

Commissioning

User Manual

30 June 2022 SN-200 Rev. 2.8

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1. Introduction

AirLink Blue Commissioning is a set of software tools that allows commissioning agents, contractors, installers and facility managers to configure, control and manage commercial lighting infrastructures based on qualified Bluetooth mesh.

AirLink Blue Commissioning consists of two elements:

- The AirLink Blue web app¹, which is used off site to manage lighting installation projects and plan commissioning, including mapping zones within a building, setting up profiles for zones and managing users collaborating on the project. To start with AirLink Blue Commissioning, please create an account in our web app.
- The AirLink Blue mobile app², which is used on site to commission the devices with the commissioning plan set up earlier in the AirLink Blue web app. It also has the basic features for managing a project, so it can also be used to perform fine-tuning of a large project or the commissioning of small projects. The app supports English, French and German (customizable in app settings on your mobile device). It is available only for iOS devices.
 - O The AirLink Blue mobile app allows for ad hoc commissioning, which lets the user create a commissioning project without using the web app. This way of commissioning is done only with the mobile app, but it has more limited settings than creating a commissioning plan in the web app.

This document describes how to use the AirLink Blue web and mobile apps for commissioning, i.e.:

- Create an account and sign in.
- Create a commissioning plan with the AirLink Blue web app.
- Commission the installed system with the AirLink Blue mobile app.

² The AirLink Blue mobile app requires an iOS (AirLink Blue supports the **latest two versions** of Apple iOS and iPadOS) and Bluetooth enabled as well as an internet connection - minimum 3G (WiFi or cellular).



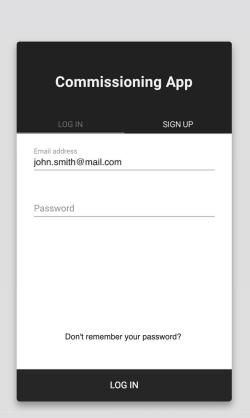
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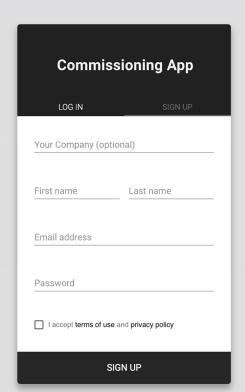
¹ The AirLink Blue web app requires the Chrome browser (other browsers are not supported) and an internet connection.

2. Creating a Commissioning Plan

Log in & sign up

lsi-airLinkblue.com





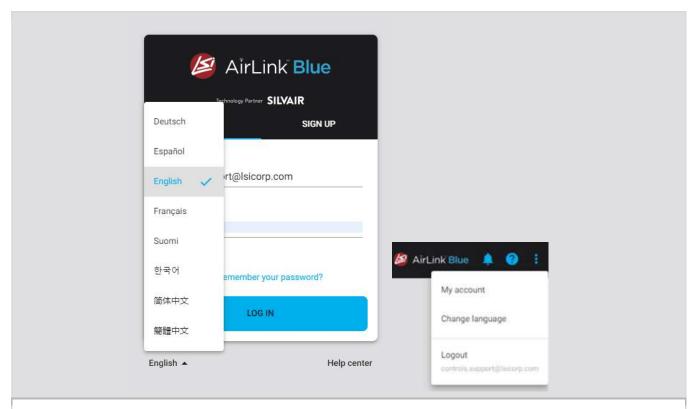
For new users: visit AirLink Blue web app <u>Isi-airlinkblue.com</u> and create a new account. To do it, open the "SIGN UP" tab and enter your details. Accept the terms of use and privacy policy and click "SIGN UP".

If you are an existing user, go to the AirLink Blue web app at <u>Isi-airlinkblue.com</u>, open the "LOG IN" tab, enter your registration email address and password and press the "LOG IN" button.

NOTE: User account will be blocked after 10 unsuccessful login attempts. You will receive an email about suspicious activity on the account from reply@authOuser.net.

To unlock the account, reset the password using "Don't remember your password?" link.

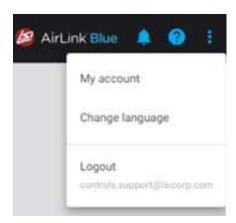




The web app supports 8 languages: English, German, French, Spanish, Korean, Finnish, traditional Chinese and simplified Chinese. You can change it anytime:

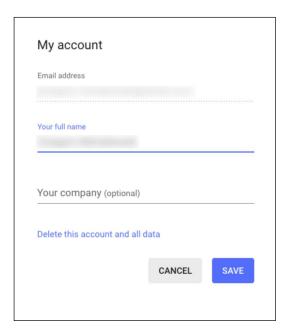
- by pressing the already selected language on the log in & sign-up screen, or
- inside the app, display the context menu by tapping the *button and select "Change language".

Edit or delete the account



In the web app or mobile app, tap and select "my account".



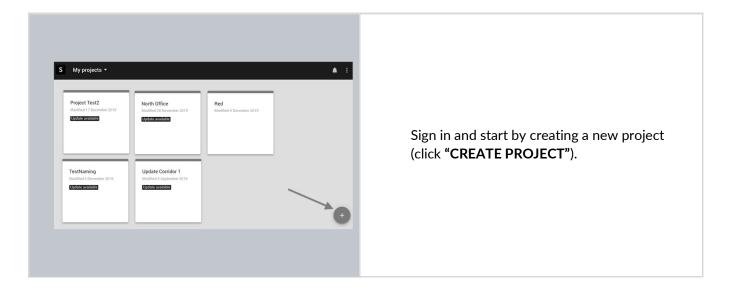


In the respective fields, edit your full name or your company name.

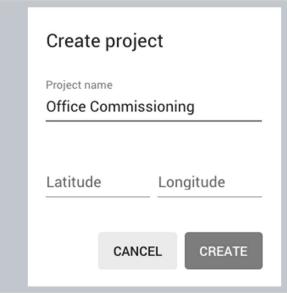
To delete your account, click "Delete this account and all data". If you confirm the deletion, your account and all data will be removed after 30 days. But if you log in within these 30 days again, you will be asked if you want to "Cancel deletion" in case you changed your mind.

Create a project

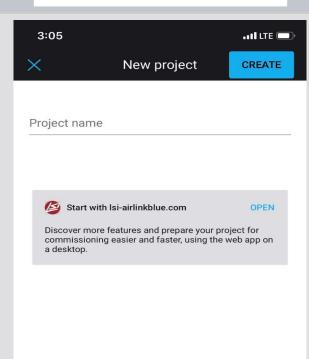
Your lighting systems are organized into projects that can represent areas as large as a whole building, or as small as a single room. Each project is a separate Bluetooth mesh network.







- Enter the project name
- Enter Latitude and Longitude of the place where the project will / is used
 - O This step is **not** mandatory
 - It is used for extended services that require using gateway
- Press "CREATE" to confirm
- You will see your new project appear in the list
- Projects are sorted by the creation date, from the newest to the oldest



When you will start creating the project using mobile app, the information about the desktop web app will be displayed.

Tap "Open" to share URL to browser/email.



NOTE: By default, the user who creates the project becomes its owner and is marked as such on the collaborators list (see: Invite & manage project collaborators)



NOTE: A project represents a single mesh network, so any devices added to this project will automatically be part of the same network.



Create an area

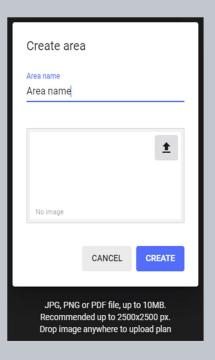
Create areas in your projects. This will allow to add various zones to the plan and locate them in the building.



IMPORTANT: Ensure that every area within a project can communicate with each other. If an area would be separated from other areas, create an additional project dedicated only for that area instead.



Every commissioning plan must have at least one area. To create an area, click "CREATE AREA" on the project screen.



- Add a plan image by clicking on "SELECT IMAGE".
- Select the image you want to use, it must be a JPG, PNG, or PDF file up to 10 MB.
- Enter the area name.
- Click "CREATE" to save the area details.

HINT: You can drag the image anywhere on the screen to upload the plan.

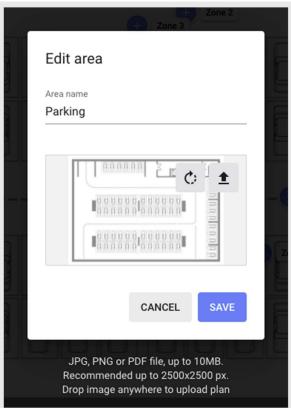


Edit an area



- 1. Open the project with the area you want to edit
- 2. Click icon and select **Edit**.

HINT: The menu allows you to edit the selected plan or remove the area.



In this panel you can:

- edit the area name
- rotate or replace the image

You can also replace the plan by dragging an image file from your computer onto the existing plan.

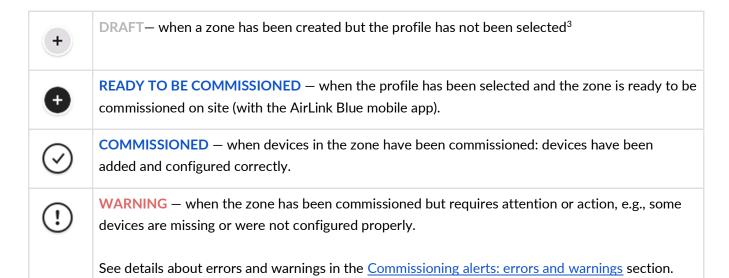


Zones

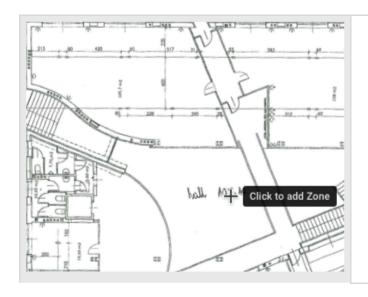
Devices (i.e., fixtures, drivers, sensors or switches) commissioned using the AirLink Blue mobile app are organized into zones. A zone is a group of devices that operate with a selected profile. It doesn't have to be a physical space (e.g., a room) as a room may contain one or more zones, e.g., multiple daylight zones.

The AirLink Blue web and mobile apps are synced, so any progress or problems that occur during commissioning are reflected in both interfaces.

A zone is represented on the area with a circular icon which changes color depending on its status:



Create a zone

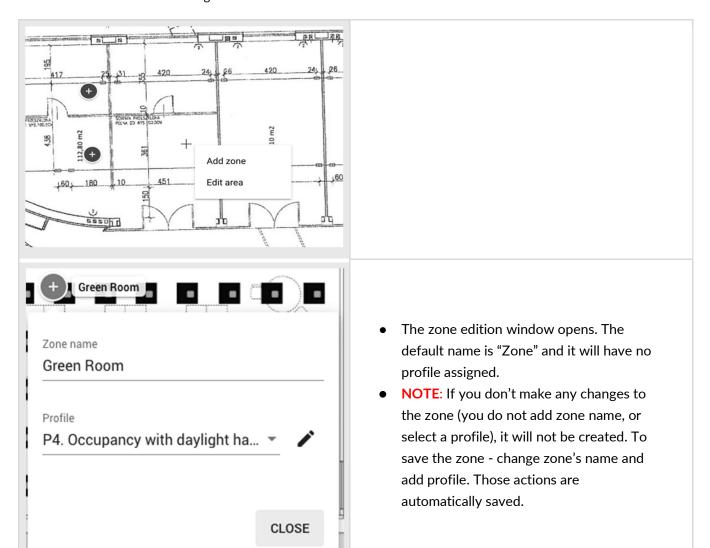


- Navigate to the area view, left click on the floorplan in a place where you want the zone to be created and add zone.
- You can also right-click on the floorplan and select "Add zone" from the dropdown.

³ DRAFT zones are only available in the Silvair web application.



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NOTE: You can create multiple zones and edit them later. Don't forget to add zone names and assign profiles. Otherwise, your zones will not be created.



Edit a zone



- Editing a zone can be done in two ways:
- Right-click the zone icon.
 - o Press "**EDIT**" button
 - Enter a name, e.g., Conference
 Room, select the desired profile
 e.g., Occupancy.
 - Click the pencil button to the right of the PROFILE to start editing profile settings.
 - O Click "CLOSE" to save the changes.
- Left click the zone icon.

NOTE: This would work only for zone that has a Profile assigned.

- Change zone name or select a different profile.
- Click the pencil button to the right of the profile name to start editing profile settings.
- O Click "CLOSE" to save the changes.

Duplicate zone

To duplicate a zone, right-click an existing zone and select "Duplicate".

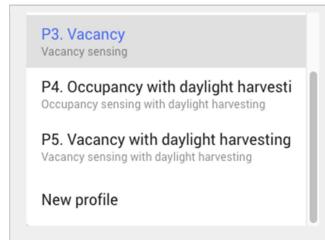
HINT: Alternatively, you can press the "Option" key on MacOS or "Alt" key on Windows/Linux and drag an existing zone.

The duplicated zone has the same control and energy profile as the original zone. The zone linking and devices are not copied.

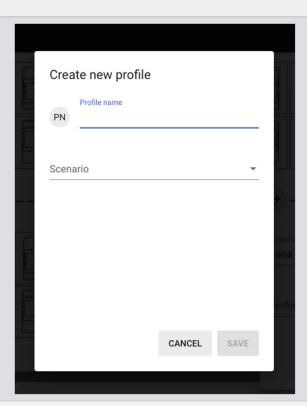


Profiles

AirLink Blue Commissioning lets you set up profiles and each one can be customized as needed (see: <u>Customize profile</u>). New profiles can also be created. Each zone must have an assigned profile in order to be commissioned. Profiles can be added when a user <u>creates</u>, or <u>edits</u> a zone.



- After right-clicking on a zone from the floorplan view and pressing Edit, expand the list of available profiles. For your convenience. under each profile there is a scenario label (this shows the scenario in which this profile operates).
- Select a profile, you can edit this profile settings later.
- At the bottom of the list there is an option that allows to create a new profile, if none of the proposed profiles is good for you.



Creating new profile

- After right-clicking on a zone from the floorplan view and pressing Edit, expand the list of available profiles.
- At the bottom of the list there is an option "New Profile" that allows to create a new profile.
- Add a profile name and select a scenario.
- Tap the Save button.

You can edit the profile by changing its settings to the desired values. For more details, please check Customize a profile section.



NOTE: You can create separate profiles for different types of spaces, e.g., conference rooms can have a "Conference room" profile operating in the Vacancy with daylight harvesting scenario, while corridors can have a "Corridor" profile operating in the Occupancy with daylight harvesting scenario with different times and levels. Each profile can be assigned to the appropriate zones through a project. This approach allows light control behavior in similar spaces to be easily modified by customizing the profiles.



Regardless of the selected profile, you can define two scenes for each zone that are triggered with a wall switch (see: <u>Scenes setup</u>). For all profiles, the default light level and automatic mode can be restored manually by pressing the On/Auto key of the wall switch (see: <u>Using the EnOcean switch</u>).

The available scenarios assigned to the created profiles are:

Manual control

All luminaires in the zone are switched on manually to a defined light level, switched off and dimmed manually with a wall switch. After a power failure, the luminaries will come back to the same level as before the power failure.

Vacancy sensing

All luminaires in the zone are switched on manually with a wall switch to the defined light level and switched off automatically when no motion is detected for a given time. The lights can also be dimmed and switched off manually with a wall switch, and this action will override automation.⁴ Automation will resume after the zone has been vacant for a given time (called *timeout* parameter).

Vacancy sensing with daylight harvesting

All luminaires in the zone are switched on manually with a wall switch to the defined light level and switched off automatically when no motion is detected for a given time, or there is sufficient daylight available to maintain the defined light level. The lights can also be dimmed and switched off manually with a wall switch, and this action will override automation. Automation will resume after the zone has been vacant for a given time (timeout).

