Signify

MasterConnect

MasterConnect App

Installer Manual

MasterConnect is a connected lighting system that works for you - simple to install, flexible to scale, and ready for the future of smart and sustainable buildings.

About the document

This document is an instructional guide for installers and users of the MasterConnect (MC) system working with the Signify MasterConnect app. The combination forms a cost-effective and easy-to-install solution for wireless control of intelligent luminaires, ideal for energy-savings.

Commissioning and configuration during and after installation is quick and easy using the Signify MasterConnect app. This app works via Bluetooth Low Energy (BLE) technology and is available for free on Apple's App Store and Google's Play Store.

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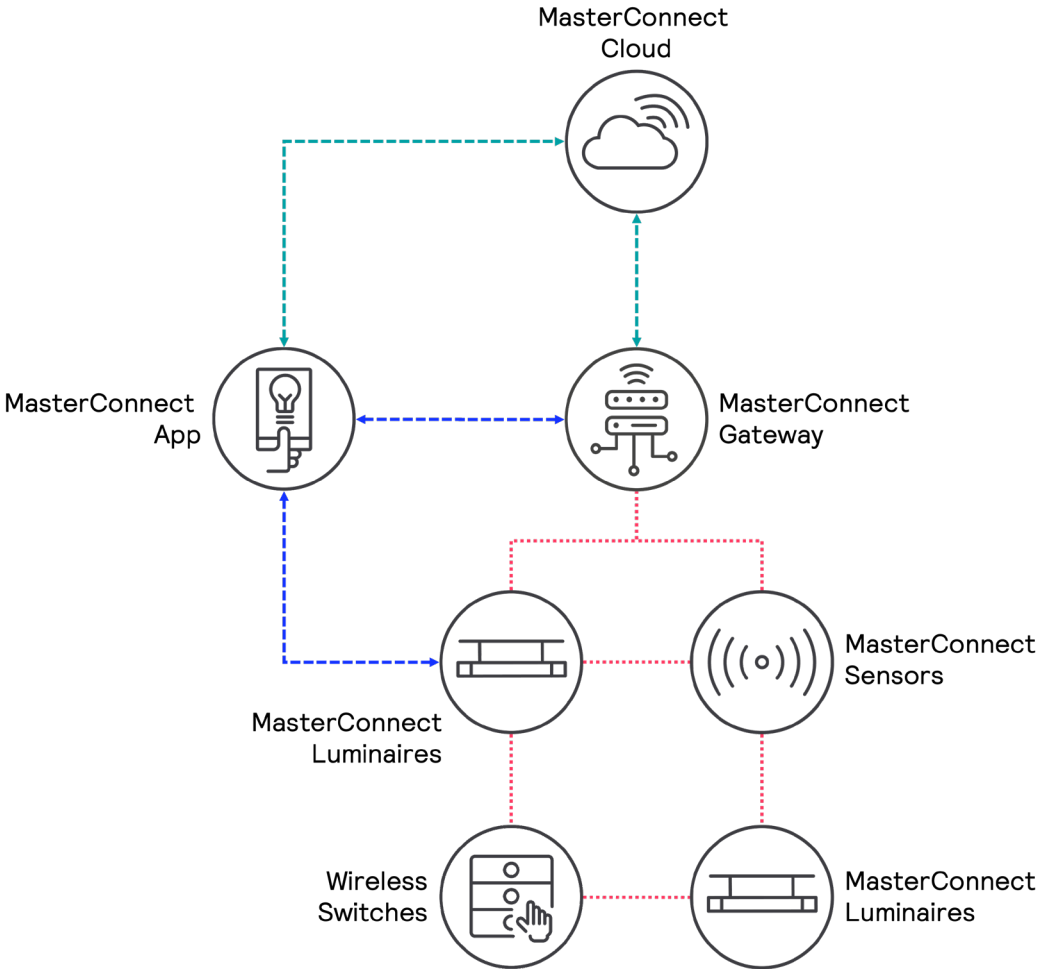
Get to know the MasterConnect system

MasterConnect is a flexible and scalable system that can enables use cases ranging from simple stand-alone to more complex installations. The components range can range from luminaires with integrated motion and daylight sensors to internet connected gateways.



MasterConnect wireless system architecture

Architectural drawing

This drawings shows a simplified architecture to explain how the different components in the system are interacting with each other. Not all components shown are mandatory for the operation.

A simple stand-alone MasterConnect system sets up multiple MasterConnect nodes - such as Xitanium Wireless Drivers MC, EasyAir SNS21x MC sensors or EasySense SNS21x MC – into a single network or group, enabling sophisticated automatic light control as well as manual switch control of the group. The system can be set up using the 'Signify MasterConnect' app. For the system setup, the app opens a Bluetooth connection between the app and the first MasterConnect device to create a wireless, secured Zigbee network. Further devices can then be added to the same group enabling network sizes of up to 120 devices. Later, further devices such as wireless switches for manual control or peripheral gateways for data reporting can be added to the same network. The configuration of behaviors as well as reporting features is also possible via the same mobile application.

System components

Lights

Lights describe luminaires with integrated MasterConnect nodes. This can be MasterConnect wireless drivers, wireless nodes or luminaire-integrated sensors.

Sensors

External, mains-powered or battery-powered sensors can be used to bring motion and daylight control to MasterConnect systems without luminaire-integrated sensors.

Switches

Switches can be used to manually control lights in a MasterConnect system. These switches operate on Zigbee GreenPower and can be self-powered (energy harvesting). They are available from a variety of companies.

Gateways

Gateways can be used to add reporting and scheduling features to any MasterConnect system. These are supplied by Signify and by partners companies.

Availability of the Signify MasterConnect App

The central part for setting up and configuring a MasterConnect system is the Signify MasterConnect app that can be installed on most modern smartphones with Android or iOS operating system.

The minimum phone requirements are:

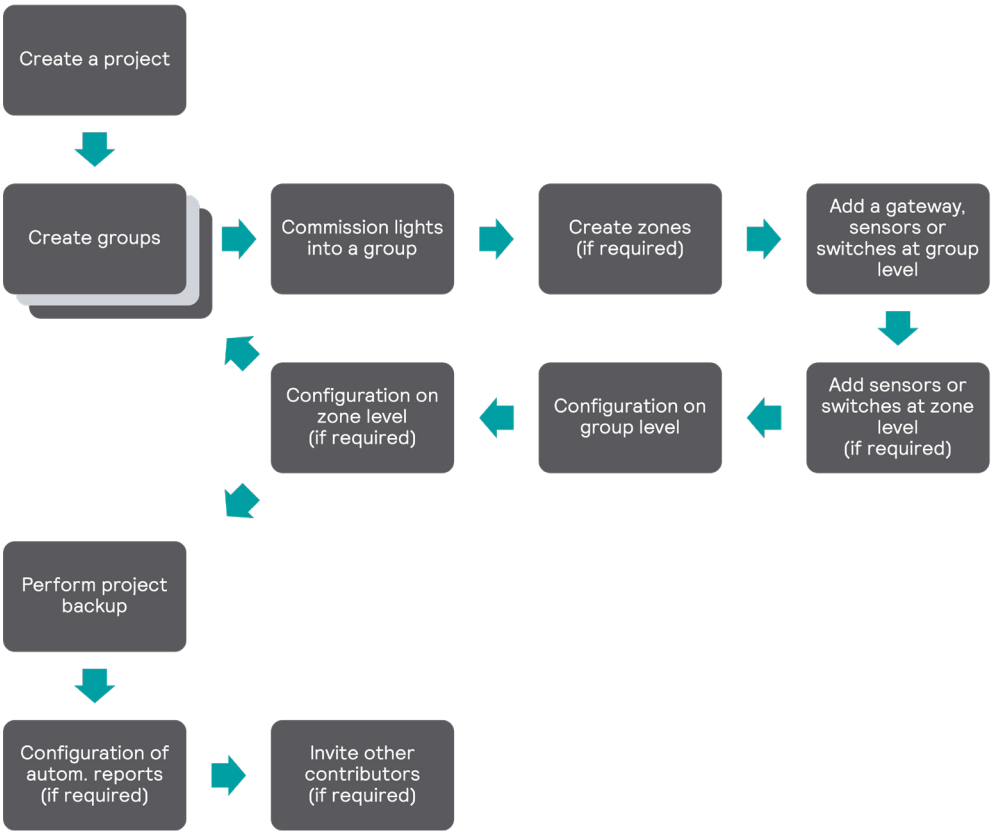
- Android-based phones: version 11 or higher
- iOS-based phones: version 17 or higher
- Bluetooth Low Energy: version 4.2 or higher

The list of smartphone types in the market is long and increasing. System performance can vary for different combinations of the operating system, Bluetooth version and implementation in the phone model. Alterations from industry can have an impact too. Therefore, although we expect good performance in most cases, we do not guarantee expected performance of Signify MasterConnect app. It is recommended to test your mobile device with a wireless lighting system with Signify MasterConnect app.

Please note that Huawei phones, Redmi phones, and Samsung J3 phones are not officially supported. Xiaomi Redmi Note 8 Pro and Xiaomi Redmi 8A are not recommended because of a less stable Bluetooth Low Energy communication. iPads and Android tablets have not been tested.

How to setup a MasterConnect system

The MasterConnect system is covering a variety of different uses cases. Depending on the project requirements, some of the following steps will be essential to setup a stable and working system.

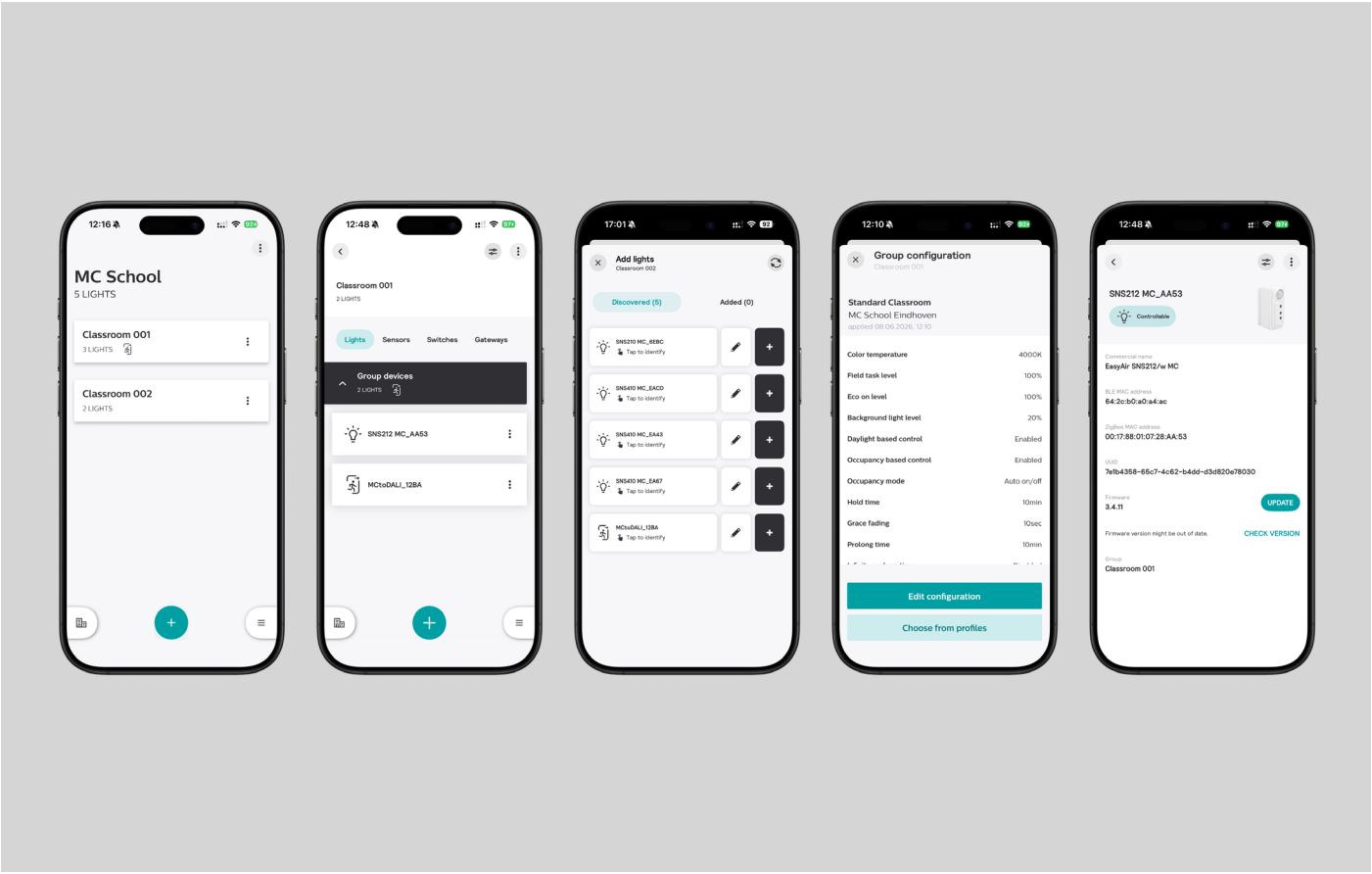


Recommended steps for setting up a project

Setup flow chart

This chart shows the recommended order of setup steps for a new MasterConnect project. This order minimizes commissioning and configuration time.

The central feature set of the Signify MasterConnect is around setting up a wireless MasterConnect network including lights, switches, and gateway. To ensure that the setup runs smoothly and fast, it is important to follow the recommended order of steps as well as planning the project, groups, zones, and devices prior to starting the commissioning.



App screens

The screens above show the different elements and screens available in the Signify MasterConnect app. This installer manual will use these screen descriptions to explain the each system and app features.

- **Project screen:** Overview of all groups in a project and the entry point to project settings.
- **Group overview screen:** List of all devices in a group and central point to manage group configuration.
- **Commissioning screen:** Screen to add devices such as lights, mains-powered sensors, or gateways to a group.
- **Configuration screen:** Screen to modify configuration parameters for groups or zones.
- **Device detail screen:** Overview of all information on a project including its firmware version, or features.

Group limitations

When using and planning a wireless network with Signify MasterConnect, you should keep these group size limitations in mind. When these limits are disregarded, the performance of the networks and its participants may decrease.

Lights running on ...	... firmware 2 or 3	... firmware 1
Maximum number of devices in a group	120	40 (without switches) 30 (with switches) 20 (local energy reporting)
Maximum number of zones per group	15	5
Maximum number of switches per group	15	5
Maximum number of switches per zone	5	5
Maximum number of SR / D4i drivers	4	4 (only supporting SR drivers)
Maximum number of sensors per SR / D4i driver	1	1 (only supporting SR drivers)

Login

Purpose

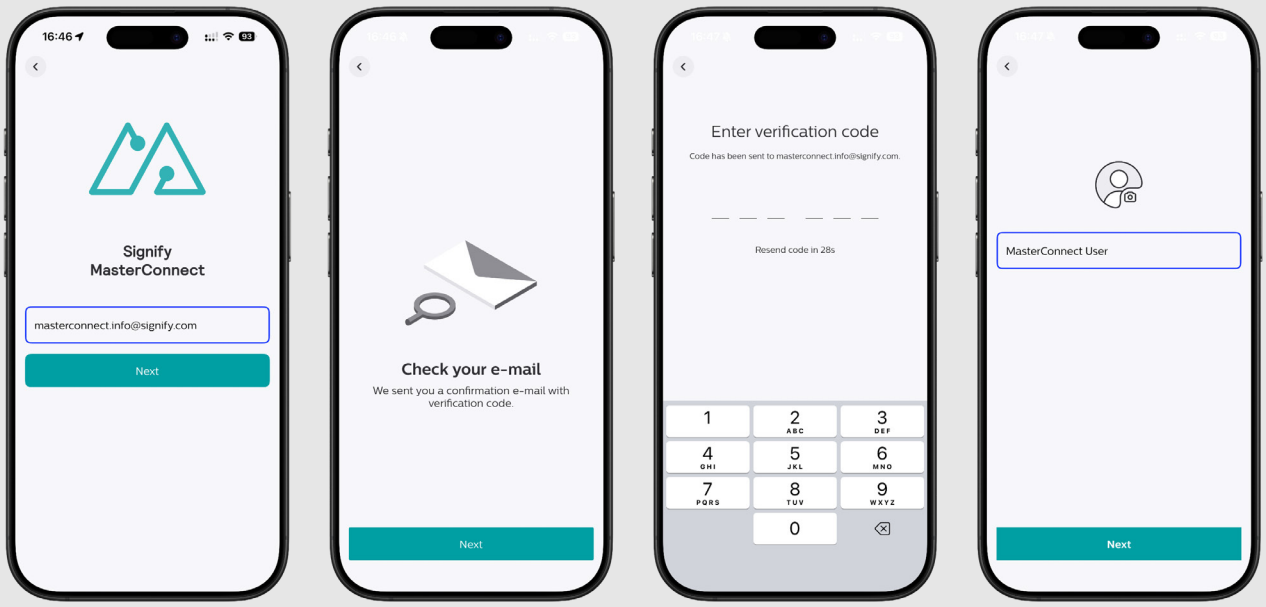
Only registered users get access to setup or maintain a MasterConnect lighting system using the Signify MasterConnect app.

How to

- Download and install the Signify MasterConnect app from the Apple App Store or Google Play Store. Search for 'Signify MasterConnect'.
- When opening the app for the first time, you will be asked to read and accept our Terms of Use.
- After accepting, register with your email address. You will receive an email with a 6-digit verification code that needs to be filled in the app.
- Complete the login by assigning a name to your account.

Remarks

- Make sure that you have a stable Internet connection before trying to login.
- A verification code is obtained at every log-in; no password needs to be remembered.
- Regularly check for app-updates, it is recommended to use the most recent version for best performance and most options. Usually 'auto-update' can be enabled in the smartphone settings.
- If you also work with the Philips Field Apps for SNS200 or SNH200, use a different e-mail account to log-in to the Signify MasterConnect app.



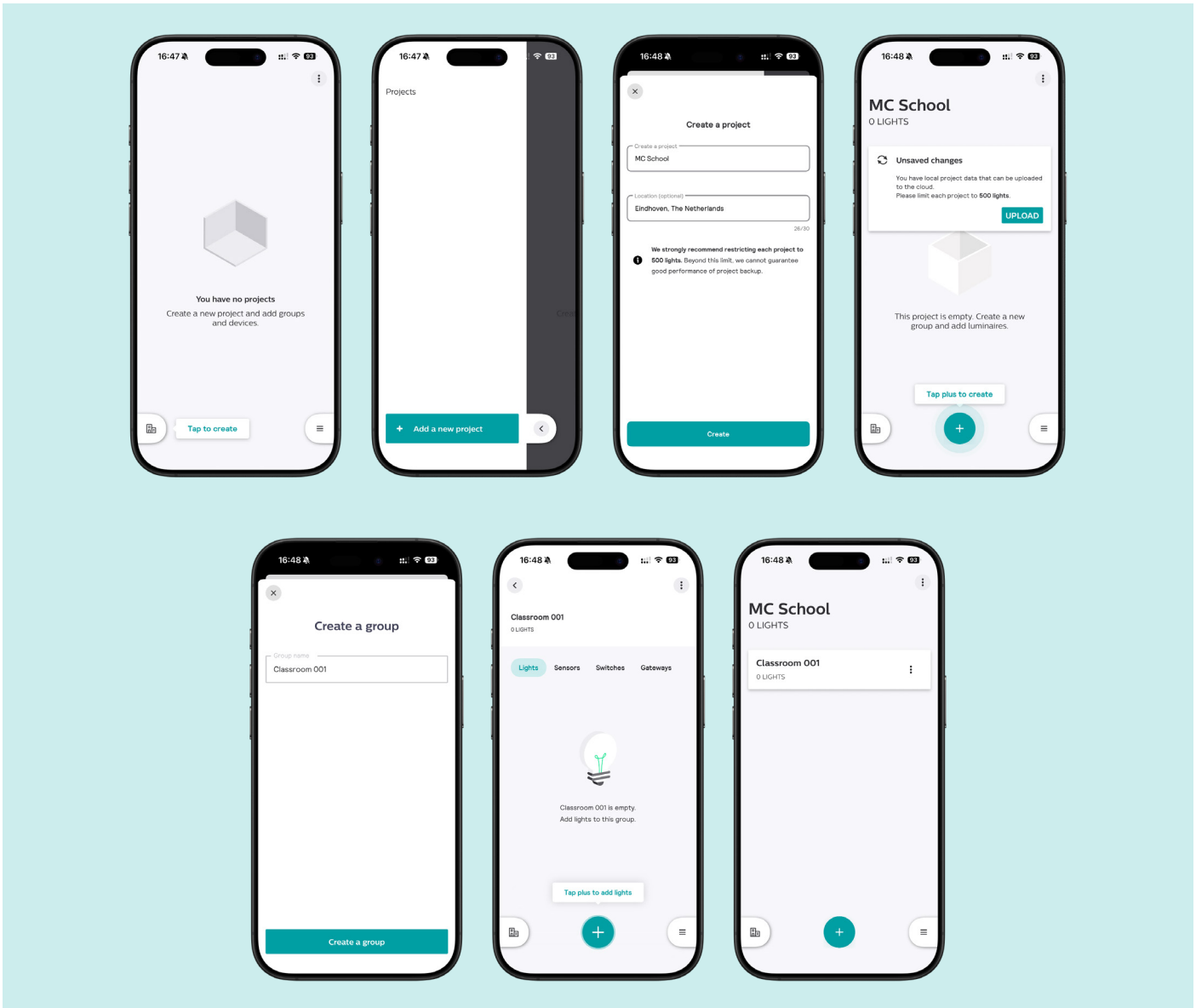
Create a project and add groups

Purpose

Define a new lighting project and plan the luminaire groups, in which the wireless devices need to operate together.

How to

- Creation of the first project is prompted automatically. For another project, click on the building icon to get a list of earlier projects made under the same account, and add a new one.
- Give a name to the lighting project and optionally fill in the location. Create the project.
- For each group of luminaires that need to work together, a group needs to be created. A group is defined by a name that needs to be unique per project.
- Creation of the first group is prompted automatically after project creation. For more groups push “+” on the project screen.



Commissioning

Purpose

Groups can be used to connect lights to each other. To assign lights to a group, they need to be grouped (or commissioned). Depending on the MasterConnect node, the lights can be commissioned using a list-based approach or using a torchlight.

Lights with integrated sensors (such as SNS21x MC, SNM21x MC or SNH21x MC)

- Option 1: point-and-trigger approach using a flashlight / torchlight
- Option 2: list-based commissioning using the received signal strength of each device (RSSI)

Lights with integrated wireless nodes (such as a wireless MC driver or a SNS41x MC)

- Option 1: list-based commissioning using the received signal strength of each device (RSSI)

Remarks

- Ensure that Bluetooth is activated on the smartphone used. In case Bluetooth is disabled, Signify MasterConnect app will prompt for activation, which the user needs to confirm. Allow for Location Access services to be enabled, when requested by the app.
- Ensure that all lights of your system are powered on.
- Lights that are added to a group are considered claimed devices and therefore, not available for other groups, projects, or users.
- Xitanium wireless drivers, SNS41x MC and lights with integrated MC sensors can be commissioned in one group when using firmware 2 or higher. Otherwise, they must be commissioned in different groups. Xitanium wireless drivers and SNS41x MC nodes can be combined in one group.
- The maximum distance as specified in the datasheet, between luminaires, and between the user and the luminaires must be respected.
- Firmware versions 1 and 2 as well as 1 and 3 may not be mixed in a group. Firmware 2 and 3 can be combined in the same group.
- When creating a new network or adding a device to an existing group, please note that the behavior during first occupancy cycle might deviate slightly. After the first cycle was completed, the lights show the same light behavior when occupancy is detected next.

Flashlight commissioning

Purpose

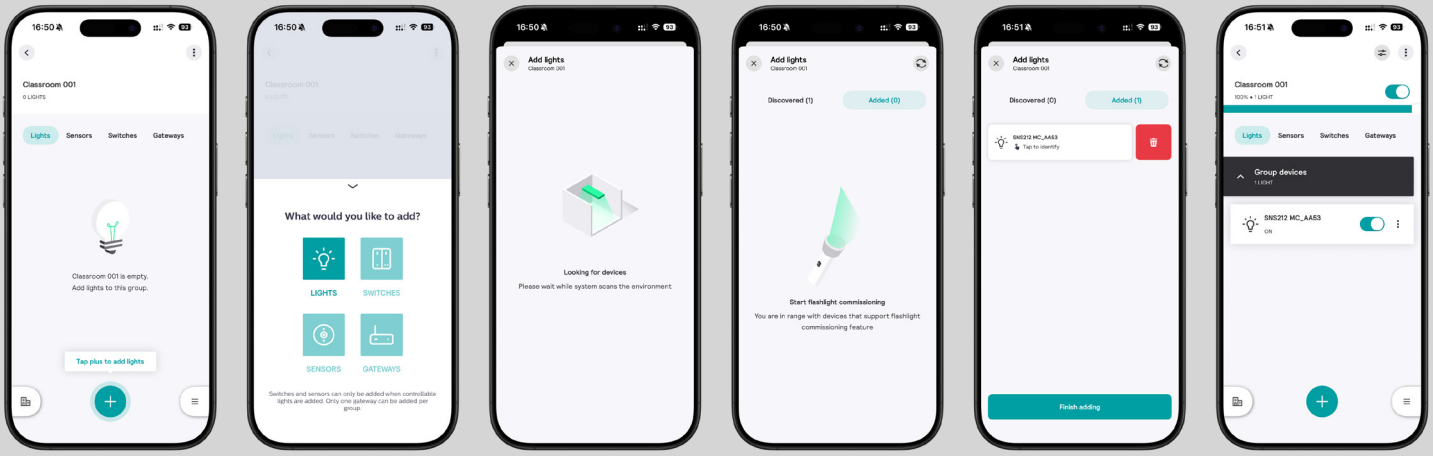
Lights with an integrated MasterConnect sensor can be added to a group by pointing to them with a flashlight.

How to

- Open the group, tap “+” and select “Lights” to start discovering all the MC nodes that are in close reach for commissioning. Please wait 10 seconds for the lights to be discovered.
- Direct the light of a torchlight to the MasterConnect sensor that you like to add to a group and move it over the sensor. The sensor is triggered by a steep change from a relatively low light level to a higher light level.
- The smartphone responds to the detection with a sound and a brief vibration. On the 2nd beep, the selected light dims down and shows up in the “Added” tap in the app. The light is now commissioned. Wait for another 3 seconds before proceeding to the next light.
- When all luminaires for a group have been selected, choose “Finish adding”. The devices that are bind to that group are now displayed in the group overview.

Remarks

- Use a flashlight with a well-defined light cone. Please refer to the design-in guide of the product for more information.
- Typically, illuminance of the sensor should increase by ≥5000lx suddenly.
- It is advised to wait for 2 beeps, after which a light will show up in “Added” tab.
- In case a light is not added when pointed by a flashlight, please re-try, or use the list-based commissioning.
- In case a light is not discovered, it might be that it was not in the scan list because of a too big range, e.g., in case of a long corridor. A re-scan of the lights with closer range is required to add this light to the list.
- It is strongly recommended not to change the flashlight sensitivity in the app settings section.



List-based commissioning

Purpose

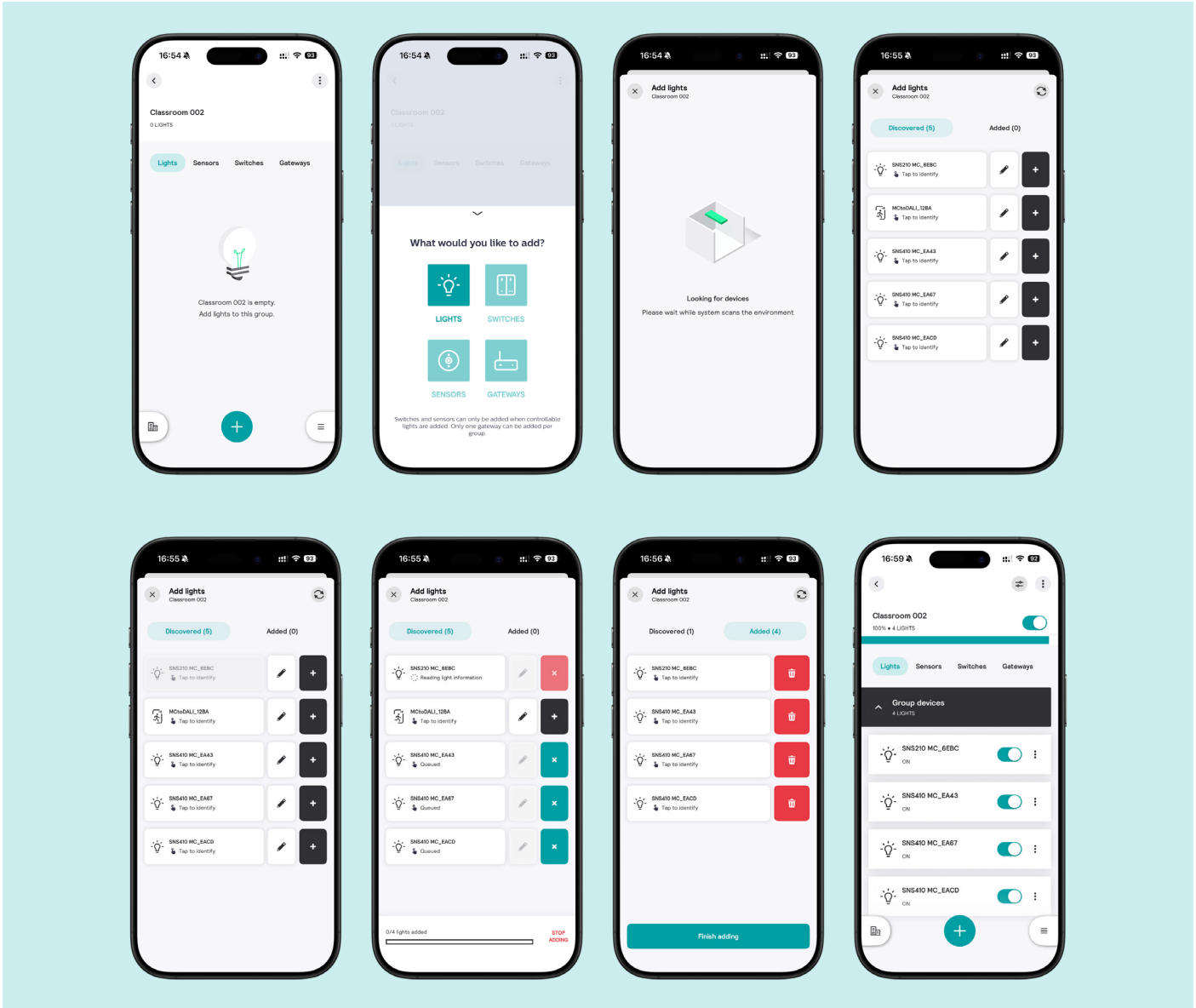
Lights with an integrated MasterConnect node can be added using a list overview.

How to

- Open the group, tap “+” and select “Lights” to start discovering all the MC nodes that are in close reach for commissioning. Please wait 10 seconds for the lights to be discovered.
- If not selected already, click on the “Discovered” tab. A list of all the lights with wireless component sorted by signal strength is shown.
- To identify a luminaire in the app, click on the device name: the corresponding luminaire will blink several times.
- Press “+” for all lights that need to be added to the group. When multiple devices are added simultaneously, a loading bar pops up. Press “Finish adding” to finalize.

Remarks

- In case not all lights are listed, please retry. The lights are sorted based on the signal strength received by the smartphone and only those with the strongest signal are listed.



Device renaming

Purpose

For simplified identification during maintenance scenarios or reporting features, lights with an integrated MC node or sensor can be renamed during and after the commissioning.

