To connect control device to Smart Control unit press 'Connect remotely'.



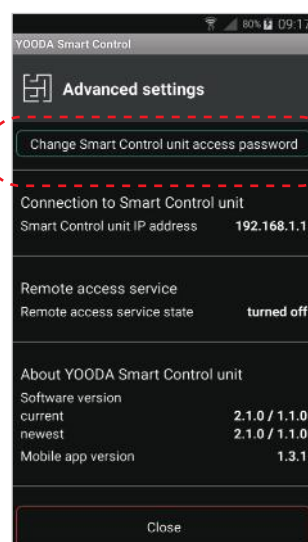
When controlling device is again within reach of local Wi-Fi network it can be reconnected, by turning it off using 'Settings' tab.

5. Configuration and work mode

5.8 Setting password



To set password go into 'Settings', and then choose 'Advanced'.



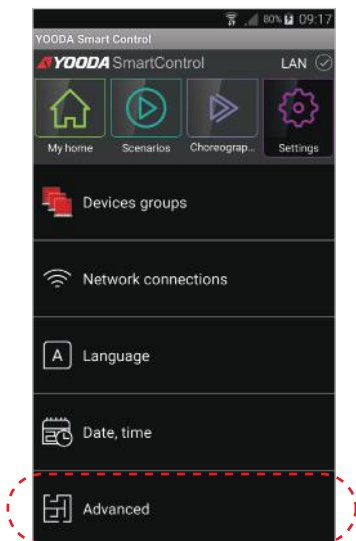
Choose 'Change Smart Control unit access password'.

5. Configuration and work mode

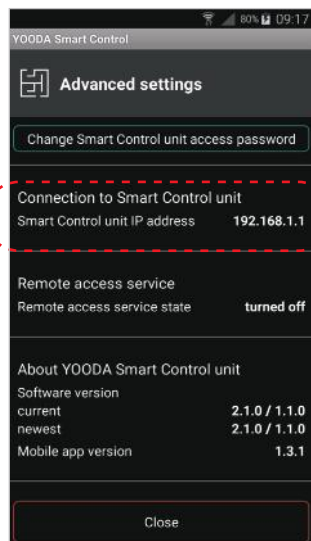
5.9 Controlling device from computer



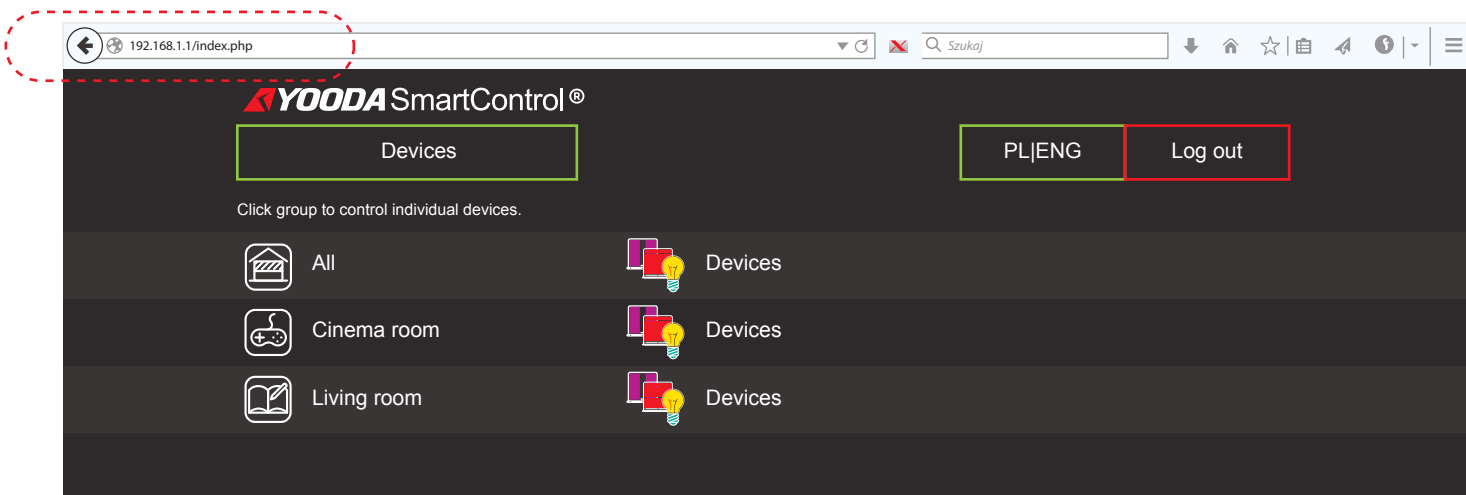
Control unit, as well as the computer, must be connected to the same local Wi-Fi network. To control roller shutters using computers web browser it's necessary to know IP address of the control unit in local Wi-Fi network. We can check it in the mobile app.