Occupancy sensing

All luminaires are switched on automatically to the defined level when motion is detected and switched off automatically when no motion is detected for a given time. The lights can also be dimmed and switched off manually with a wall switch, and this action will override automation. Automation will resume automatically after the zone has been vacant for a given time (timeout).

Occupancy sensing with daylight harvesting

All luminaires are switched on automatically to the defined light level when motion is detected and switched off automatically when no motion is detected for a given time, or there is sufficient daylight available. The lights can also be dimmed and switched off manually with a wall switch and this action will override automation. Automation will resume automatically after the zone has been vacant for a given time (timeout).

Photocell

It is a scenario that allows you to control lighting depending on the level of ambient light and occupancy. The luminaries switch ON/OFF to the defined level depending on whether it gets dark or bright. The light level can adjust automatically to a defined level when it is occupied.

⁴ Manual control (e.g. wall switch) will override automatic control and the luminaires will no longer maintain the desired light level until the automatic control is restored.



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Multiple scenes

Is a scenario that allows you to set up 4 customizable scenes using the AirLink Blue web app. You can set a separate name and different values for each scene depending on their properties, e.g.,, desired light levels and different timeouts for office working hours and outside of them, or appropriate light conditions for subsequent work shifts.

The scenes can be triggered by:

- a) pressing wall switch e.g., EnOcean switch (see EnOcean switch section)
- b) Scheduler feature which allows for an automatic scene recall at preset time, without manual control

NOTE: Multiple scenes scenario cannot be adjusted using the AirLink Blue mobile app.

Central control, Central control for dual output

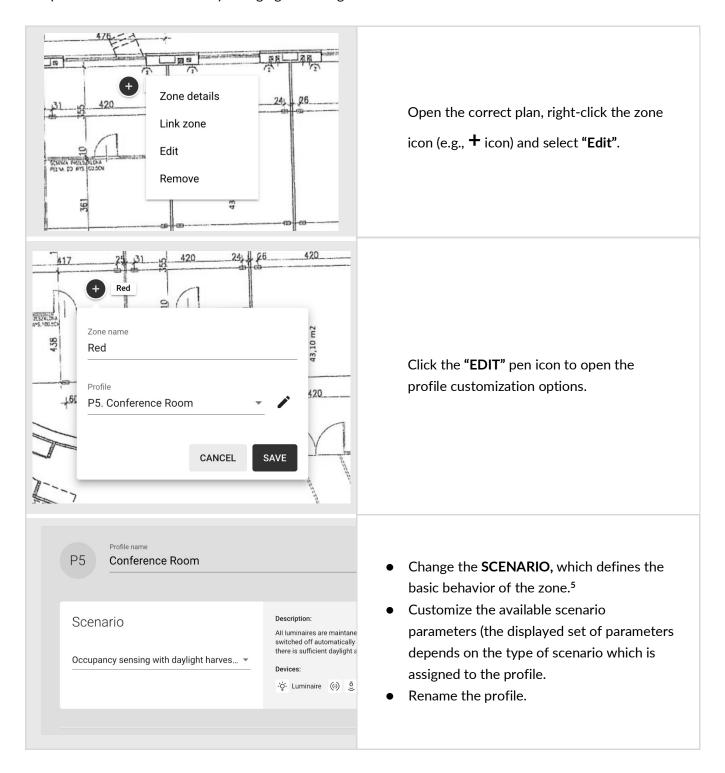
The Central control is used in spaces where all luminaires are controlled by a central controller that receives the data from sensors and switches. The central controller determines the appropriate light levels for all luminaires in a zone.

In case of Central control for dual output scenario, one group of devices is controlled centrally and second is controlled locally.



Customize a profile

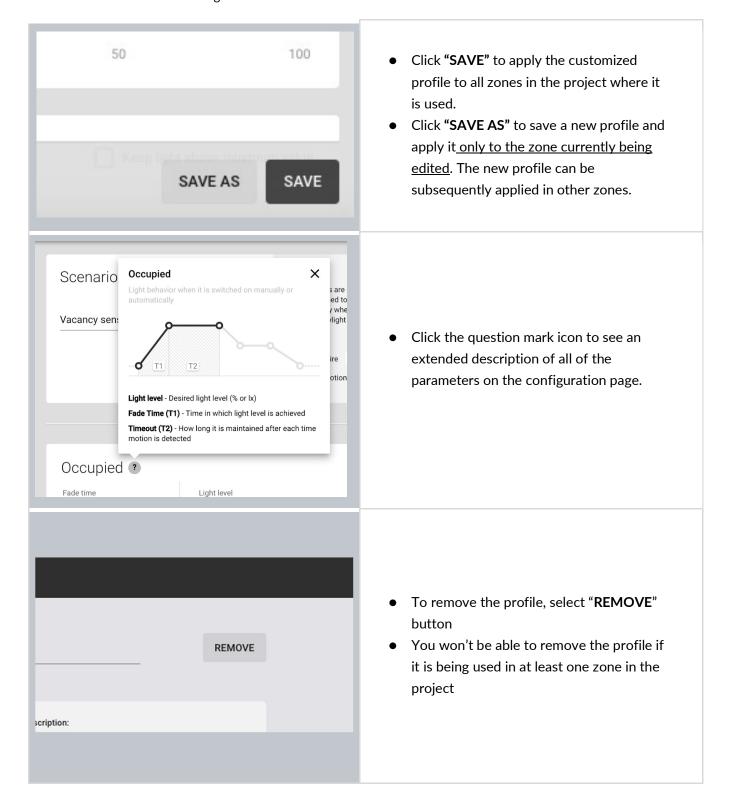
Each profile can be customized by changing its settings to the desired values.



 $^{^{5}}$ To avoid confusion, we recommend using the "New profile" option or changing the name of the edited profile.



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Scenario parameters for customization

Each profile has multiple parameters that can be changed to customize it to your needs. The parameters are set when adding a device but can be also modified later. The available parameters depend on the **Scenario**, which is assigned to the profile. The parameters are described below.



Manual control scenario

Segment	Parameter	Description
		General
Default light level	Light level	Light level when switched on.
	Fade time	The time over which the light reached.
Low/high-end trim	Min	Minimum light level that can be reached with automatic or manual control (e.g. with a wall switch).
		 NOTE: Even with the low-end trim set to value higher than 0%, the device may be still switched off: Manually with a wall switch by pressing Off, or dimming down to 0% Manually by setting the app slider to 0%; if the slider is set between 0% and the low-end trim (minimum), the light level adjusts to the minimum set by the user Automatically if automatic control would switch the light off in particular scenarios
	Max	Maximum light level that can be reached with automatic or manual control (e.g., with a wall switch).
Power up behavior	Keep light off	The light will remain off on power up.
	Restore	The light will return to the last level before power failure.
	Defined light level	The light will come on at this light level on power up.
Scenes		
Scene A	Light level (%)	Light level when switched on.
Scene B	Light level (%)	Light level when switched on.

Vacancy sensing & Occupancy sensing scenarios

General		
Occupied	Light level	Light level when switched on.



	Timeout	Time for which the defined light level is maintained after turned on. The timer is reset each time motion is detected.
	Fade time	The time over which the occupied mode Light Level is reached.
Prolonged	Light Level	Light level to be maintained for a defined time after the Occupied mode (occupancy) timeout.
	Timeout	The time for which the light is maintained at the Prolonged mode Light Level after Occupied mode timeout.
	Fade time	The time over which Prolonged mode light level is reached after Occupied mode timeout.
Vacant	Light Level	Light level to be maintained for a defined time after the prolonged mode timeout. It can be a non-zero value.
	Fade time	The time over which the Vacant mode light level is reached after Prolonged mode timeout.
Low/high-end trim	Min	 Minimum light level that can be reached with automatic or manual control (e.g., with a wall switch). NOTE: Even with the low-end trim set to value higher than 0%, the device may be still switched off: manually controls a wall switch by pressing Off, or dimming down to 0% manually by setting the app slider to 0%; if the slider is set between 0% and lower than low-end trim (minimum), the light level adjusts to the minimum set by the user automatically if automatic control would switch the light off in particular scenarios
	Max	Maximum light level that can be reached with automatic or manual control (e.g., with a wall switch).
Power up behavior	Keep light off	The light will remain off on power up.
	Restore	The light will return to the last level before power failure.



	Defined light level	The light will come on at this light level on power up.
Manual override timeout	Time	Time after which the light will switch itself to default settings. Example: Manual override timeout is set to 10 minutes. When I turn on one of the preset scenes from the EnOcean switch, after 10 minutes of detected vacancy in the space the light will be switched to default settings. NOTE: Any human activity detected (such as occupancy, using the EnOcean switch) will reset the timer.
		Scenes
Scene A	Light level (%)	Light level when switched on.
Scene B	Light level (%)	Light level when switched on.

Occupancy sensing with daylight harvesting scenario

General		
Occupied	Light level	Light level when switched on.
	Timeout	Time for which the occupied light level is maintained when turned on. Timer resets each tie motion is detected.
	Fade time	The time over which the occupied mode Light level is reached.
	Keep light above minimum value	Keeps the light in the zone at the minimum value even if sufficient daylight is available.
Prolonged	Light level	Light level to be maintained for a defined time after the occupied mode (occupancy) timeout.
	Timeout	Time for which the prolonged mode light level is maintained after occupied mode timeout.
	Fade time	Time over which prolonged mode light level is reached after occupied mode timeout.
	Keep light above minimum value	Keeps the light in the zone at the minimum value even if sufficient daylight is available.
Vacant	Light level	Light level to be maintained for a defined time after the



		Prolonged mode timeout. It can be a non-zero value.
	Fade time	Time in which vacant mode light level is reached after prolonged mode timeout.
	Keep light above minimum value	Keeps the light in the zone at the minimum value even if sufficient daylight is available.
Low/high-end trim	Min	 Minimum light level that can be reached with automatic or manual control (e.g., with a wall switch). NOTE: Even with the low-end trim set to value higher than 0%, the device may be still switched off: manually with a wall switch by pressing Off, or dimming down to 0% manually be setting the app slider to 0%; if the slider is set between 0% and the low-end trim (minimum), the light level adjusts to the minimum set by the user automatically if automatic control would switch the light off in particular scenarios
	Max	Maximum light level that can be reached with automatic or manual control (e.g., with a wall switch).
Power up	Keep light off	Light will remain off on power up.
behavior	Restore	Light will return to the last level before power failure.
	Defined light level	Light will switch on to this light level on power up.
Manual override timeout	Time	Time after which the light switches itself to default settings. Example: Manual override timeout is set to 10 minutes. When you turn on one of the preset scenes from the EnOcean switch, after 10 minutes of detected vacancy in the space the light will be switched to default settings. NOTE: Any human activity (such as occupancy or use of the EnOcean switch) will reset the timer.



Scenes		
Scene A	Light level (%)	Light level when switched on.
Scene B	Light level (%)	Light level when switched on.

Vacancy sensing with daylight harvesting

General		
Occupied	Light level	Light level when turned on.
	Timeout	Time for which the occupied light level is maintained when turned on. Timer resets each time motion is detected.
	Fade time	Time over which the occupied light level is reached.
	Keep light above minimum value	Keeps the light in the zone at the minimum value even if sufficient daylight is available.
Prolonged	Light level	Light level to be maintained for a defined time after the Occupied mode (occupancy) timeout.
	Timeout	The time for which the light is maintained in the Prolonged mode Light level after Occupied mode timeout.
	Fade time	The time over which Prolonged mode light level is reached after the occupied mode timeout.
	Keep light above minimum value	Keeps the light in the zone at the minimum value even if sufficient daylight is available.
Vacant	Light level	Light level to be maintained for a defined time after the Prolonged mode timeout. It can be a non-zero value.
	Fade time	The time in which Vacant mode light level is reached after Prolonged mode timeout.
	Keep light above minimum value	Keeps the light in the zone at the minimum value even if sufficient daylight is available.
Low/high-end trim	Min	Minimum light level that can be reached with automatic or manual control (e.g., with a wall switch).
		NOTE: Even if the low-end trim is set to value higher than 0%,



	Max	 the device can still be switched off: manually with a wall switch by pressing Off, or dimming down to 0% manually be setting the app slider to 0%; if the slider is set between 0% and the low-end trim (minimum), the light level adjusts to the minimum set by the user automatically if automatic control would switch the light off in particular scenarios Maximum light level that can be reached with automatic or manual control (e.g., with a wall switch).
Power up behavior	Keep light off	Light remains off on power up.
	Restore	Light returns to the last level before power failure.
	Defined light level	Light comes on at this light level on power up.
Manual override timeout	Time	Time after which the light switches itself to default settings. Example: Manual override timeout is set to 10 minutes. When you turn on one of the preset scenes from the EnOcean switch, after 10 minutes of detected vacancy in the space the light will be switched to default settings. NOTE: Any human activity detected (such as occupancy, using the EnOcean switch) will reset the timer.
		Scenes
Scene A	Light level (%)	Light level when switched on.
Scene B	Light level (%)	Light level when switched on.

Central control

Segment	Parameter	Description	
General			
Default light level	Light level	When selected, the light will come on to this level (0-100% light level).	
	Fade time	Time over which the light reaches the target level after turned on.	



Low/high-end trim	Min	The minimum light level that can be adjusted automatically or manually (e.g., with a wall switch). NOTE: Even with the low-end trim set to value higher than 0%, the device may be still switched off: • Manually with a wall switch by pressing Off, or dimming down to 0% • Manually by setting the app slider to 0%; if the slider is set between 0% and the low-end trim (minimum), the light level adjusts to the minimum set by the user • Automatically if automatic control would switch the light off in particular scenarios		
	Max	Maximum light level that can be reached with automatic or manually (e.g., with a wall switch).		
Power up behavior	Keep light off	Light remains off on power up.		
	Restore	Light returns to the last level before power failure.		
	Defined light level	Light comes on at this light level on power up.		
Scenes				
Scene A	Light level (%)	Light level when switched on.		
Scene B	Light level (%)	Light level when switched on.		

Photocell

Segment	Parameter	Description		
General				
Night	Night starts below	Threshold of the level reported by the light sensor, below which the lighting is switched to the night settings		
	Default	Light level to which the lighting is switched on when it gets dark (only vacant if occupancy level is enabled).		
	Occupancy	Light level to which the lighting is switched on when occupancy is detected.		
Occupancy timeout	Duration	Time for which the defined light level is maintained after occupancy is detected.		



Manual override timeout	Time	Time after which the light switches itself to default settings.
Low/high-end trim	Min	Minimum light level that can be reached with automatic or manually (e.g., with a wall switch).
		NOTE: Even if the low-end trim set to value higher than 0%, the device may be still switched off:
		 manually with a wall switch by pressing Off, or dimming down to 0%
		 manually be setting the app slider to 0%; if the slider is set between 0% and the low-end trim (minimum), the light level adjusts to the minimum set by the user
		 automatically if automatic control would switch the light off in particular scenarios
	Max	Maximum light level that can be reached with automatic or manual control (e.g., with a wall switch).
Day	Day starts above	Threshold of the level reported by the light sensor, above which the lighting is switched to the day settings.
	Default	Light level to which the lighting is switched on when it gets bright (only vacant if occupancy level is enabled).
	Occupancy	Light level to which the lighting is switched on when occupancy is detected.
Fade time	Duration	Time over which particular light level is reached.
Power up behavior	Keep light off	Light remains off on power up.
	Restore	Light returns to the last level before power failure.
	Defined light level	Light comes on at this light level on power up.
		Scenes
Scene A	Light level (%)	Light level when switched on.
Scene B	Light level (%)	Light level when switched on.