How to – renaming after commissioning

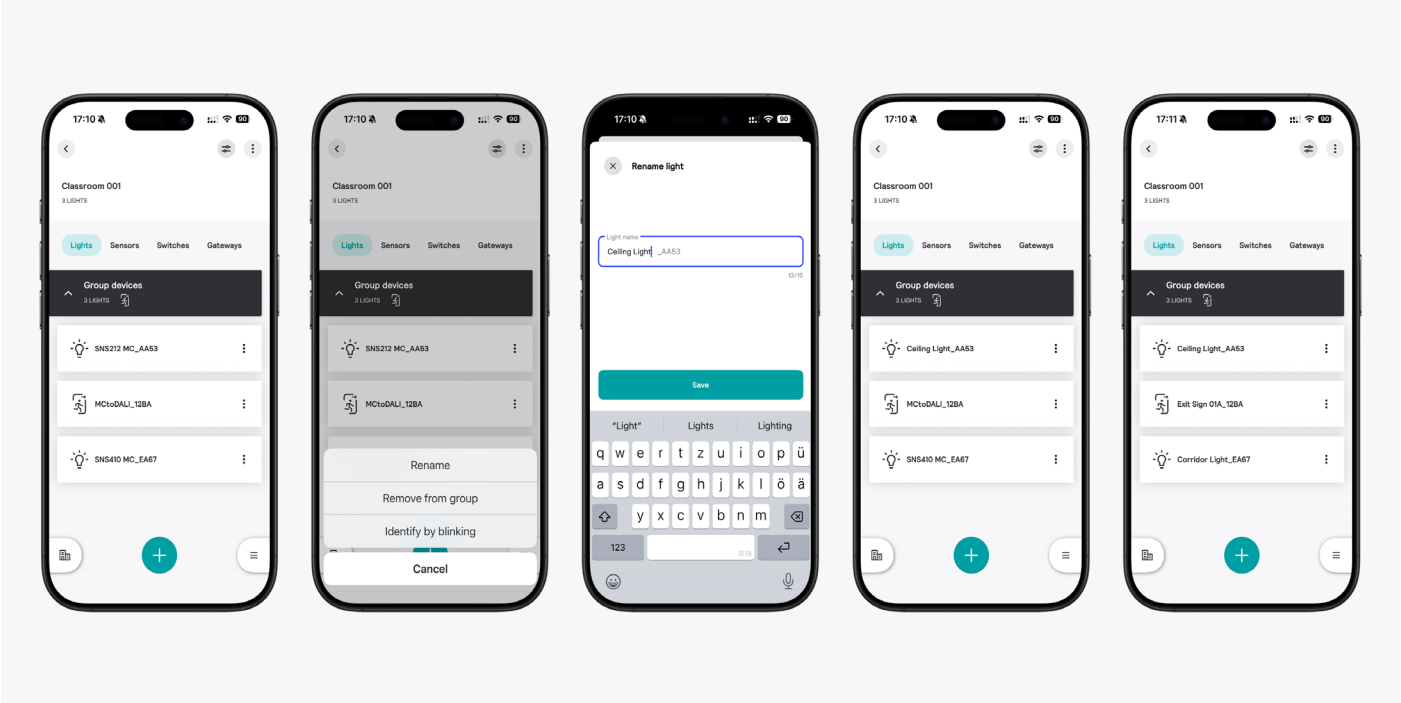
- Open the group overview screen. Press the three dots next to the name of the light.
- Choose “Rename” from the menu to open the name editing page.
- Enter the new luminaire name and confirm by pressing “Save”.
- Repeat the process for all luminaires that need to be renamed

How to – renaming during commissioning

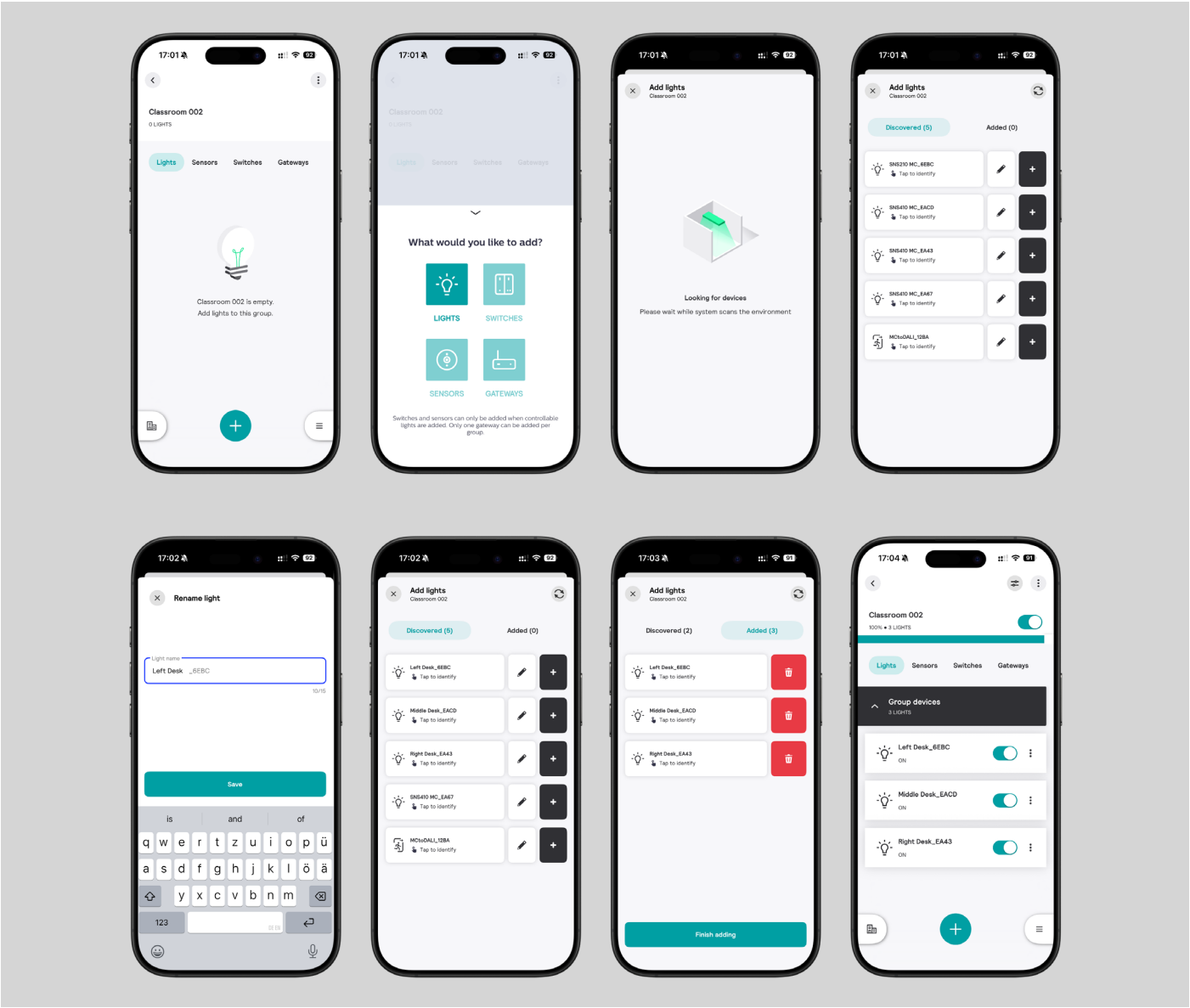
- Start the commissioning process and click on the “Discovered” tab to see the list of all lights.
- Click on the pencil icon to open the name editing pages.
- Enter the new luminaire name and confirm by pressing “Save”.
- Repeat the process for all luminaires that need to be renamed.
- Continue the commissioning by tapping “+” for all lights that need to be added to the group. Press “Finish adding” to finalize.

Remarks

- Avoid using multiple “.” or “–“ in the custom name to ensure the name is stored properly on the devices.



Step-by-step guide – renaming after commissioning



Step-by-step guide – renaming during commissioning

Installer test

Purpose

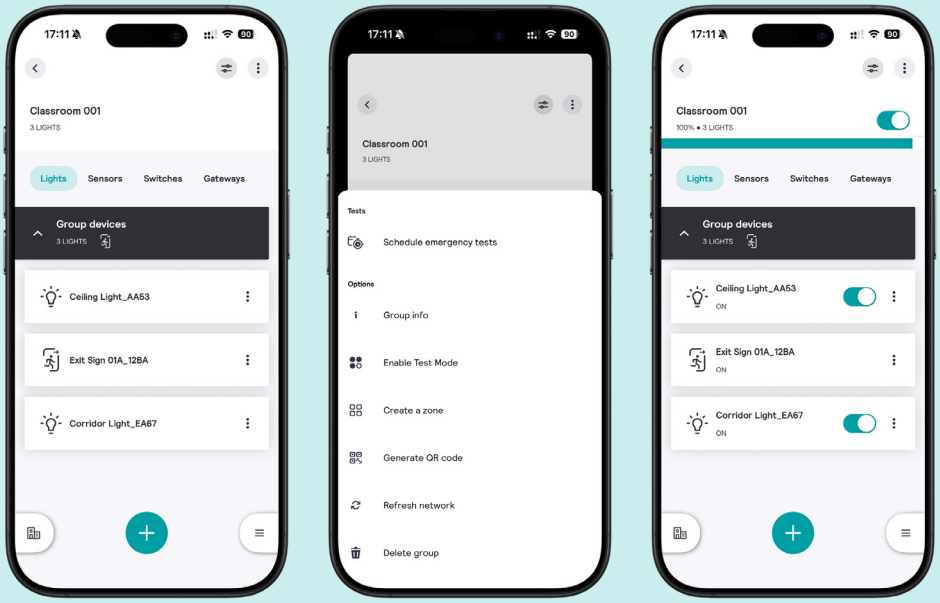
To make a quick check that all luminaires in a group are well-commissioned and work as expected. A simple switch on/off or dimming command can be given to the group to verify that commissioning was done as desired.

How to

- Tap the three dots and choose “Enable Test Mode”.
- Using the toggle switches, the entire group of lights or individual luminaires can be switched on and off.
- Using the blue bar, the dim level of the luminaires in the group can be controlled.
- Verify that all luminaires respond properly. In test mode, the response of the luminaires is not immediate and might need a few seconds.
- After testing, leave the test environment by going back one screen by clicking the arrow in upper left corner.

Remarks

- Dim levels of the luminaires using the test mode are influenced by the configured field task levels of the devices. A field task level of 100% is recommended.
- In case the installer test does not work, please try restarting the app.



Identify by blinking

Purpose

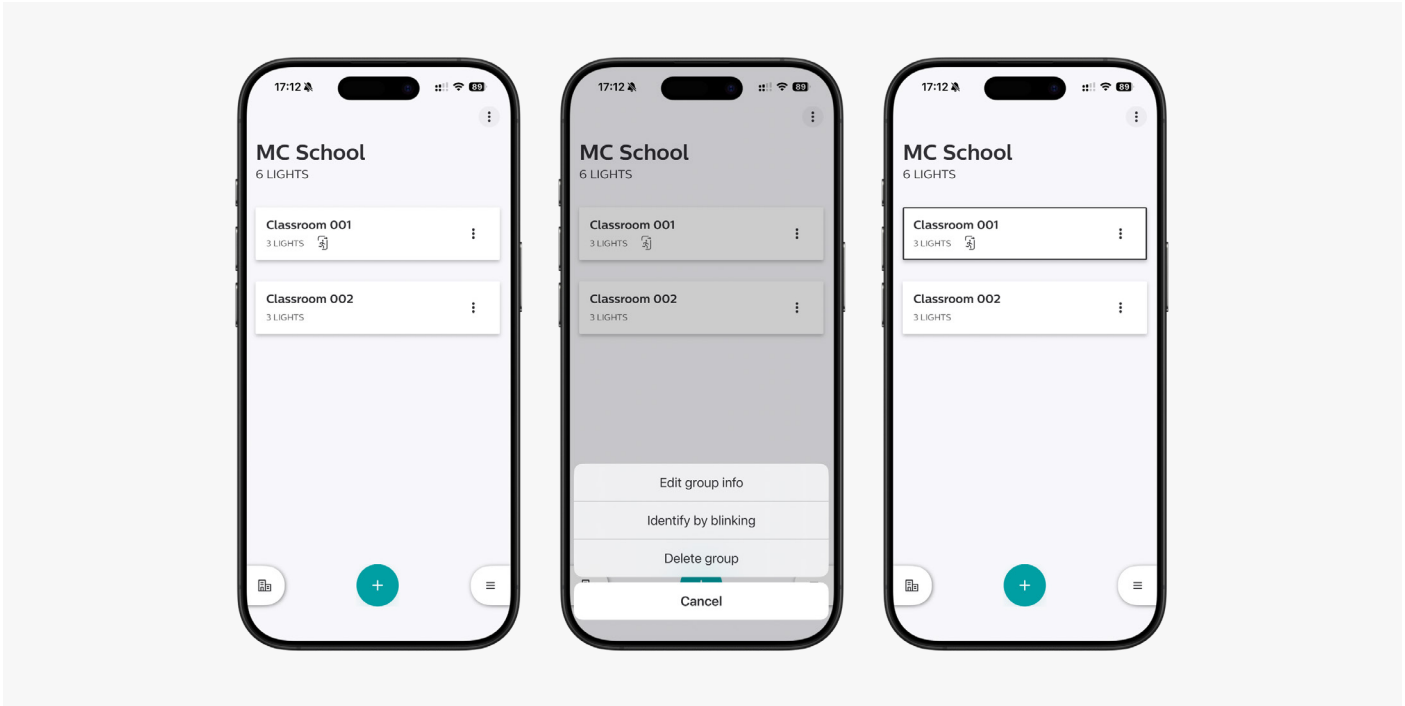
You can easily identify a group or node with the command “Turn on identifying by blinking”.

How to – identify on group level

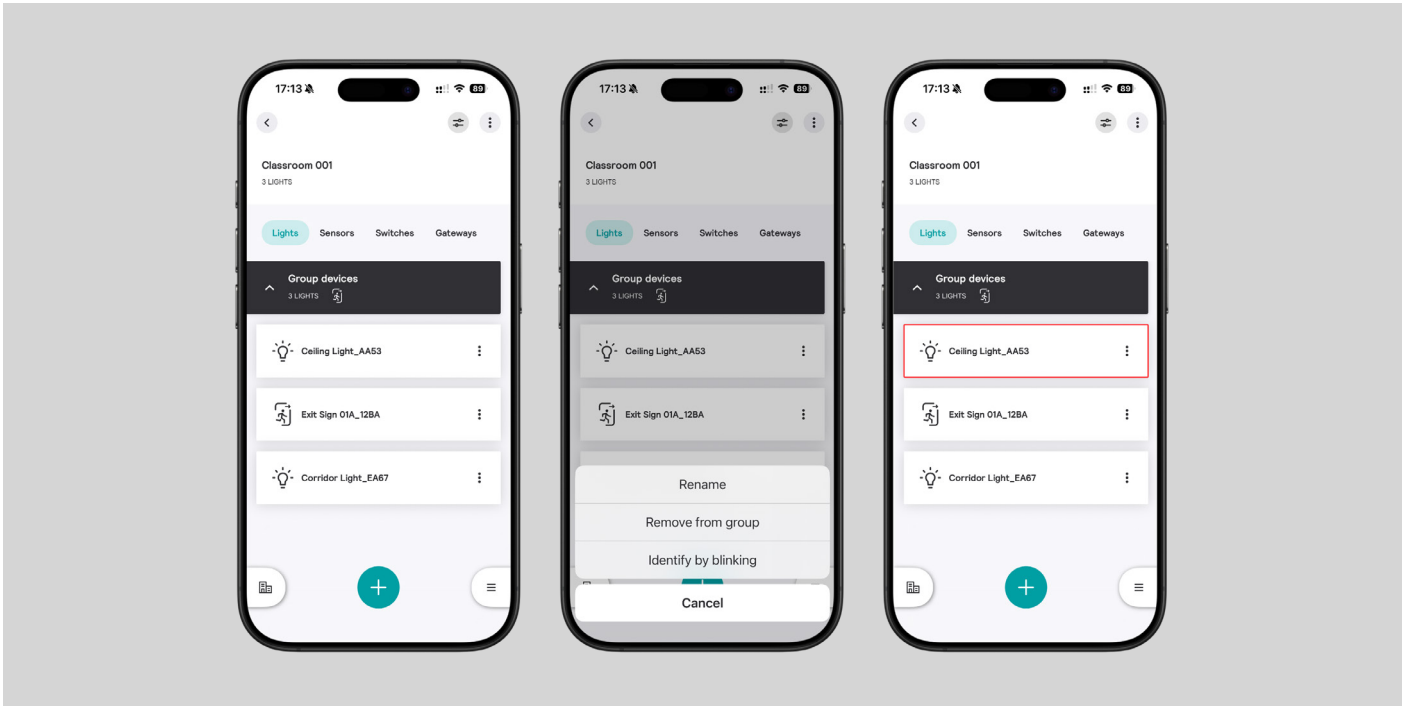
- Press the three dots right of the group name.
- Select “Identifying by blinking” from the list.
- The luminaires in the group start to blink. The blinking will stop automatically after a while.

How to – identify of device level

- Open the group and press the three dots next to the name of the light.
- Select “Identifying by blinking” from the list.
- The node starts to blink. The blinking will stop automatically after a while.



Step-by-step guide – identify on group level



Step-by-step guide – identify on device level

Zoning

Purpose

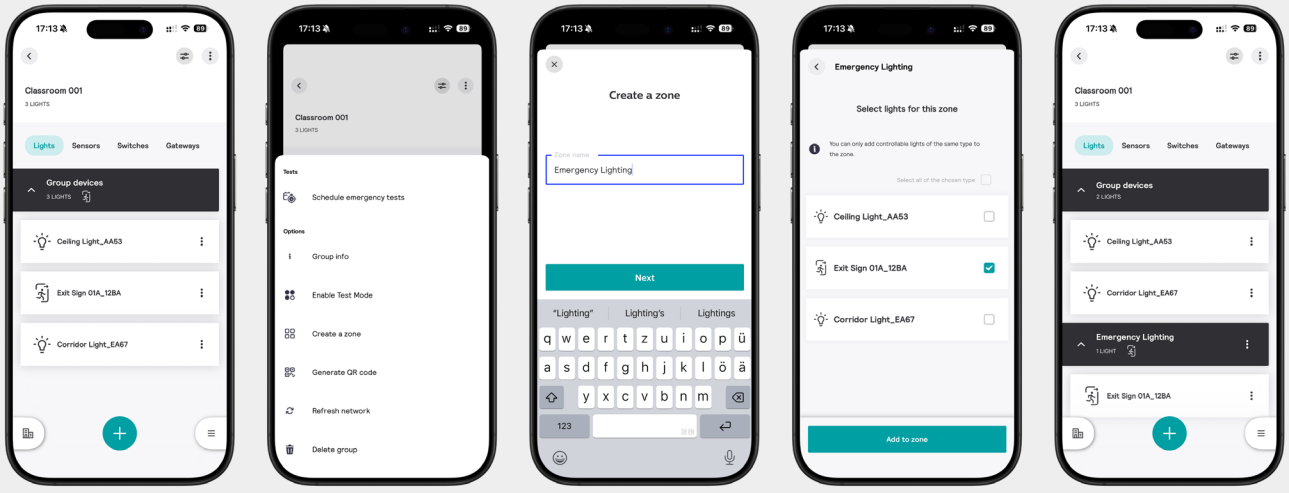
A group of lights can be split into different zones which can be controlled by different switches or sensors.

How to

- Tap the three dots, choose “create a zone” and select a name for the zone.
- Select the luminaires for the zone. To identify a luminaire in the app, click on the device name: the corresponding luminaire will blink several times.
- After selecting all luminaires, choose “Add to a zone”.
- Repeat this procedure for all the zones required.

Remarks

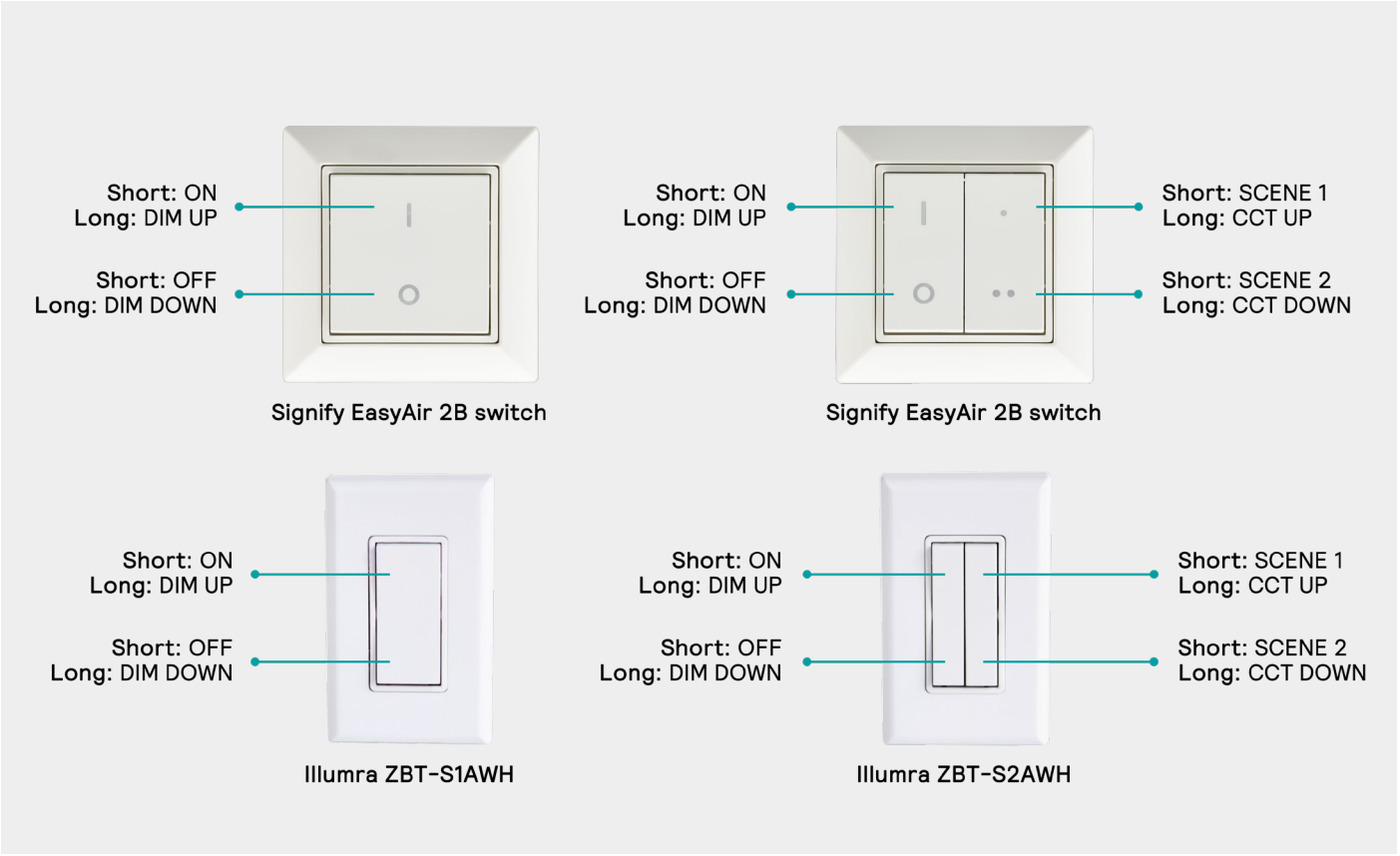
- The separation into zones can be verified via the installer test feature. For details, refer to the installer test section of this document.
- When moving a light into an existing zone or out of a zone, make sure you are in range of that device (within 5m distance)



Adding switches

Purpose

A wireless Zigbee switch can be added to a group or zone for manual lighting control. Features of the switch are shown below. Position of each feature on the switch can vary depending on manufacturer.



Switch feature locations

How to - click-based commissioning method

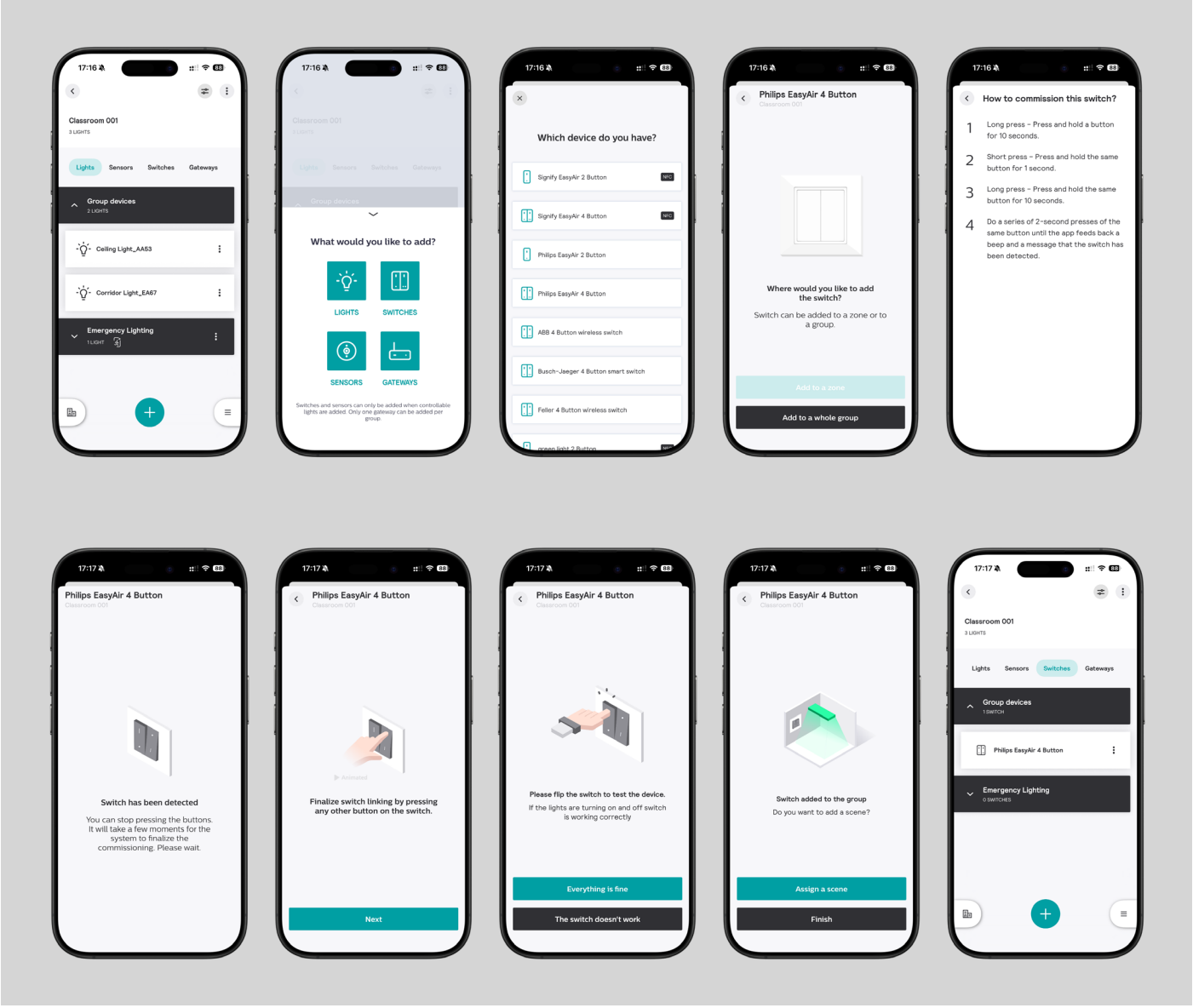
- Click on the “+” on the group screen and select “Switch”.
- From the drop-down list of compatible switches select the brand and type of switch you like to add.
- Next indicate whether you would like to add to a zone or to the whole group.
- Follow the switch commissioning instructions shown in the app or on our website precisely.
- Once commissioned, the app requests to test if the switch works correctly.
- Test the switch by making another button press, and once it works as expected press “Everything is fine”.
- In case of a four-button switch, you can assign and customize scenes in the next step.

How to - NFC-based commissioning method

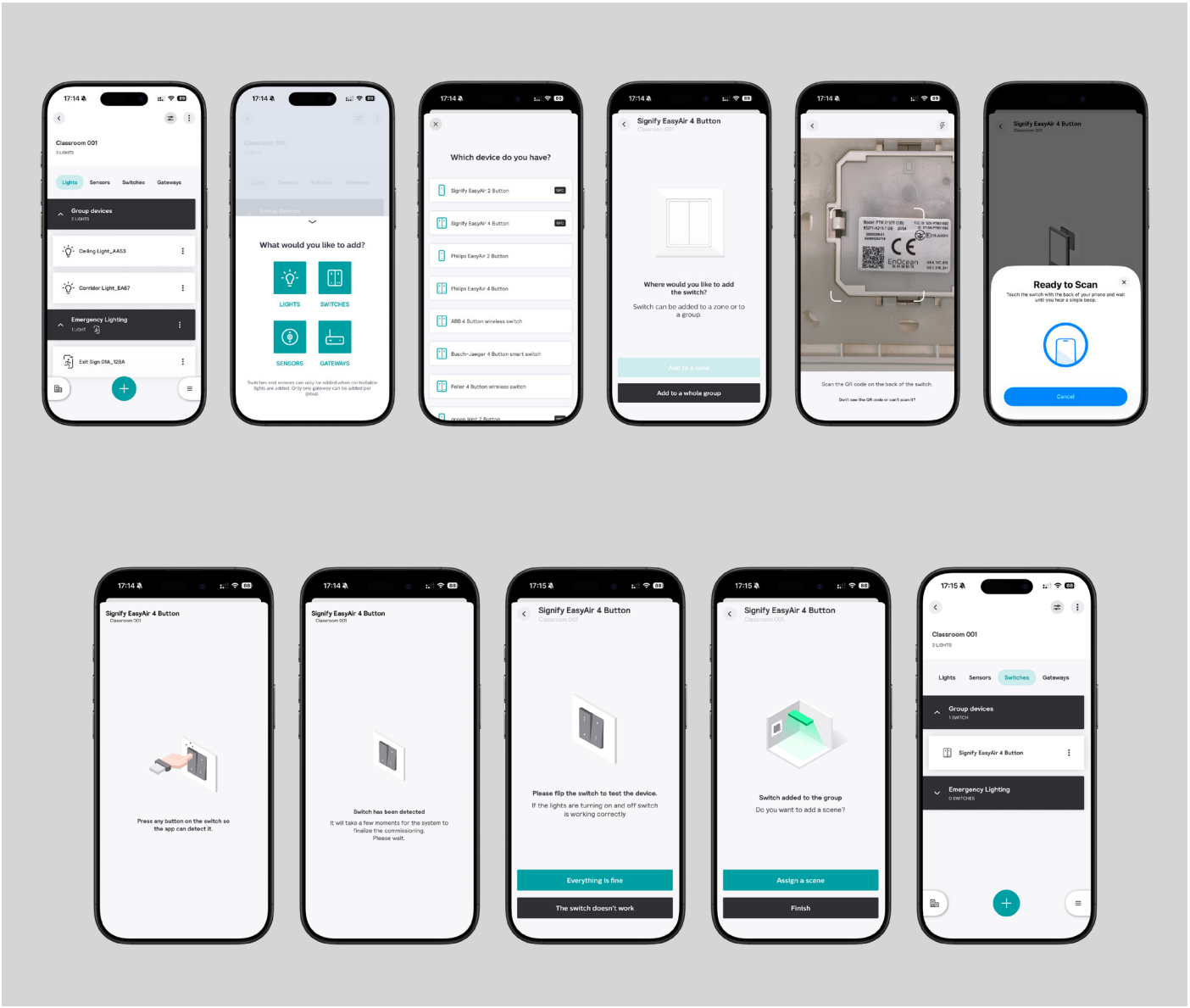
- Click on the “+” on the group screen and select “Switch”.
- From the drop-down list of compatible switches select the brand and type of switch you like to add.
- Next indicate whether you would like to add to a zone or to the whole group.
- Scan the QR code on the back of the switch.
- Hold the NFC antenna of the phone close to the switch and wait for the confirmation.
- Confirm commissioning, by pressing any button of the switch.
- Once commissioned, the app requests to test if the switch works correctly.
- Test the switch by making another button press, and once it works as expected press “Everything is fine”.
- In case of a four-button switch, you can assign and customize scenes in the next step.