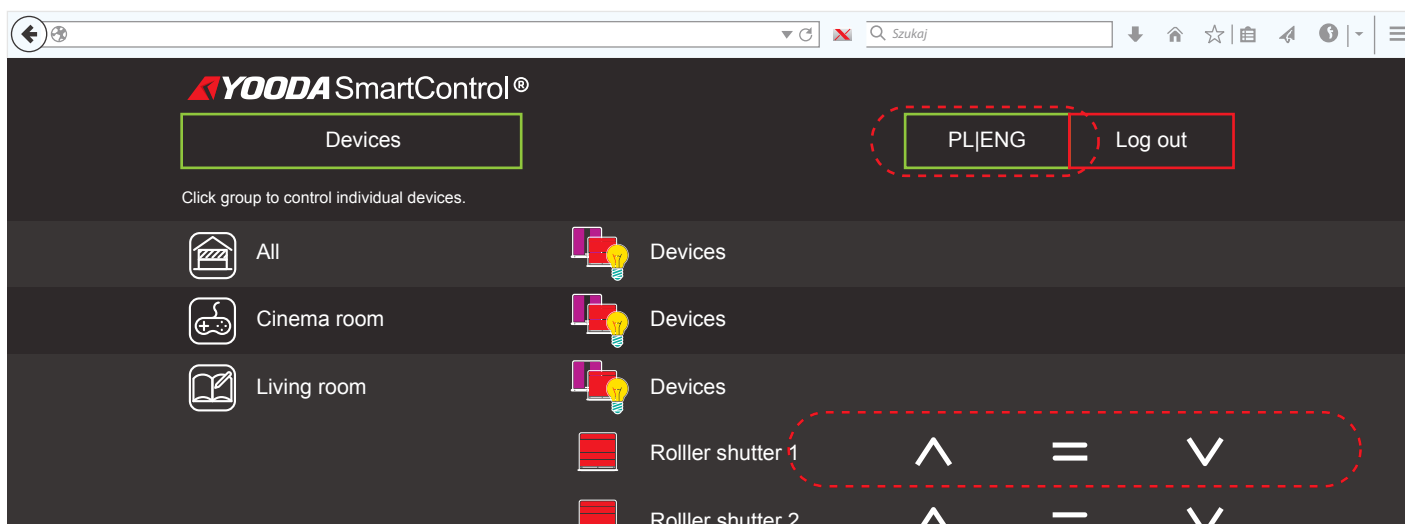
In 'Settings' tab choose 'Advanced'.



Check control units IP address.



Enter IP into address bar of browser of computer connected to the same local Wi-Fi network as the control unit. The web site of the system will appear.

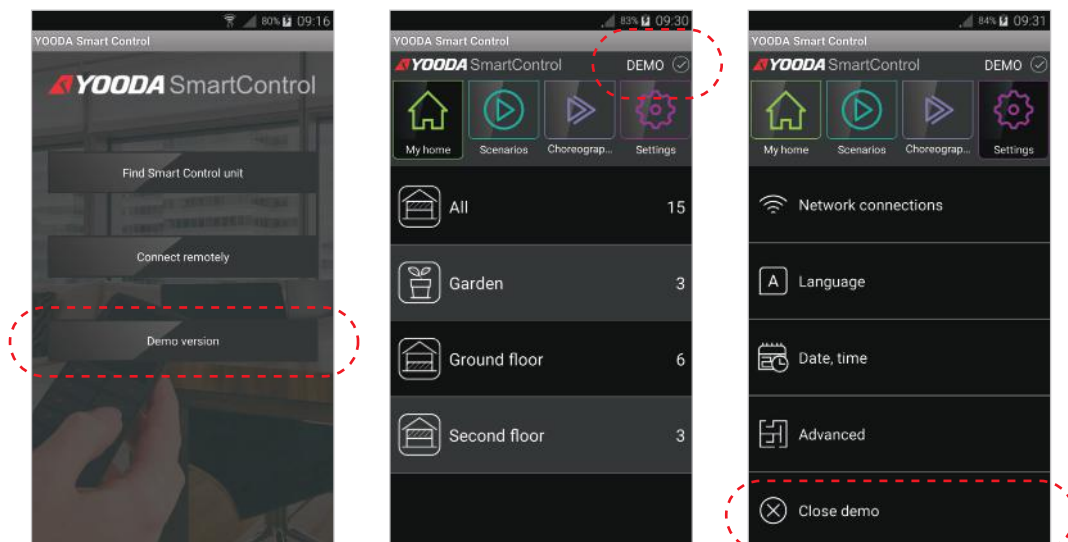


After choosing group of devices control buttons will be displayed. By using 'PL|ENG' buttons language version can be changed.

7. Demo version



Demo version was designed to show all the possibilities of the YOODA SMART CONTROL app. For the app to work in DEMO mode there is no need to connect to any control unit. App is equipped with exemplary setting.



To run DEMO version choose 'Demo version'.

Exemplary programmed control unit with prepared app is being presented. Whenever using DEMO version its name is being shown in top right of the app.

To quit demo mode enter 'Settings' tab and click 'Close demo'.