Multiple scenes

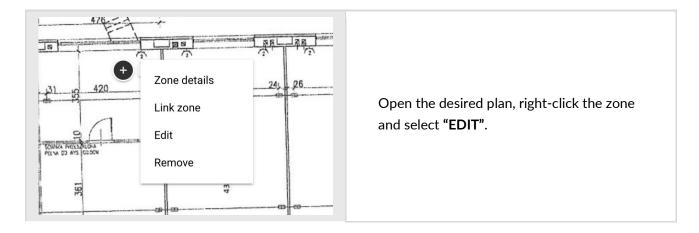
A scenario that allows you to add four customizable scenes in the AirLink Blue web app. It cannot be configured from the mobile AirLink Blue app. You can set a separate name and different values for each scene depending on its properties.

SCENE DETAILS			
Scene name	Click to edit the scer	ne name.	
Scene properties	Static scene	If a static scene is chosen, none of the checkboxes are ticked. Scene properties Automatic scene Daylight harvesting Scene settings: Light level: Set the desired light level.	
	Automatic scene	Scene settings: Occupied Fade time: the time during which the desired light level is reached. Timeout: the time for which the light is maintained at the defined level when motion is detected. Light level: the desired light level. Prolonged Fade time: the time during which the desired light level is reached. Timeout: the time for which the light is maintained at the defined level before switching to Vacant. Light level: the desired light level. Vacant Fade time: the time during which the desired light level is reached. Timeout: by default, it is set to until Occupied mode is triggered. Light level: the desired light level (set to OFF by default).	

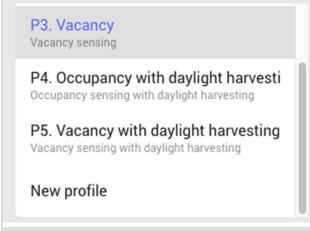


Automatic scene Scene properties with daylight Daylight harvesting Automatic scene harvesting Scene settings: Keep light level above a minimum value: The feature allows the light in the zone to be kept at a preset minimum value. The light in the zone with will not fall below this level for the duration of the Occupied mode. Min. value: select the minimum light value using the slider or enter the percentage value. Occupied ? Keep light above minimum value Light level sec 🔻 300 1500 Timeout Min. value 10 min • 100

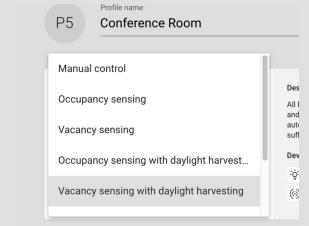
Create a new scenario





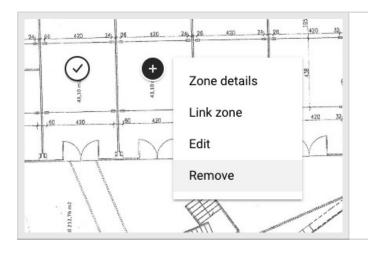


Unfold the "Profile" list and scroll down until you see "NEW PROFILE". Click it to start creating a new profile.



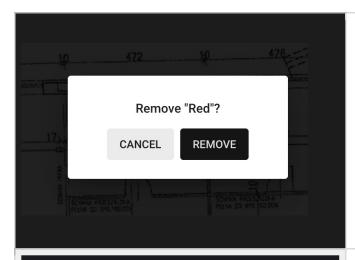
- Enter the profile name.
- Select the scenario to define the basic behaviour of the zone. This determines which parameters are available for customization.
- "SAVE" the new profile. It can now be applied to any zone.

emove a zone

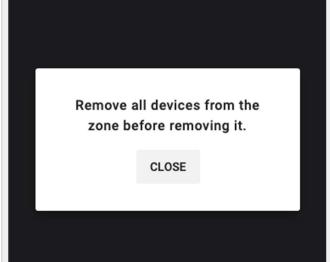


Right-click the zone you want to remove and select "REMOVE".





Confirm your decision by clicking "REMOVE" on the confirmation pop-up. In order to prevent accidental removal of the zone, the button will be clickable after 3 seconds.



Note: You are not able to remove zones with active devices. Before doing it you will need to remove all devices.

For more information on how to do that go to the section "Remove device"

Zone linking

Zone linking allows occupancy and switch control to be shared between multiple zones, i.e.

- controlling multiple zones with a single wall switch,
- triggering the lights in multiple zones with an occupancy sensor.

The feature allows to link zones in two manners: uni-directional, or bi-directional.

Uni-directional linking

Allows for triggering or turning off the lights in linked zones in one direction only (Zone A triggers the lights in zone B, but not the other way round).

Example: A conference room (the controlling zone) is linked with a corridor. Detecting occupancy or pressing a wall switch in the conference room will trigger the lights in the corridor. Actions in the corridor do not affect the light in the conference room.



In uni-directional linking, the controlling zone is responsible for adjusting lighting behavior in all linked zones. The signal to turn the lights on or off in linked zones depends on the controlling zone's scenario settings and can be configured with the AirLink Blue web app.

Bi-directional linking

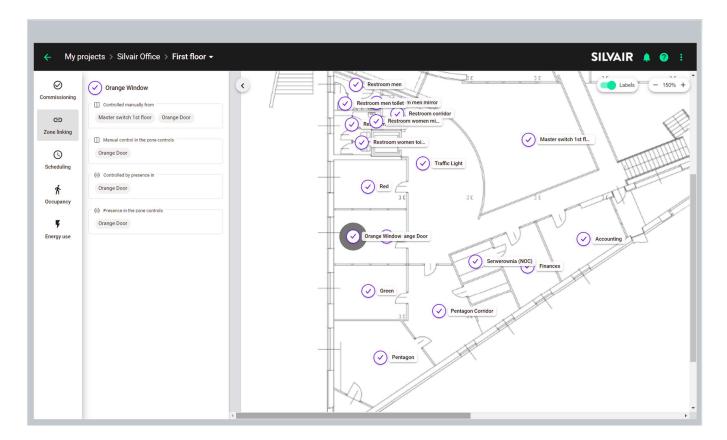
Allows for triggering or turning off the lights in linked zones in both directions. (Zone A triggers the lights in zone B, and zone B triggers the lights in zone A).

Example: A corridor is divided in two zones (zone A, and zone B), which should have the same lighting behavior. When bi-directional zone linking is applied, occupancy detected in any of the zones will turn on the light in the whole corridor (zone A and zone B). In this case, linking works in two ways - zone A triggers zone B, and zone B triggers zone A.

To link a zone:

- 1. Open the AirLink Blue web app
- 2. Navigate to My projects
- 3. Select the target Area
- 4. Click the Zone linking tab

HINT: Alternatively, right-click the zone and select "Link zone".





Use the panel to link zones by adding them to the appropriate fields in the table.

Controlled manually from

The *Orange Window* zone is controlled by switches added to the *Orange Door* and *Master switch 1st floor* zones.

Manual control in the zone controls

Switches added to the *Orange Window* zone control the *Orange Window* and *Orange Door* zones.

Controlled by presence in

Light in the *Orange Window* zone is controlled by the occupancy sensors added to the *Orange Door* zone.

Presence in the zone controls

Occupancy sensors added to the *Orange Window* zone control the *Orange Window* and *Orange Door* zones.

To finish zone linking, close the panel by clicking the icon.

HINT: You can visualize the links between zones by holding your cursor over the panel.

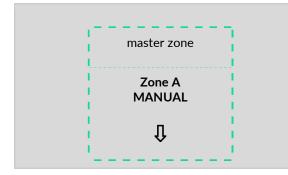
Zone linking recommendations

When you use a zone linking feature in your lighting installation, it is worth considering what are the profiles and corresponding scenarios in each of the linked zones. For example, a good practice is to link the Conference room zone with the Vacancy sensing profile and Corridor with Occupancy sensing profile to have corridor hold function.

On the other hand, it is not advisable to link motion between two zones, where one of them has Manual control profile, and light in the other zone is controlled with an occupancy sensor.

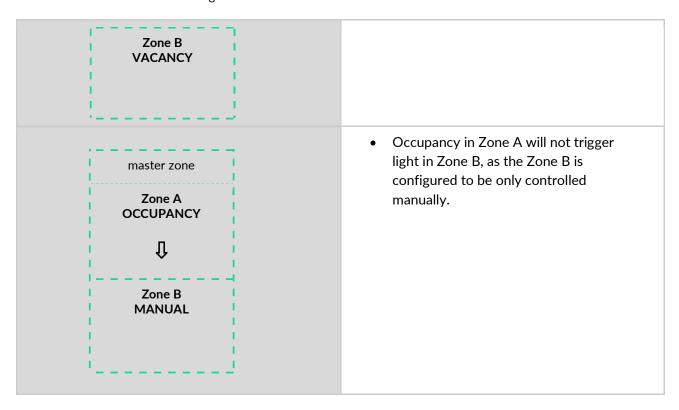
Check the below linking motion examples for more information.

Useless configuration:

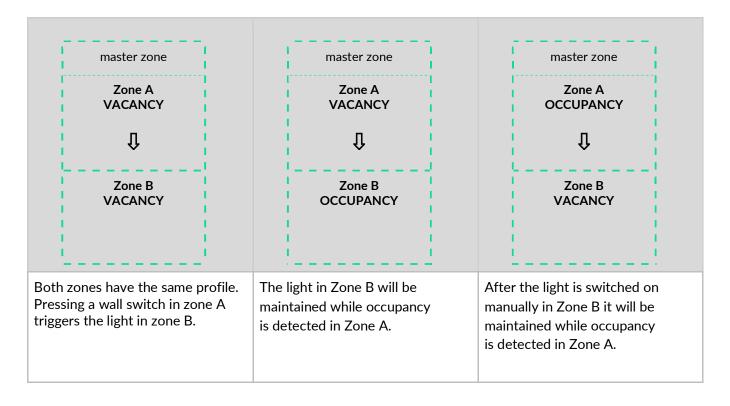


 Zone A (Manual control) does not have occupancy sensing enabled, so it will not be possible to control the light in zone B (Vacancy).





Recommended configuration:





Scheduling: in-node scheduling and gateway

Creating a New Event

NOTE: To use scheduling in a particular zone, Multiple scenes / Scheduling profile must be assigned.

- 1. Log in to https://lsi-airlinkblue.com/.
- 2. Select your project.
- 3. Select the area in which you want to schedule events.
- 4. From the left hand panel, select **Scheduling**.
- 5. At the bottom of the screen, click the + icon.
- 6. Depending on the scheduling type, select Gateway or In-node and click NEXT.
- 7. In the **Event name** field, enter a name for the event.
- 8. From the **Scene** drop-down list, select the scene that will be recalled.

 When hovering your cursor over a scene in the web app, all zones to which the corresponding profile has been assigned will be highlighted on the floor plan.
- 9. In the Fade in field, enter the fade in time.
- 10. In the Select days field, mark the days when you want the event to occur.
- 11. Depending on the selected scheduling type, perform one of the following actions:
 - For in-node scheduling: enter the time you want the event to take place.

NOTE: Enter the time in the local time for the project.

- For gateway-based scheduling: perform one of the following actions:
 - O Select **Time** and enter the time at which you want the event to take place.
 - o Select **Sunrise**, from the **Offset** drop-down list select if you want the event to take place before or after sunrise, and in the **Offset time** enter the offset value.
 - o Select **Sunset**, from the **Offset** drop-down list select if you want the event to take place before or after sunset, and in the **Offset time** enter the offset value.

NOTE: The time of sunset and sunrise is based on the geographical location set in the project settings Location tab.

12. Click SAVE.

IMPORTANT: After making any changes to in-node scheduling, an on-site network reconfiguration using the Silvair mobile app is required. During the reconfiguration, all the event information is transferred from the Silvair cloud to the devices. Until this has been done, any changes will not be applied.

Modifying Events

- 1. Log in to https://lsi-airlinkblue.com/.
- 2. Select your project.
- 3. Select the area with the scheduled events you want to modify.
- 4. From the left panel, select Scheduling.
- 5. Click on the event you want to modify.
- 6. Edit the event details.
- 7. Click SAVE.

IMPORTANT: After making any changes to in-node scheduling, an on-site network reconfiguration using the AirLink Blue mobile app is required. During the reconfiguration, all the event information is transferred from



the AirLink Blue cloud to the devices.

Removing Events

- 1. Log in to https://lsi-airlinkblue.com/.
- 2. Select your project.
- 3. Select the area with the scheduled events you want to remove.
- 4. From the left panel, select Scheduling.
- 5. Click the top-right corner of the event you want to delete and select **Remove**.

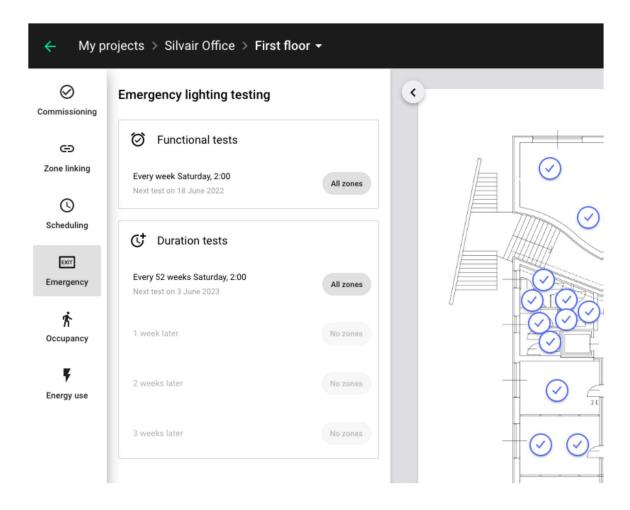
IMPORTANT: After making any changes to in-node scheduling, an on-site network reconfiguration using the Silvair mobile app is required. During the reconfiguration, all the event information is transferred from the Silvair cloud to the devices.

For more information, see SN-201 Scheduling and SN-202 Optimizing Mesh Network Performance.

Emergency

The Emergency tab in the AirLink Blue web app allows you to define schedules for testing emergency devices.

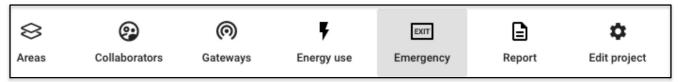
Two Types of tests can be schedulded: functional and duration





To collect the test results from all emergency devices in the project, you must be on-site and use the **AirLink Blue mobile app**. The collected results are stored in the cloud. Tests are done automatically by the devices but can also be started manually use the **AirLink Blue web app** for each emergency device.

To view the collected results, open the AirLink Blue web app and go to Project>Emergency.



For more information, see SN-214 Emergency lighting testing application note.

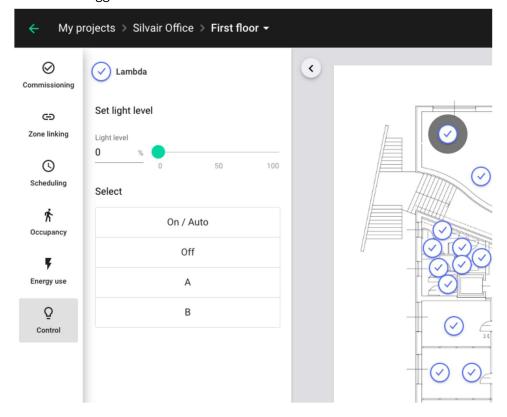
Control (beta feature)

If a gateway has been added to the project and this feature is enabled for your project, you can control a zone remotely from the AirLink Blue web app.

If you want to use a new Control tab in your web app, go to the Customer Portal and submit your request to enable this beta feature for your project. Make sure to include the URL of this project.