Remarks

- Please follow the instructions carefully, e.g., press the correct buttons and do not press sequences too fast. In case the switch is not detected during the commissioning procedure, please re-try.
- Add all luminaires in a group first and then add a switch. Switch binding mechanism is to each node within the Zigbee group at the time of commissioning. For firmware versions 1.X, no switch binding takes place, when new nodes are commissioned after the switch was added.
- All switches attached within a group should belong to a single brand. Combining switches from different brands is not recommended and lead to incorrect behavior.
- In case a group has switches on group and on zone level, please first add the switch to the group level. In this combination, a 2-Button switch is recommend while a 4-Button switches can be used for the zones.
- If two or more zones are used with a 4-button switch, the maximum number of lights is 20 per zone.
- The backside of the switch may show an “O” and an “I indicator. The switch needs to be mounted such that ‘I’ is at the TOP and ‘O’ at the BOTTOM.
- Do not remove the rocker from the switch module. If the rocker is placed back incorrectly, the switch does not function properly.
- During commissioning of ZGP switches the devices should not be too close to the lights (between 2m and 5m distance) to avoid commissioning failures.
- After commissioning of groups with more than 50 lights, please wait a few minutes before adding the first switch to avoid commissioning failure.



Step-by-step guide - click-based commissioning method



Step-by-step guide - NFC-based commissioning method

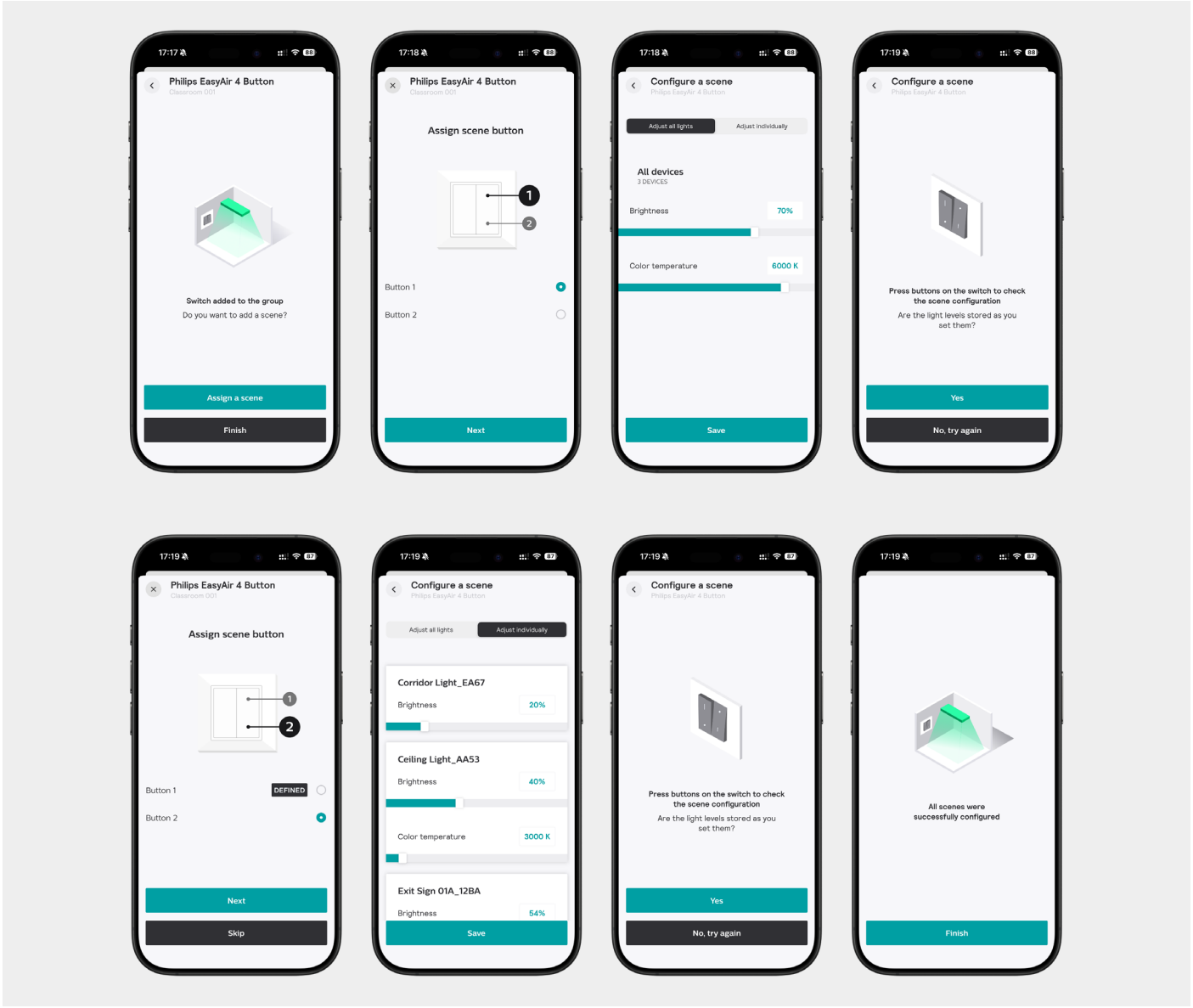
Configuring scenes

Purpose

Different lighting configuration settings can be stored in scenes. With any 4-button wireless switch, up to 2 scenes can be configured.

How to

- Choose “Assign a scene” at the end of the switch commissioning or select the device from the group overview.
- Select the button with which that scene will be switched on and off.
- The light levels of all the luminaires in the scene can be set individually or get the same value when set together.
- Test the scene setting by pressing the selected button of the wireless switch.
- Set the second scene for the second scene button and select light levels and CCTs.
- Once all scenes have been configured and all light levels are as expected, tap “Finish”.



Adding external, battery-powered sensors

Purpose

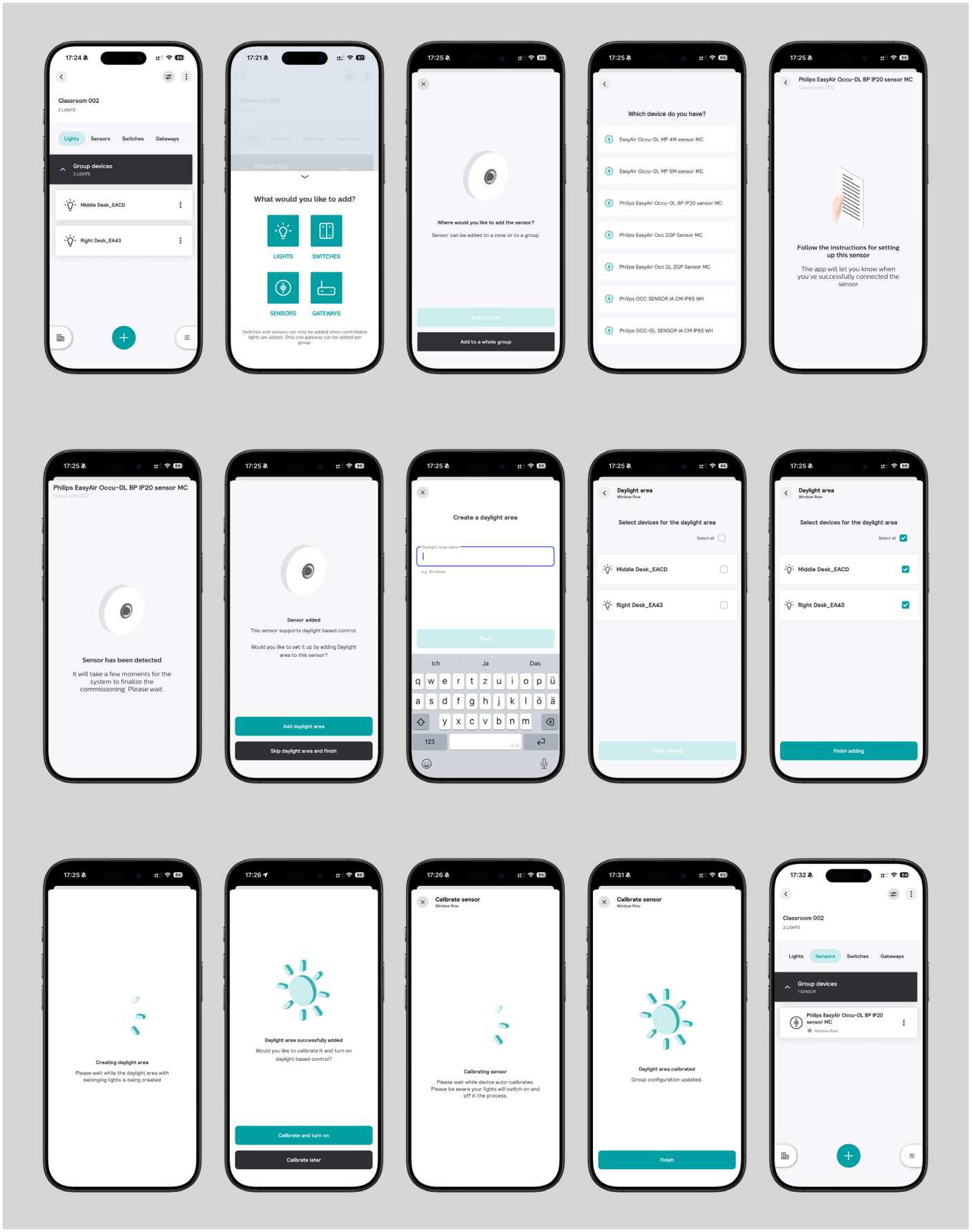
To control a group or a zone with one sensor, external sensors can be commissioned to a group or to a zone. The MasterConnect system offers battery-powered (also known as external ZGP sensors) as well as main-powered external area sensors that are commissioned differently.

How to

- Click on the “+” on the group screen and select “Sensors”.
- Indicate whether you would like to add the sensor to a zone or to the entire group.
- From the drop-down list of available sensors, select the type of sensor you like to add.
- Follow the instructions for setting up the sensor.
  For factory new sensors, pull out the plastic strip that shields the battery.
  If the sensor is not factory new, press the pinhole reset button at the rear side of the sensor until the red and green LED have lighted up twice.
- Within a few seconds the app feeds back that the sensor was found, and the sensor is commissioned automatically.
- When the sensor is added, you can choose to finish the process or assign lights to a daylight area, see the next part for more explanation.

Remarks

- You cannot add battery-powered external sensors to groups consisting out of wireless drivers and luminaire-integrated sensors (hybrid networks) or to groups and zones consisting out of luminaire-integrated sensors only.
- During commissioning of battery-powered sensors the devices should not be too close to the lights (between 2m and 5m distance) to avoid commissioning failures.
- In case battery-powered external sensors are used for a group, and at the same time for zones of that group, the sensor(s) of the group must be added first.
- With firmware 2.1.1, situations may occur when battery-powered sensors cannot be added to the same group it was previously removed from. Try using a different sensor or to recommission the entire group.
- In case a wrong battery-powered sensor has been selected in the dropdown list and assigned (e.g. the ‘EasyAir Occ sensor MC’ instead of the ‘EasyAir Occ – DL sensor MC’), other battery-powered sensors or ZPG switches that are added to the group later might not work properly. To recover from this situation the lights in the group need to be rebooted or recommissioned and the battery-powered sensors must be recommissioned.
- The sum of the ZGP sensors and wireless switches in a group should not exceed 5 if the lights (wireless drivers and SNS410 MC) are on a FW 1 version, and it should not exceed 15 if the lights are on FW 2 or FW 3. To read the firmware version of the lights see chapter ‘Device details’.
- After commissioning of a battery-powered external sensor, it is recommended to verify the successful commissioning by waiting one occupancy cycle (short timers can help for testing).


Classroom 002
2 LIGHTS
Lights
Sensors
Switches
Gateways
Group devices
2 LIGHTS
Middle Desk_EACD
Right Desk_EA43
What would you like to add?
LIGHTS
SWITCHES
SENSORS
GATEWAYS
Switches and sensors can only be added when controllable lights are added. Only one gateway can be added per group.
Where would you like to add the sensor?
Sensor can be added to a zone or to a group.
Add to zone
Add to a whole group
Which device do you have?
EasyAir Occu-DL MP 4M sensor MC
EasyAir Occu-DL MP 8M sensor MC
Philips EasyAir Occu-DL BP IP20 sensor MC
Philips EasyAir Occ ZGP Sensor MC
Philips EasyAir Occ DL ZGP Sensor MC
Philips OCC SENSOR IA CM IP65 WH
Philips OCC-DL SENSOR IA CM IP65 WH
Philips EasyAir Occu-DL BP IP20 sensor MC
Follow the instructions for setting up this sensor
The app will let you know when you've successfully connected the sensor
Sensor has been detected
It will take a few moments for the system to finalize the commissioning. Please wait.
Sensor added
This sensor supports daylight based control.
Would you like to set it up by adding Daylight area to this sensor?
Add daylight area
Skip daylight area and finish
Create a daylight area
Daylight area name
e.g. Windows
Next
Daylight area
Window Row
Select devices for the daylight area
Select all
Middle Desk_EACD
Right Desk_EA43
Finish adding
Creating daylight area
Please wait while the daylight area with belonging lights is being created
Daylight area successfully added
Would you like to calibrate it and turn on daylight based control?
Calibrate and turn on
Calibrate later
Calibrate sensor
Window Row
Calibrating sensor
Please wait while device auto-calibrates. Please be aware your lights will switch on and off in the process.
Daylight area calibrated
Group configuration updated.
Finish
Classroom 002
2 LIGHTS
Lights
Sensors
Switches
Gateways
Group devices
1 SENSOR
Philips EasyAir Occu-DL BP IP20 sensor MC
Window Row

Adding external, mains-powered sensors

Purpose

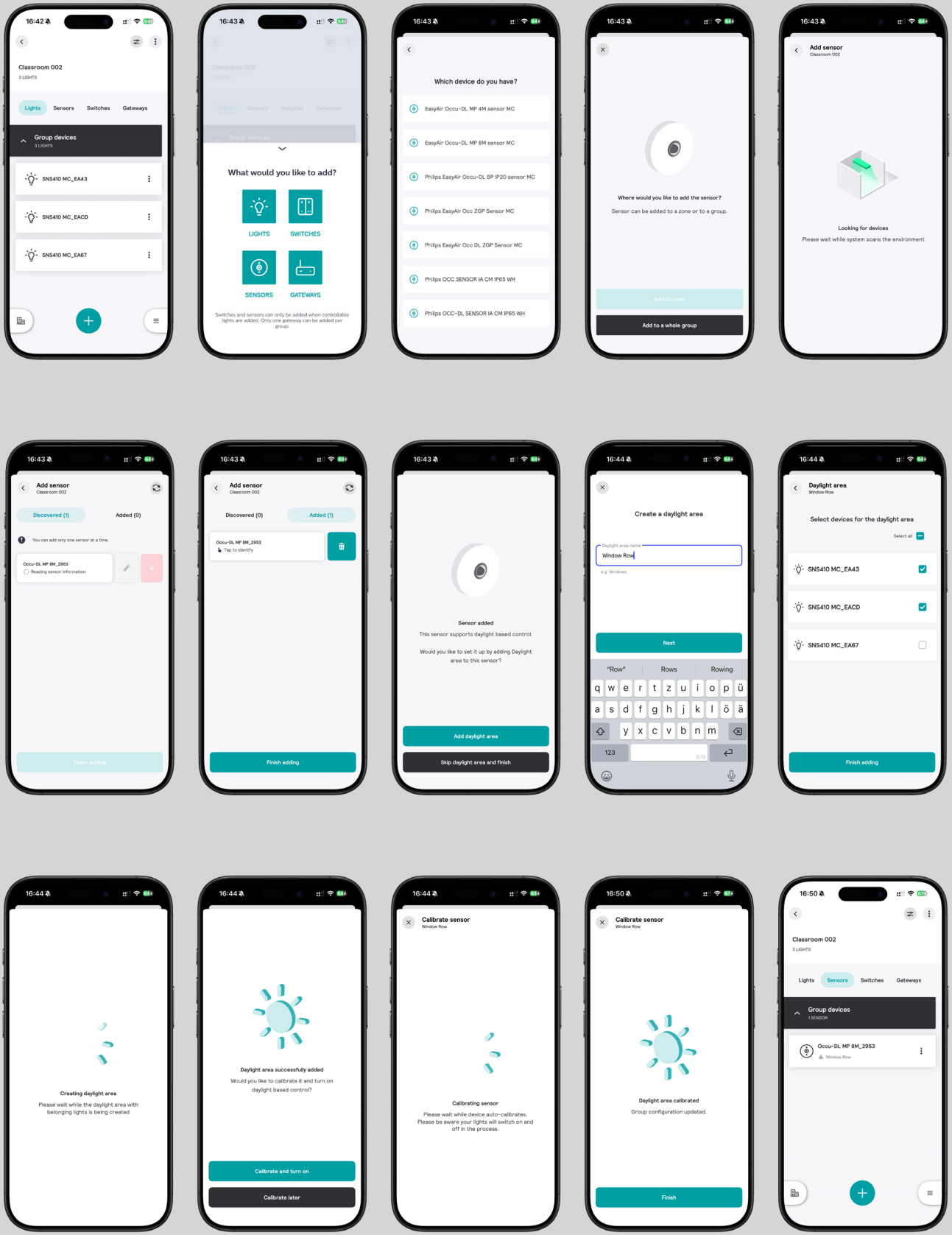
To control a group or a zone with one sensor, external sensors can be commissioned to a group or to a zone. The MasterConnect system offers battery-powered (also known as external ZGP sensors) as well as main-powered external area sensors that are commissioned differently.

How to

- Click on the “+” on the group screen and select “Sensors”.
- Indicate whether you would like to add the sensor to a zone or to the entire group.
- From the drop-down list of available sensors, select the type of sensor you like to add.
- Please wait 10 seconds for the sensors to be discovered.
- Direct the light of a torchlight to the MasterConnect sensor that you like to add to a group for a couple of seconds. Alternatively, select the sensor from the “Discovered” list and commissioning it by pressing the “+”. Choose “Finish adding” to complete the commissioning.
- When the sensor is added, you can choose to finish the process or assign lights to a daylight area, see the next part for more explanation.

Remarks

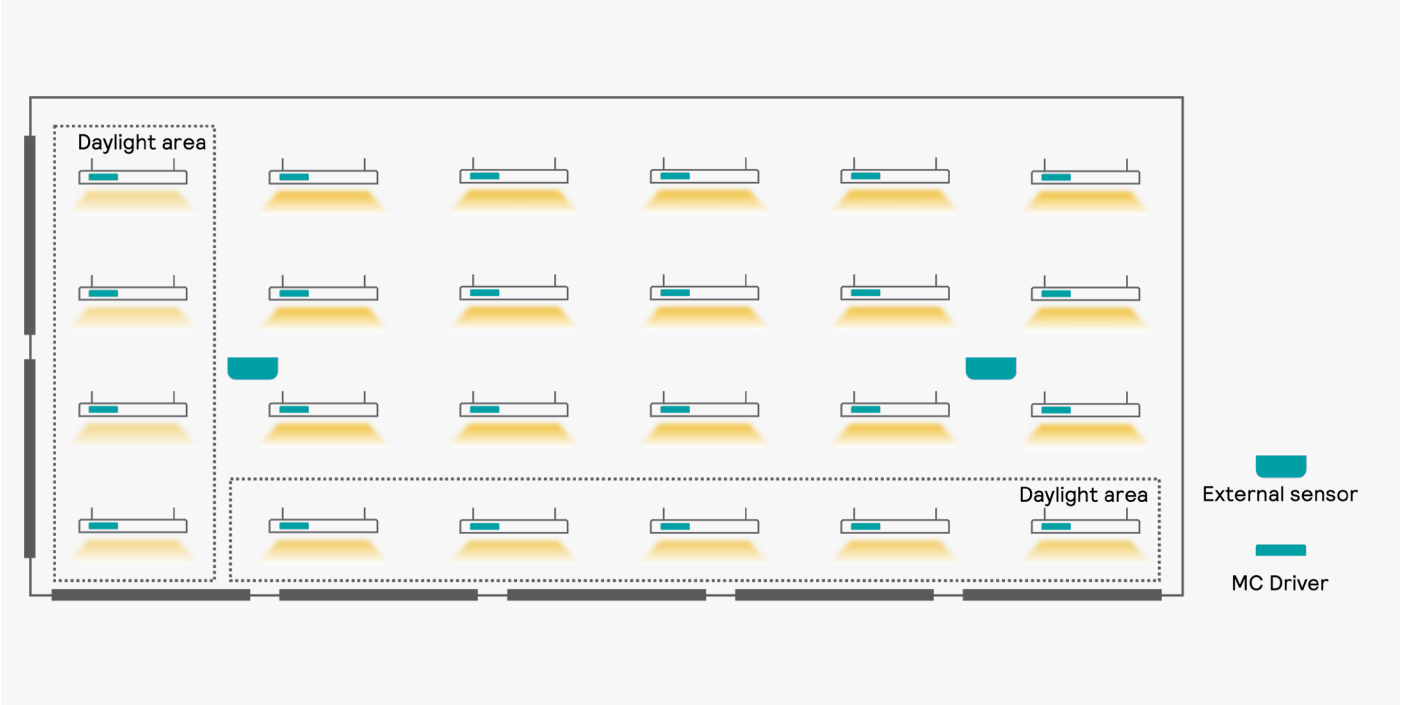
- You can only add mains-powered external sensors to groups consisting out of wireless drivers and / or luminaire-integrated sensors with firmware 2 or higher.
- You can only add wireless drivers with firmware 2.1 or higher to daylight areas associated to mains-powered external area sensors.
- Please note that in case zone-occupancy sharing in a zone configuration is disabled, MC devices in that zone will react to the mains-powered external sensors of the group but not to the mains-powered external sensors of that zone.


Classroom 002
3 LIGHTS
Lights
Sensors
Switches
Gateways
Group devices
3 LIGHTS
SNS410 MC_EA43
SNS410 MC_EACD
SNS410 MC_EA67
What would you like to add?
LIGHTS
SWITCHES
SENSORS
GATEWAYS
Switches and sensors can only be added when controllable lights are added. Only one gateway can be added per group.
Which device do you have?
EasyAir Occu-DL MP 4M sensor MC
EasyAir Occu-DL MP 8M sensor MC
Philips EasyAir Occu-DL BP IP20 sensor MC
Philips EasyAir Occ ZGP Sensor MC
Philips EasyAir Occ DL ZGP Sensor MC
Philips OCC SENSOR IA CM IP65 WH
Philips OCC-DL SENSOR IA CM IP65 WH
Where would you like to add the sensor?
Sensor can be added to a zone or to a group.
Add to zone
Add to a whole group
Add sensor
Classroom 002
Looking for devices
Please wait while system scans the environment
Discovered (1)
Added (0)
You can add only one sensor at a time.
Occu-DL MP 8M_2953
Reading sensor information
Finish adding
Discovered (0)
Added (1)
Occu-DL MP 8M_2953
Tap to identify
Sensor added
This sensor supports daylight based control.
Would you like to set it up by adding Daylight area to this sensor?
Add daylight area
Skip daylight area and finish
Create a daylight area
Daylight area name
Window Row
e.g. Windows
Next
Daylight area
Window Row
Select devices for the daylight area
Select all
Creating daylight area
Please wait while the daylight area with belonging lights is being created
Daylight area successfully added
Would you like to calibrate it and turn on daylight based control?
Calibrate and turn on
Calibrate later
Calibrate sensor
Window Row
Calibrating sensor
Please wait while device auto-calibrates. Please be aware your lights will switch on and off in the process.
Daylight area calibrated
Group configuration updated.
Finish
1 SENSOR
Occu-DL MP 8M_2953

Daylight areas for external sensors

Purpose

Lights assigned to a daylight area, dim down when the amount of daylight as sensed by internal sensor increases. You can assign daylight areas to a group and/or to a zone. Only the lights in the daylight area will follow daylight regulation. Typically, those are the lights close to the window.

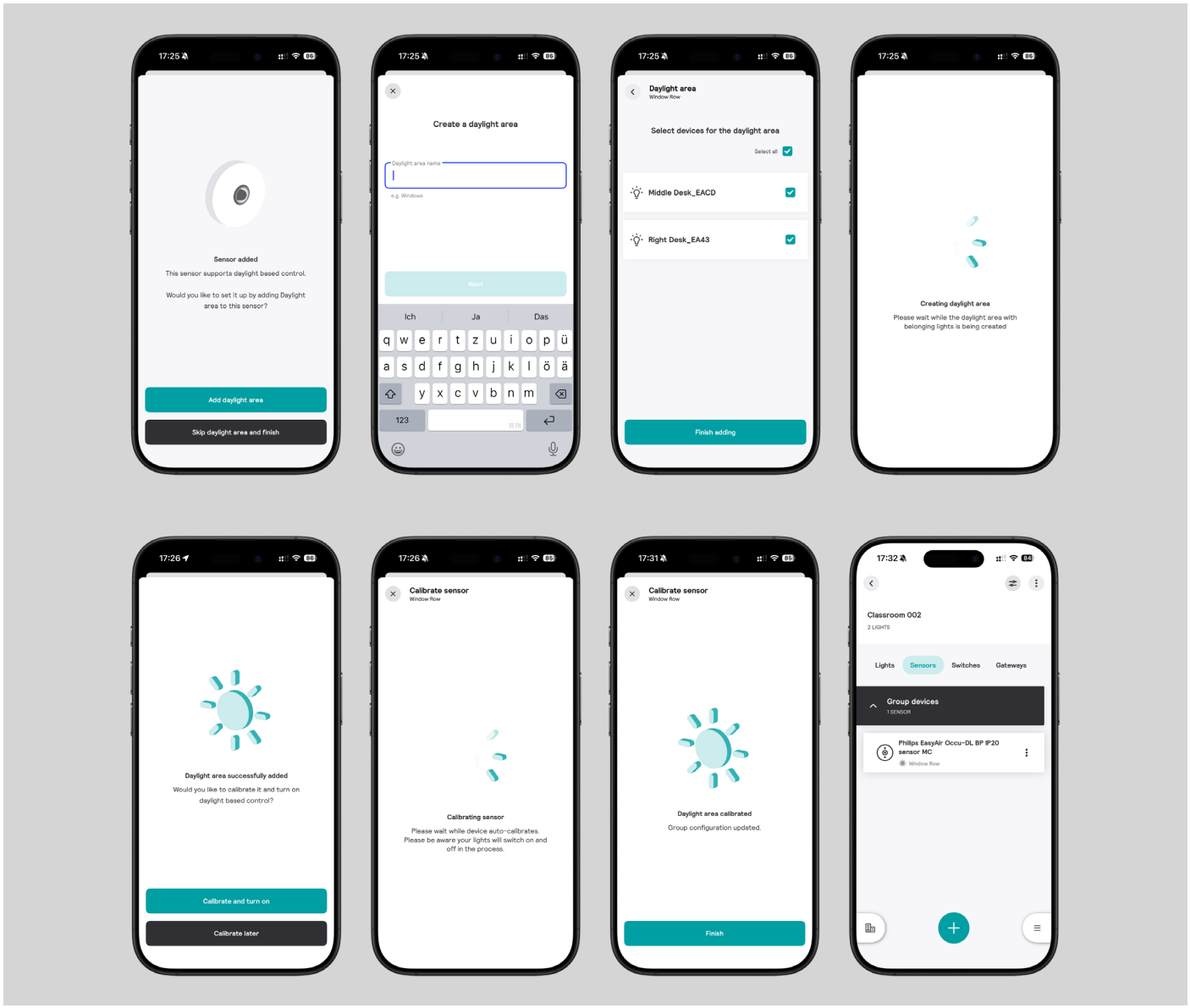


How to

- Choose “Create daylight area” at the end of the sensor commissioning or via the device info screen of the sensor from the group overview.
- Assign a name for the daylight area.
- Select devices for the daylight area and click next.
- Choose “Calibrate and turn on” to activate the calibration process. This process can be skipped by selecting “Calibrate later” and done via the device info screen from the group overview.
- After the calibration is done, hit “Finish” to finalize the commissioning.

Remarks

- A daylight area can be in a group or in a zone but cannot include lights of different zones, or lights of a zone and lights outside that zone.
- Up to 25 lights can be moved into a daylight area.
- For best lighting performance, it is recommended to calibrate daylight areas at night times.
- Lights can be moved from one daylight area to another and can be added or removed. But repeated actions can cause wrong light behavior. It is recommended to plan daylight areas carefully in advance.


Sensor added
This sensor supports daylight based control.
Would you like to set it up by adding Daylight area to this sensor?
Add daylight area
Skip daylight area and finish
Create a daylight area
Daylight area name
e.g. Windows
Next
Daylight area
Window Row
Select devices for the daylight area
Select all
Middle Desk_EACD
Right Desk_EA43
Finish adding
Creating daylight area
Please wait while the daylight area with belonging lights is being created
Daylight area successfully added
Would you like to calibrate it and turn on daylight based control?
Calibrate and turn on
Calibrate later
Calibrate sensor
Window Row
Calibrating sensor
Please wait while device auto-calibrates. Please be aware your lights will switch on and off in the process.
Calibrate sensor
Window Row
Daylight area calibrated
Group configuration updated.
Finish
Classroom 002
2 LIGHTS
Lights
Sensors
Switches
Gateways
Group devices
1 SENSOR
Philips EasyAir Occu-DL BP IP20 sensor MC
Window Row

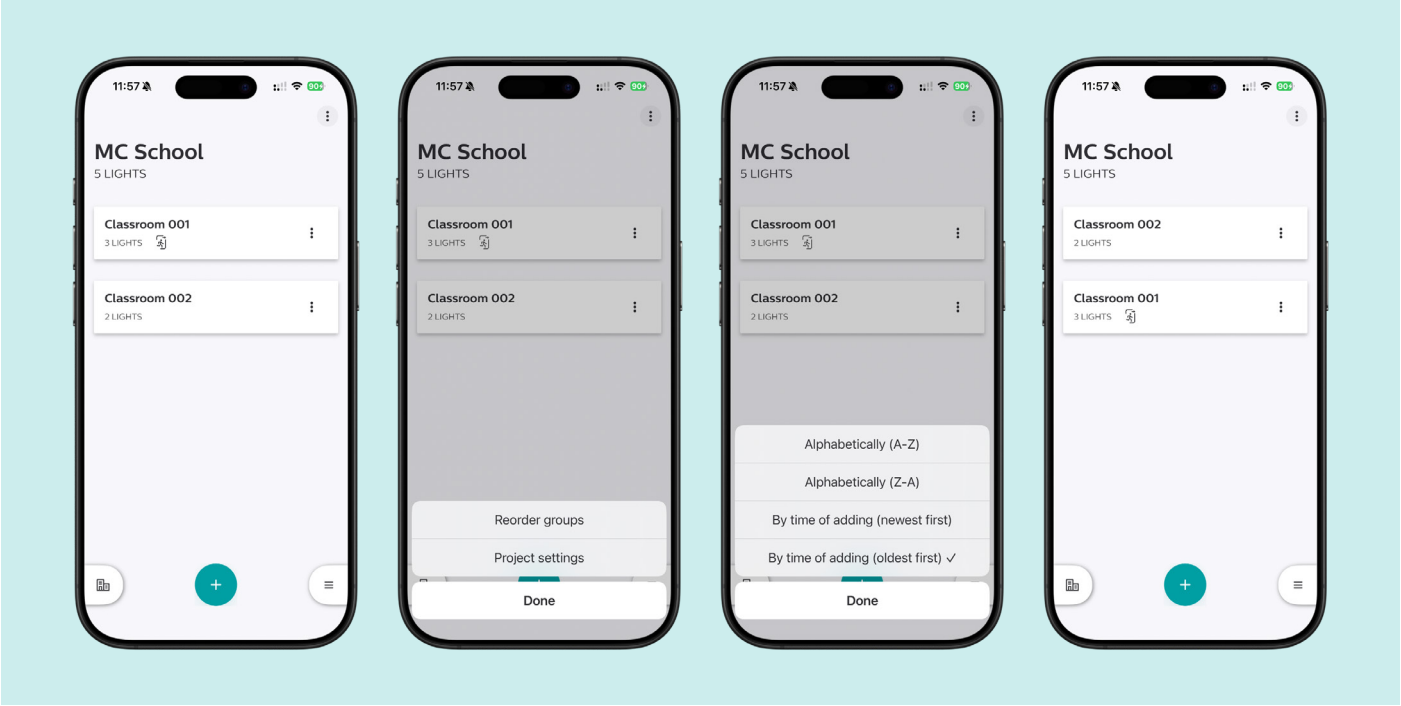
Arrange your groups

Purpose

Arrange your groups in the order you prefer.

How to

- Open the right-hand three-dot menu on the project overview and choose “Reorder groups”.
- Choose the arrangement you prefer.



Generating a QR Code for the Control app

Purpose

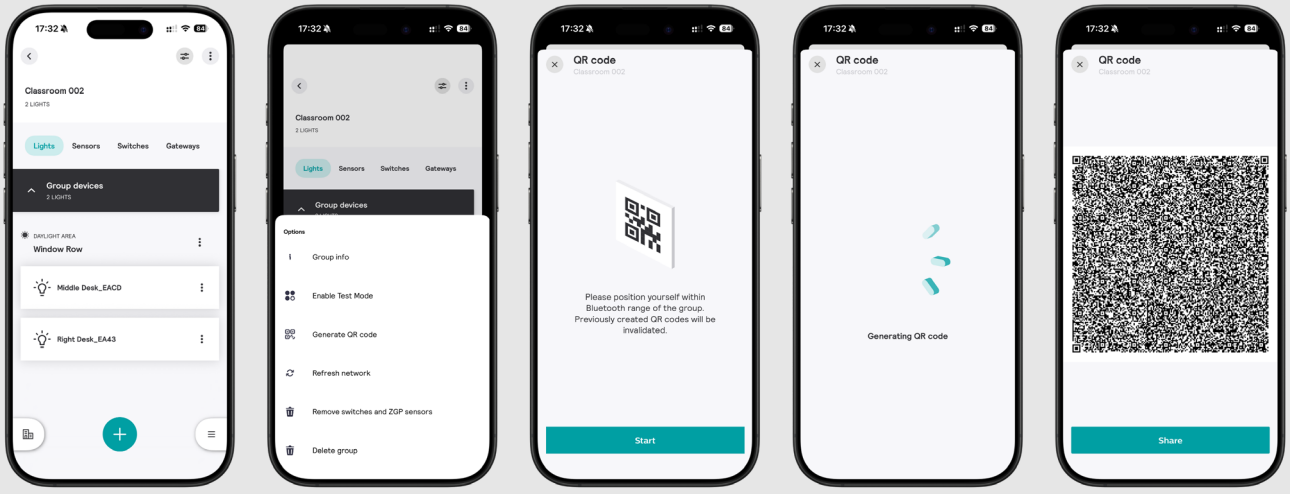
To provide lighting control access for end users via smartphone or tablet with the Philips MasterConnect control app.

How to

- Generating a QR code can be done on group or zone level.
- To generate QR code for a zone, click on the 3 dots next to the zone name and select “Generate QR Code”.
- To generate QR code for a group, click on the 3 group dots at the top right and select “Generate QR Code”.
- Confirm the creation by choosing “Start”.
- A QR is ready to be shared and can be printed for placement at the intended application area, making it accessible for scanning by an end-user.

Remarks

- It is not supported to mix tunable white and single-color white lights in one group.
- For QR generation the user needs to be in range of the lights.
- Within one group QR codes should be generated either for the whole group or for one or more zones, but not for the group and a zone.
- The light settings of scenes 1 and 2 that show up with the Philips MasterConnect Control app, can be adjusted by setting scenes using a 4B switch before the QR code is generated. However, this adjustment of scenes for end user control is only possible if the firmware versions FW 1.2.12 and higher.



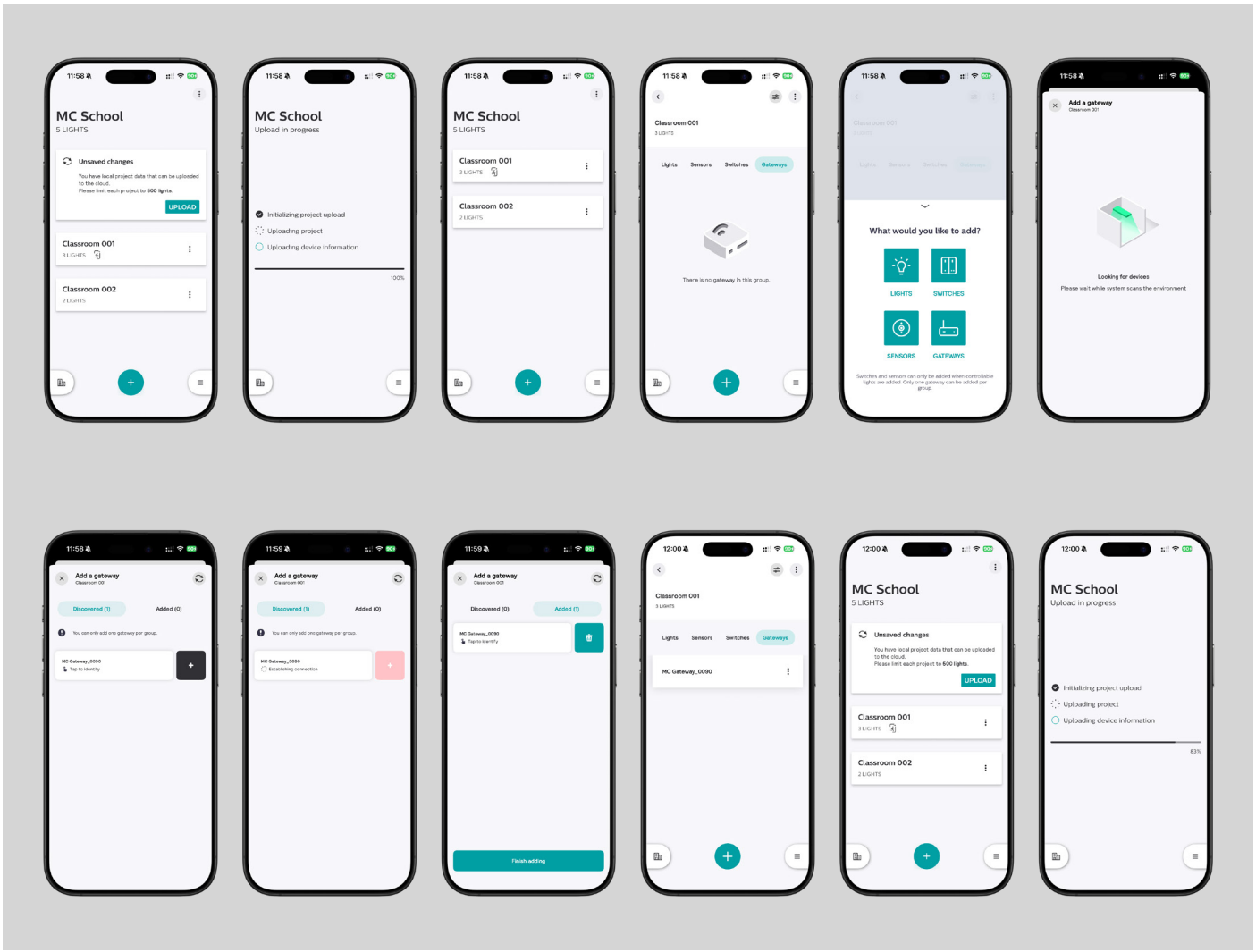
Adding a MasterConnect gateway

Purpose

Add a MasterConnect gateway to a group to connect your lighting system to the cloud.

How to

- For commissioning, the indicator-LED of the gateway should be red. If it shows blue or green the gateway needs to be reset first.
- Before starting to add the gateway, upload the project to the cloud.
- Click on the “+” on the group screen and select “Gateway”. The system scans for available gateways.
- Press the "+" next to the name of gateway you'd like to add. Press "Finish adding" to finalize the commissioning.
- Make sure to upload the project to the cloud once more to activate the data link.



Advanced gateway network settings

Purpose

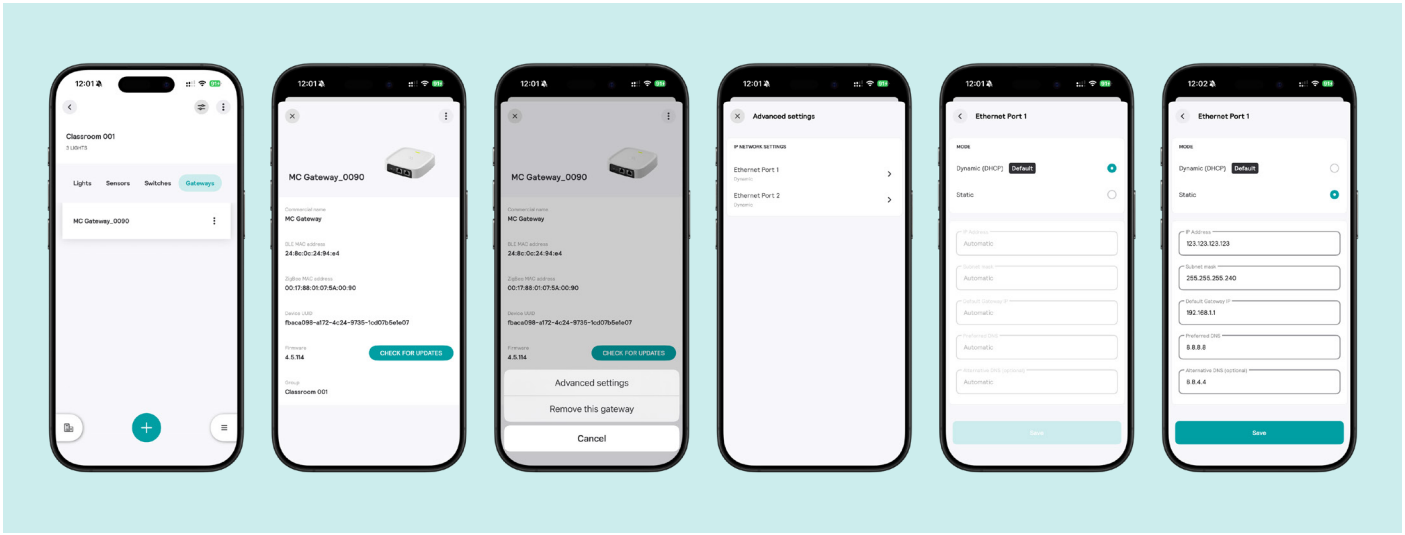
When using a MasterConnect gateway in a group, the network settings can be changed between static IP addressing and the default dynamic IP addressing.

How to

- After successfully adding a gateway, open the group overview and select the “Gateways” tab.
- Select the gateway by clicking on its name and open the menu by clicking on the three dots in the top right.
- Choose “Advanced settings” from the list and ethernet port that is connected to the network.
- Choose between the “Dynamic (DHCP)” and “Static” IP addressing mode.
- When selecting the “Static” mode, enter the network details into the input mask.
- Complete the settings change by clicking “Save”.

Remarks

- A blue status LED on the gateway indicates that no internet connection could be established. A change of the network settings may be required. If the status LED on the gateway is green, a change of the networks settings is not required as the gateway could connected to the internet successfully.



Enabling automatic energy reports

Purpose

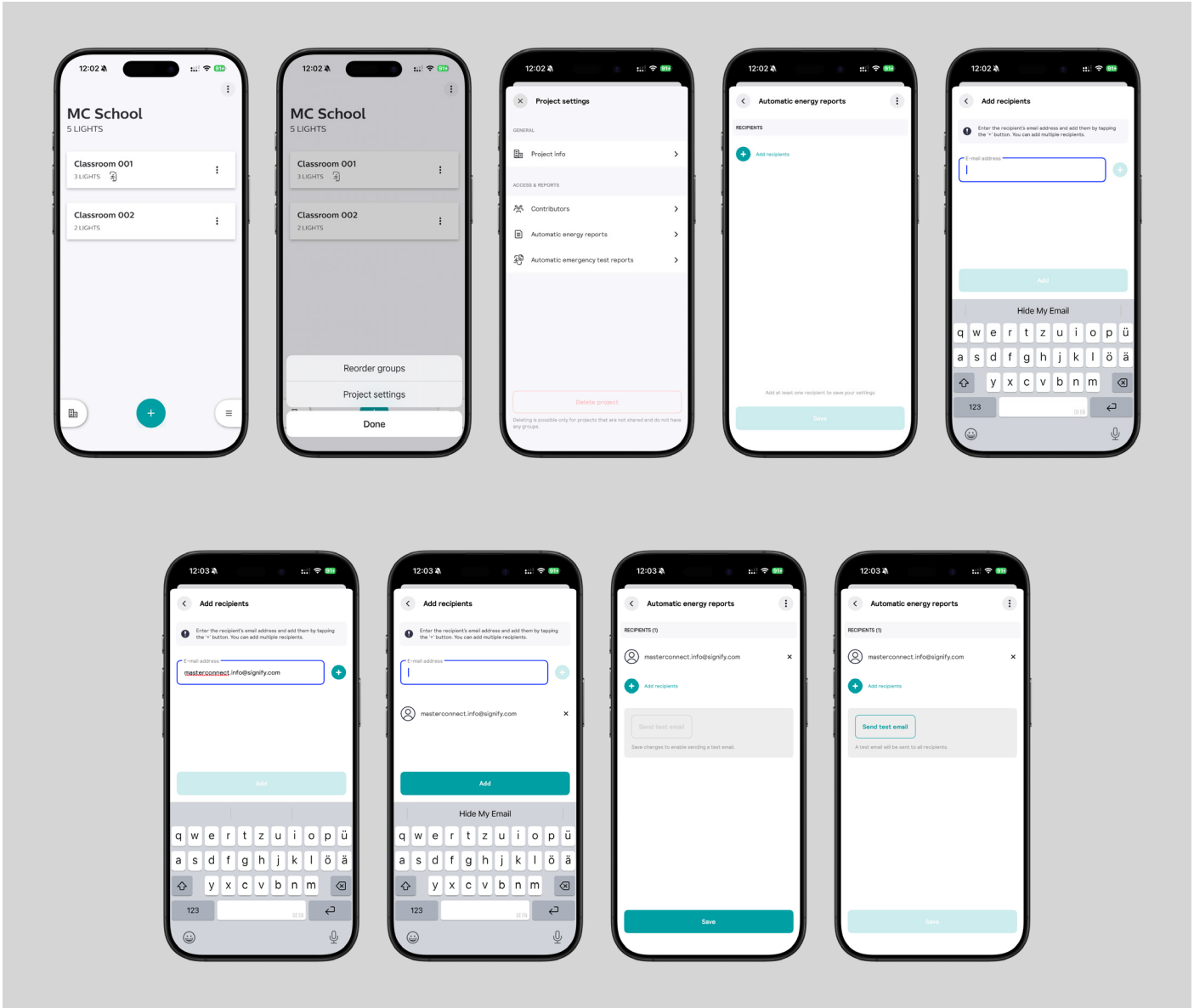
When using a MasterConnect gateway, automatic energy report sending can be activated for a project.

How to

- After successfully adding a gateway and uploading the project to the cloud, open the project settings screen by clicking on the 3 dots at the top right of the project screen and select "Project settings".
- Go to "Automatic energy reports".
- Choose "Add recipients" and fill in the e-mail address of the recipient. Press "+". Repeat this step for any other recipient.
- Complete the setup by pressing "Add" and "Save".

Remarks

- The recipients for automatic energy reports don't have to be MasterConnect users. The reports are automatically sent to the provided e-mail addresses once a month.
- The report covers the information from all gateways in the project and shows the following information per group and zone: Group name, zone name, daylight area name, number of lights, reporting period, power consumption current period – in kWh, power consumption previous period – in kWh, power consumption – project lifetime – in kWh, power consumption – luminaire lifetime – in kWh.
- If no recipients are added, no energy data are stored in the cloud, and it will not be possible for a user to retrieve energy data of the periods before the feature was enabled.



Setting emergency lighting test schedules

Purpose

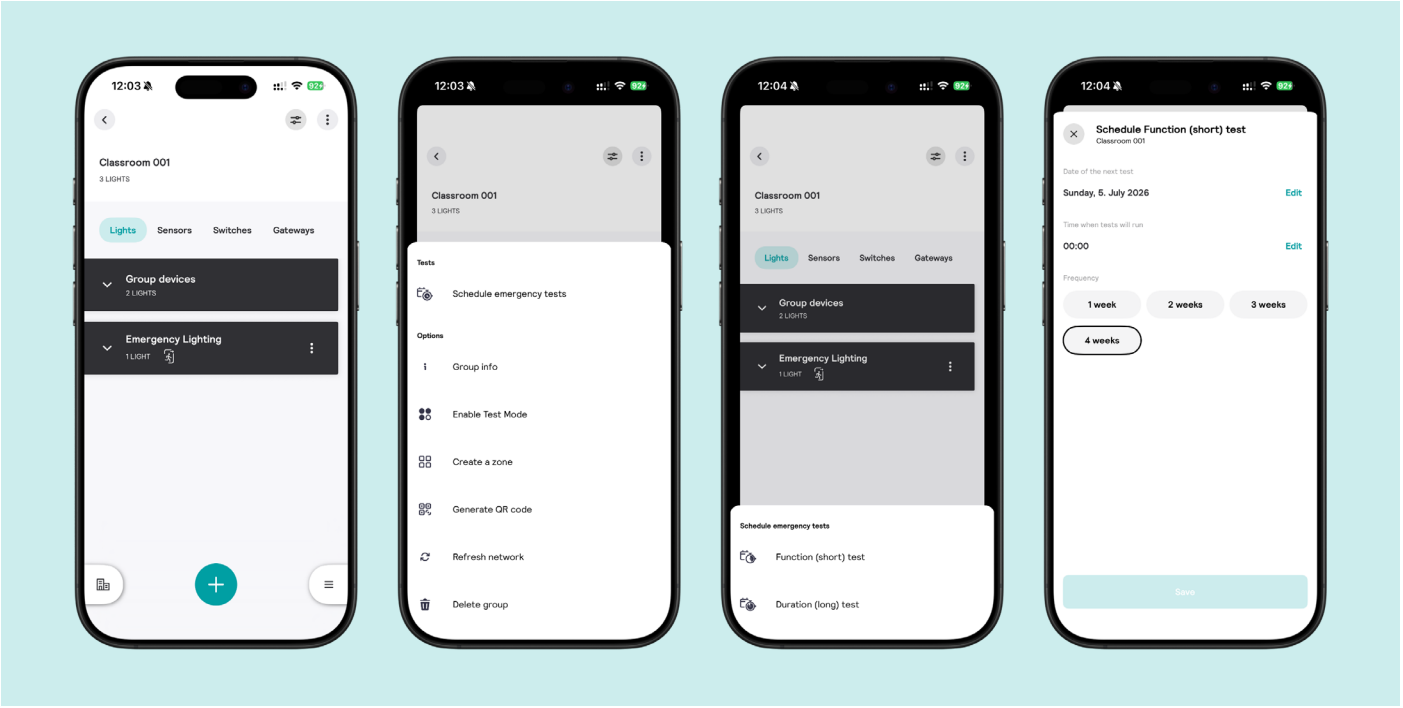
When using emergency-enabled lights, test schedules in a zone and a group can be modified to accommodate for project requirements.

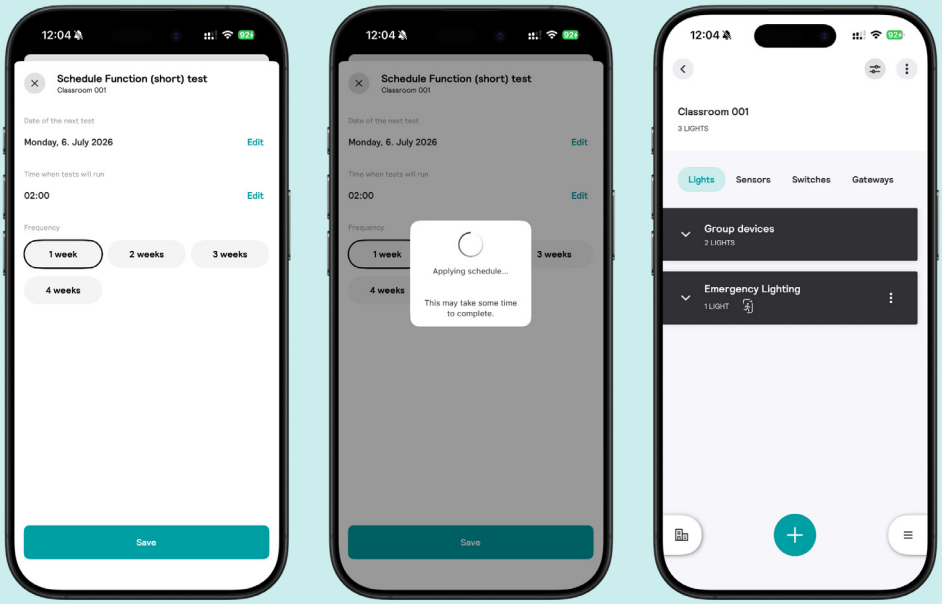
How to

- Enter the group overview screen.
- Tap the three dots at the top right to change group test schedules or the three dots next to a zone name to change zone test schedules.
- Choose “Schedule emergency tests” and select whether to change the “Function (short) test” or the “Duration (long) test”.
- Change the next test date, next test time as well as the desired frequency of the test.
- Press "Save" to apply the test schedules.

Remarks

- Scheduling done on group level will override the schedule of a zone. To ensure proper scheduling, schedule of a group level first before changing the zone schedules.
- Emergency test schedules are maintained on the devices. Actual start time and scheduled start time can deviate.
- Emergency lighting functionalities are only supported from firmware 3.3 onwards and in combination with 3rd party emergency drivers compliant with IEC 62386-202 / DALI-Part 202: “Requirements for control gear - Self-contained emergency lighting”.
- Please note that scheduling is based on the time zone of the phone using the MasterConnect app. Ensure the time zone of the mobile device is setup correctly before applying the schedule.
- Please avoid scheduling short, function tests and long, duration tests for the same day and time as this will cause the function test to fail.




12:04
Schedule Function (short) test
Classroom 001
Date of the next test
Monday, 6. July 2026
Edit
Time when tests will run
02:00
Edit
Frequency
1 week
2 weeks
3 weeks
4 weeks
Save
12:04
Schedule Function (short) test
Classroom 001
Date of the next test
Monday, 6. July 2026
Edit
Time when tests will run
02:00
Edit
Frequency
1 week
3 weeks
4 weeks
Applying schedule...
This may take some time to complete.
Save
12:04
Classroom 001
3 LIGHTS
Lights
Sensors
Switches
Gateways
Group devices
2 LIGHTS
Emergency Lighting
1 LIGHT

Enabling emergency test reports

Purpose

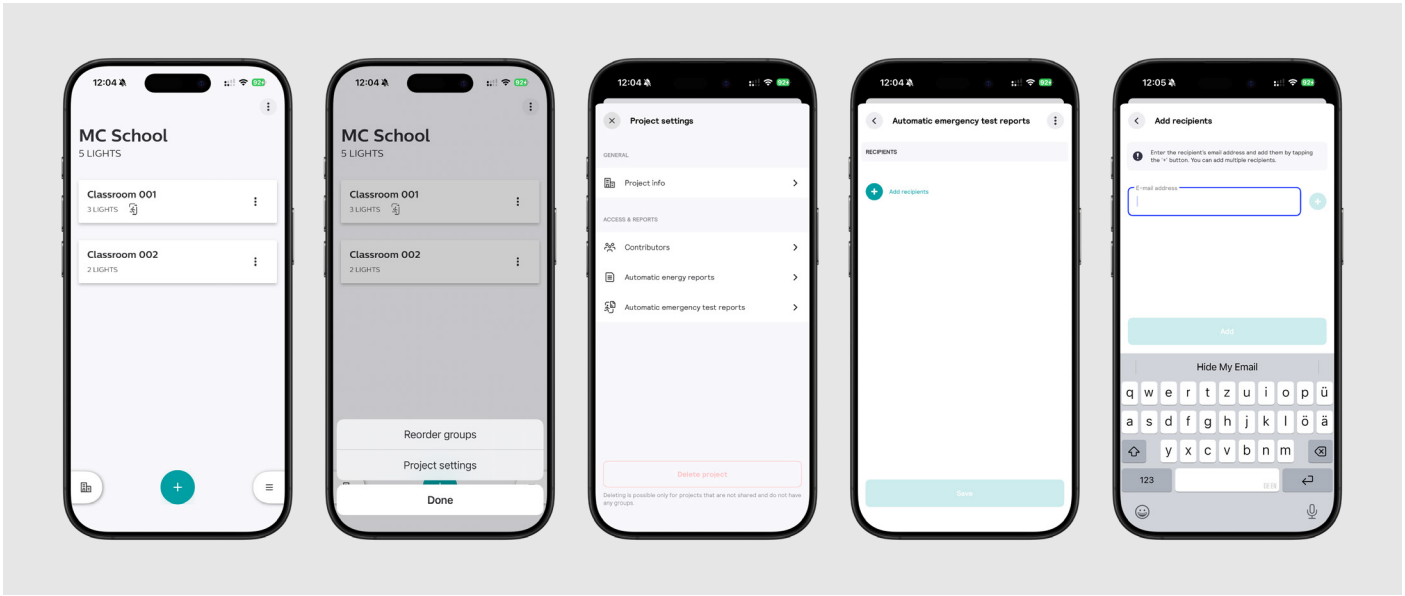
When using a MasterConnect gateway and emergency-enabled lights in one or more groups, automatic emergency test report sending can be activated for a project.

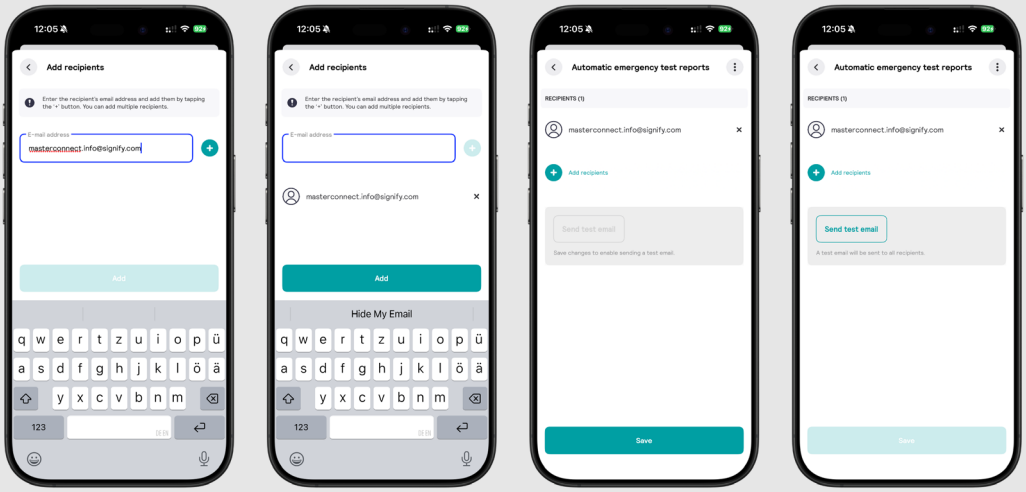
How to

- After successfully adding a gateway and uploading the project to the cloud, open the project settings screen by clicking on the 3 dots at the top right of the project screen and select "Project settings".
- Go to "Automatic emergency test reports".
- Choose "Add recipients" and fill in the e-mail address of the recipient. Press "+". Repeat this step for any other recipient.
- Complete the setup by pressing "Add" and "Save".

Remarks

- The recipients for automatic emergency test reports don't have to be MasterConnect users.
- The reports are automatically sent to the provided e-mail addresses once a month (1st or 2nd day of a month) and on ad hoc basis in case of a detected failure.
- The reports cover the information from all gateways in the project and shows the following information: group name, zone name, daylight area name, device name, test date, test type, test result, error code (if any), error description (if any).
- The ad hoc report is sent within 48 hours after detecting a failure of the luminaires or after detecting a missing test report for a scheduled test.
- Please note that scheduled testing and test result reporting will only be applied to emergency luminaires that have been commissioned into a project. Ensure that all emergency luminaires are commissioned, a gateway is added and the project is uploaded to the cloud for proper functioning of the system.
- Please be aware that function and duration tests may be postponed based on the usage of the project and the used emergency gear. This may cause an ad-hoc failure report to trigger.




12:05
Add recipients
Enter the recipient's email address and add them by tapping the '+' button. You can add multiple recipients.
E-mail address
masterconnect.info@signify.com
Add
Hide My Email
Automatic emergency test reports
RECIPIENTS (1)
masterconnect.info@signify.com
Add recipients
Send test email
Save changes to enable sending a test email.
Save
A test email will be sent to all recipients.

Sending a reporting test email

Purpose

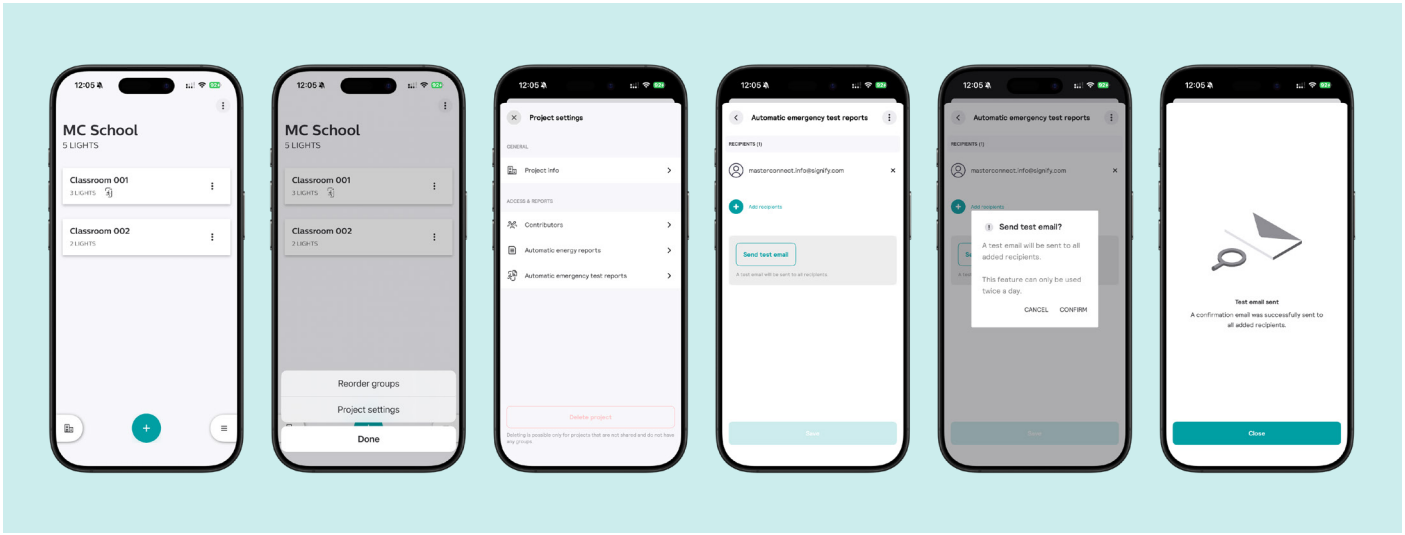
When using a MasterConnect gateway and one of the automatic reporting services, test emails can be sent to confirm proper functioning of the report recipient list.

How to

- After successfully adding a one or more recipients to the reporting recipient list and saving the list, the “Send test email” option will be enabled.
- Press “Send test email” and proceed by pressing “Confirm”.

Remarks

- The reporting can only be used twice a day per user.
- Every recipient in the recipient list will receive a test mail not just newly added one.



Project backup and access sharing

Purpose

The Signify MasterConnect app offers the capability to store user created projects in the cloud. This capability allows users to access their projects (even when a phone is lost) and give project access to specific contributors.

Definitions

Upload:
- Local data of a project are transferred to the Cloud.
- When a Project has been created or edited, the app will ask if you want to upload the Project. Each time you upload a project the version in the cloud will be overwritten.

Download:
- Cloud data of a project are transferred to your device.
- Each time you download a project the local version will be overwritten.

Sync:
- The app checks the local and the Cloud data of your projects. Projects that have an updated version in the Cloud will be downloaded, projects that have an updated local version will be uploaded.

How to – activate the project backup feature

- To use project backup, enter the “Settings” from the right-hand menu.
- Choose “Project backup” and enable the “Sync project with the cloud” option.
- On iOS, please fully close and reopen the app to apply the change.