To control a zone, open your project and an area. On the left, click Control. In the floorplan, select a zone. Then use the slider or enter a value to set the required light level. You can also use the following options:

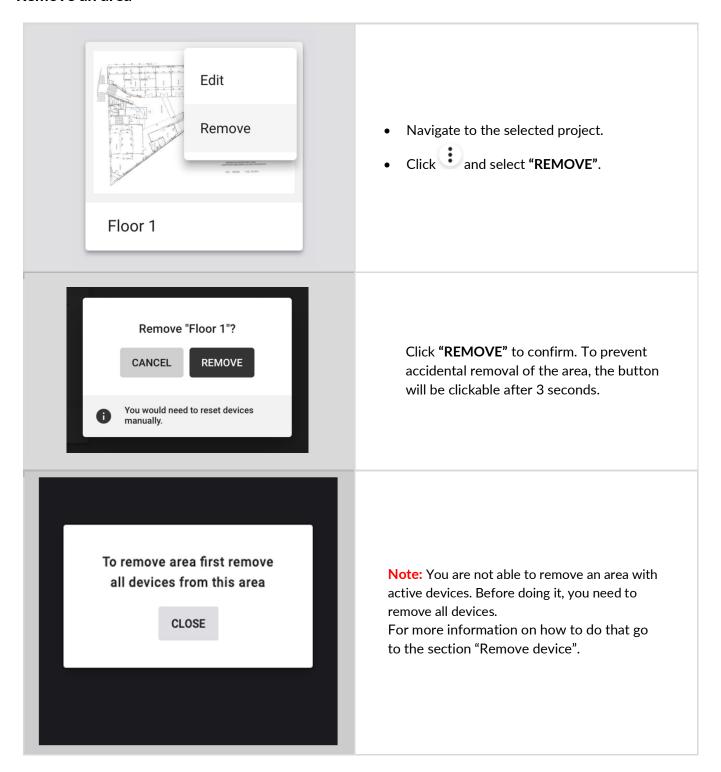
- On/Auto restores the scenario
- Off turns off the light
- A triggers scene A
- B triggers scene B





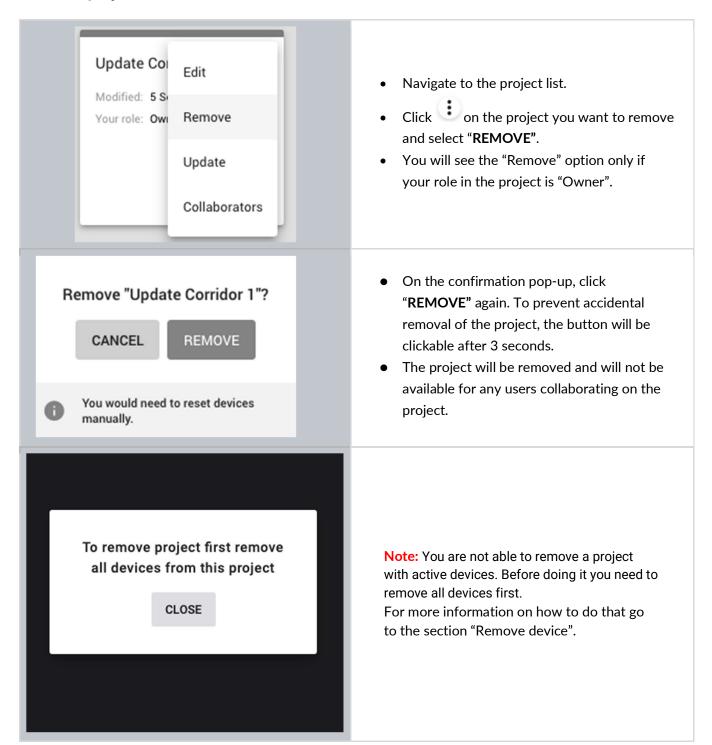
NOTE: This is a beta feature which means there can be bugs and other issues, and it may fail or be removed at any time. If you find issues, please let us know.

Remove an area





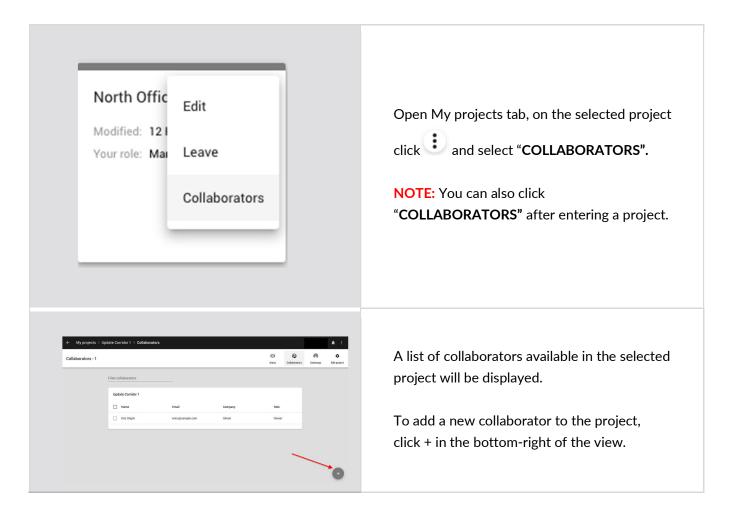
Remove a project



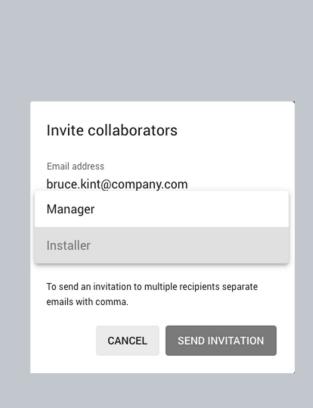


Invite & manage project collaborators

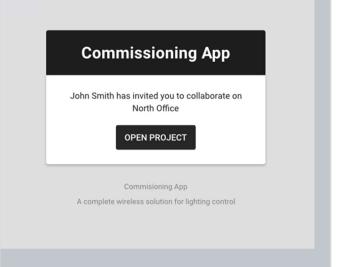
Multiple users can collaborate on the same project by creating and editing the commissioning plan and, most importantly, by carrying out on-site commissioning, thereby shortening the most critical part of the whole project.







- Enter one or more email addresses to invite collaborators and share access to the project.
- Select the role for the new user(s). You can choose between:
 - Installer
 - Manager
- Depending on the selected <u>user role</u> the user rights vary. Confirm by pressing the SEND INVITATION button.
- The invited users will be granted a set of rights to the project which depend on the user role.



All users invited to collaborate will receive an invitation email with a link to the shared project. Accessing the project requires the user to have a registered <u>AirLink Blue account</u>.

Anyone without an account will be labelled with "Pending invitation" on the list of collaborators.

Tapping the "Open project" button on a mobile device will open the mobile application at a project screen.



User roles in the project

Our commissioning apps (web and mobile) currently support 4 user-roles in the projects: owner, installer, end user and manager.

O End user

Can only view the project and control the light. Cannot make any changes.

Installer

Can make changes in the project. Can add and manage devices.

O Manager

Can manage collaborators, make changes in the project, add and manage devices.

Owner

Have full access to the project. Cannot be removed.

If you create a project, you automatically become **owner** of the project.

Owner role:

- The owner is automatically assigned to the user who creates a project in the app. There is only one owner of the project.
- The owner right cannot be revoked (there must always be an owner of the project), but instead of that it can be transferred to a <u>verified</u> collaborator.
 - O You can transfer the ownership **only when:**
 - You're logged in as owner of the project
 - There're other project members added (the owner is **not** the only person left in the project)
 - The other collaborator(s) already have a verified account in the system
- Only the owner of a project is able to delete a project from the web / mobile app
- Owner can manage access to the project

O End user

Can only view the project and control the light. Cannot make any changes.

O Installer

Can make changes in the project. Can add and manage devices.

Manager

Can manage collaborators, make changes in the project, add and manage devices.

Owner

Have full access to the project. Cannot be removed.

Manager role:

- This role is granted to the user by inviting the new collaborator to a project (access is granted by owner or another manager).
- Can manage collaborators (invite / remove users from the project and change user roles).
- Can manage project & commissioning processes.
- It is possible to have multiple managers added to a single project
- They can leave a project, but cannot remove the project (only the "Owner" role can remove the project



C) End user Can only view the project and control the light. Cannot make any changes. Installer Can make changes in the project. Can add and manage devices. Manager (Current) Can manage collaborators, make changes in the project, add and manage devices. Owner Have full access to the project. Cannot be removed. End user Can only view the project and control the light. Cannot make any changes. Installer Can make changes in the project. Can add and manage devices. Manager (Current) Can manage collaborators, make changes in the project, add and manage devices. Owner Have full access to the project. Cannot be removed.

Installer:

- This role is granted to the user by inviting the new collaborator to a project (access is granted by owner or another manager).
- Can manage project & commissioning processes
- This user cannot manage collaborators (cannot invite / remove users from the project or change user roles)
- It is possible to have multiple installers added to a single project
- They can leave a project, but cannot remove the project (only the "Owner" role can remove the project

End user:

- This role is the default role granted to the user by inviting the new collaborator to a project (access is granted by owner or another manager).
- The user can only see a list of projects with an option to "Leave project" selected from the
- or manage collaborators (cannot invite / remove users from the project or change user roles)
- It is possible to have multiple end users added to a single project
- They can leave a project, but cannot remove the project (only the "Owner" role can remove the project

- project context menu This user cannot make changes inside a project,

Manager Change role Installer Revoke access Installer

Changing user roles:

To change the user role (e.g., from a manager to an installer role), select a project from the menu



Select the user and select "Change role".

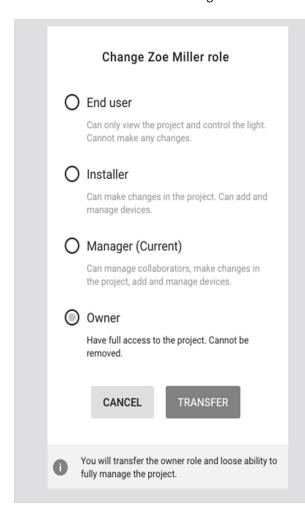


Change Zoe Miller role End user Can only view the project and control the light. Cannot make any changes. Installer Can make changes in the project. Can add and manage devices. Manager (Current) Can manage collaborators, make changes in the project, add and manage devices. Owner Have full access to the project. Cannot be removed. CANCEL SAVE

- Select the role that you want this user to have and confirm with the SAVE button
- The role will be updated for the selected user.

NOTE: It is not possible to change the role of a user to "Owner" role, as there is only **one** owner of each project.





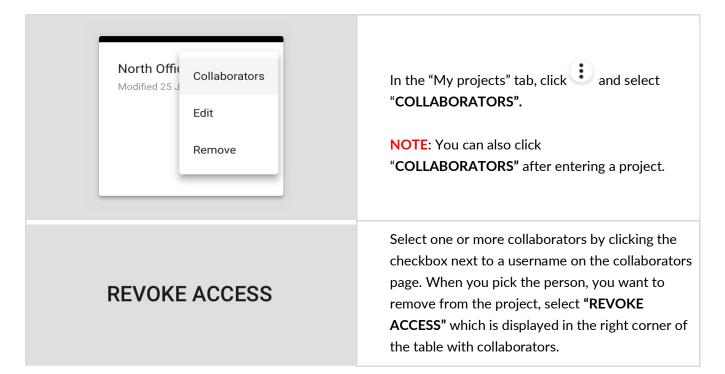
Transfer ownership of a project:

- It is not possible to change the role of a user who is a manager, or an installer to **owner** of a project. The role of "owner" can only be transferred.
- To do it, owner of a project needs to open

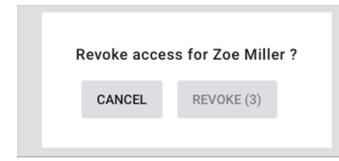
COLLABORATORS panel and click the icon on any user's menu which has a **confirmed** account in the app.

- Press "Change role" and select "Owner". Confirm by pressing the TRANSFER button.
- The ownership of the project will be transferred to the selected user. The user will be notified about becoming the new owner of that project

Revoke access to the project







Confirm by clicking "**REVOKE**" on the pop-up window.

NOTE: It is not possible to revoke access to of the user with the "Owner" role in the project.



NOTE: The selected users will be removed from the project and will no longer have access to it either from the web app or the mobile app.

Supporting previous versions

New versions of the AirLink Blue Commissioning platform bring new features, improvements and some modifications that may not be compatible with the capabilities of devices in your projects or may require some actions on-site such as reconfiguration. You can update your project to the newest version at the right time, or you can keep using it in the older version, without having to reconfigure the whole project.



NOTE: You will not be able to update projects to the newest version if they already include commissioned devices that are not compatible (e.g., out-of-date, not supported or lacking some features).

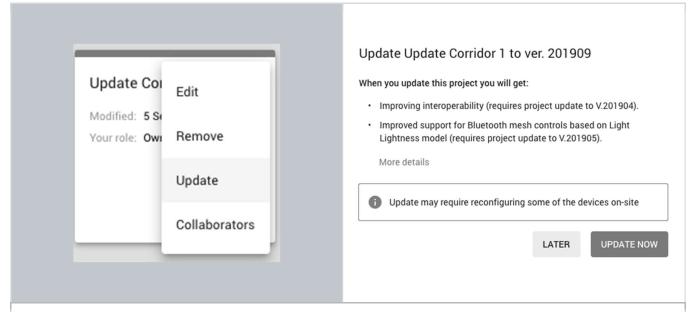


NOTE: The zones that include devices that are not compatible with the project version will be marked with alerts and conflicting devices will be highlighted on the list of devices.



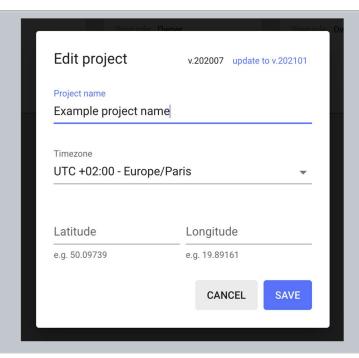
Updating project to latest version

There are two ways in which the user can update a project to the newest version.



Option1:

- Click on the Project box context menu in the top-right corner and select "**Update**". You will see a pop-up, where you can update your project by clicking the "**UPDATE NOW**" button.
- Click "More details" to access the release notes for the newest version.
- Additionally, there is information about firmware compatibility, e.g., Ver. 201808
 Compatible with firmware: >=2.8.0



Option 2:

• Click on the Project box context menu in the top-right corner and select "Edit".



- If the project is not in the newest version, in the top-right corner there are the names of two versions of the project: current version and "update to v.XXX". Where XXX stands for the new project version number.
- Click on the new version link and select the "**Update**" button. The update should start automatically.

Title bar navigation



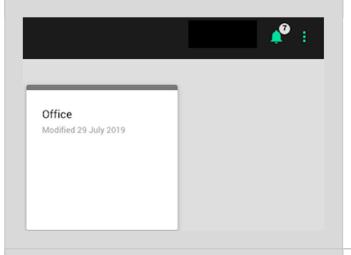
You can easily and quickly navigate through projects, areas and profiles using the navigation in the title bar. This feature also allows you to create projects and areas quickly.

Sign out

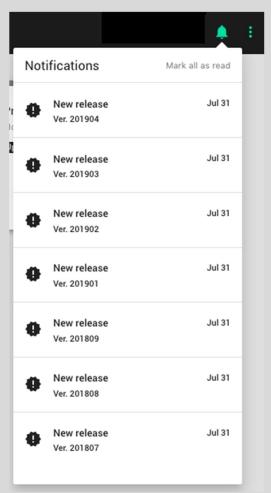




Notifications



When a new version of the app is available, you will see an icon on the black navigation bar with a number of new notifications on it.



To see more information about a release, click the icon and press the release notification that you want to read on.

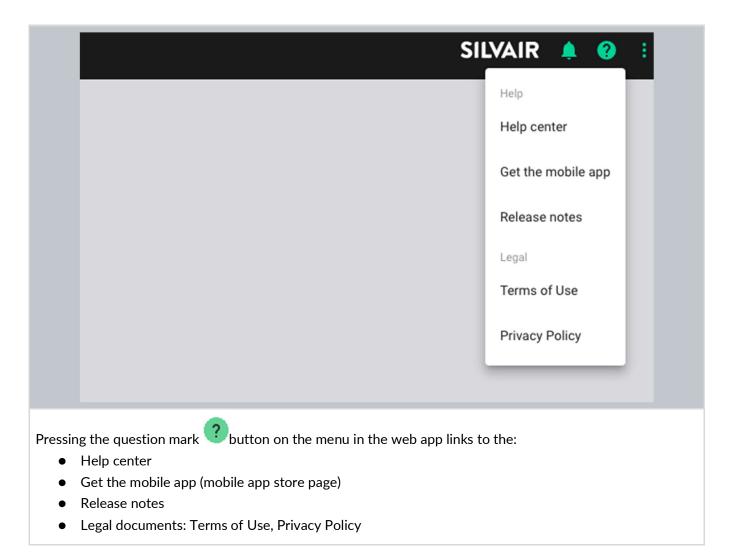
To delete an individual notification, hover on the release notification from the list and press the x button (clear notification).

You can also click "MARK ALL AS READ" to see only new notifications bolded.

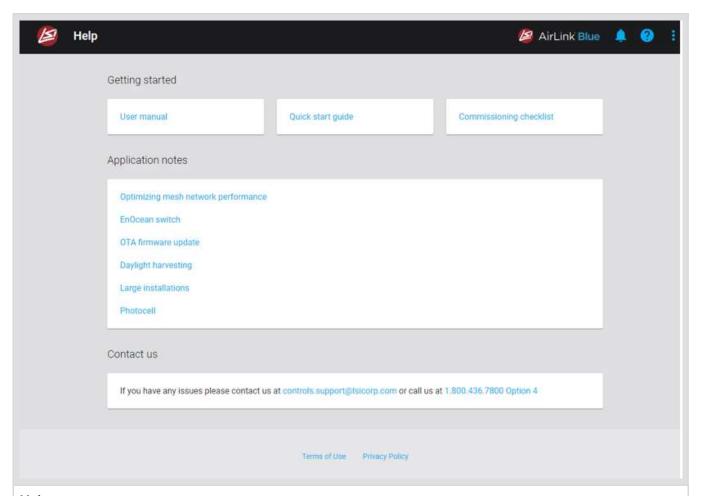


Help center

Provides quick access to all essential support documents, including user manuals, application notes, and tutorials. The Help Center can be accessed via buttons located in the upper right corner of the screen. In the web app, click the question mark 3 button. In the mobile app, use the context menu button.







Help center:

- Opens in the new tab.
- Is available externally the user doesn't need to be logged in.
- Can be opened on the mobile phone.
- Contains support documents, including user manuals, application notes, and tutorials.
- Helpline phone number and email address for customers who require immediate support.



3. Commissioning on-site

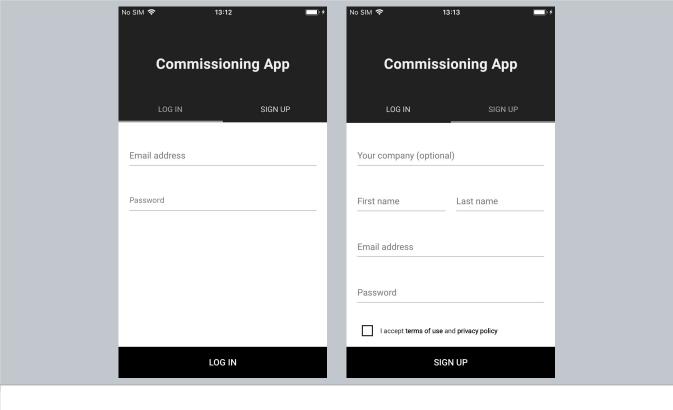
Commissioning of the devices installed on site can be done with the <u>AirLink Blue mobile app</u> on an iPhone or iPad. The mobile app synchronizes with the web app, so any problems or changes made during commissioning are visible in both apps in real time. The app supports 7 languages: English, German, French, Spanish, Finnish, Korean, traditional Chinese and simplified Chinese. You can change it anytime. The app for testing purposes is also distributed via TestFlight. If you'd like to use the version for testing, please contact your business representative at AirLink Blue, or contact <u>controls.support@lsicorp.com</u>.



NOTE: For as long as it remains in use, the mobile app disables your smartphone's automatic screen locking functionality. This is to allow undisturbed commissioning process.

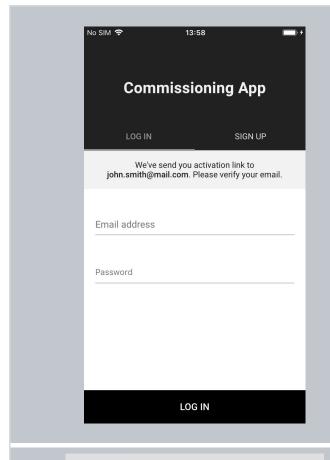
Log in & Sign up

To use the commissioning app, sign into your account or create one in the app. Make sure you have access to the project you're going to commission (see: Invite & manage project collaborators).

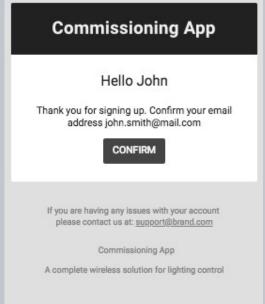


For new users: open "SIGN UP" and enter your company (optional), first and last name, email and password. Accept the terms of use and privacy policy and click "SIGN UP".





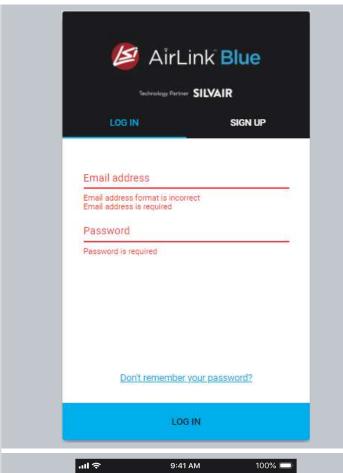
A verification email will be sent to the address you entered.



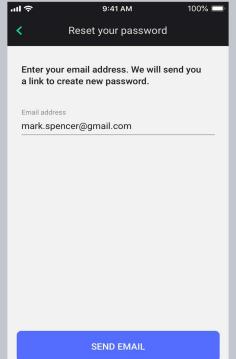
On your phone, open the verification email and click "CONFIRM". Once the email is verified you can login to the AirLink Blue mobile app.⁶

⁶ Clicking **Confirm** will direct you to the web app in your mobile web browser.



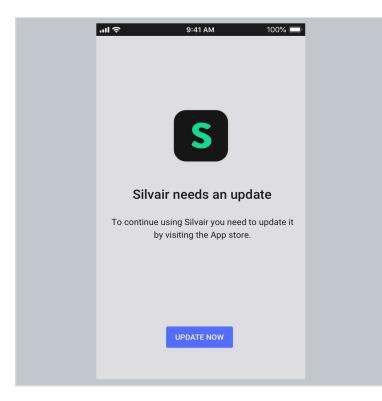


 If you have forgotten your password, tap "Don't remember your password?" button at the bottom of the page.



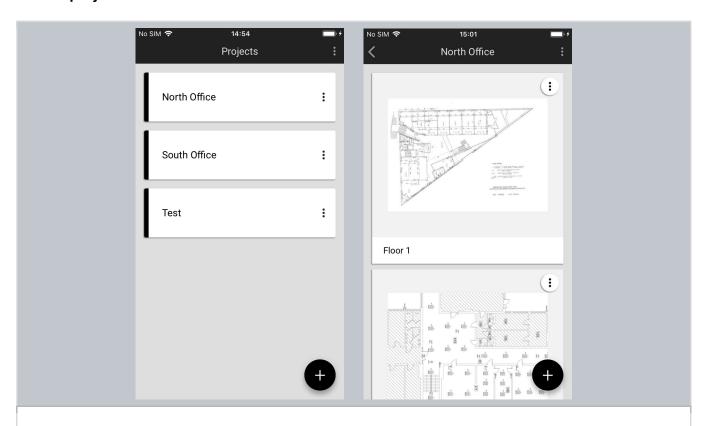
- Enter your valid email address.
- Check your mailbox for the confirmation email with the link to create a new password.
- Follow the steps in the email to create a new password.





If an update is required, information about the need to download updates will be displayed. After pressing the "**Update now**" button you will be redirected to the App store.

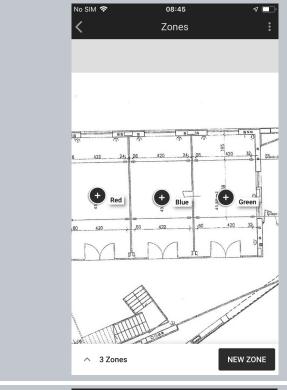
Select a project and area



All projects that you have access to will be listed in the projects list. To begin commissioning, select the desired project and area.



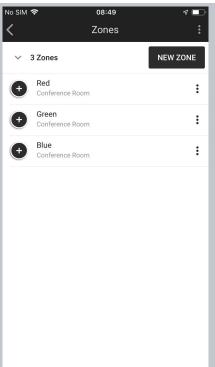
Select zone



Area view:

- Zones appear labeled with their assigned name.
- Use a pinch/spread gesture to zoom in and out.
- Select the zone to be commissioned by tapping the zone icon.

The app automatically displays the previously created zones along with their actual status (see: Zones)



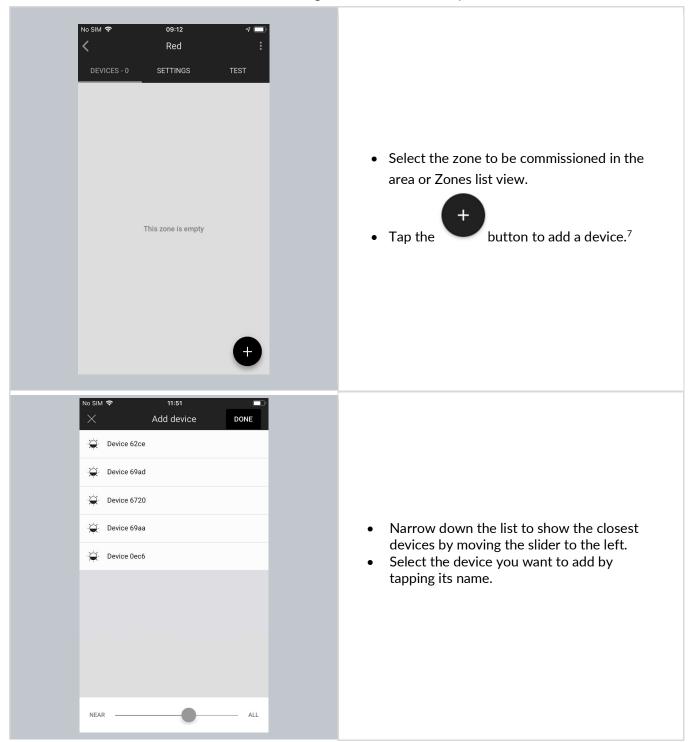
List view

- If you prefer to see the zones on a list, tap the element at the bottom of the screen with the number of zones, e.g., 3 Zones in this example.
- Each zone has a status icon, name and assigned profile, e.g.,
 Conference Room
- Select the desired zone by tapping its name.
- To go back to the area view, tap on the element at the top of the screen with the number of zones, e.g., "3 Zones".

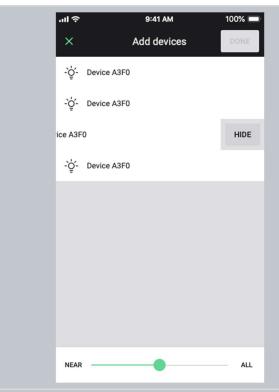


Adding devices

Adding devices to a zone allows their full functionality to be accessed and provides maximum security. Devices added to a zone for the first time must also be configured in order to be fully functional.

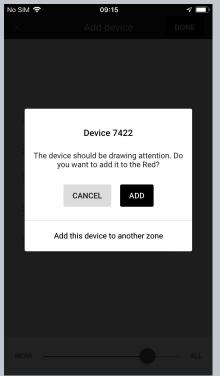


⁷ Before adding devices to an existing project, the application may require the user to be within range of previously added devices in order to add devices with current network security settings. Ignoring this may lead to issues in communication, causing devices to not operate as expected.



Add devices view, so that it does not identify them repeatedly. It limits the list of devices to the ones you're looking for.

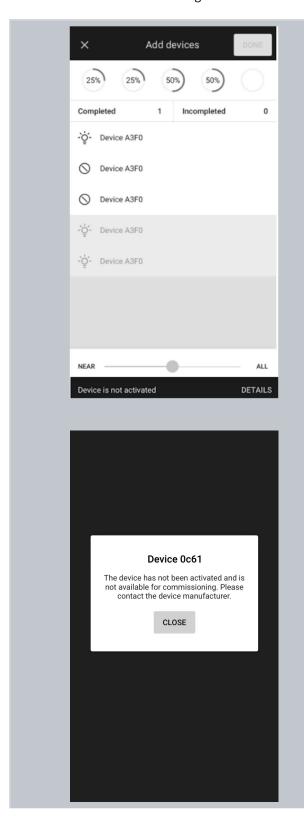
To do it, swipe the finger from right to left. The removed devices will appear again after the "pull down to refresh" action.



- Check if the device is attracting attention e.g., by flashing (this behavior depends on the device).
- If this is the device you want to add to the zone, tap "ADD".
- If this is not the device you want to add to this zone, but you know you want to add it to another zone, tap on the link "Add this device to another zone".
- Otherwise, tap "CANCEL" and move on to the next device.

⁸ Note: devices added to another zone will still require configuration with the settings for that zone.





Inactive Devices

It may happen that one (or some) of the devices are greyed out on the list or are marked inactive with this icon . This indicates that you **cannot** add them to your project. There are two cases when a device cannot be added to a project:

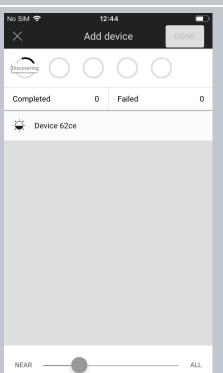
Case 1: A device has not been activated.
 Solution: You need to contact this device's manufacturer to set up activation.





 Case 2: A device is out of range (it's greyed-out on the list).

Solution: change your location and try to move closer to a distant device. Refresh the devices list and try to add it to the project again.



- If your device is active, and it has been successfully added, the configuration will be applied in the background (configuring Mesh network, setting Relays on some of the devices) so you can start adding another device straight away.⁹
- When all required devices have been added to the zone, close the Add device view.¹⁰

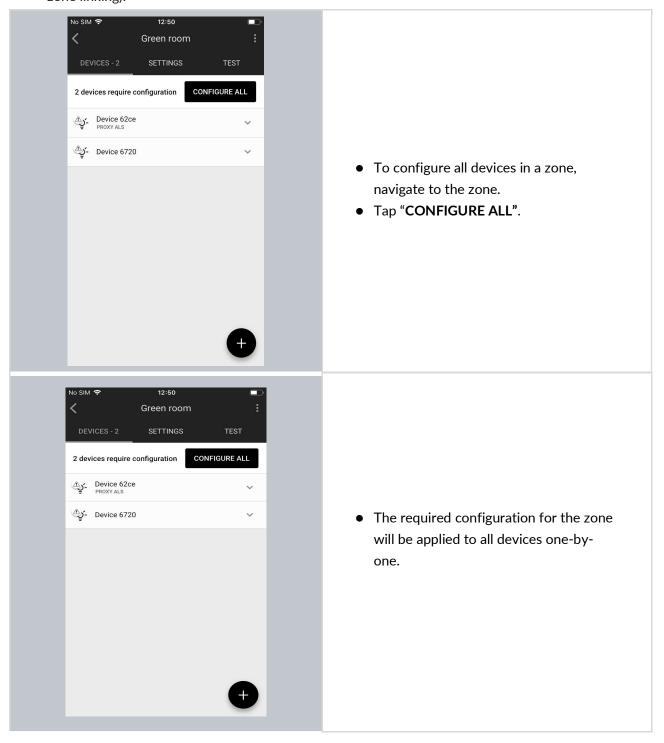
⁹ Note: Up to 5 devices can be configured in parallel. The configuration status is displayed in the upper panel.