How to – upload a project

- When a project has been created or updated, the user will be prompted to upload the project to the cloud.
- Click on upload to transfer changes to the cloud. This will overwrite the previous version of the project in the cloud.

How to – invite a contributor

- After uploading a project, open the project edit screen by clicking on the 3 dots at the top right and selecting “Edit project” from the list.
- Choose “Invite more people” and enter the email address of the user.
- Confirm by clicking the plus and invite.
- Save the changes by choosing “Save”.

How to – download a project

- When opening the app or changing to a project, the user will be prompted to download changes that are available in the cloud.

Remarks

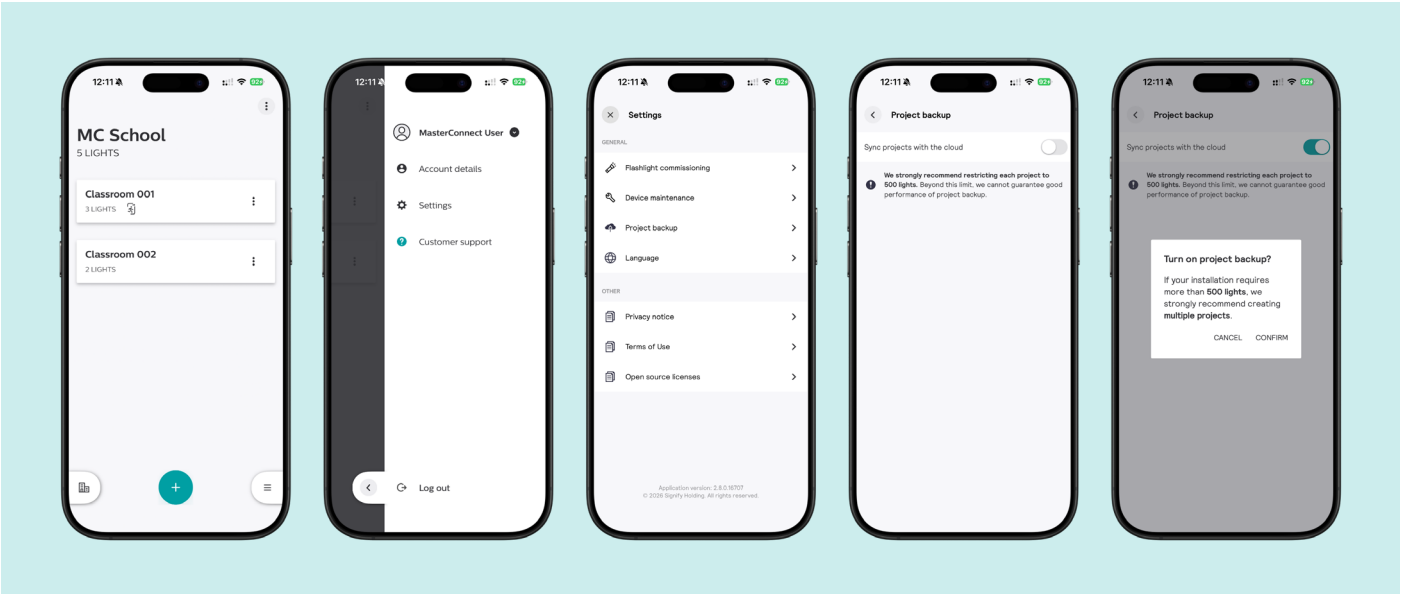
General:
- Device Wi-Fi must be enabled (but commissioning can still take place offline).
- The Internet connection must be stable during synchronization. If the upload fails due to a broken connection, it might be needed to log out from the app, and in again, to recover the process.
- Do not reset a device that is saved in the cloud. It is not removed from the project but cannot be controlled anymore.
- To retrieve lost devices, please contact your local account manager for support.

Contributors & accounts:
- When creating a project with a newly registered user, it may take up to 30 min to activate the project backup feature.
- Only users who have already registered for Signify MasterConnect app can be added as contributors.
- A contributor who invites a new contributor shall not invite his own account which is currently used.
- If a project that has been uploaded with app version 2.4 or higher is shared for the first time with a contributor who still uses app version 2.3 or older, he/she does not get to see the project for download. He needs to update the app first.

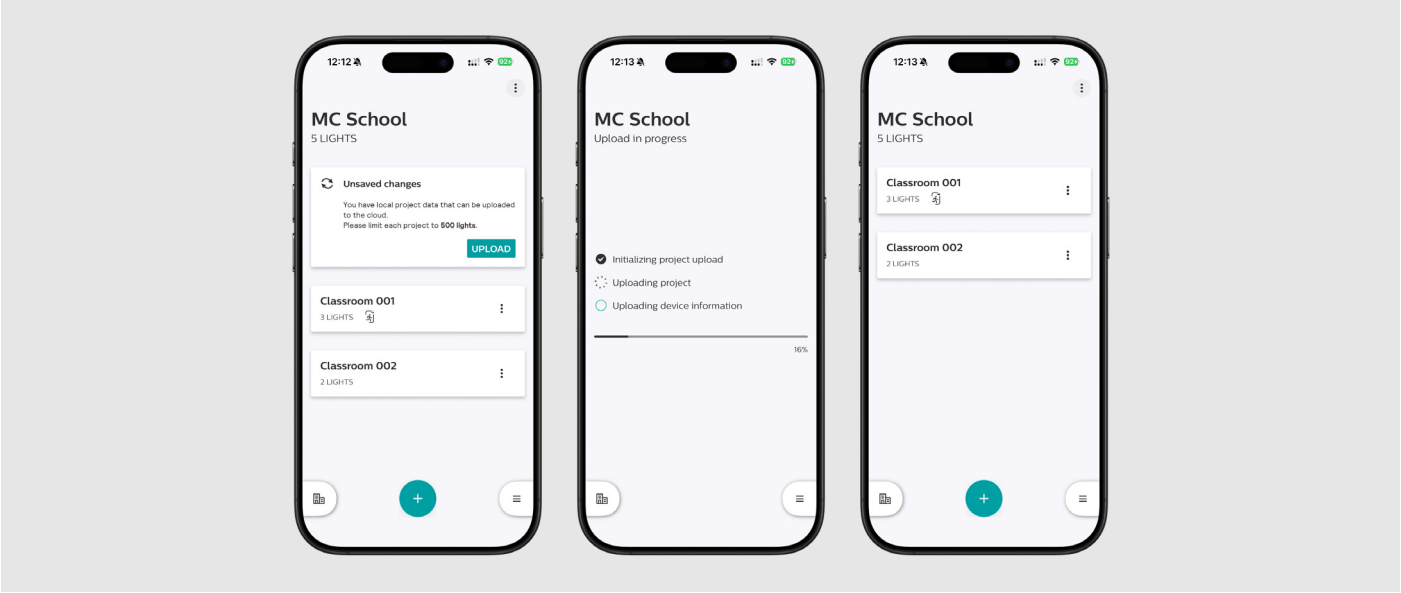
Projects:
- Up- or downloading projects with daylight areas is only possible with app version 1.9.0. or newer.
- Profiles are not part of the cloud back up process.
- Scene parameters are stored in the devices, however, parameter settings from the app are not backed up in the cloud.
- Simultaneous editing the same project on different phones is not allowed.
- When another user has modified a joint project, a notification about the changes only appears when restarting the app.
- Projects can only be deleted when all contributors have been removed first from the contributor list.

Syncing & Sharing:
- It is recommended to always check if uploading, downloading, and syncing have been completed successfully. Downloading of an incomplete project can result in loss of project data when changes are applied.
- Energy reports are not backed up in the Cloud. Therefore, after downloading a project from the Cloud, previously generated energy reports will not be shown. Nevertheless, when generating a new report, this report will be based on all previously generated energy data and provides accurate information.
- Project backup sometimes fails. If it continues to fail after a retry, please use the “Report a Problem” feature to send the app data logs to the MasterConnect Team for analysis.
- The time for syncing depends on the number of devices in a project (typically 4 seconds per device). Please remain patient.
- Ensure the screen timeout/auto lock is not activated during Syncing. Please adapt the phone settings accordingly.
- Project size must not exceed 500 devices.
- Do not use another app during up- or download.
- When deleting or adding devices to a group, always sync (upload) the project to the Cloud. This syncing must be done every time a change is done per group. Make sure the project is synced successfully by checking the syncing notification.
- After sharing access to a new contributor, it can take some minutes for the new contributor to get the project fully downloaded.
- If “Distinct cloud and local names” is enabled, each contributor of a project can adjust a project name. This name can differ from the one originally used when the project was created and backed up in the cloud at that moment. Each contributor can use a different name for the same project.

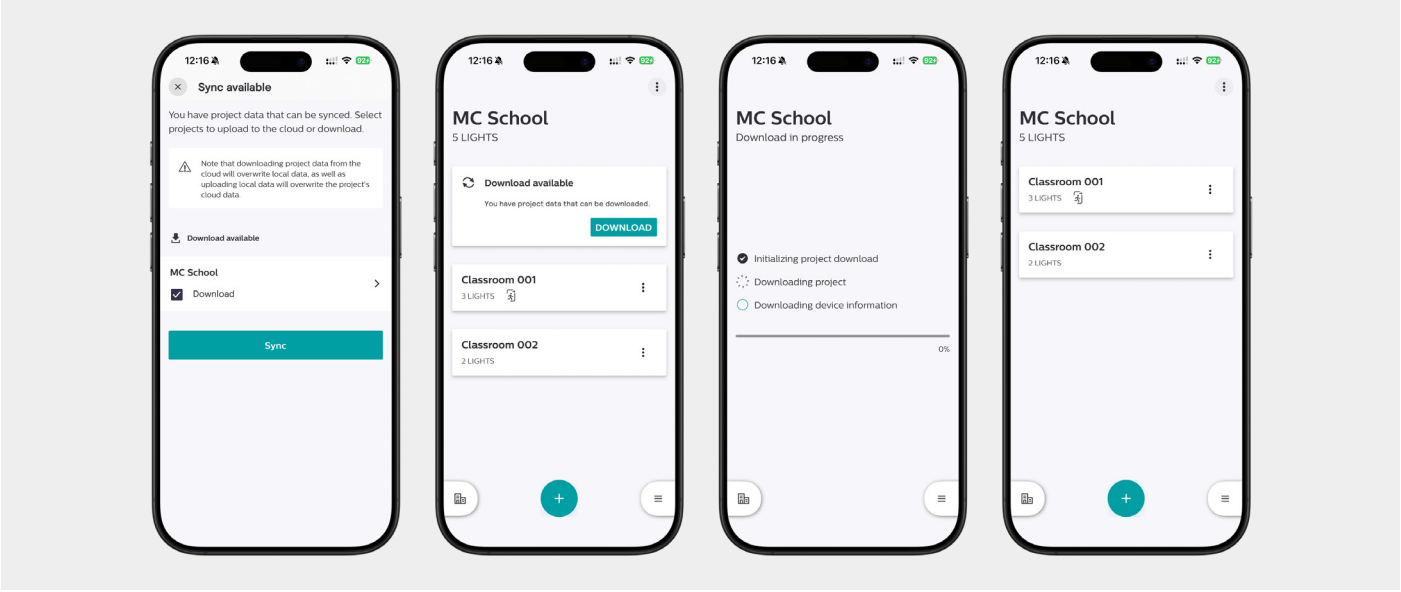
Working in one project simultaneously:
- You cannot work simultaneously in one project. If installers want to work simultaneously in one building, we suggest the following way of working:
- User 1 creates project “Floor 1” and adds User 2 as contributor. User 1 commissions project “Floor 1”.
- User 2 creates project “Floor 2” and adds User 1 as contributor. User 2 commissions project “Floor 2”
- If needed more projects and users can be added.
- All users are continuously updated about the status of all floors and work on their own projects only.
- When one user uploads a project, this project is locked for downloads and uploads by any other user until the upload was completed successfully. This project lock feature is preventing data corruption and data loss. When a user is presented with a project lock message, it is recommended to wait and try again at a later stage.



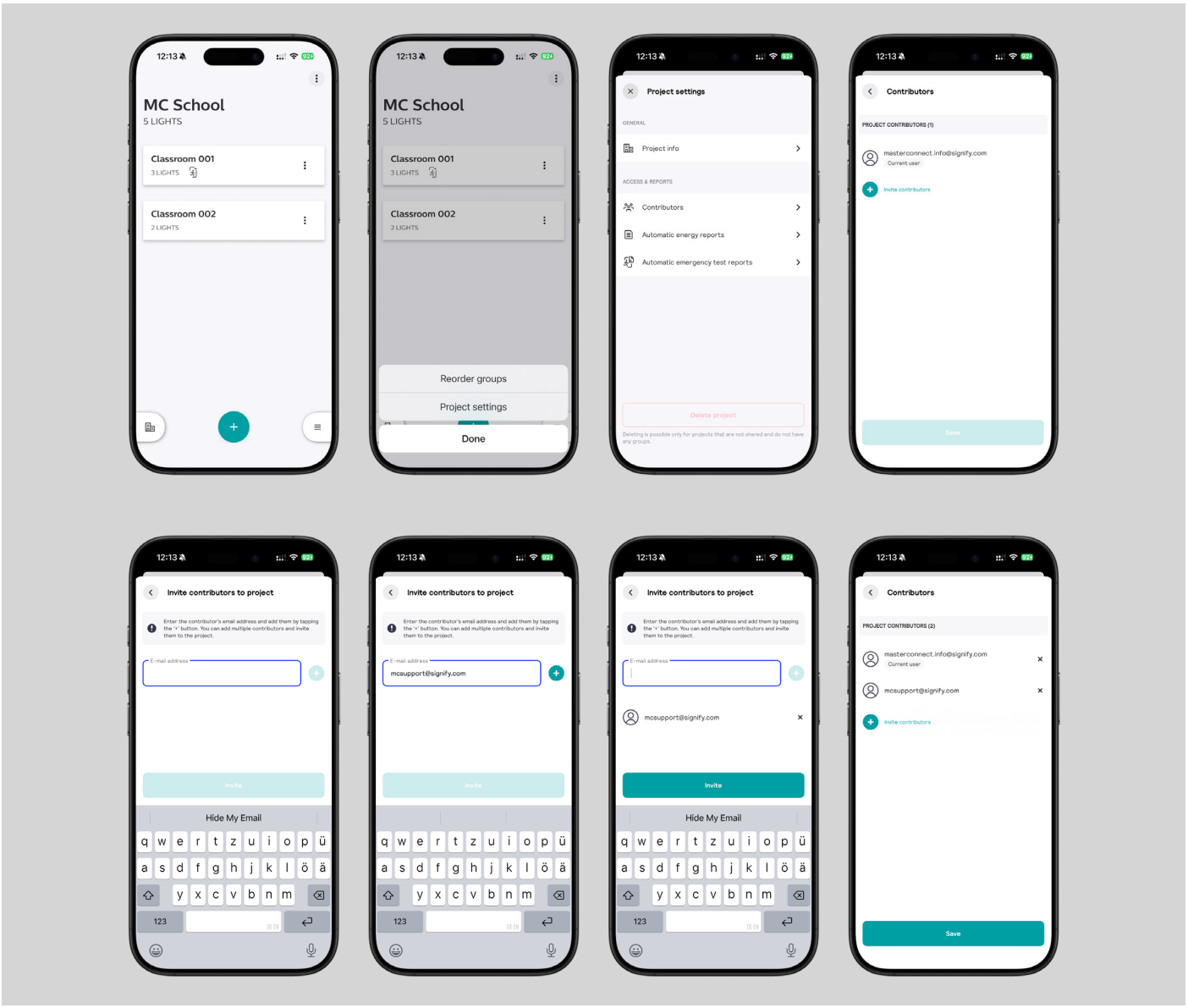
Step-by-step guide - enable the project backup feature



Step-by-step guide - upload a project



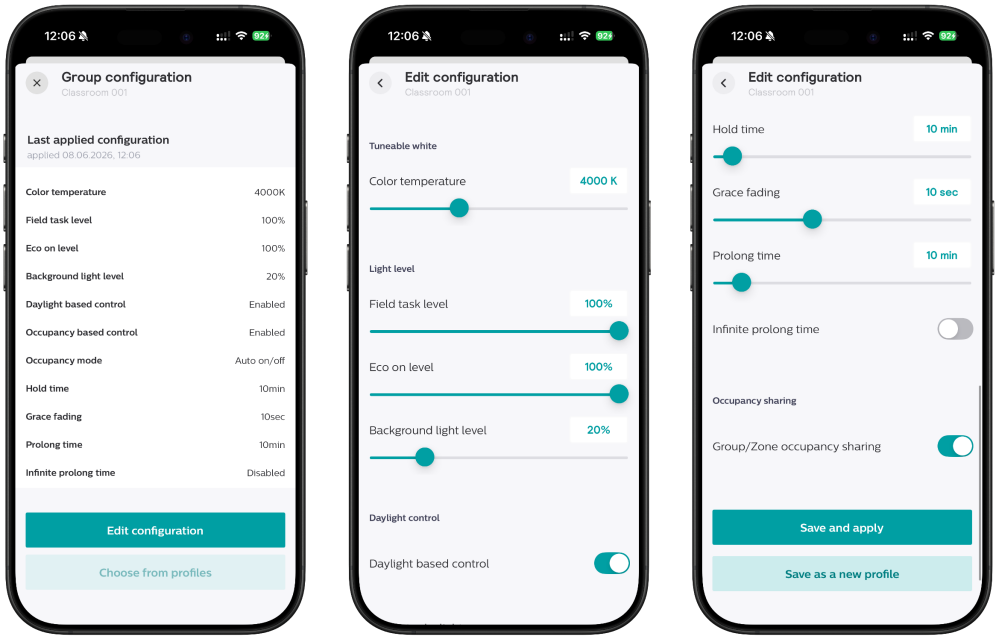
Step-by-step guide - download a project



Step-by-step guide – invite a contributor

How to configure a MasterConnect system

MasterConnect is a flexible and scalable system that can enables use cases ranging from simple stand-alone to more complex installations. Using the MasterConnect App, the behaviors of these installations can be changed and configured.



Configuration screens with a variety of configuration parameters

Configuration screens

The central element to the behavioral changes is the configuration screens that allow to tailor the solution to the requirements of a project.

Configurable parameters

MasterConnect devices can be configured using the Signify MasterConnect app. The following parameters can be configured via the app for an entire group of lights or a single light. Note that not all parameters are available for all MC devices.

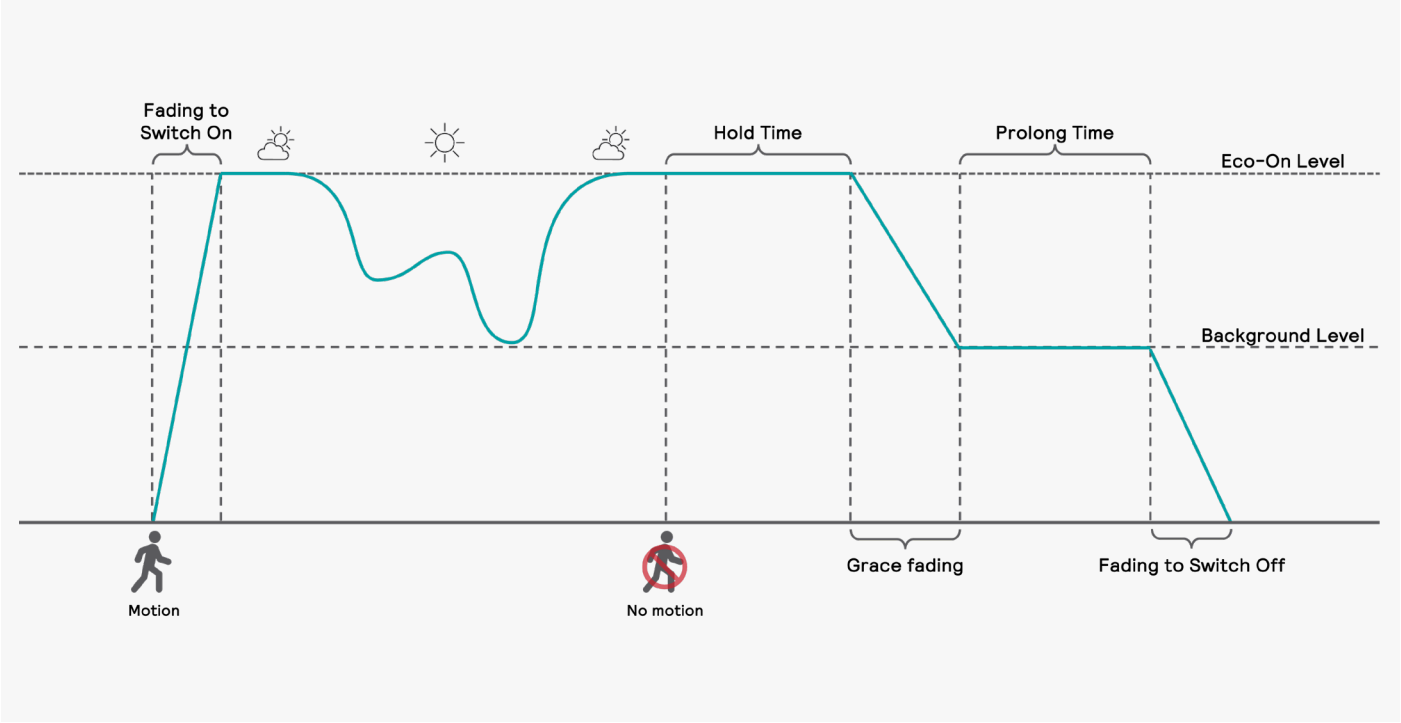
Parameter	Description
Field task level	Field task Level can be tuned to reduce the maximum output of a luminaire to a certain percentage of the maximum power of the driver. With a manual switch override, a user could dim up to this level. Task light level is a configurable parameter and can be adjusted to a value between 1% and 100% through the app.
Eco-on level	A configurable light level to enable eco-friendly light behavior, enabling energy savings. In automatic behavior, lights switch on to Eco-on Level and it can be set to a value between Field Task level and Background Light Level.
Background level	A configurable light level that can be set as the lowest dim level and enables comfort for end users. This light level comes into play when the hold time has expired.
Daylight-based control	When enabled, daylight-based dimming is activated to further enable energy savings. With this feature, when there is plenty of daylight, the light output from the luminaire adjusts to maintain a certain light level. Daylight based control is locally done for every light within a group.
Group/ Zone occupancy sharing	A configurable feature which enables luminaire-integrated sensors to share its local occupancy detection status with the rest of the group. This can enable granular dimming i.e., when presence is detected within the group, the luminaires in non-occupied areas or 'elsewhere' areas can be configured to stay at a desired light level (specified by Group light behavior parameter). In case occupancy-based control is disabled while group occupancy sharing being enabled, elsewhere occupancy is taken as local occupancy trigger.
Zone occupancy sharing	This parameter appears for a Zone only when the 'Group/Zone occupancy sharing' is enabled for the parent Group. If 'Zone occupancy sharing' is enabled as well, occupancy is shared only with the other lights in the same zone; if it is disabled, occupancy is shared with the whole group.
Group/ Zone light behavior	Enables choice of light behavior for the rest of the group i.e., to determine the light levels of lights within a group that reside in non-occupied areas. Group light behavior enables granular dimming of lights within a group and brings comfort to users via lighting.
Occupancy-based control	When enabled, occupancy detection takes place to control the lighting.
Occupancy mode	This feature can be configured to maximize lighting control behavior with wireless switches. The mode options are auto on/off, manual on/off and manual on/auto off.
Hold time	A configurable timer that begins once occupancy is no longer detected. Lights continue to be at Eco-on level for a period set as Hold Time, before dimming down to Background Light Level. If occupancy is detected again during Hold Time, the timer stops, and the automated occupancy cycle re-starts.
Grace fading	The transition period where the lights are being dimmed down from the Eco-on light level to the Background light level. This is a configurable parameter and enables slow change of light levels for improved comfort.
Prolong time	A configurable timer that keeps the lights at Background Light Level for a certain time set as Prolong Time before switching off. Prolong Time comes into effect after the elapse of Hold Time period. In case Group light behavior is set to Eco-on level, lights in non-occupied areas continue to remain to Eco-on light level.
Infinite prolong time	When enabled, lights do not switch off and continue to be in Background light level or Eco on level (when set via Group Light Behavior parameter).
Color temperature	Setting of the color temperature for the automatic and manual on level.
Circadian Rhythm	This feature can be enabled or disabled, allowing a peripheral gateway to run HCL schedules.

Occupancy modes

This configuration option feature can be used to maximize lighting control behavior together with wireless switches. The mode options are auto-on/auto-off, manual-on/manual-off and manual-on/auto-off.

Auto on / Auto Off

Lights are switched on and off automatically based on occupancy detection and timer settings. This is the default operating mode for the sensor. In this automatic behavior, lights always switch on to Eco on level.



Auto ON / Auto OFF with daylight dependent regulation

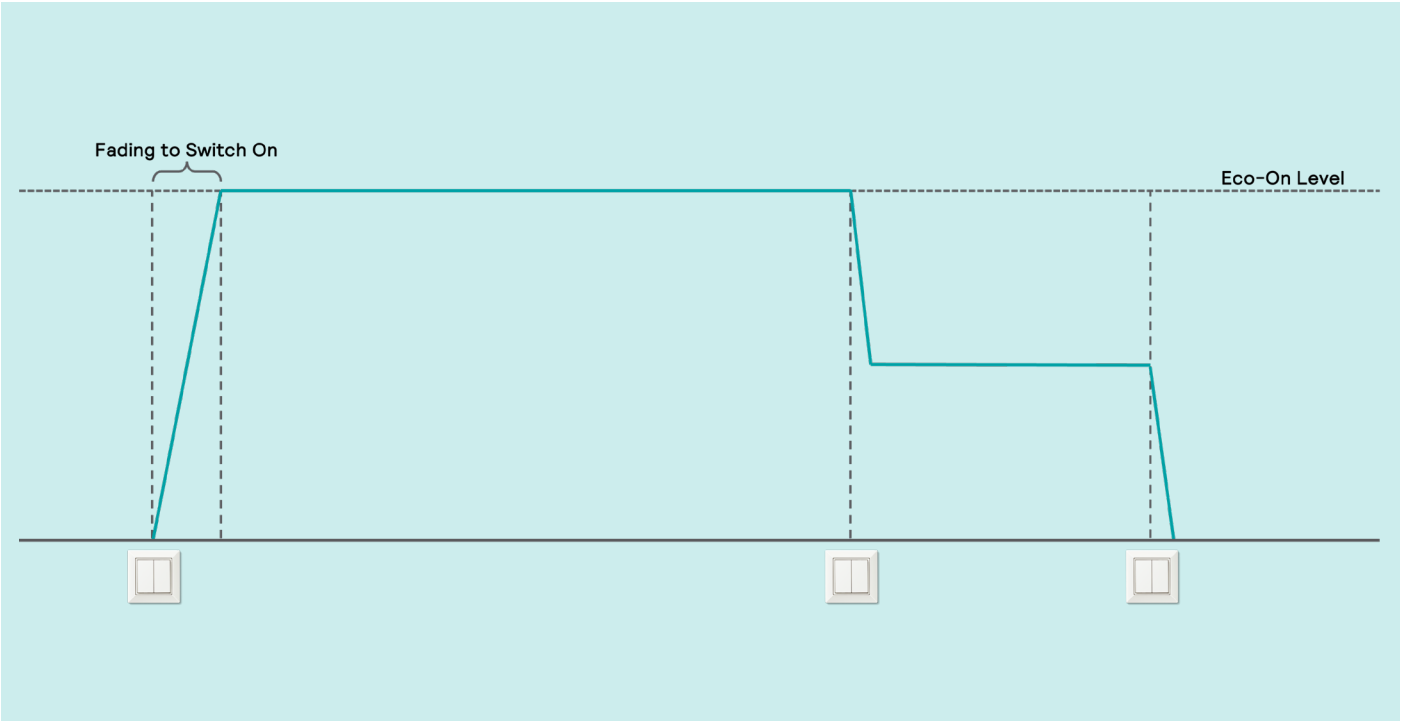
Auto ON / Auto OFF with manual switch input

Manual on / Auto Off

Lights are turned on with a manual command from a wireless switch. A manual on command switches on the lights to Eco-on level and can be further tuned up to Task Level. Lights turn off automatically once vacancy is detected, and timers expire. This mode is typically selected to achieve maximum energy savings.

Manual on / Manual Off

Lights are turned on and off manually through a wireless switch. This is typically used in applications which just need wireless manual control for switch on/off or dimming functionality. This setting must be selected for a MasterConnect System consisting of Xitanium Wireless Drivers only.



Manual ON / Manual OFF

Manual ON / Manual OFF with motion sensing and daylight dependent regulation

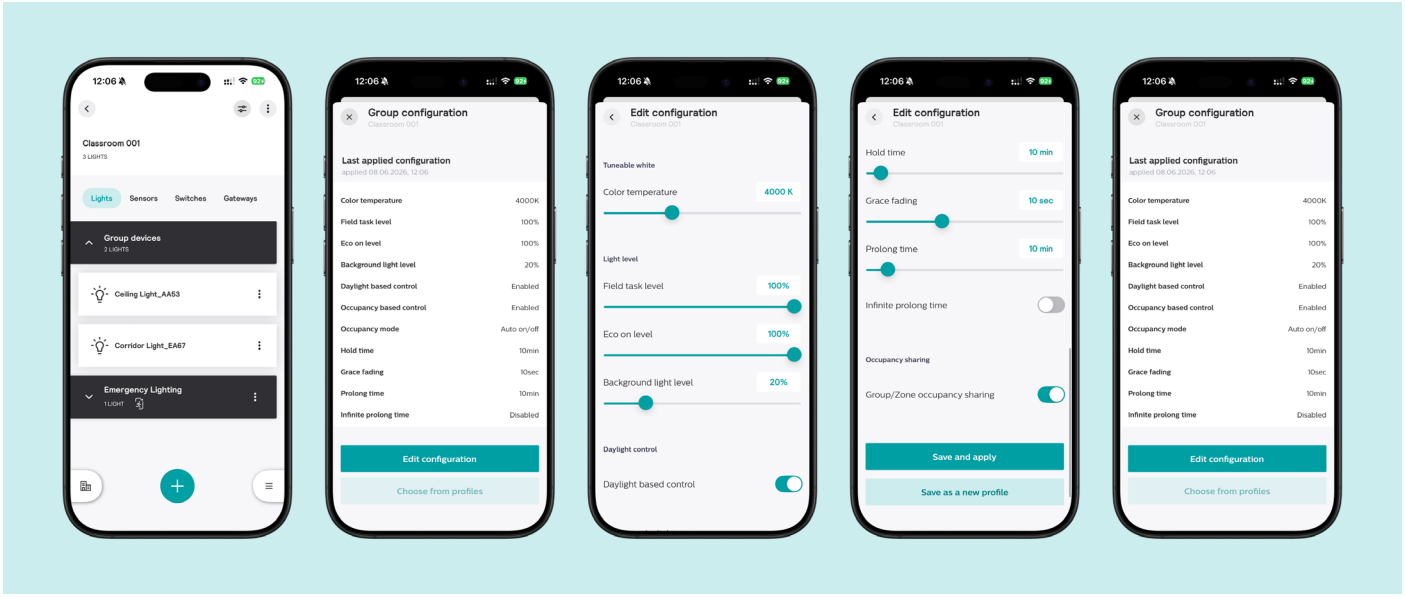
Group configuration

Purpose

To customize light levels, light behavior, and response times of all lights within a group.

How to

- Enter the group overview screen.
- Tap the second icon from the top right.
- Choose “Edit configuration” and change the parameters according to your needs.
- Press "Save and apply" to modify configuration.