¹⁰ Note: Closing the "Add device" window before configuration has completed will result in an incorrect configuration and the zone will have to be reconfigured later.

Configure all devices in a zone

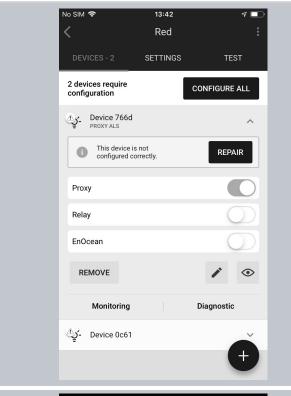
In rare cases, a user has to configure the device manually using the mobile app (user selects a single device, or a group of malfunctioning devices by pressing **CONFIGURE ALL** button). Manual configuration is needed when:

- there has been a connection error (e.g., Internet problems)
- user has accidentally interrupted devices configuration (e.g., an iOS device powers off)
- user made changes in zone's settings (e.g., changing profile, changing scenario settings, adding/editing zone linking).



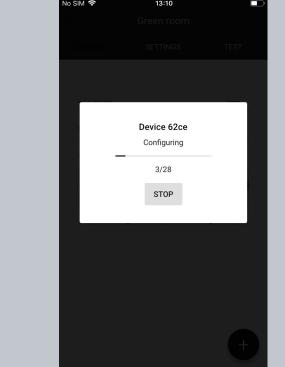


Repair device



In some cases, configuration of the device may fail or be cancelled by the user. In such cases, the device configuration needs to be repaired.

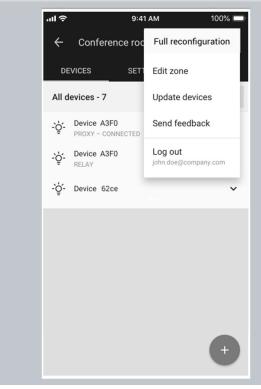
- To repair a misconfigured device, select it from the Devices list and expand the options.
- Tap "REPAIR".



• The required configuration will be applied to the device.

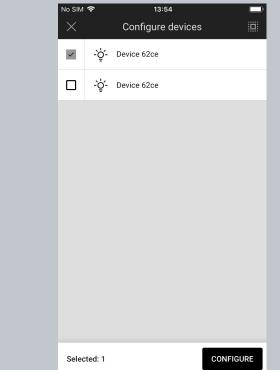


Full Configuration



The AirLink Blue mobile app also allows you to fully configure any device(s) at any time. A full configuration will send the entire configuration to the device(s) regardless of whether it was previously configured or not.

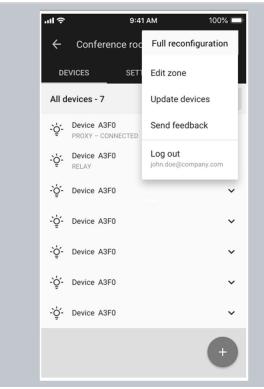
- Select zone.
- Tap the icon and select "FULL RECONFIGURATION".



- A list of devices will appear.
- Select the devices to be configured. You can do it by tapping the checkbox next to each device or select all devices by tapping the square icon in the top-right corner of the view.
- Tap the "CONFIGURE" button.



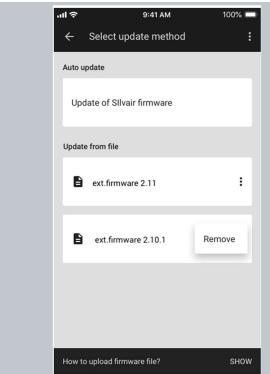
Update devices (Over-the-air update)



With the AirLink Blue mobile app, you can also do the OTA (Over-the-air) update of devices in the mesh network.

The feature allows to update devices that have already been added to the mesh network. Update for devices with AirLink Blue firmware is automatic (the new firmware is stored and automatically downloaded from the cloud).

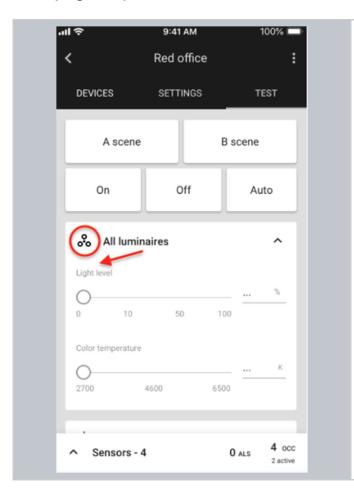
To update devices with external firmware, you must have a firmware file (in a zip format) and upload it to the AirLink Blue mobile app.



Full information about OTA (Over-the-air) update and configuration details available in in Application Note "SN-208 Over-the-air Update in the AirLink Blue mobile app".



Identifying faulty luminaires in a zone



When an installer finish adding devices, but there's one, or more faulty nodes inside that zone there is an easy way to check where such a faulty luminaire is located.

To do it, navigate to the zone where you were adding, or updating devices and go to the TEST tab and press the icon next to "All luminaires". This button will trigger the mass zone attention. While performing the test, observe the surface on which luminaires are mounted. The faulty luminaire in that zone will not be drawing any attention.

Alternatively, you can also use the "Light level" slider which is placed under the "All luminaires" button. While moving the slider to the desired light level (e.g., 70%), the faulty node will not be changing its light level.

Zone profile customization

Once all the devices have been added to the zone, you can change the settings (e.g., default light level) in the **SETTINGS** tab by tapping **CUSTOMIZE**. The settings and features depend on the **scenario** which controls the profile. Each profile can be controlled by one of the 7 available scenarios. (See: <u>Scenario parameters for customization</u>).

Example: in **profiles** controlled by **manual control** scenario, users can change *default light level* and *low/high-end trim* using the AirLink Blue mobile app.

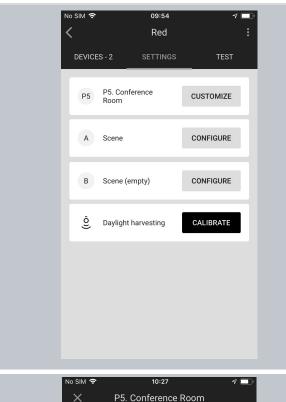


NOTE: Any changes made to zone parameters via the mobile app will automatically create a local, customized version of the original profile. These changes will be applied only to the particular zone and will not affect other zones configured with the original profile.

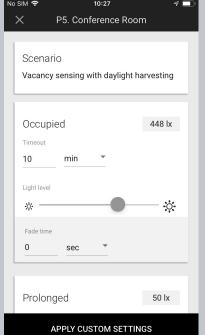


Customize a profile

Each profile can be customized. Depending on the selected **Scenario**, there will be different customization parameters available.



- Go to the "SETTINGS" tab.
- Tap "CUSTOMIZE" next to the profile that you want to update.



- Change the parameters as needed.
- Tap "APPLY CUSTOM SETTINGS".
- The devices added to the zone will be automatically reconfigured. Observe the progress bar and wait for full reconfiguration.
- After going back to the profiles list on the "SETTINGS" tab, the new profile will appear as "Custom profile".



Which scenario can be customized?

Each profile has one scenario assigned. From the AirLink Blue mobile app, user can change settings of 7 scenarios:

- Manual control
- Occupancy sensing
- Vacancy sensing
- Occupancy sensing with daylight harvesting
- Vacancy sensing with daylight harvesting
- Central control
- Central control for dual output

Each of the above scenarios has one or a few parameters to customize. The below table shows a list of parameters that can show up for customization in each of the above scenarios.

Scenario customization parameters:

Parameter	Description
Default Light level	Light level when turned on.
	Fade time – time over which the default light level is reached.
	Light Level - light level when switched on.
Occupied	Timeout - the time for which the defined light level is maintained after turned on. The timer is reset each time motion is detected.
	Fade time - the time over which the occupied mode Light Level is reached.
Prolonged	Light level - light level to be maintained for a defined time after the Occupied mode (occupancy) timeout.
	Timeout - the time for which the light is maintained at the Prolonged mode Light Level after Occupied mode timeout.
	Fade time - the time over which Prolonged mode light level is reached after Occupied mode timeout.
Vacant	Light level - light level to be maintained for a defined time after the Prolonged mode timeout. It can be a non-zero value.
	Fade time - the time over which the Vacant mode light level is reached after Prolonged mode timeout.
Low/high-end trim	Min - the lower limit of light level achievable via automatic or manual control (e.g., with a wall switch).
	Max - the upper limit of light level achievable via automatic or manual control (e.g., with a wall switch).
Manual override timeout	Time – after which the light switches itself to default settings.



Color temperature

Tunable white is a feature that allows the light intensity and correlated color temperature (CCT) to be controlled in order to achieve lighting conditions that are closer to natural light. Color temperature is controlled independently from the light level, so adjusting it won't interfere with the Daylight Harvesting mode, the selected scene or manual dimming.

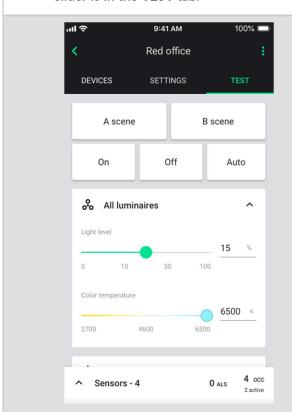
Tunable White feature requires:

- using luminaires that support tunable white
- using Bluetooth mesh devices (whether fixture controllers, or drivers) with devices that support tunable white
- devices must be **flashed** with a firmware version that supports tunable white Bluetooth SIG mesh model (Light CTL Temperature (V.2.15.0 or higher)

Color temperature manual control

The AirLink Blue mobile app allows the manual color temperature adjustment of all compatible tunable white light fixtures in the zone. The change of color temperature can be adjusted in two ways:

1. By using a color temperature slider in the mobile app (requires app version 1.19 or higher). The slider is in the **TEST** tab.



- In the mobile app open the project, select the area and press to open a desired zone.
- Go to the "TEST" tab.
- Use the Color temperature slider to adjust the color temperature of all tunable white lights in the zone.
- The supported color temperature range is from 2700 to 6500 K.

NOTE: After you set a color temperature, it will be used for all manual and automatic modes.



2. By pressing an EnOcean switch. On the <u>EnOcean switch</u>, the **right-side** rocker will control the color temperature (long press). See the example image below.



Double Rocker (EWSDB)

- Pressing EnOcean in position 3-long press up-colder temperature
- Pressing EnOcean in position 4-long press down-warmer temperature

NOTE: After you set a color temperature, it will be used for all manual and automatic modes.

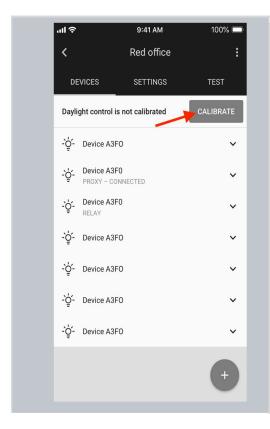


Daylight harvesting calibration

Calibration of light sensors and controls is critical as poorly calibrated daylight harvesting can negate any energy savings and create an uncomfortable work environment. The AirLink Blue mobile app allows calibration for zones operating with daylight harvesting scenarios.



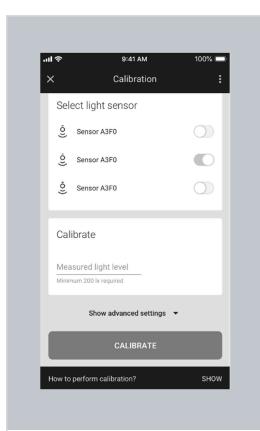
NOTE: Daylight harvesting calibration should be performed only for zones that have been properly configured. Calibration of a malfunctioning zone may lead to errors.



- Open the project, select the desired area and a zone.
- Press the CALIBRATE button from the "DEVICES" tab.
 The button will be active only if there're devices with
 ALS (ambient light sensor) that should be calibrated.

HINT: You can also start calibration from the "SETTINGS" tab. There's a "Daylight harvesting" element with CALIBRATE button that opens the calibration view.

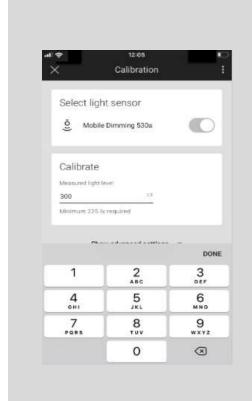




• Select the light sensor (switch the toggle next to the light sensor to the right).

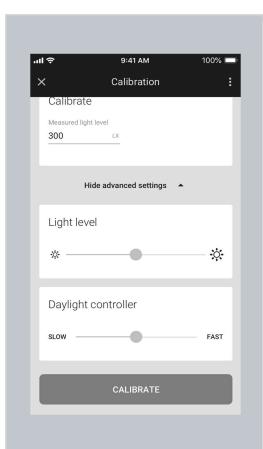
HINT: After pressing $\stackrel{Q}{\longrightarrow}$ the device starts blinking. It helps to quickly identify the luminaire.

- Place a light meter below the sensor on the surface where you want to maintain the desired light level.
- Enter the LUX value measured by the light meter in the Measured light level field. Make sure the light level in the space meets the required minimum value displayed below the input field.
- If the minimum light level conditions cannot be achieved (e.g., you need to perform calibration in the night) adjust the light level of the luminaires in the zone using the slider available in the advanced settings below.
- Note that the ALS Calibration is done once for the whole zone. This means that the selected calibration parameters will be applied to all devices in that zone.

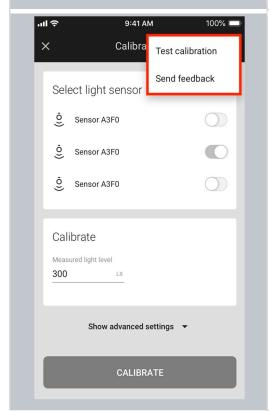


- After entering "Measured light level" LX value in the input field provided, tap anywhere outside the input field or press DONE.
- The app validates if the provided value is equal or greater than the required minimum light level.
- If validation is passed, user can confirm the action by pressing the CALIBRATE button.
- Calibration of the light sensor will start immediately.





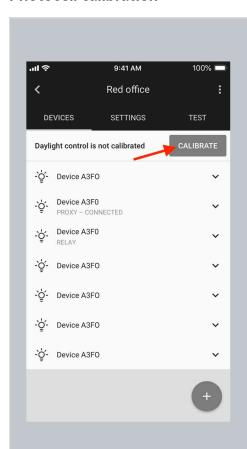
- Show advanced settings this will show you the Light level and Daylight controller sliders.
- **Light level** use the slider to adjust the light level of the luminaires in the zone.
- Daylight controller If there are any issues or unexpected light behavior including frequent on/off or oscillation, use the daylight controller slider to adjust the controller settings.
 - O Use the slider to adjust the responsiveness of daylight control.
 - O If oscillations occur, position the slider to the left.
 - If daylight adjustment is too slow, position the slider to the right.
 - Select "RUN TEST" to check whether the performance meets your requirements.
 - O After changing the slider position to the left, or right for test purposes, the slider goes back to the central position (as shown in the picture).



- Press the context menu on the calibration screen to see additional options.
- Test calibration press the START TEST button to test calibration of daylight harvesting. The testing mechanism will adjust the light level of the luminaires to the preset setpoint. The test results will show how the luminaires adjust to the setpoint. If the test shows any oscillations or misconfiguration, you should try to redo the calibration, or adjust the Daylight controller slider from the advanced settings.

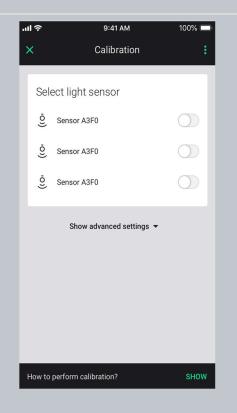


Photocell calibration



- Open the project, select desired area and a zone.
- Press the CALIBRATE button from the **DEVICES**"
 tab. The button will be active only if there're devices
 with ALS (ambient light sensor) that should be
 calibrated.

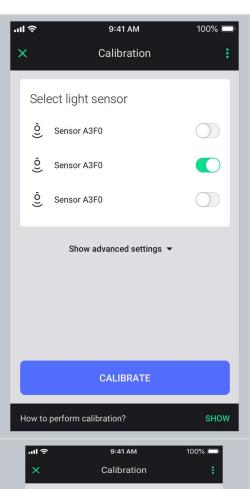
HINT: You can also start calibration from the **"SETTINGS"** tab. There's a **"Photocell"** element with a CALIBRATE button that opens the calibration view.



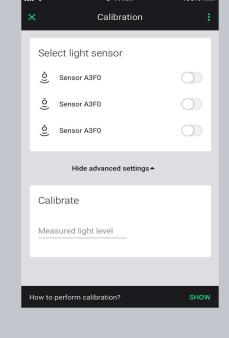
 Select the light sensor (switch the toggle next to the light sensor to the right).

HINT: After pressing the sensor icon $\stackrel{\circ}{\underbrace{\circ}}$ a device starts blinking. It helps to quickly identify the luminaire.





- Confirm by pressing the CALIBRATE button.
 Calibration of the light sensor will start immediately.
- If you have issues with the accuracy of light sensor you may use the calibrate section in the advanced settings



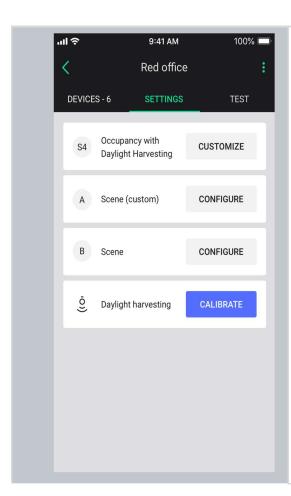
- Use a light meter to measure the light level where the light sensor is installed.
- Enter the LUX value measured by the light meter in the **Measured light level** field.
- After entering "Measured light level" LX value in the input field provided, tap the CALIBRATE button to confirm.
- Calibration of the light sensor will start immediately.



Scenes A & B setup

The AirLink Blue mobile app allows two scenes to be created per zone. Scenes can be activated with a wall switch (see: <u>Using the EnOcean switch</u>).

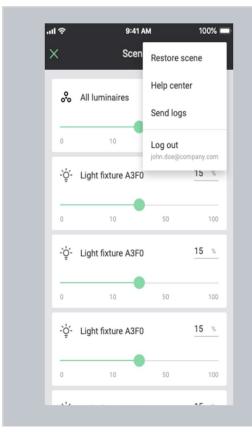
- In the web app users can <u>predefine scene level</u> for scenes A and B. If the predefined settings are enabled, the devices are being configured using those settings while being added/reconfigured in the zone.
- If the predefined settings are not enabled, users can enter scene A & B settings view in the mobile app and customize the scene in the particular zone.
- Each of the two scenes for a zone can have different parameters.



- Open the **SETTINGS** tab.
- Press "CONFIGURE" to select the scene that you want to configure.
- Labels in the settings view show if the scene is customized in this zone
 - No label the scene has been predefined in the profile with the web app but hasn't been customized with the mobile app
 - Empty the scene hasn't been predefined nor customized
 - Custom the scene was customized with the mobile app.

NOTE: Configuring scenes requires that all devices have been added to the zone and are configured correctly (i.e., there are no zone alerts or warnings).

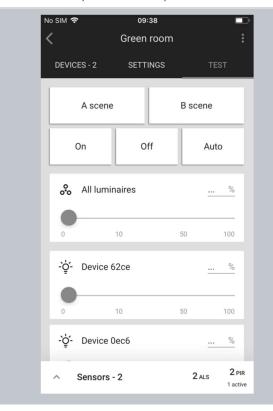




- Adjust the light level for individual luminaires to reflect the desired scene configuration.
- Identify the luminaire by tapping on the device icon. The luminaire will start to flash.
- Tap "Apply custom settings" to save the scene.
- If the scene was customized (has a custom label), in the context menu there is an option:
 "Restore scene", which removes scene settings, or "Remove scene" if the scene was not predefined in the profile.

Test your zone

Testing allows you to test if the light control is working correctly, i.e. can the luminaires be switched on to maximum level, switched off, dimmed and the scenes are configured as desired.



- Open the **TEST** tab
- Choose the test:

A scene: luminaires will go to the light level defined in scene A.

B scene: luminaires will go to the light level defined in scene B.

Off: all luminiaires switch off.

On: all luminaires go to 100%.

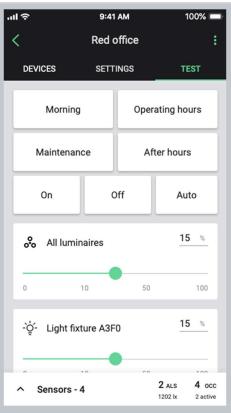
Auto: turns on the automatic settings for luminaires

• The luminaries will react immediately.

HINT: Check which devices are added to your zone.

Press one xt to "All luminaires". All devices from the zone will immediately start flashing.





 For a zone where the "Multiple scenes" scenario has been selected, the TEST tab along the On, Off, and Auto options will display the customized names of configured scenes:

Morning (scene 1)

Operating hours (scene 2)

Maintenance (scene 3)

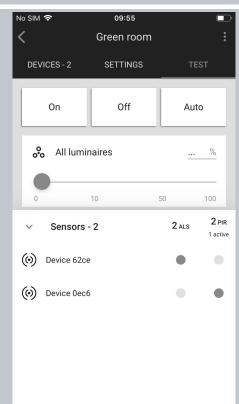
After hours (scene 4)

Testing individual luminaires:

Scroll down to see all luminaires added to the selected zone.

Use the slider to change the light level or enter the value manually (in %).

The selected luminaire should react immediately.



Sensors view:

- Sensors can be previewed via the TEST tab.
- The list at the bottom of the screen shows how many sensors are available and the light level measured by the light sensor
- The lux level value is read immediately when the panel is opened, and then the next update is only after the device reports the value. When you open the panel again, the application reads the value again (after each lux level update the background is green for a 3 sec.).
- To preview the sensors, expand the list and see which sensors are currently active.
- If no sensors are available, the list is empty.

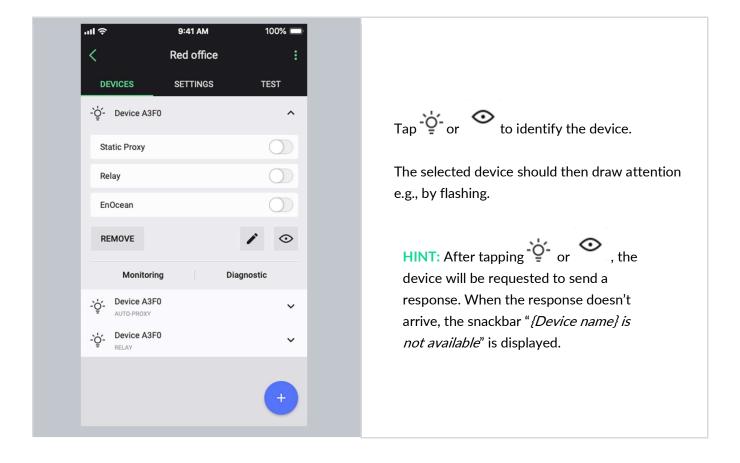


Check the devices list

All devices commissioned to a particular zone are listed in the DEVICES tab, along with their name and features.

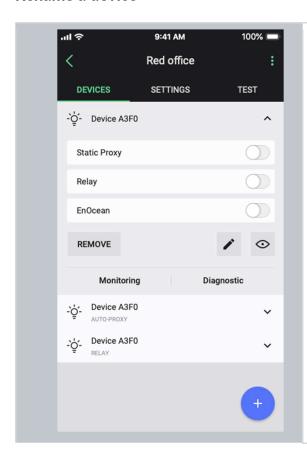
Identifying devices added to a zone

Sometimes it is necessary to identify a specific device which has a problem or must be configured as a relay or EnOcean adapter.





Rename a device



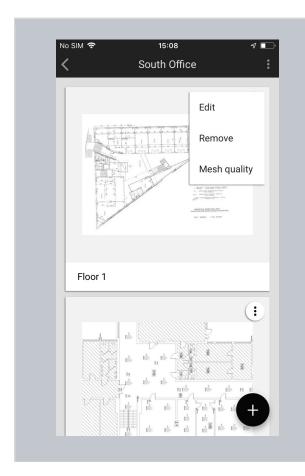
- Once the name is changed, the new name will be visible in the mobile and web application.
- If the device is removed from the zone and recommissioned, it will appear in the mobile and web application with its default name.



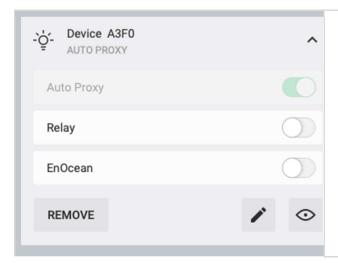
Device mesh network settings

The mesh quality test allows users to check the node availability and mesh quality within an area.

The test is performed using the AirLink Blue mobile app from where it is currently connected to the network. If the test is performed from a different part of the network, test results might differ.



- To start running the test, select the project where you would like to check the connection.
- Then, select the correct plan, click the "More" button, choose "Mesh quality" and tap START TEST.
- The test is performed by selecting a random proxy within the Area and sending a ping message to all the nodes in that Area (one retry is executed if a node does not respond to the first ping message).
- If all the nodes reply with a pong message, zones are marked green to indicate good connection.
- If even one node does not reply with a pong message, the zone it is added to is marked red to indicate potential connection problems.
- The results are presented on the Area floor plan with the possibility to see results per device within a zone.
- For more information about the Mesh quality test and troubleshooting, see SN-202 Optimizing Mesh Network Performance.

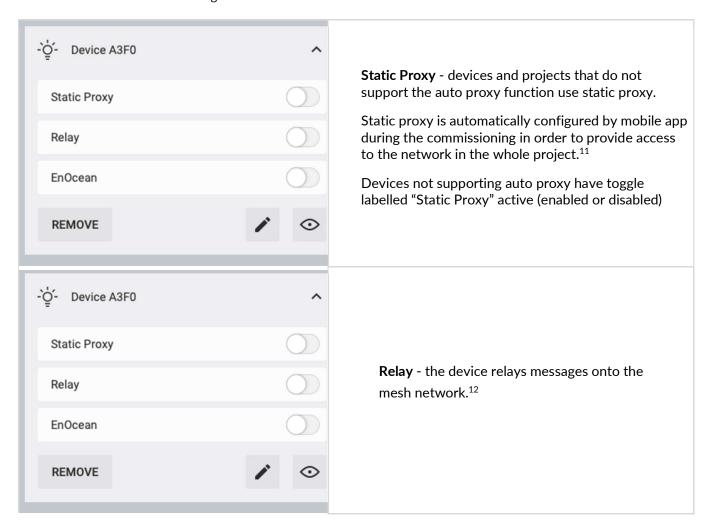


Auto Proxy - allows each node to automatically become a proxy whenever the AirLink Blue mobile app is around.

Devices with enabled auto proxy have toggle labelled "Auto proxy" enabled and inactive.

NOTE: Auto proxy function is available in devices with AirLink Blue firmware from version 2.17 and projects from version 202005. To use this function in already commissioned projects that do not meet the requirements, a web app project update, firmware update, and recommissioning is required.





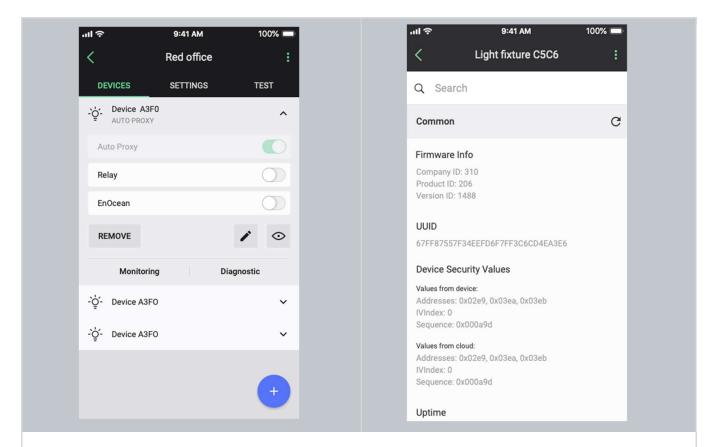
¹² Enabling both the Mobile device proxy and Relay functions on the same node will lead to inefficient performance and is not recommended.



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¹¹ By default, the mobile application will make sure that at least one device in the project has the proxy enabled. Please be aware that disabling or removing a proxy device affects the performance of connecting the application to the network.

Device diagnostics



The device diagnostic report may be helpful in the event of any problems. It gives basic information such as:

- Firmware information
- Uptime
- Time since last fault
- Controller parameters

The AirLink Blue app also supports some manufacturer specific device health tests, e.g., DALI Bus Reset. With the search box, the user can find a cell that contains the searched string. If the search box is empty, then all properties are visible. If the search box contains the searched string, then only those cells are visible that contain the searched string in their content.



Monitoring

The Monitoring feature allows you to see the energy consumption of compatible devices and occupancy events within a zone with a PIR sensor in the mobile app.

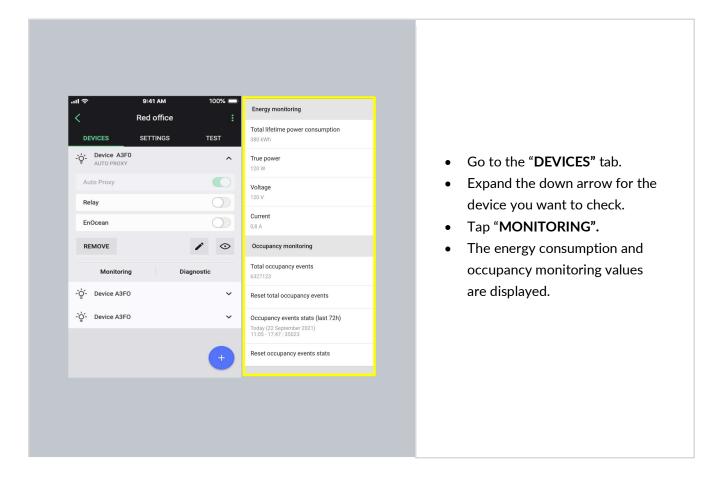
The energy monitoring values include:

- Total lifetime power consumption (kWh)
- Apparent power (W)
- Voltage (V)
- Power factor

The occupancy monitoring values include:

- Total occupancy events
- Occupancy events stats (last 72h)

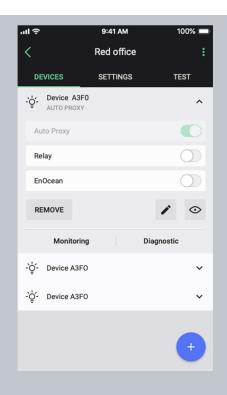
HINT: You can use the occupancy monitoring data and their reset functions to verify sensor false triggering.