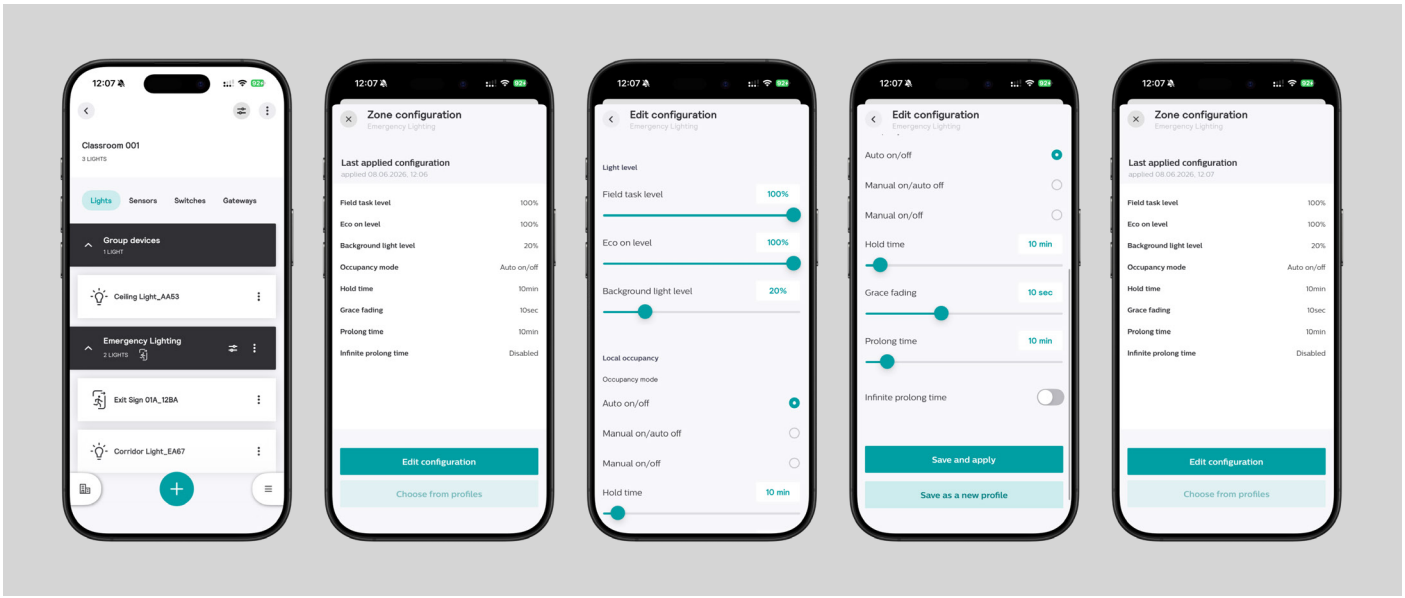
Zone configuration

Purpose

To customize light levels, light behavior, and response times of all lights within a zone.

How to

- Enter the group overview screen.
- Tap the configuration icon next to the zone name (second icon from the right).
- Choose “Edit configuration” and change the parameters according to your needs.
- Press "Save and apply" to modify configuration.



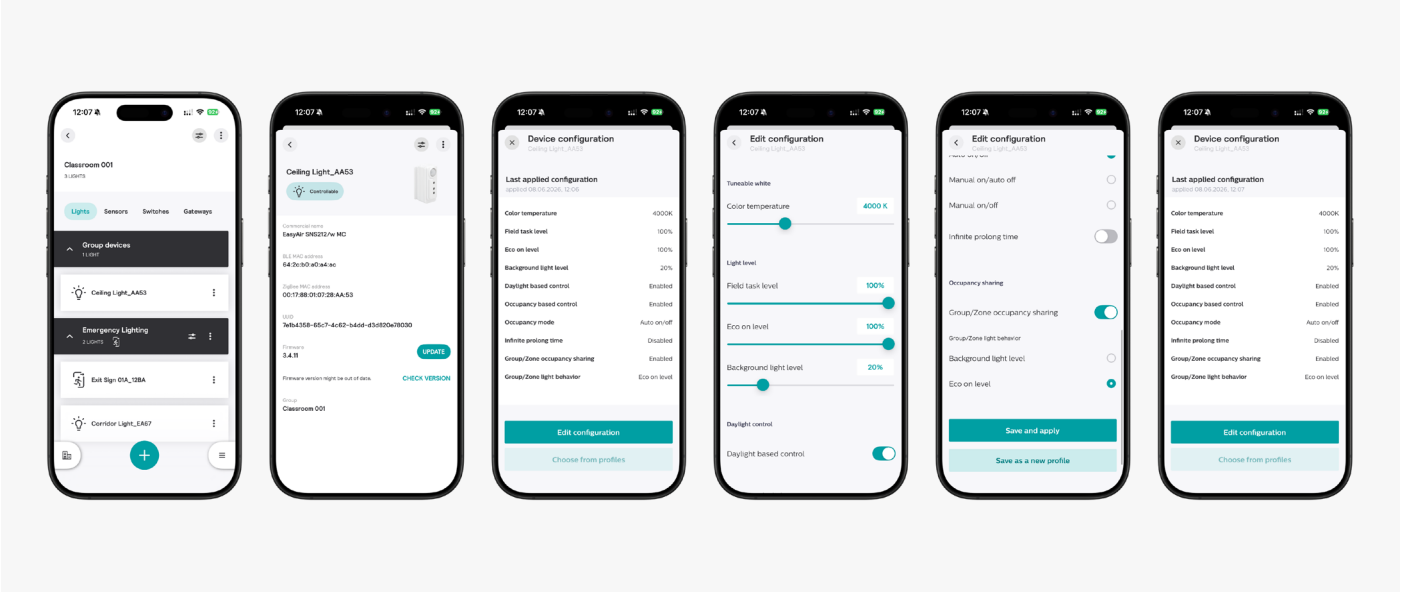
Single device configuration

Purpose

To customize light levels, light behavior, and response times of a single device.

How to

- Enter the group overview screen and select a device by clicking on the name of the device.
- Tap the configuration icon at the top of the screen (second icon from the right).
- Choose “Edit configuration” and change the parameters according to your needs.
- Press "Save and apply" to modify configuration.



Configuration profiles

Purpose

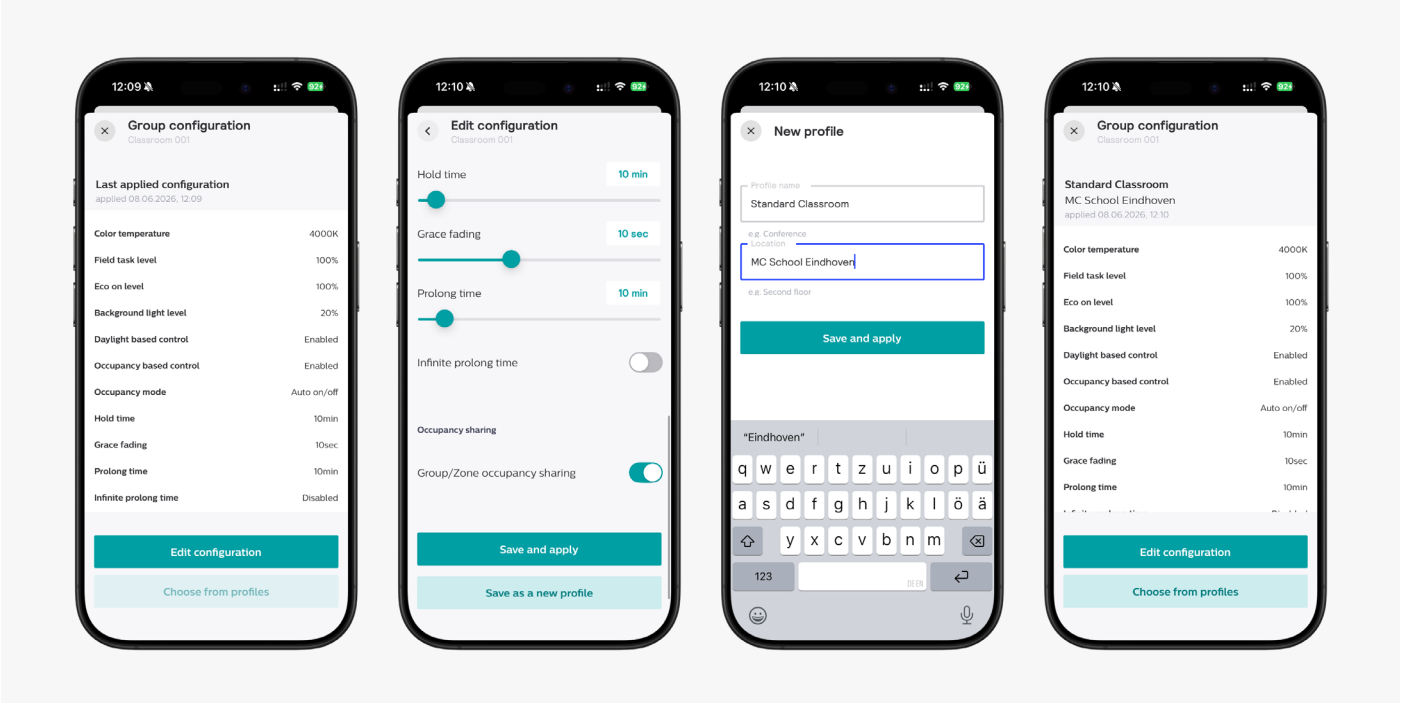
Profiles are used for saving a combination of configuration parameters (e.g., light levels, occupancy and daylight control and timers) for specific applications.

How to

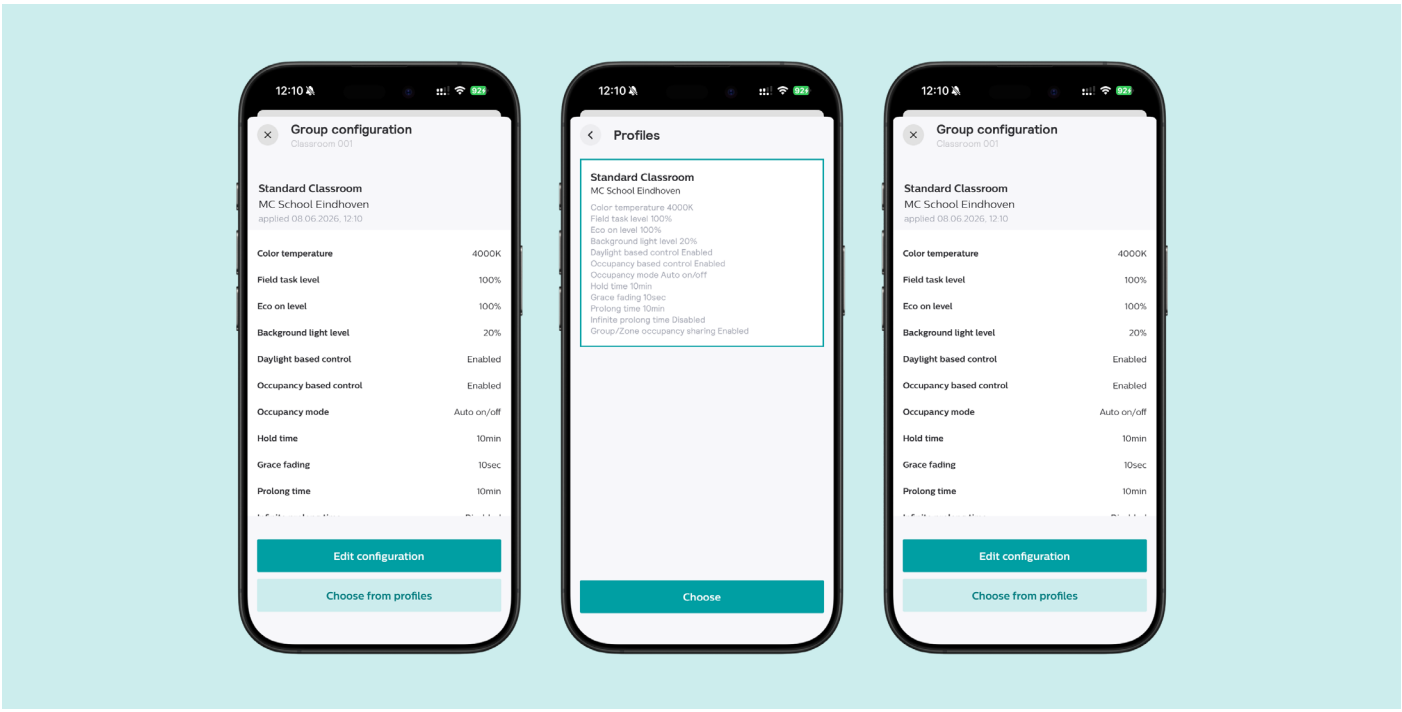
- When changing a configuration instead of “Save and apply” select “Save as a new profile” and give the profile a name and optionally a location description.
- To recall a profile, click on “Choose from profiles” instead of “Edit configuration”. Select the right profile from the list and tap “Choose”.

Remarks

- Editing and deleting profiles is not possible. To store a new configuration a new profile should be made.
- Profiles are stored locally on a phone and not backed up in the cloud.
- It is recommended to provide meaningful names to the profiles based on associated application – e.g., private office, corridor, classroom etc. for easy re-use at a future point.



Step-by-step guide - save a configuration profile



Step-by-step guide - use a configuration profile

Daylight regulation

Purpose

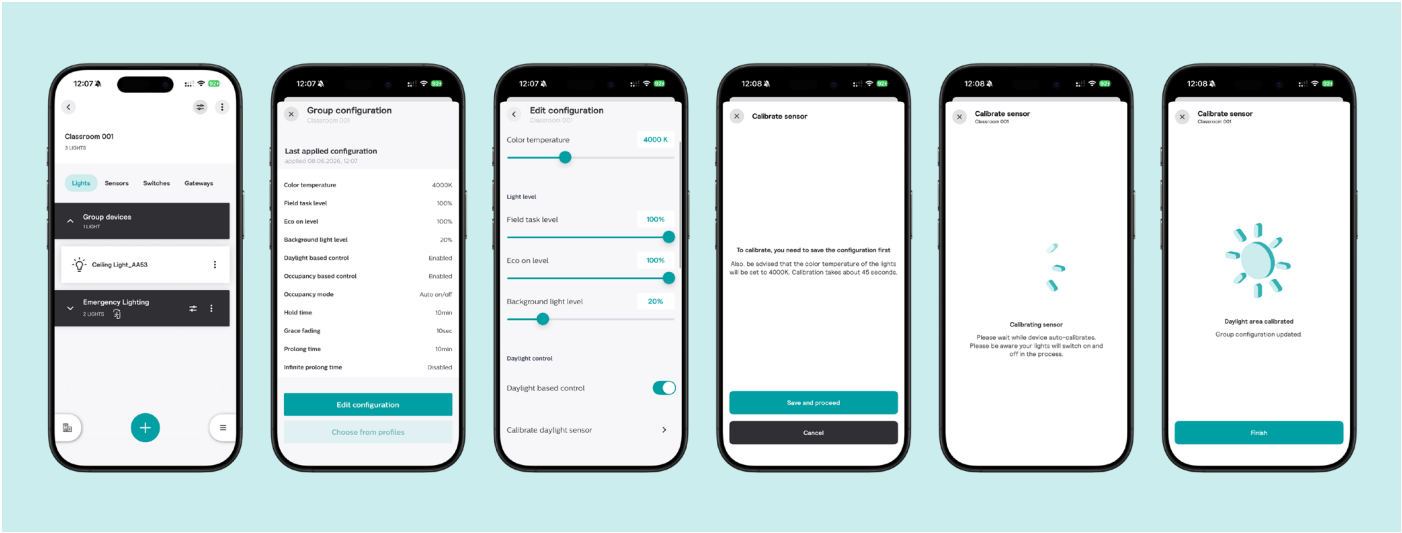
In the presence of daylight, the output from a luminaire is regulated to achieve a target light level on the working plane to save energy. The light output from the luminaire will still be bound by Eco-on level on the upper side and Background level on the lower side.

How to

- Enter the group and configuration screen for a device, zone, or group.
- Choose “Edit configuration” and change the light level parameters.
- Activate “Daylight based control” and choose “Calibrate daylight sensor”.
- Choose “Save and proceed” to start the calibration.
- Finalize process by selecting “Finish”.

Remarks

- Any time after configuring the Eco-on level, a calibration routine shall be initiated. When the calibration routine is run, the light level adjusts to the full light output (given by the operating current of the luminaire) times the percentage value set for the Eco-on level. By adjusting the operating current of the luminaire and the Eco-on level in the app, a user has full control on the light level realized on the desk.
- If no calibration is performed, the light output adjusts approximately to a product dependent, predefined light level (500 lux for SNS21x MC) times the value set for the Eco-on level. If the Eco-on level of SNS21x MC products is set to 80% for example, the light output from the luminaire adjusts to 400 lux on desk level.
- The calibration for daylight dependent light regulation needs to be done in the absence of daylight, i.e., at night or with blinds closed.
- When the calibration is run, the light output of the luminaires first goes to a low level and to a high level before it regulates to the set light level. This procedure takes approximately 1 minute for luminaire-integrated sensors, and 5 minutes for wireless drivers in combination with external sensors.
- The calibration must not be interrupted. Termination of a running calibration can compromise a following calibration process. In case the process has been accidentally terminated, please wait 7 minutes before restarting the calibration.
- The lux levels are an estimation for a typical office configuration; the precise level depends on the amount of light reflecting surfaces in the field of view of the sensor. With different reflecting surfaces below the luminaires, e.g., light desks or dark carpets, the light output of the luminaires can be different. If the light level is not as wanted, please do the calibration, and adjust the light level via the Eco-on level.
- To determine the optimum Eco-on level it is recommended to turn off daylight regulation temporary before calibration, and to measure illuminance as a function of Eco-on level.
- Daylight areas must be created before switching on Daylight based control.
- In case daylight-based control is disabled, luminaires with SNS21x MC switch on at field task level after a power cycle. This is different to SNS21x MC which switches on at Eco-on level. After the first occupancy cycle, SNS21x MC and SNS21x MC are aligned, and both go to Eco-on when presence is detected.


12:07
Classroom 001
3 LIGHTS
Lights
Sensors
Switches
Gateways
Group devices
1 LIGHT
Ceiling Light_AA53
Emergency Lighting
2 LIGHTS
12:07
Group configuration
Classroom 001
Last applied configuration
applied 08.06.2026, 12:07
Color temperature 4000K
Field task level 100%
Eco on level 100%
Background light level 20%
Daylight based control Enabled
Occupancy based control Enabled
Occupancy mode Auto on/off
Hold time 10min
Grace fading 10sec
Prolong time 10min
Infinite prolong time Disabled
Edit configuration
Choose from profiles
12:07
Edit configuration
Classroom 001
Color temperature
4000 K
Light level
Field task level
100%
Eco on level
100%
Background light level
20%
Daylight control
Daylight based control
Calibrate daylight sensor
12:08
Calibrate sensor
To calibrate, you need to save the configuration first
Also, be advised that the color temperature of the lights will be set to 4000K. Calibration takes about 45 seconds.
Save and proceed
Cancel
12:08
Calibrate sensor
Classroom 001
Calibrating sensor
Please wait while device auto-calibrates.
Please be aware your lights will switch on and off in the process.
12:08
Calibrate sensor
Classroom 001
Daylight area calibrated
Group configuration updated
Finish

Group-level energy reporting

Purpose

The Signify MasterConnect app can be used to retrieve energy usage reports at group level. Each reading stores the time stamp along with the total energy (in kWh) used by all the light fixtures in the group. All the past reports are also stored in “History” and can be retrieved by the user at a later point. Light fixture energy data is for this report is read from the real measured energy counters of the SR – D4i Drivers connected to a sensor.

Following parameters are displayed:

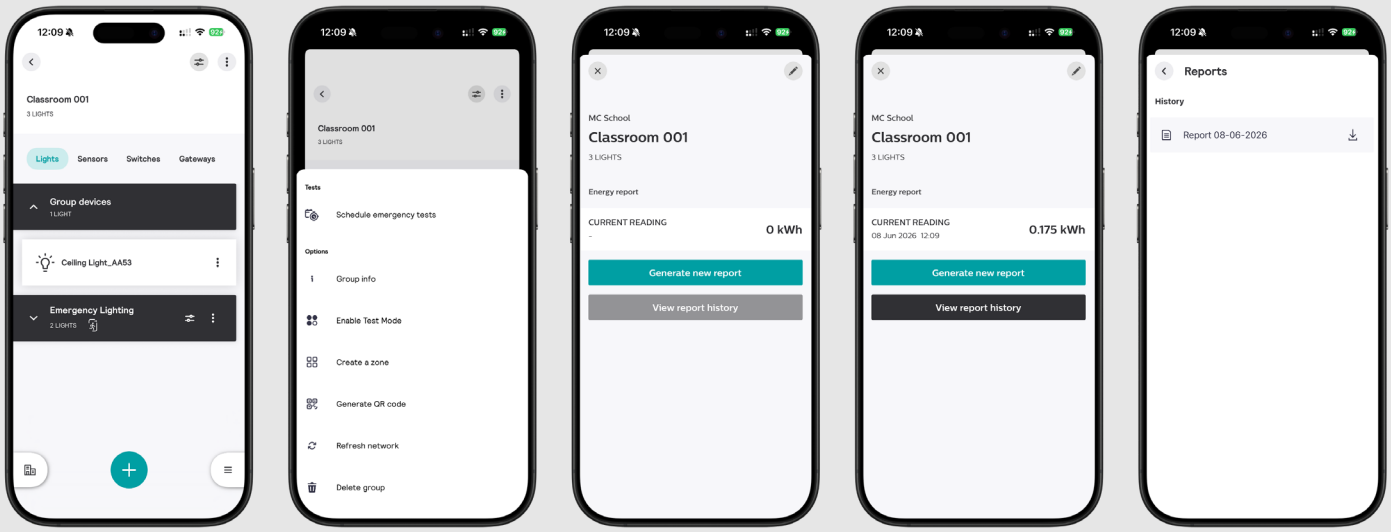
- Previous Reading: Time stamp and the total energy used by the group of lights at the time of last reading.
- Current Reading: Time stamp and the total energy used by the group of lights at this reading. This number is set to zero at first commissioning of the group.
- Interval: The time interval between above two readings and the energy used by the group of lights during this period.

How to

- Open a group and select the menu via the 3 dots in the top right.
- Choose “Group info” from the list.
- Choose “Generate new report” to read out the energy data from the device.
- Choose “View report history” to export data as a csv file.

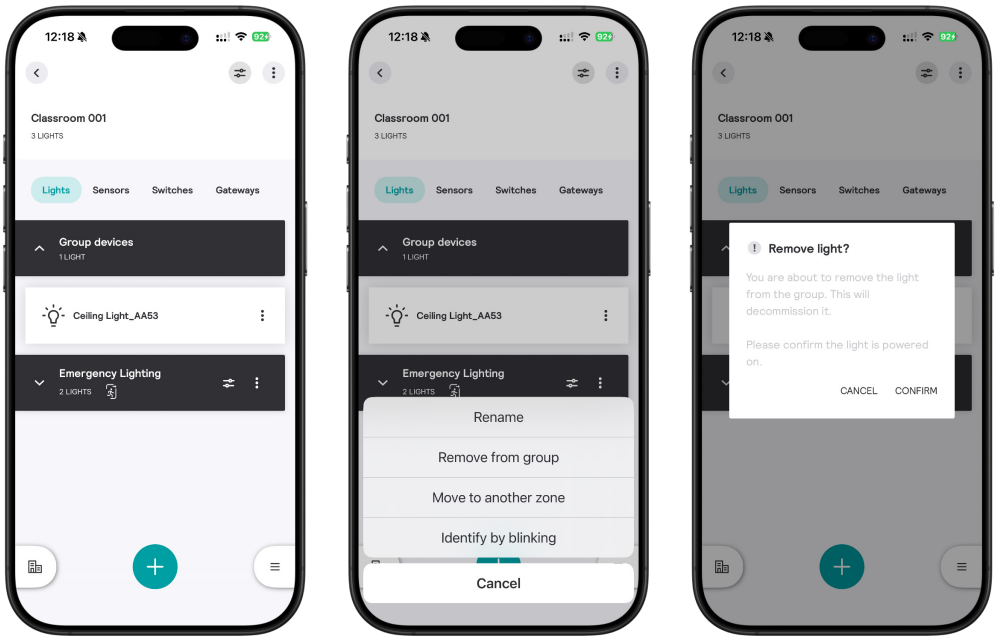
Remarks

- For SNS41x MC and wireless drivers, energy reporting is limited to 20 devices for firmware 1.
- In rare cases a report may fail to capture all the devices in the allotted time. If this happens, we recommend waiting for a few minutes and generating another report. The “current reading” number will always be correct when all the devices are captured. The Xitanium SR drivers in the fixtures maintain a continuous and accurate counter for energy used.
- If the app indicates that the reported energy is not complete because a device has been missed, it is recommended to trigger “Refresh network”.



How to maintain a MasterConnect system

MasterConnect systems are meant to be installed and forgotten. Nevertheless, sometimes things need to be changed or adjusted, products removed or changes. All these maintenance are also available in the Signify MasterConnect app without additional tools.



Maintenance use cases within the MasterConnect app

Maintenance scenarios

To manage a project at time of commissioning or afterwards, a variety of different maintenance flows are available to ensure proper functioning of the system.

Remove components from groups

Purpose

Each MasterConnect components is secured and cannot be used by another user that has not access to the project. In case any adaptations are needed on an existing installation, these MasterConnect wireless components need to be removed from the app. Only then, the removed devices can be used in other groups, projects or by other users. Either entire group or single devices can be removed via the Signify MasterConnect app.

How to

Remove all switches and battery-powered external sensors

- In the group overview, click on the three dots and choose “Remove switches and ZGP sensors”.

Remove individual switches or battery-powered external sensors

- If ZGP switches are used in groups with FW 2.0.21 or higher, they can also be removed individually.
- Click on the three dots next to the switch name and choose “Remove switch” or “Remove sensor”

Remove a single light, MasterConnect gateway or mains-powered external sensor

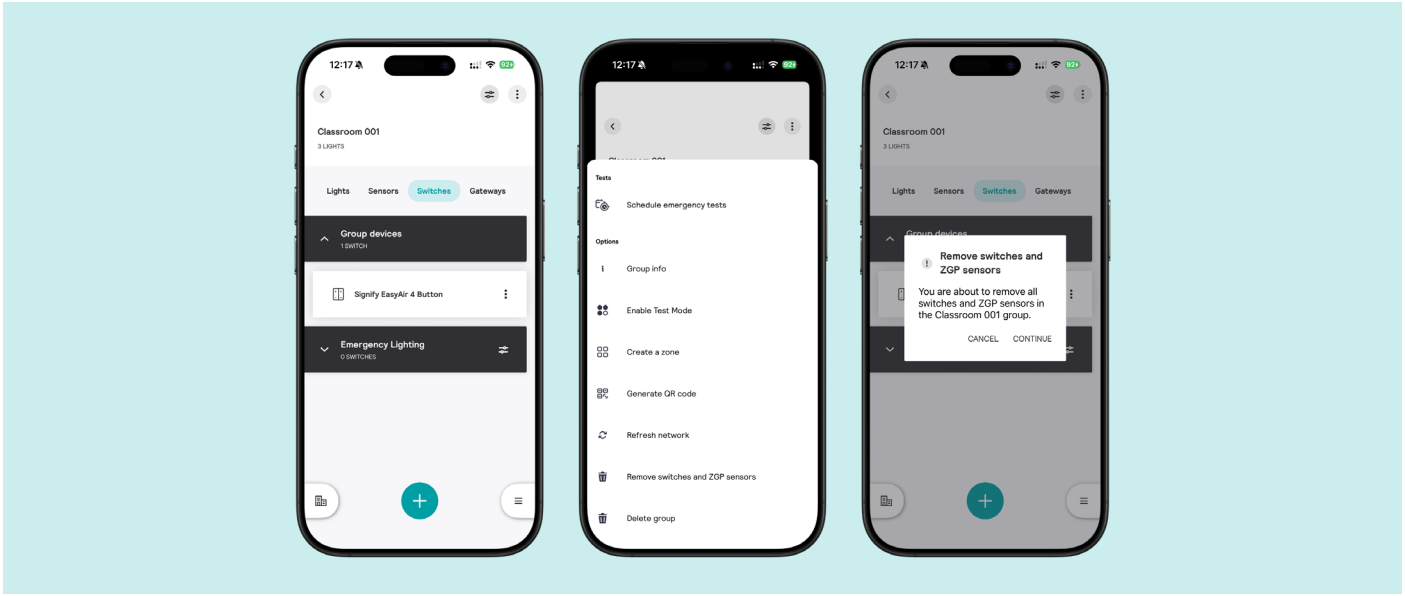
- In the group overview, choose the device to be removed by clicking on the three dots next to the light and choose “Remove from group”, “Remove sensor” or “Remove this gateway”.

Remove a entire group

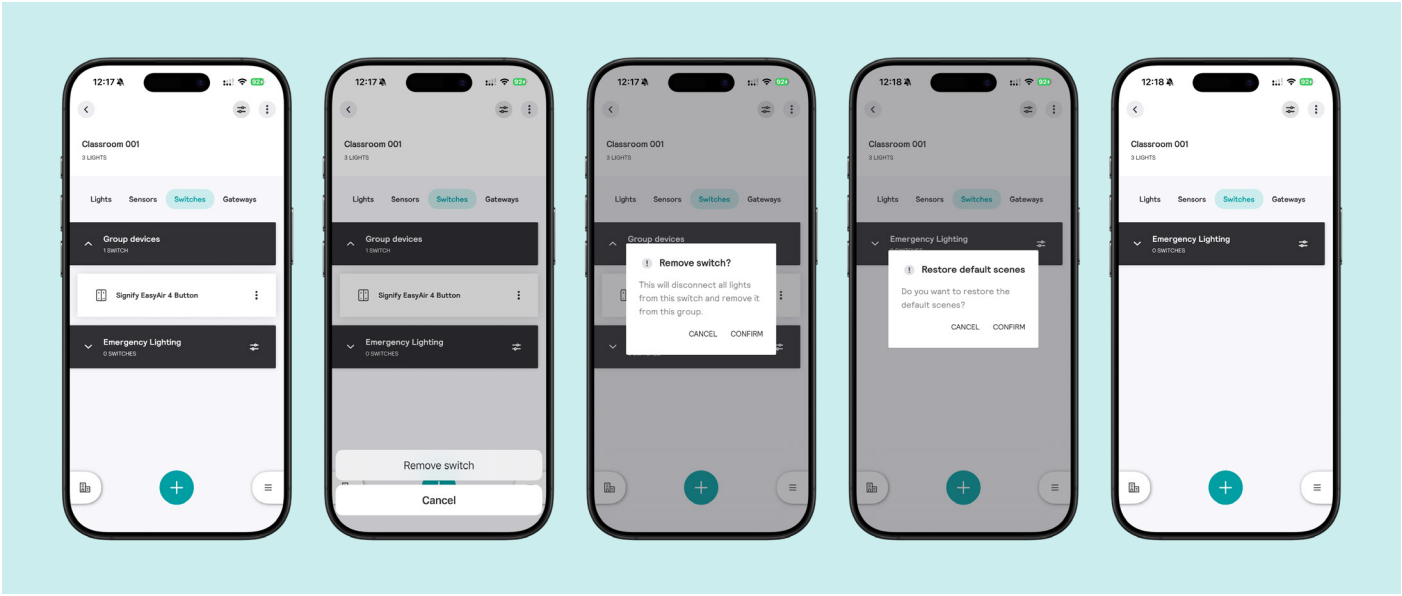
- In the group overview, click on the three dots and choose “Remove group”. As feedback, the intensity of all lights goes to full light level.

Remarks

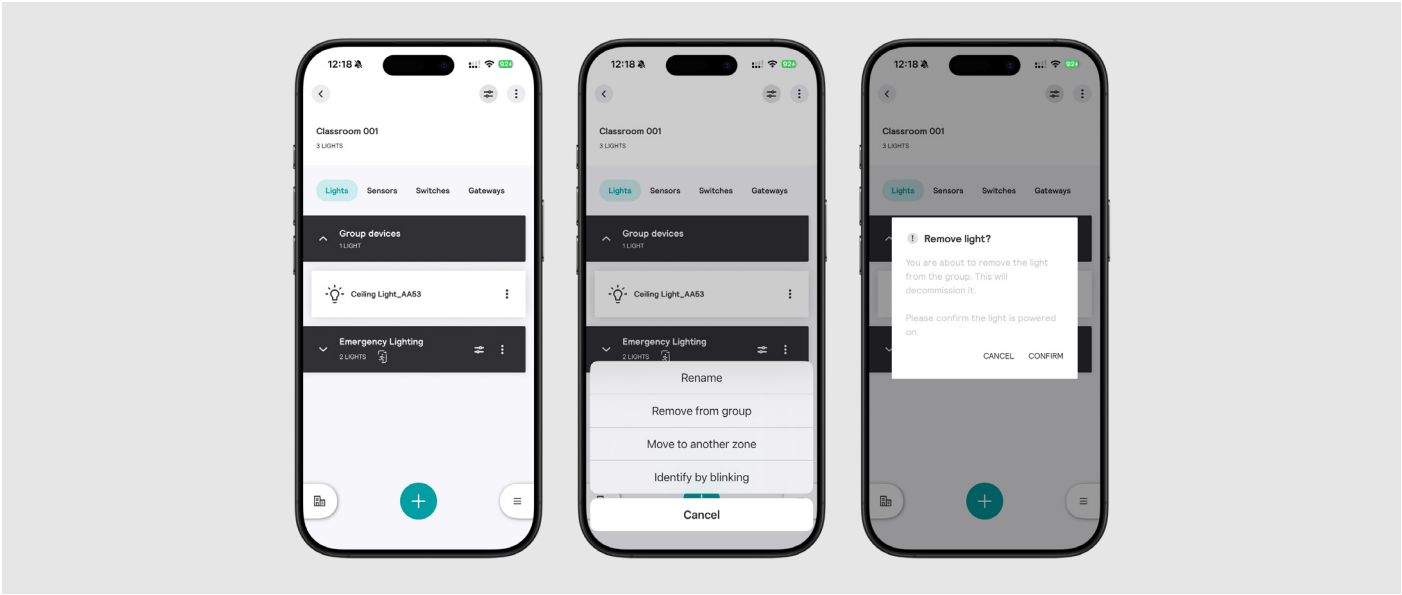
- When “Remove group” does not finish on the first attempt, please make a second attempt to finish.
- For the removal of switches all devices of the group controlled by a switch need to be in range of the smartphone.
- Please, make sure that all lights connected to a switch or ZGP sensor are powered on when the switch or sensor is removed.
- When trying to remove an mains-powered external sensor on firmware 3.2 from a group while an open Zigbee network is in the environment, the sensor might get removed without the app being able to confirm the deletion. In case this happens, please try again and remove the sensor locally from the app as prompted by the app.



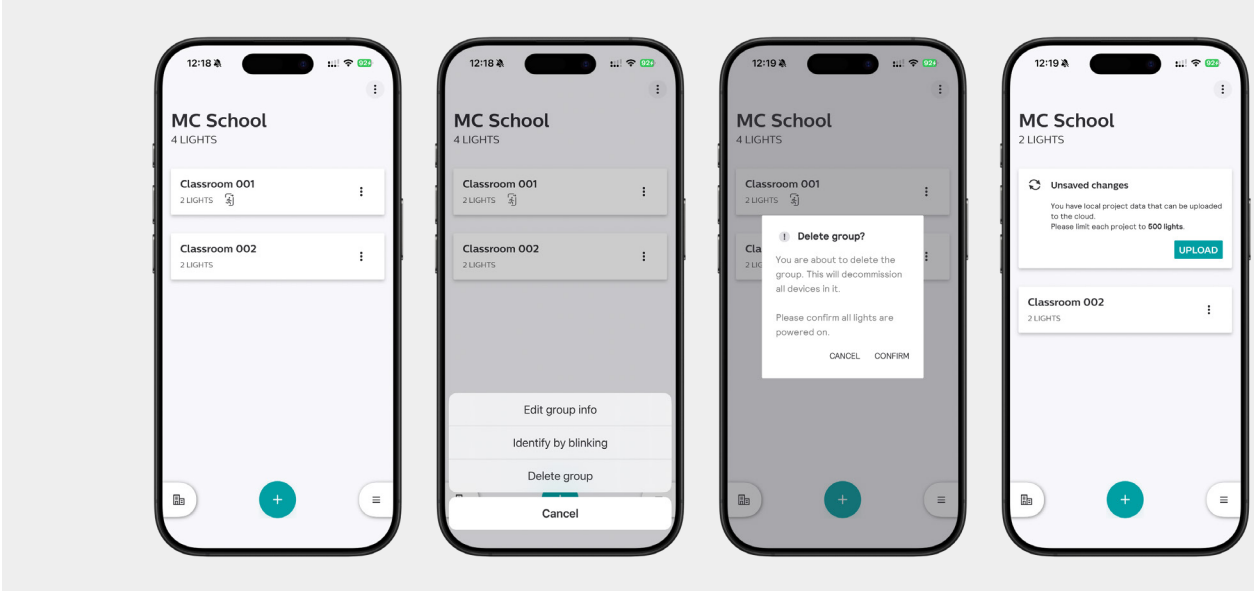
Step-by-step guide - remove all switches and battery powered external sensors



Step-by-step guide - remove individual switches and battery powered external sensors



Step-by-step guide - remove individual lights, mains-powered sensors, or a gateway



Step-by-step guide - remove an entire group

Remove components from groups using the safe mode

Purpose

In some cases, for instance when a cell phone is lost, components cannot be removed via the standard method. In that situation, lights can be reset via the Safe Mode.

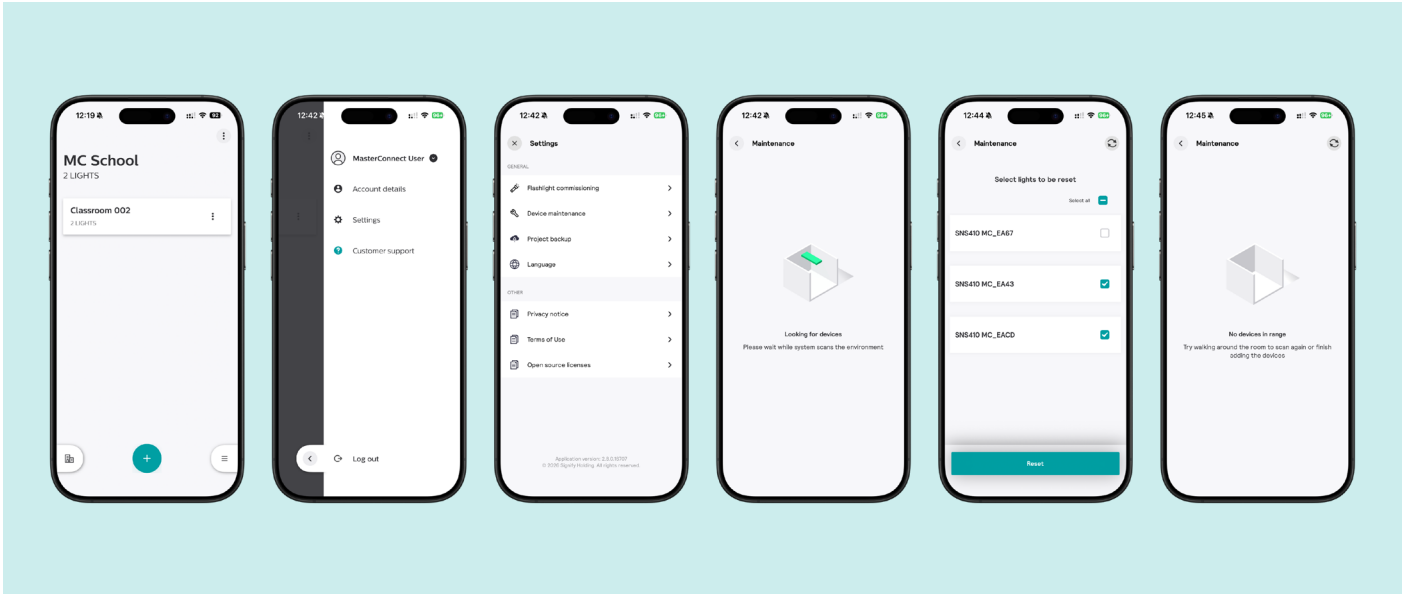
How to

The luminaires must be powered ON for more than 15 seconds.

- Power OFF mains for more than 10 seconds but less than 15 seconds (disconnect device form mains).
- Power ON mains for 2 to 3 seconds (reconnect device to mains).
- Repeat above process for 4 more times.
- On the 5th cycle, leave the fixtures powered ON at the end. You should see a short dim-down/dim-up signal (in case of SNS21x MC). lights are now in Safe Mode.
- Open the "Setting" section in the app and select “Device Maintenance” to start scanning for devices in safe mode.
- Select the device that should be reset and press “Reset”.

Remarks

- In case a project is on several phones, a light reset on phone A via Safe mode is not automatically removed from the project on phone B. If that light is recommissioned in the project using phone B, it is needed to reapply the configuration to the light for proper light behavior.



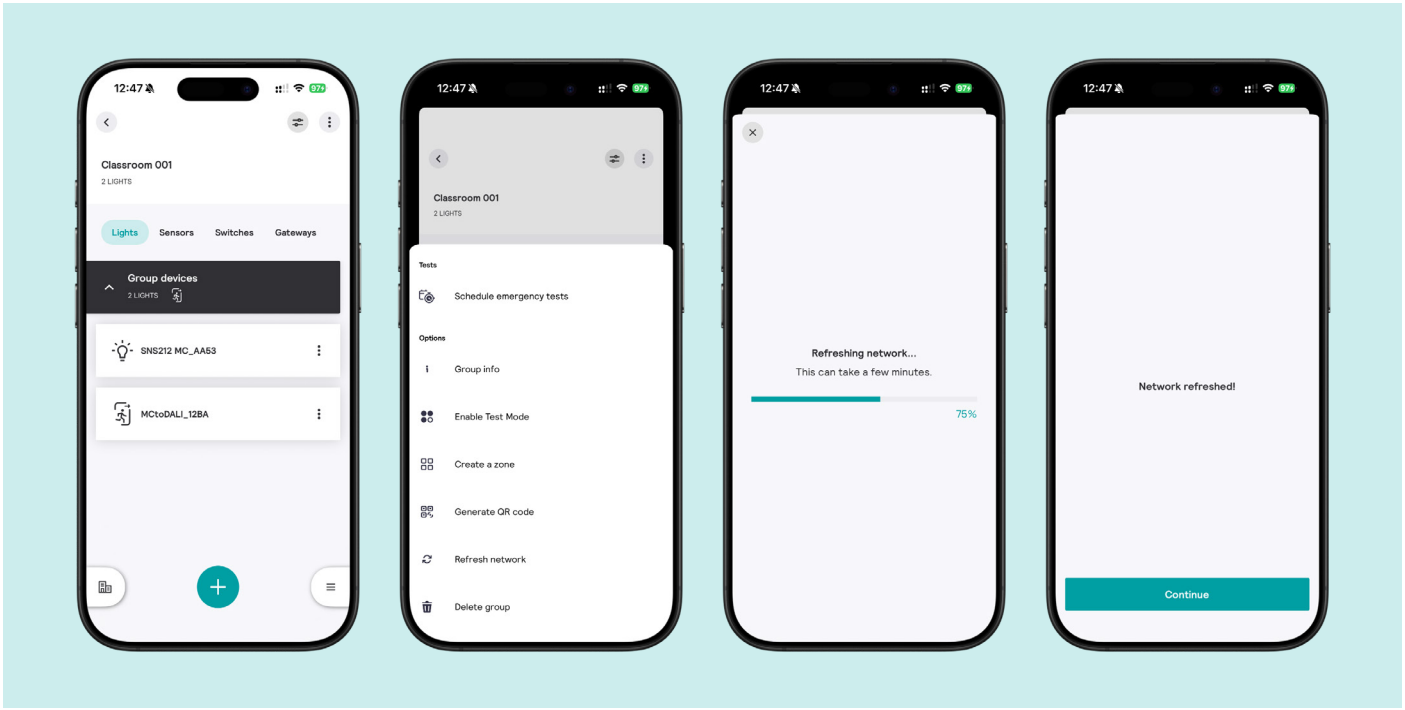
Refresh network

Purpose

In some cases, lights may not respond to configuration and energy report generation commands. Perform a refresh network to get the latest device data.

How to

- In the group overview, click the three dots and select “Refresh network”.
- Finish the process by clicking on “Continue”.



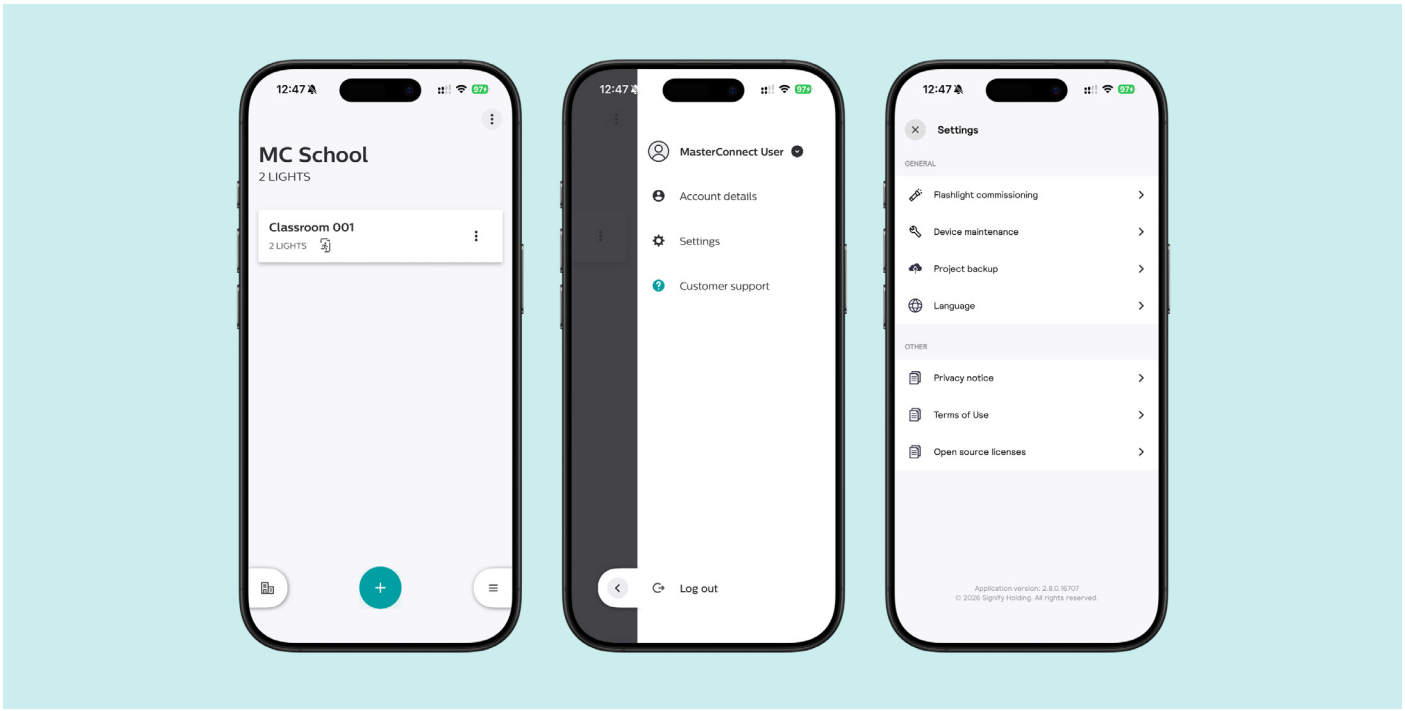
How to check the app version

Purpose

To look up the version number of the Signify MasterConnect app that is used.

How to

- Open the right-hand menu and choose settings.
- The version number can be found at the bottom of the screen.



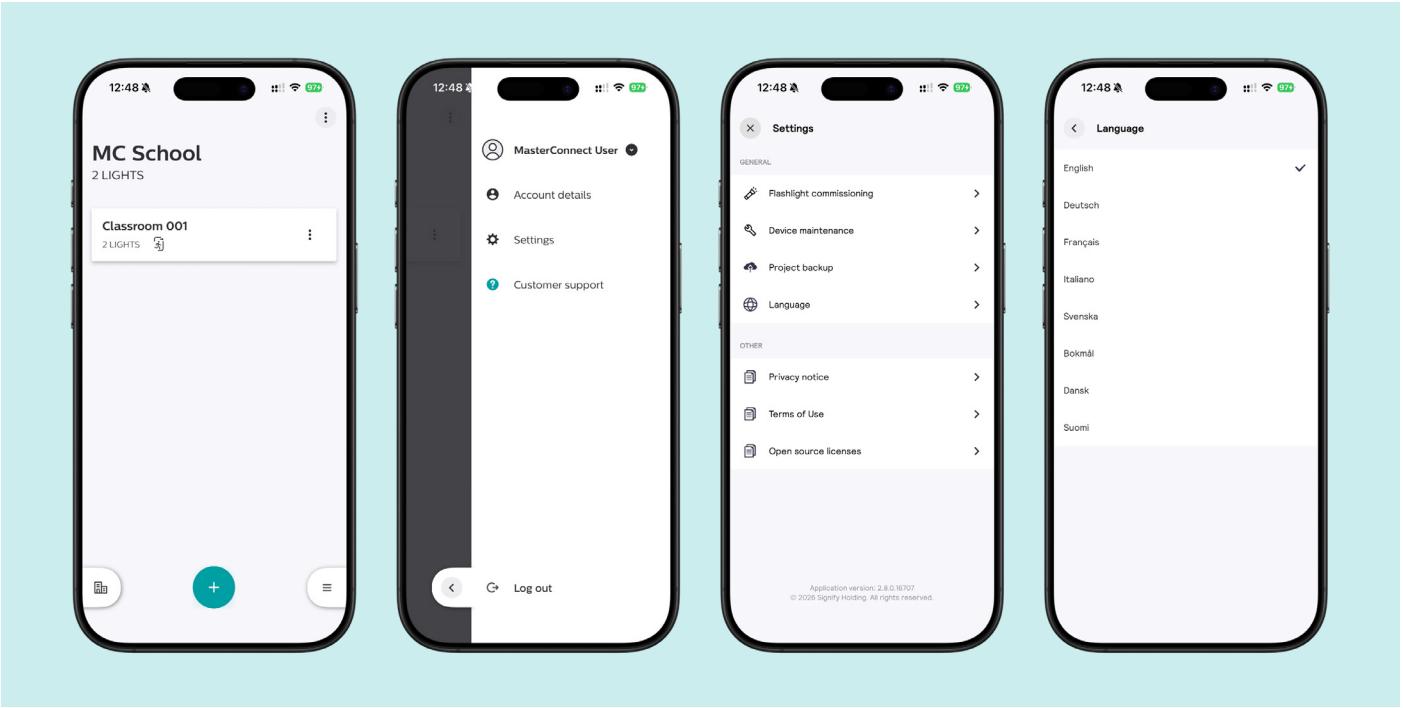
Set your language

Purpose

Change the app language for simplified app use.

How to

- Open the right-hand menu and choose settings.
- Click on “Settings” and choose “Language”.
- Choose the language that you prefer.



Over-the-air update

Purpose

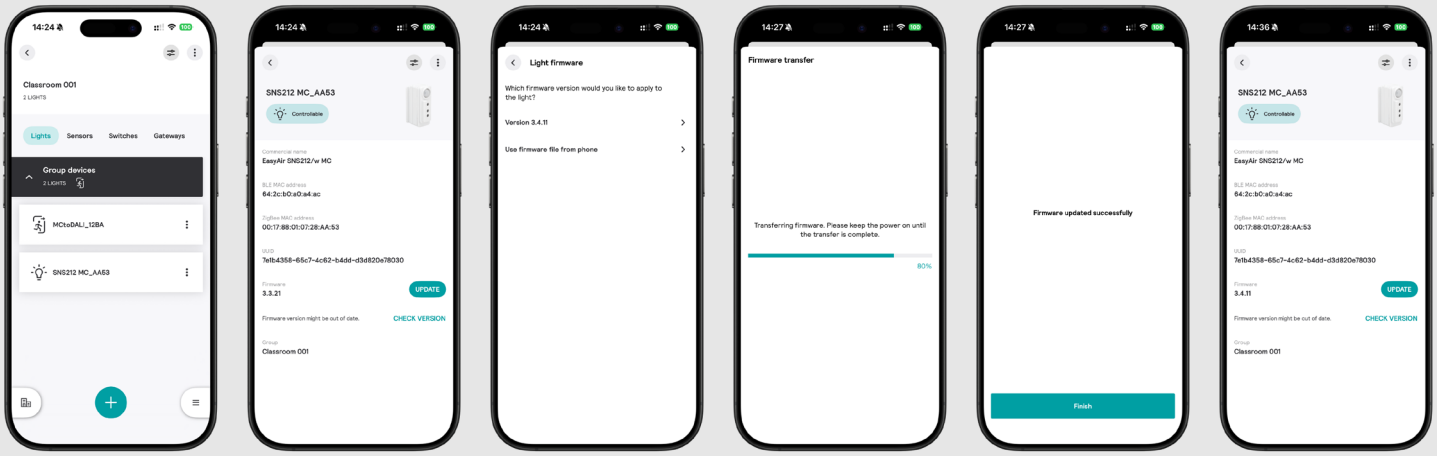
To enable a firmware update of MasterConnect components such as luminaire-integrated sensors via the app. Such updates may include new released features, security, and bug fixes.

How to

- Open the device details of a device and click on “Update”.
- Select the latest version from the list and choose “Finish” after the update has been completed.

Remarks

- It is recommended to restart the smartphone to clean the internal BLE memory before starting the BLE upgrade process.
- Do not interrupt the upgrade process. Keep the smartphone in close reach of the device getting upgraded.
- The upgrade is done at device level.
- If an upgrade fails, an error message is displayed. Please try again.
- It may happen that the firmware is properly loaded but the new firmware is not yet shown on the device info screen. By clicking “check version” the app connects to the device and corrects the display if needed.
- After firmware upgrade from FW 1.0.5, 1.1.11, 1.1.16, 1.2.12, 1.2.16 to any higher FW-version, recommissioning is required to make use of the latest functionality and to avoid unexpected behavior.
- Before updating from firmware 1 to firmware 2, please remove all switches, and commission them again after the entire group has been updated.
- If the MasterConnect system is used with a supported peripheral gateway it is also possible to distribute a firmware upgrade to the sensors via the gateway. Please contact your Signify account manager for support.
- If group light behavior is set to “Eco-On level”, a firmware upgrade via the gateway may change the group light behavior to “Background light level”. To correct this, please change the group light behavior to “Background light level”, apply the settings and change it back to “Eco-On level” afterwards.



Account deletion

Purpose

This section describes how you can delete an account form the Signify MasterConnect App.

How to

- On one of the project screens, press the three lines in the right bottom corner
- Press “Account details” and select “Delete account”.
- Please review any warnings and if you understand and accept them, press "Continue” and “Confirm”
- Check your email for a six-digit verification code, press “Next”, and fill in the code
- Your account will be deleted, and the app will confirm it has been deleted successfully. Press “Dismiss” to return to the login screen

Remarks

- On iOS systems, ensure that the MasterConnect app does not go to background during the account deletion process. Do not use another app and take care that the screen time out/auto lock is not activated.

How to troubleshoot a MasterConnect system

While the MasterConnect system is designed for stable and reliable operation, occasional deviations from expected behavior can occur. This section highlights the key aspects to check when things don't perform as intended, guiding you quickly to the root cause and helping you restore the desired system behavior with confidence using the MasterConnect App.

Device claiming

Purpose

- MasterConnect devices out of the factory start out with open interfaces for BLE and Zigbee communication for easy set up.
- Zigbee device communications become encrypted with secret keys and thus, secure on the first commissioning of MasterConnect devices into a project.
- Once commissioned, the MasterConnect devices from a project will only be visible for users that claimed it first (and for invited users).

Remarks

- Due to the open Zigbee interface, the MC devices may join another open (rogue) Zigbee network if significant time elapses between installation of luminaires and commissioning with the Signify MasterConnect app. In this case, the app will still discover these devices and allow commissioning of these devices into a proper MC network.

Known limitations

These limitations are valid for FW version 2 or higher when combining luminaire-integrated sensors with wireless drivers in one network:

- Luminaire-integrated sensors can only be added in the same group as wireless drivers and SNS41x when using firmware 2 or higher.
- You cannot create zones consisting out of wireless drivers and luminaire-integrated sensors. This will be enabled with a future app update.
- You cannot add ZGP sensors to groups consisting out of wireless drivers and luminaire-integrated sensors. This will be enabled with a future app update.
- Ensure that all areas are well covered with occupancy sensors. When using AUTO ON/OFF, the automatic occupancy cycling is based on the detection of luminaires with an integrated sensor. In case only areas with wireless drivers are occupied, the group might turn off after the timers have passed.
- When combining wireless drivers and luminaire-integrated sensors in one group, daylight dependent regulation will only take place on luminaires with an integrated sensor. To enable daylight harvesting, an external mains-powered external sensor can be added to the group.
- The default settings of a group consisting out of luminaire-integrated sensors and wireless drivers can be different from what you are used to. Please verify the configuration matches with the project requirements after commissioning. If certain parameters are different or cannot be changed, please try to re-commission the entire group.
- After an update to firmware 2 from firmware 1, recommissioning is required before starting a combined network out of luminaire-integrated sensors and wireless drivers.
- Mixing TW and not-TW is not supported.

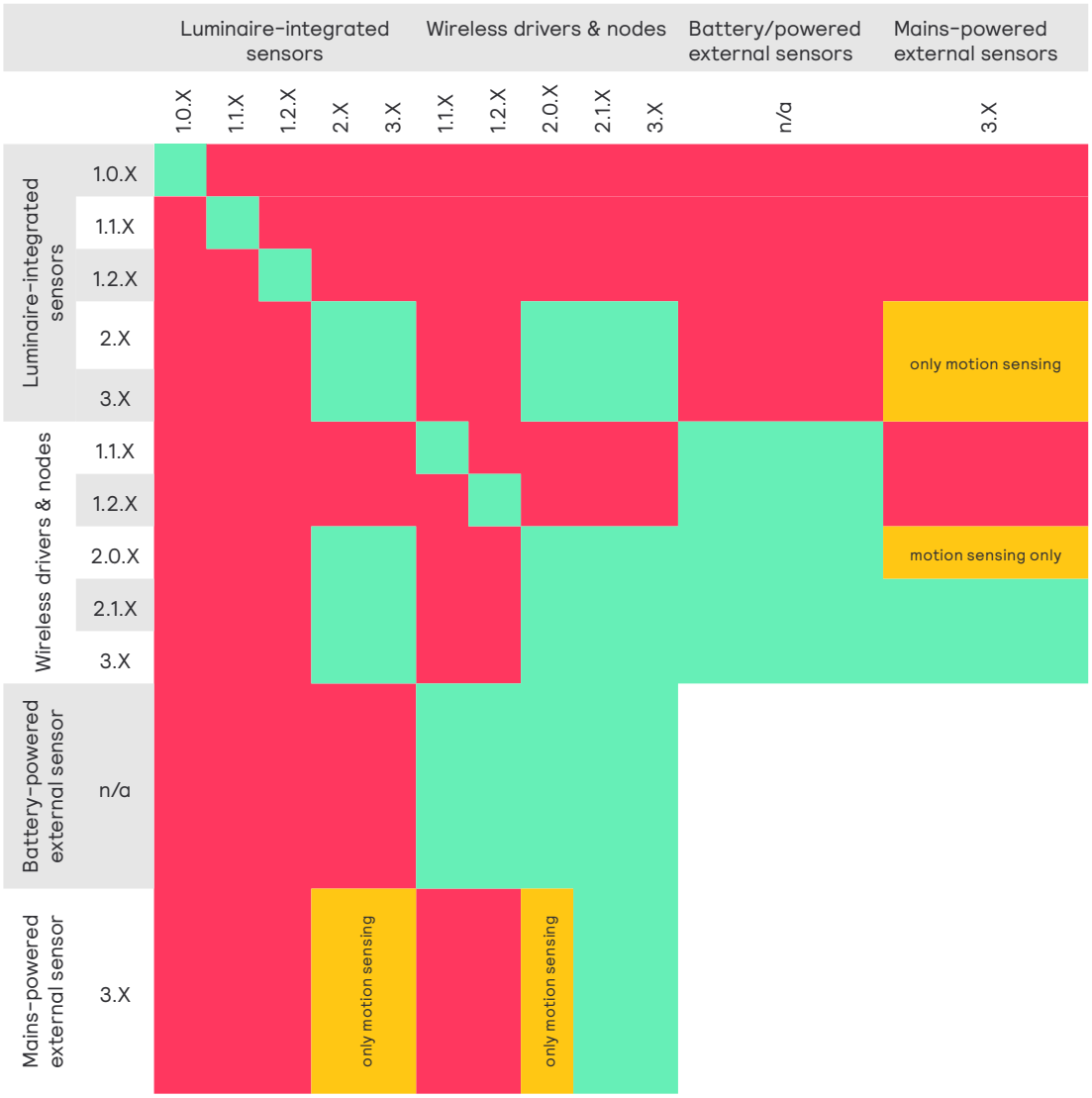
These limitations are valid for the latest firmware versions – 2.0.21 (SNS21x, SNH21x), 3.1.31 (SNS212 and SNH(B)212), 1.2.16 (WDR and SNS41x), and 2.1.3 (WDR and SNS41x):

- Occasionally, project backup can fail. If it continues to fail after a retry, please use the “Report a Problem” feature (see page 110) to send the app data logs to the MasterConnect Team for analysis.
- When Circadian Rhythm is enabled AND infinite prolong time is selected, unexpected light behavior may occur, lights may not dim down to background light level.
- Mixing TW and not-TW is not supported.
- A mix of firmware versions may cause unpredicted behavior.
- In case of an open Zigbee network close to luminaire-integrated sensors, the out-of-the-box sensor behavior may stop working, and the lights remain in their latest state.
- In case occupancy sharing is disabled, prolong time is 4 minutes longer than indicated in the app. With firmware 2.1.1, situations may occur when sensors cannot be added to the same group it was previously removed from. Try using a different sensor or to recommission the entire group.

Remarks

- In the annex section, you can find a complete overview of the known limitations for earlier versions of the firmware.
- Always use the latest app version.

Compatibility matrix



Troubleshooting

MasterConnect devices can be configured using the Signify MasterConnect app. The following parameters can be configured via the app for an entire group of lights or a single light. Note that not all parameters are available for all MC devices.

Feature	Potential Issue	Advised workaround
Login	Occasionally an error message is received, or no confirmation code is received via email.	A re-try with a new account with same email address and username typically resolves the problem. Otherwise re-try with another email address.
List based commissioning	At times, app reports an error when attempting to add a light to a group.	• A retry typically resolved the problem. • Ensure the smartphone is within range during commissioning. • Ensure the phone in use is from the recommended phone list.
Flashlight commissioning	At times, commissioning using torchlight is not always successful.	Wait for additional 3 seconds after the 2nd beep before proceeding to the next light.
Adding a wireless switch	Switch commissioning fails.	• For non-Philips switches, remember to exit the linking mode on the switch by pressing any other button on the switch (as given in the switch instruction sheet). Test the switch by pressing ON/OFF buttons. • Ensure ZGP switch commissioning is carried out as described by manufacturer. • Make sure only 1 brand of switches are used within a group.
Group removal after commissioning	Removal on group level may not fully succeed. Occasionally a device may not get reset leading to unsuccessful re-commissioning thereafter.	A complete reset is advised via the Safe Mode. Please contact your OEM or Signify representative / customer care for further support.
Configuration	Some luminaires do not take over the configuration that is sent, without a warning in the app	• The configuration of lights with Philips MasterConnect app can be impacted by other strong wireless traffic. Switch off RF-devises, like for example Wi-Fi routers, close to the system during the configuration process. • Always verify that all luminaires operate according to new settings. • When the configuration is ready the RF devices can be switched on again.
Commissioning of ZGP sensors	Sometimes occupancy detection does not work	Recommissioning of the ZGP sensor: via the sensors tab on group level, choose “remove switches and ZGP sensors”. Do a hardware reset of the removed ZGP sensor(s) via the button at the rear side. Refresh network to ensure all devices can be reached.
Refresh network	• A light doesn’t respond to a single light configuration setting. • In test mode individual lights don’t respond to app commands (i.e., blinking), while with group commands all lights still react. • Energy reading is not complete, misses a light.	It can happen that in a mesh network one of the lights changes its short address. By the action ‘Refresh network’, this is corrected.
Remove Components from group using safe mode	The power cycling procedure does not work.	Please, reach out to your local account manager for further assistance.
Out-of-the-box sensor behavior	• As our sensors include an auto-joining feature, they will join open Zigbee networks in their surroundings. Once connected, sensors will wait for commands of that gateway and remain in their last state (ON or OFF). • This behavior is according to our specification but might come across as unintentional if not known. • Closed Zigbee networks (normal state) do not affect the behavior.	Commission the sensors using the Signify MasterConnect app, finish the commissioning using the gateway (if applicable), or close the Zigbee network in the area and restart the sensors.

How to get support

Purpose

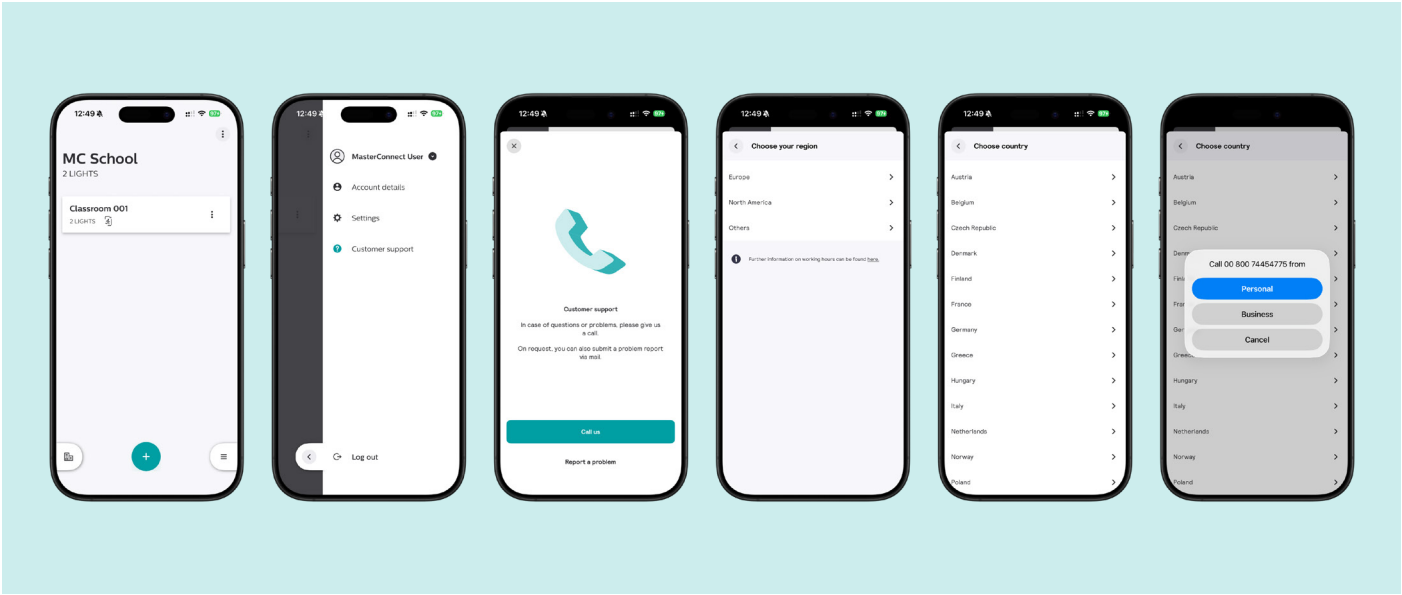
In case you run into issues, you can use the “Customer Support”-button to report and share relevant data with Signify. First line of support is via a call. Second line of support is via mail.

How to – phone support

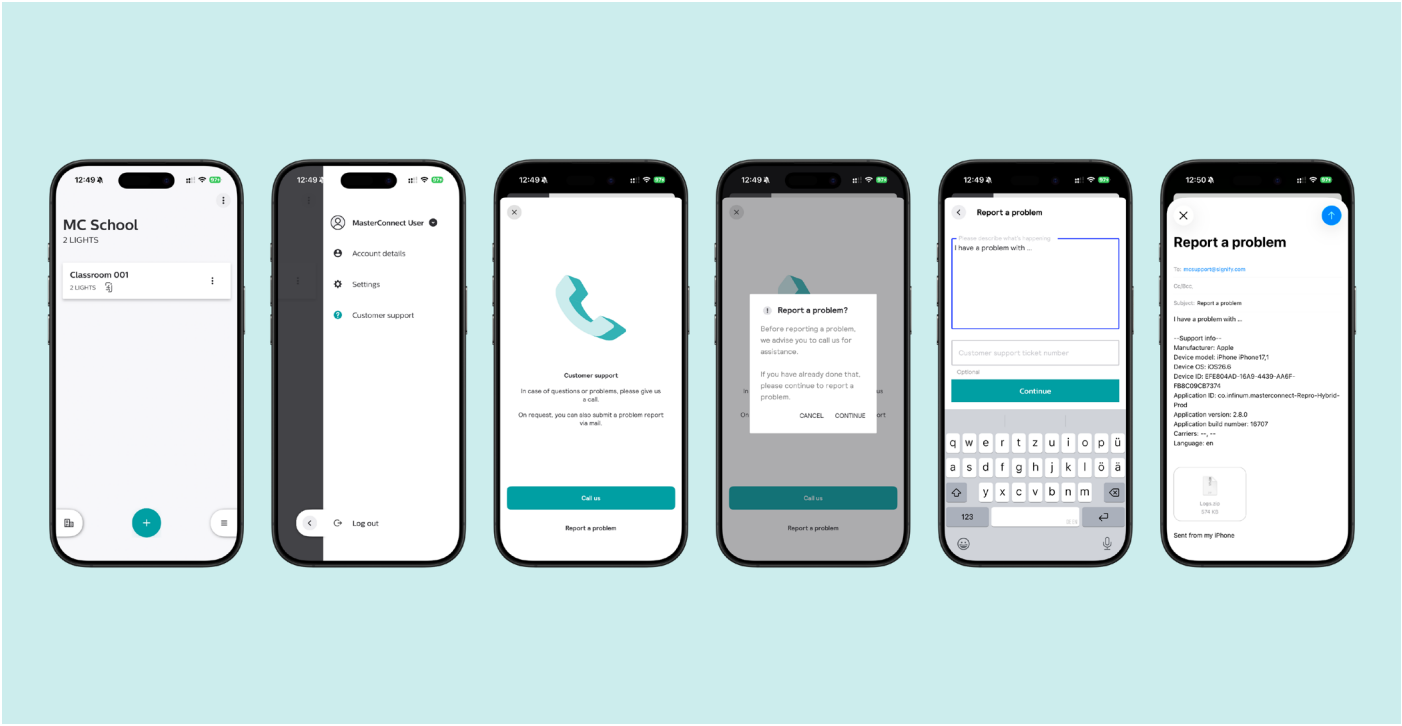
- Select the right-hand menu and choose “Customer Support”.
- Choose “Call us”.
- Choose your region.
- Choose your country.
- The telephone number will appear on your screen, and you can call the help desk

How to – mail support

- Select the right-hand menu and choose “Customer Support”.
- Choose “Report a problem”.
- You will be advised to call first for assistance, if you want to report via mail, press “Continue”.
- Describe the issue, and, if you received a ticket number, please fill it in. Press “Continue”.
- Select an email option for sharing the report with mcsupport@signify.com.
- Send the email with the description and relevant data to Signify.



Step-by-step guide – phone support



Step-by-step guide - mail support

Annex

Annex 1: Factory device renaming

Purpose

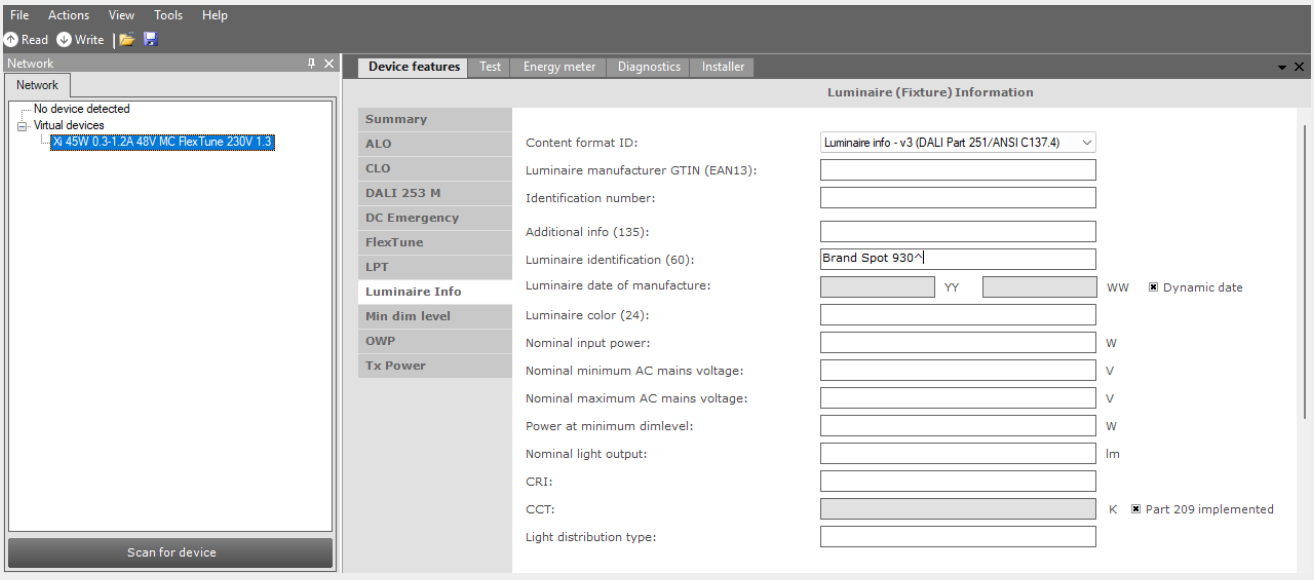
Lights can be given a customized name via a registry in the driver memory bank with MultiOne. Use your own brand and luminaire name instead of default product names. The name is programmed inside the SR or wireless MC driver using the existing tools for MultiOne by Signify.

How to

- Use the Luminaire identification field that is part of Luminaire Info (DALI part 251).
- This Luminaire identification field is available for SR drivers and wireless MC drivers.
- Use MultiOne to write a custom name into the driver. Following structure needs to be followed:
  Custom name
  Delimiting character
  Example: Brand Spot 930^

Remarks

- This option is available for products on firmware 2.0.20 or higher in combination with D4i SR drivers.
- Custom naming via driver is fully optional. When field is not filled, the app will show the default product name.
- Please choose one delimiting character:
  Changes on Bluetooth interface (MC app): ;
  Changes on Zigbee and BLE interface (MC app or GW): ^
- Please only use universal characters. Avoid symbols and special characters.
- The length of the custom name in the MC app is limited to 15 characters. Longer names can be used for the Zigbee interface and will be shortened by the MC app if needed.



Annex 2: Supported switches

There a veriety of supported wireless siwtches from Signify and from partners. The following list shows the switches that can be used with the Signify MasterConnect app and MasterConnect wireless networks.

Brand	Type	EasyAir sensors and MC drivers	EasySense sensors
Signify	EasyAir 2B switch		
	EasyAir 4B switch		
	SWS200 4 Button		
Philips	EasyAir 2B switch		
	EasyAir 4B switch		
	2 Button UID8450/10		
	4 Button UID8460/10		
	2 Button UID8451/10		
ABB	4 Button wireless switch		
Busch-Jaeger	4 Button smart switch		
Feller	4 Button wireless switch		
Fischer Lighting	2-Button 8100		
	4-Button 8211		
green light	2 Button		
	4 Button		
Illumra	2 Button		
	4 Button		
Jaeger Direkt	OPUS55 2 Button		
Jumitech	4 Button smart switch		
Jung	4 Button wireless switch		
Lumitech	L-Sense 2 Button		
	L-Sense 4 Button		
Magnum	2 Button		
	4 Button		
Niko	4 Button switch, xx-91004		
RunLessWire	Click - 2 Button		
	Click - 2 Button		
Senic	4 Button wireless switch		
ubisys	C4		
	C2 mini		
Vimar	4 Button switch, 02905		
	4 Button switch, 02906		
Voltus	evoToggle switch		
X-Light	X Touch 2 Button		
	X Touch 4 Button		

Annex 3: Click-based switch commissioning procedures

Purpose

For adding a switch to a group or zone, a specific procedure must be followed to bind it correctly to the luminaires. For any switch, you must first open the group in the MasterConnect app, choose “+” and “Switches” to add it. Select the switch from the list and decide whether to add the switch to a zone or a group.

This commissioning procedure differs depending on the switch that is used. Please refer to the segment of the document that describes the procedure for your switch.

Signify EasyAir switches, Philips EasyAir switches and partner switches from Fischer Lighting, green light, Jaeger Direkt, Lumitech, Vimar (03905), and X Light

For commissioning a switch into a group, the cover does not need to be removed, and you may choose to work with any one of the four buttons.

Please follow the steps given below, once the app asks you to:

1. Long press - press and hold a button for 10 seconds and release the button.
2. Short press - press and hold the same button for 1 second and release it again.
3. Long press - press and hold the same button for 10 second and release it again.
4. Do a series of 2-second presses and releases of the same button. If the app feeds back a beep and a message that the switch has been detected, stop pressing the button and wait for instructions about next steps.
5. After getting the app feedback, wait as indicated by the app and then make a short press with any of the other buttons to finalize the switch linking.

Partner switches from ABB, Busch-Jaeger, Feller, Jumitech, Jung, Niko, Senic, Voltus, RunLessWire, and Vimar (03906)

For commissioning a switch into a group, the cover does not need to be removed.

Please follow the steps given below, once the app asks you to:

1. Press and hold the button on the top right for 10 seconds.
   If the app feeds back a beep and a message that the switch has been detected, stop pressing the buttons and wait for instructions about next steps.
   Otherwise, repeat this step for the other buttons until the app feeds back a beep and a message.
2. After getting the app feedback, wait as indicated by the app and then make a short press with the top right and bottom left buttons to finalize the switch linking.

Philips (Prev. Gen.) 2 Button - UID8450/10

For commissioning a switch into a group, the cover needs to be removed.

Please follow the steps given below, once the app asks you to:

1. Long press - press and hold the control key A0 and the energy bow for 10 seconds.
   If the app feeds back a beep and a message that the switch has been detected, stop pressing the buttons and wait for instructions about next steps.
   Otherwise, continue with step 2.
1. Long press - press and hold the control key A1 and the energy bow for 10 seconds.
   If the app feeds back a beep and a message that the switch has been detected, stop pressing the buttons and wait for instructions about next steps.
   Otherwise, continue with step 2.
2. Long press - press and hold the control key B0 and the energy bow for 10 seconds.
   If the app feeds back a beep and a message that the switch has been detected, stop pressing the buttons and wait for instructions about next steps.
   Otherwise, continue with step 2.
3. Long press - press and hold the control key B1 and the energy bow for 10 seconds.
   If the app feeds back a beep and a message that the switch has been detected, stop pressing the buttons and wait for instructions about next steps.
   Otherwise, continue with step 2.
4. After getting the app feedback, wait as indicated by the app and then make a short press with any of the other buttons to finalize the switch linking.

Philips (Prev. Gen.) 2 Button - UID8460/10

For commissioning a switch into a group, the cover does not need to be removed.

Please follow the steps given below, once the app asks you to:

1. Long press - press and hold any button for 10 seconds.
   f the app feeds back a beep and a message that the switch has been detected, stop pressing the button and wait for instructions about next steps.
   Otherwise, repeat this step with another button on the switch.
2. After getting the app feedback, wait as indicated by the app and then make a short press with any of the other buttons to finalize the switch linking.

ubisys C4 / C2 mini

For commissioning a switch into a group, the cover does not need to be removed.

Please follow the steps given below, once the app asks you to:Press and hold the button on the top right for 10 seconds.

1. Long press - press and hold button #1 for 10 seconds.
   If the app feeds back a beep and a message that the switch has been detected, stop pressing the button and wait for instructions about next steps.
   Otherwise, repeat the step with another button.
2. After getting the app feedback, wait as indicated by the app and then make a 5-second press with button #1 to finalize the switch linking.

XELIUM ZGB-1BP XBP.02.01

For commissioning a switch into a group, the cover does not need to be removed, and you may choose to work with any one of the four buttons.

Please follow the steps given below, once the app asks you to:

1. Long press - press and hold a button for at least 10 seconds before releasing the button.
2. Short press - press and immediately release the same button.
3. Long press - press and hold a button for at least 10 seconds before releasing the button.
4. Wait for 1 second. If the app feeds back a beep and a message that the switch has been detected, stop pressing the button and wait for instructions about next steps.
5. Do a series of short presses of the same button followed by a 1-second wait.
   If the app feeds back a beep and a message that the switch has been detected, stop pressing the button and wait for instructions about next steps.

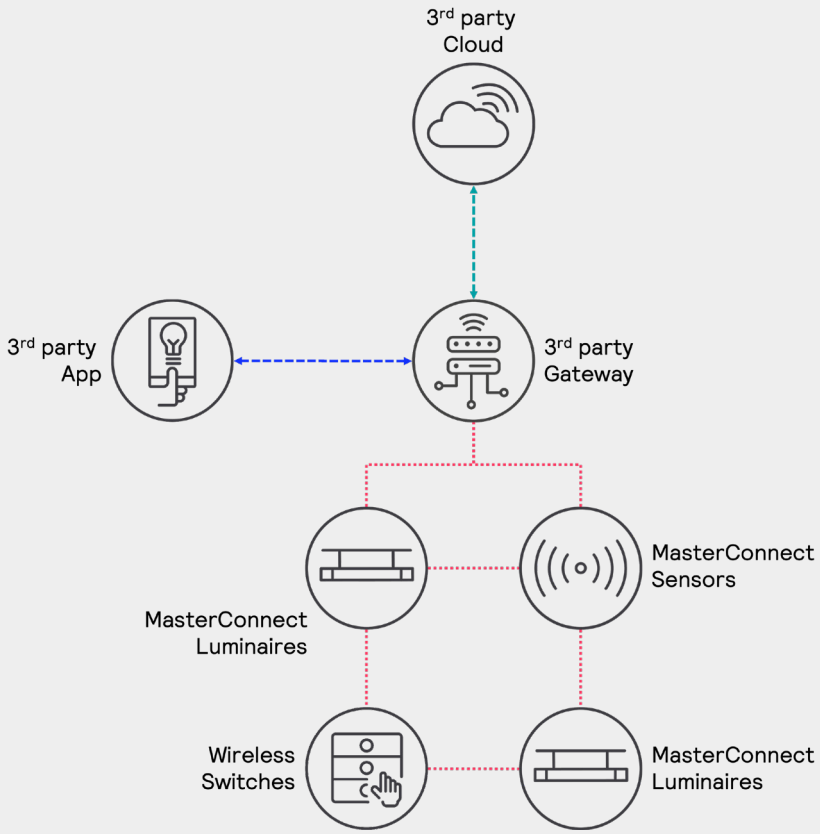
Annex 4: 3rd party gateways

Purpose

Enabling projects with a coordinating role of a gateway and dashboard.

How to

- The Signify MasterConnect system can be setup in standalone way and works without a gateway. Out of the box, MasterConnect products can be commissioned via the Signify MasterConnect app but are also open for joining Zigbee networks of gateways from partner companies like ubisys technologies GmbH.
- To commission MasterConnect wireless products with partner gateways, software and apps of the partners need to be used.
- Please refer to gateway suppliers for more information on how to set up a system with their gateway and how to get support.



Annex 5: partner gateway – ubisys g1

Purpose – human centric lighting feature

One of our supported gateways is the ubisys G1 gateway. Adding this gateway can enable further features for MasterConnect including running Human Centric Lighting (HCL) profile to mimic the changes in color temperature of natural sunlight. The default profile “HCL for Philips EasyAir SNS21x MC” starts with warm white light in the morning goes to cold white at mid-day and becomes warm white in the evening again.

It is also possible to set customized lighting profiles with the Ubisys app: sample points (time, CCT and intensity) can be set throughout the day. In between those points CCT and intensity change gradually. When using a customized profile make sure that in the ubisys app the steering interval is set to 30s and that the parameter “suppress insignificant changes” is put to “no”. The gateway needs to be commissioned in MasterConnect. After commissioning the parameter “Circadian Rhythm” needs to be enabled.

How to – human centric lighting feature

- Click on the “+” on the group screen and select “Gateway”.
- Choose the gateway you want to commission.
- Select the right gateway from the scan list by clicking “Add” and “Finish adding”.
- Enter the group configuration screen and choose “Edit configuration”
- Activate “Circadian Rhythm” and confirm by pressing “Save and apply”.
- Follow the next steps in the ubisys app to activate the profile in the ubisys app.
- Open the “Automations” and click the pen icon to add a new automation.
- Click the plus to add a new automation and enable the “HCL for Philips EasyAir” template.
- Change the “Suppress insignificant changes” and “Steering interval settings” and any other setting.
- Confirm settings by clicking on the checkmark and ensure that the play button is green by clicking on it.

Remarks

- When working with a peripheral gateway in combination with a Circadian Rhythm lighting profile, please work as follows: first add all the lights that should be included, then add the gateway. If you want to add lights later, please remove the gateway, add the new lights, and add the gateway again.
- During commissioning of the gateway in MasterConnect the gateway needs to be in Bluetooth range of the smartphone, i.e., within 5m.
- On the Ubisys gateway an automatic update of sensor firmware via the gateway is enabled by default as soon as the gateway is commissioned. So, if the gateway in a MasterConnect system is connected to internet, the firmware upgrade can happen without control of the user. This is an unwanted situation and can result in unexpected light behavior because the Signify MasterConnect app is not updated automatically either. Therefore, it is recommended to disable automatic firmware upgrade via the gateway.
- When using a customized profile make sure that in the ubisys app the steering interval is set to 30s and that the parameter “suppress insignificant changes” is put to “no”.
- Circadian does not work as expected in combination with Infinite Prolong time

Purpose – Disabling automatic firmware upgrade via the ubisys gateway

Automatic firmware upgrade needs to be disabled after the Gateway has been commissioned.

How to – Disabling automatic firmware upgrade

- Gateway and smartphone/laptop need to be connected to the same local network, e.g., via a router. The Gateway is connected via an ethernet cable.
- The Gateway will then be visible on the Network on Windows explorer.
- By double clicking on the Gateway icon, you will be taken to the gateway's website. Note: if no password has been set, it is "admin".
- At the tab "Updates" please uncheck "Use this gateway to supply the system with updates".

Purpose – Zigbee OTA via gateway

When using a gateway in a peripheral mode the gateway can be used to distribute firmware updates to device. After updating using a gateway, please confirm the update in the app.

How to – Zigbee OTA via gateway

- Open the group that has been updated via the gateway.
- Choose the "Gateway" tab and click on the three dots next to the gateway name.
- Select "OTA via Gateway" and choose the new firmware version from the list. Confirm by pressing "Save".

Remarks – Zigbee OTA via gateway

- See remarks in the "Over the air update" section of this manual.
- In case group actions fail after the Zigbee OTA, please perform "Check version" on the device detail screen to verify the success of the Zigbee OTA.

Purpose – Remove a ubisys

When a gateway needs to be removed from a group.

How to – Remove a ubisys

- In the "Gateway" section of the group overview, click on the three dots next to the gateway.
- Choose "Remove this gateway".
- Reset the gateway as described by the gateway instructions.
- Choose "Check status" to confirm the gateway is reset and select "Finish" to complete the process.

Remarks

- Before removing the gateway from the group, Circadian Rhythm shall be set to "Disabled" in the Group Configuration.

Annex 6: Known limitations of previous firmware versions

Firmware 1 versions

Known limitation	1.0.5	1.1.11	1.1.12	1.1.16	1.2.12	1.2.14 1.2.15	1.2.16
When occupancy sharing is disabled, all lights of the group still go to Eco-on level when occupancy is detected. Only granular dimming does not occur.							
When daylight-based control is enabled, the following limitations apply: • For luminaires, where the calibration fails due to too little light reflections from dark surfaces in the field of view of the daylight sensor, the luminaire goes to maximum light output and is not capped at Eco-on level. • A double 'ON' press on a wireless switch is needed for lights to go to Eco on level as the 1st button press will only bring lights to background level. • Two occupancy triggers are needed for the lights to go to Eco-on level. The luminaire that first triggers occupancy in a group goes to background level. Within some minutes, the light of the luminaire increases to Eco-on.							
When group occupancy sharing is disabled on a single device, that device does not go to background level but remains in Eco during prolong time.							
The reset of components from the network in Safe Mode as describe in our manual is not possible. For alternatives, please contact your local contact.							
Tunable White is not supported.							
Occupancy sensing is only possible on group-level.							
Circadian Rhythm is not supported yet.							
Daylight harvesting function is not supported in the Manual ON/OFF mode.							
If Occupancy Based Control is disabled for one or more devices, automatic light behavior is incorrect after a short "On" or "Off" press on the wireless switch: • Short "On": Lights with disabled occupancy control will remain at Eco-On and other lights will remain on Background level without occupancy. • Short "Off": All lights remain off, even when there is occupancy detected after Hold Time and Prolong Time expired. The system can be recovered either by a long press or a scene recall.							
In the Auto ON/Auto OFF mode, pressing the switch to turn OFF lights may delay Auto ON. Sometimes lights do not turn on automatically at all. Manual ON press is suggested to turn the lights back ON.							
The use of a GW for circadian rhythm can result in unwanted light behavior.							
If a group contains two zones and a separate switch is commissioned to each zone, the following behavior can be expected: • 4B of zone A, press "on": zone A goes to Eco On, zone B to BG. • 2B of zone B, press "on": zone B goes to Eco On, zone A to BG. • 4B of zone A, press "scene": zone A goes to scene, zone B remains off.							
Wireless drivers with FW 1.1.12 do not work with stand-alone ZGP sensors.							
After commissioning of lights with wireless drivers or with SNS410 MC radio nodes, it can happen that during a period of 3 minutes some of the lights turn off. Use the 'Test mode' in the app to turn the lights back on.							
When a GW with an automation profile is added to a group, circadian rhythm must be switched on in the MC-app to avoid unpredictable light behavior.							
Adding and removing individual lights from daylight area is not possible. The daylight area needs to be recreated.							
Project backup sometimes fails. If it continues to fail after a retry, please use the "Report a Problem" feature to send the app data logs to the MasterConnect Team for analysis.							
When Circadian Rhythm is enabled AND infinite prolong time is selected, lights may not dim down to background light level.							
Wireless drivers and SNS410 CANNOT be added in the same group as SNS210.							
After firmware updates from an older firmware, recommissioning is needed.							
Mixing TW and not-TW is not supported.							
A mix of firmware 1 versions may cause unpredicted behavior.							
With an open Zigbee network close to luminaire-integrated sensors, the out-of-the-box sensor behavior may stop working, and the lights remain in their latest state. Find more info in the Troubleshoot Tips section.							

Firmware 2 and 3 versions

Known limitation	2.0.20	2.0.21	2.1.1	3.0.24	3.0.29	3.1.29 3.1.31
When occupancy sharing is disabled, all lights of the group still go to Eco-on level when occupancy is detected. Only granular dimming does not occur.						
When daylight-based control is enabled, the following limitations apply: • For luminaires, where the calibration fails due to too little light reflections from dark surfaces in the field of view of the daylight sensor, the luminaire goes to maximum light output and is not capped at Eco-on level. • A double 'ON' press on a wireless switch is needed for lights to go to Eco on level as the 1st button press will only bring lights to background level. • Two occupancy triggers are needed for the lights to go to Eco-on level. The luminaire that first triggers occupancy in a group goes to background level. Within some minutes, the light of the luminaire increases to Eco-on.						
When group occupancy sharing is disabled on a single device, that device does not go to background level but remains in Eco during prolong time.						
The reset of components from the network in Safe Mode as describe in our manual is not possible. For alternatives, please contact your local contact.						
Tunable White is not supported.						
Occupancy sensing is only possible on group-level.						
Circadian Rhythm is not supported yet.						
Daylight harvesting function is not supported in the Manual ON/OFF mode.						
If Occupancy Based Control is disabled for one or more devices, automatic light behavior is incorrect after a short "On" or "Off" press on the wireless switch: • Short "On": Lights with disabled occupancy control will remain at Eco-On and other lights will remain on Background level without occupancy. • Short "Off": All lights remain off, even when there is occupancy detected after Hold Time and Prolong Time expired. The system can be recovered either by a long press or a scene recall.						
In the Auto ON/Auto OFF mode, pressing the switch to turn OFF lights may delay Auto ON. Sometimes lights do not turn on automatically at all. Manual ON press is suggested to turn the lights back ON.						
The use of a GW for circadian rhythm can result in unwanted light behavior.						
If a group contains two zones and a separate switch is commissioned to each zone, the following behavior can be expected: • 4B of zone A, press "on": zone A goes to Eco On, zone B to BG. • 2B of zone B, press "on": zone B goes to Eco On, zone A to BG. • 4B of zone A, press "scene": zone A goes to scene, zone B remains off.						
Wireless drivers with FW 1.1.12 do not work with stand-alone ZGP sensors.						
After commissioning of lights with wireless drivers or with SNS410 MC radio nodes, it can happen that during a period of 3 minutes some of the lights turn off. Use the 'Test mode' in the app to turn the lights back on.						
When a GW with an automation profile is added to a group, circadian rhythm must be switched on in the MC-app to avoid unpredictable light behavior.						
Adding and removing individual lights from daylight area is not possible. The daylight area needs to be recreated.						
Project backup sometimes fails. If it continues to fail after a retry, please use the "Report a Problem" feature to send the app data logs to the MasterConnect Team for analysis.						
When Circadian Rhythm is enabled AND infinite prolong time is selected, lights may not dim down to background light level.						
Wireless drivers and SNS410 CANNOT be added in the same group as SNS210.						
After firmware updates from an older firmware, recommissioning is needed.						
Mixing TW and not-TW is not supported.						
A mix of firmware 1 versions may cause unpredicted behavior.						
With an open Zigbee network close to luminaire-integrated sensors, the out-of-the-box sensor behavior may stop working, and the lights remain in their latest state. Find more info in the Troubleshoot Tips section.						

Annex 7: MasterConnect LED Lamps

Remarks – firmware support

- MasterConnect LED Lamps running on firmware 6.5.3 and 6.6.16 can be commissioned and used in combination with the Signify MasterConnect App starting with app version 1.8.0.
- Any other firmware versions of the MasterConnect LED Lamps are not supported to be commissioned and used in the Signify MasterConnect App.

Remarks – commissioning

- Lights with integrated MasterConnect LED lamps can only use the list-based commissioning.

Remarks – zoning

- When creating a large-scale zone with MC lamps, set up the zone with a maximum of 10 MC lamps first and add more MC lamps to it in packages of 10 max.

Remarks – calibration

- When the calibration is run, the light output of the luminaires first goes to a low level and to a high level before it regulates to the set light level. This procedure takes approximately 7.5 minutes for MasterConnect lamps.

Remarks – QR code generation

- For groups with MC lamps, QR codes for Signify MasterConnect Control app cannot be generated.

Known limitations

These limitations are valid for FW version 6.5.3 and 6.6.16 for MasterConnect lamps:

- A mix of firmware versions may cause unpredicted behavior.
- After removing MC lamps from a project – either by removing them from a group, deleting the whole group or by resetting them via Safe Mode – it occasionally happens that light behavior of these MC lamps is not correct after recommissioning. In that case the MC lamps need to be decommissioned and recommissioned once more.
- In case a system with MC lamps with occupancy mode setting “Auto on/off” or “Manual on/auto off” is switched off with a ZGP switch or via test mode while, the area is occupied, lamps turn on at background level after the hold time and turn off again after the prolong time.

References

Apps

Signify MasterConnect for iOS	Apple AppStore
Signify MasterConnect for Android	Google PlayStore
Philips MasterConnect Control app for iOS	Apple AppStore
Philips MasterConnect Control app for Android	Google PlayStore

Weblinks

MasterConnect website:	Signify MasterConnect Website Europe
	Signify MasterConnect Website Americas
Technical documentation:	MasterConnect Product Pages Europe
	MasterConnect Product Pages Americas
OEM Warranty:	Signify OEM Warranty
	Signify OEM Warranty Americas

Contact options

Commercial inquiries:	masterconnect.info@signify.com
Technical problems:	mcsupport@signify.com

Disclaimer

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