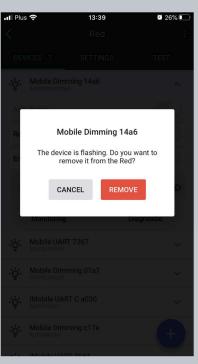


Remove device

If a device has been added to the wrong zone or doesn't operate properly, you can remove it. This action removes the device from the network and from the project, while also resetting the device and erasing its configuration data.



- Go to the "DEVICES" tab.
- Select the device you want to remove.
 The list element will expand.
- Tap "REMOVE".
- Check if the device is attraction attention e.g. by flashing.



If it's the right device, tap "REMOVE" again to confirm. This will remove it from the network and restore its default settings, making it available for adding to another network.

NOTE: The mobile app will not allow you to remove the last mobile device proxy in the project if it still contains other devices, as this will mean you will no longer be able to connect with them. To remove the last proxy, remove all other devices from the project first. Only then will the app allow you to delete the last proxy device.



(F)

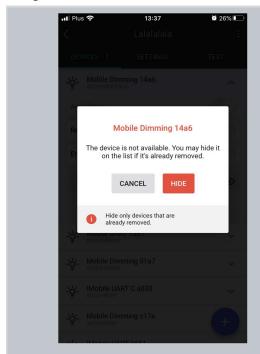
Hidden devices

As part of the device removal process described above, a device is not only removed from the app's database but also fully reset. This means removing a device from the network and restoring its default settings by erasing all configuration data, including security keys. In order to successfully carry out this process, the app needs to exchange certain data with the device which is to be removed. If the app is unable to communicate with the device, the removal process cannot be completed. This can happen in the following cases:

- device is powered off or does not operate properly (manufacturing defect, failure, etc.),
- device has already been reset or removed manually,
- mesh communication failure (e.g., device is out of range).

A device that cannot be fully removed remains visible in the app and commissioning reports and may report configuration errors. This could be confusing for the user, especially when such a device has already been physically removed from the ceiling. To address such cases, the app offers the possibility to **hide** a device that cannot be fully removed. A hidden device will no longer be displayed in the list of available devices, will not be included in commissioning reports, and will not report configuration errors. However, it can still be found in the web app (grayed out and marked as *hidden*). This allows the user to restore a device back to the unhidden state if needed (e.g., when it was hidden accidentally).

Hiding devices



When the user chooses to remove a device, but the app cannot communicate with it, the removal process cannot be completed.

In this case, the app will ask whether the device should be hidden so that it is no longer visible in the list of available devices and commissioning reports.

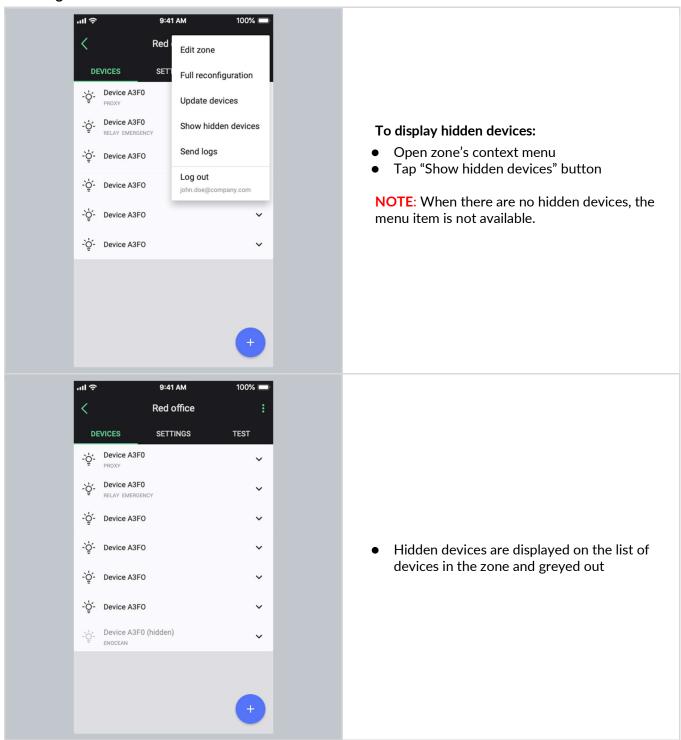
Tap "**HIDE**" to remove the unresponsive device from the list.



NOTE: Make sure to hide only those devices that are broken or have been removed from the project manually (via physical uninstallation or hardware reset). If the app is unable to communicate with a device during the device removal operation, it might happen that the user hides a device that has not been reset and keeps operating within a mesh network (i.e. it keeps implementing specified control scenarios). To successfully remove such a device from the network, read the next section for how to restore the device, and then remove the device.



Restoring hidden devices





Removing devices without access to mesh

If you want to remove a device from the zone using the mobile app, but the device is grayed out in the app, connect to the mesh by a proxy device. There are two workarounds to do that.

Workaround 1

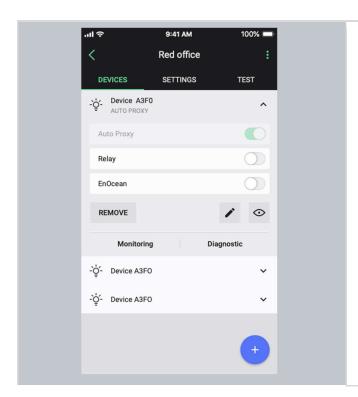
- 1) Factory reset one of devices that is active in that zone and to which user can connect over mesh.
- 2) Then, re-add that device to the same zone. Make sure it is a "Proxy" device.
- 3) After that, you should have access to the mesh and be able to remove the devices intended for deletion from the zone.

Workaround 2

- 1) Add any mesh device to that zone to have a proxy device present there. (e.g., it can be a mesh device from another zone)
- 2) Then remove the devices intended for deletion from that zone to recommission the whole zone before removing the dummy proxy device from p.1 if necessary (user should have at least one proxy device nearby to connect to the zone's mesh).

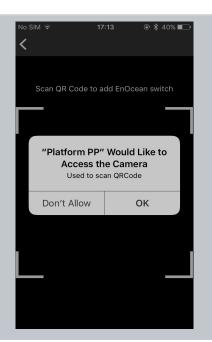
EnOcean Switch commissioning

Adding an energy harvesting EnOcean BLE switch to a zone allows it to control the lights in a zone. As an EnOcean BLE cannot communicate over the Bluetooth mesh protocol, you must select at least one of the devices already in the network to act as a gateway (or EnOcean adapter) for the switch.



- Go to the "DEVICES" tab.
- Select the device you want to act as the gateway for the EnOcean switch.
- Tap "EnOcean" to enable it as an EnOcean adapter.





The app will ask for permission to access the camera. Select **OK**.

Point the camera at the QR code on the back of the EnOcean switch or on its packaging.

The app will automatically read the QR code and configure the device appropriately.



- "This device is not supported" on a snackbar.
- When the EnOcean device selected by the user is incompatible, user will see incompatibility snackbar when scanning such a device.



NOTE: The EnOcean switch can be removed from the zone at any time by disabling the EnOcean option for the device(s) acting as its gateway.



NOTE: Multiple zones can be controlled with a single EnOcean BLE switch by enabling the EnOcean adapter for one device in each zone. All such devices must be within the range of the EnOcean BLE switch that controls them.

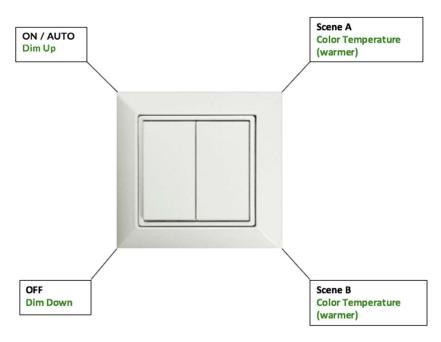


Using the EnOcean switch

EnOcean BLE switches are automatically configured as follows:

- Left rocker is used for manual control and dimming
 - O Short press up ON / AUTO resume
 - O Short press down OFF
 - O Long press up Dim Up
 - O Long press down Dim Down
- Right rocker is used to trigger preset scenes and control color temperature (if available) (see: <u>Scenes</u> setup)
 - O Short press up Scene A
 - Short press down Scene B
 - Long press up Colder¹³
 - O Long press down Warmer¹²

User can use two types of EnOcean presses (long & short presses) interchangeably. It means that the left rocker can be e.g., pressed first with a long press to turn the light ON and then with a long press to dim up the light. *



Short press actions - indicated in black.

Example behavior of EnOcean switch in various scenarios

In some scenario settings, there is an additional "Manual override timeout" parameter that is set via Commissioning Web app. When you turn on one of the preset scenes from the EnOcean switch, after (x) minutes of detected vacancy in the space, the light will be switched to its default settings. For more information on specific scenarios please check the <u>Scenario parameters for customization</u> chapter.

¹³ Color Temperature applies only to zones where compatible tunable white fixtures & appropriate version of the Silvair firmware have been added. Without these components, the right rocker color temperature adjustment (colder / warmer temperature buttons) will not work.



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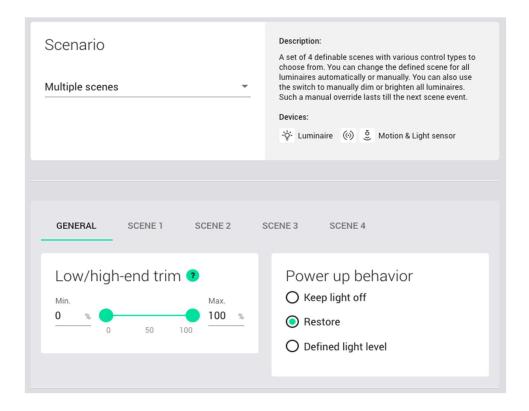
^{*} Long press actions - indicated in green.

Scenario type	EnOcean behavior	
Manual Control All luminaires are switched on and off manually with a wall switch.	 Characteristics: NO automatic control. User adjusts the lighting only by pressing the switch buttons. Manual ON / AUTO button - sets the light to the "Default light level" set in the profile settings. Manual OFF - sets the light to 0%. After changing lighting behavior (e.g., switching off, dimming, changing scene), it must be manually restored as there is no automatic behavior defined. "Manual override timeout" parameter - not available in this scenario. 	
All types of Occupancy and Vacancy scenarios Occupancy: All luminaires are switched on when motion is detected and switched off when no motion is detected for a given time. Vacancy: All luminaires are switched on manually with a wall switch and switched off automatically when no motion is detected for a given time.	Characteristics: Pressing ON / AUTO button sets the light to the Occupancy mode level and it lasts for a defined timeout (available in profile edition). "Manual override timeout" parameter is available. This parameter is triggered after pressing: OFF, Dimming Up/ Down, Scene A, Scene B on the EnOcean switch. The timer is resetted after detecting occupancy in the room. Example: Manual override timeout is set to 10 minutes. User presses OFF button on the EnOcean switch and leaves the room. CASE A: Occupancy in the room is not detected for 10 minutes. The lights are switched back to the default settings. CASE B: Occupancy in the room is detected after 3 minutes. The timer is resetted and starts counting again from 10 minutes.	
Multiple Scenes A set of 4 definable scenes with various control types to choose from. You can change the defined scene for all luminaires automatically or manually. You can also use the switch to manually dim or brighten all luminaires. Such a manual override lasts till the next scene event.	 Characteristics: 4 scenes triggered by short pressing the EnOcean switch. Dimming available after long pressing the switch. "Manual override timeout" parameter is not available. More information about specific scenes recall, see EnOcean switch support for multiple scenes 	



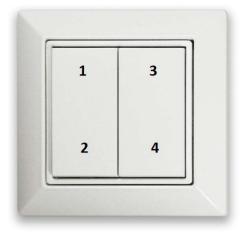
EnOcean switch support for Multiple Scenes

Multiple Scenes scenario allows the user to define up to 4 scenes to recall. Users can change light control behavior from one automatic scenario to another e.g., with different levels to maintain. Scenes set in the Multiple Scenes scenario can be triggered by scheduling and by pressing the EnOcean wall switch. The below image shows an example setup for Multiple scenes scenario.



Short press:

The configured scenes (see the image above from the Commissioning app) are triggered by pressing the EnOcean switch buttons. Check the below image to see how the EnOcean switch operates, where 1 = scene 1, 2 = scene 2, 3 = scene 3, 4 = scene 4.



In case of <u>long press</u>, the switch behavior goes to 1 = Dim Down, 2 = Dim Up, 3 = Color Temperature (Colder), 4 - Color temperature (Warmer).

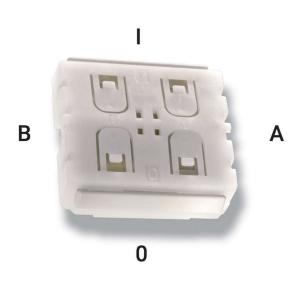


Supported EnOcean switch types:









In order for switches to operate as described above, the EnOcean BLE Switch Module (PTM 215B) should be mounted so that the "I" label is above the "O" label.

Resetting EnOcean switch

If the EnOcean switch has been reconfigured to use nonstandard channels, it might not work correctly with AirLink Blue firmware. In order to set the switches back to standard Bluetooth advertising channels, the switch needs to be reset to factory settings. The process has been documented in EnOcean *ESRPB & EDRPB User Manual* in chapter *5.4 Factory Reset*. The procedure is as follows:

In order to execute such factory reset, the rocker(s) and the switch housing have to be removed from PTM 215B so that all four PTM 215B module contacts and the energy bar are accessible.

After that, all four button contacts (A0, A1, B0 and B1) have to be pressed at the same time while the energy bow of the PTM 215B module is pressed down.

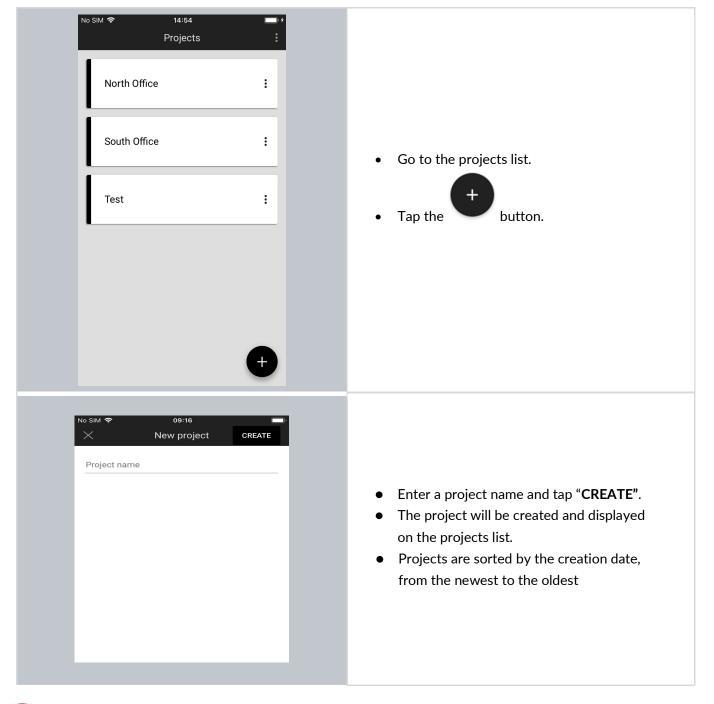
More information and illustrated steps showing how to reset the switch are in the application note *SN-203 EnOcean Switch*.



4. Commissioning with the Mobile App

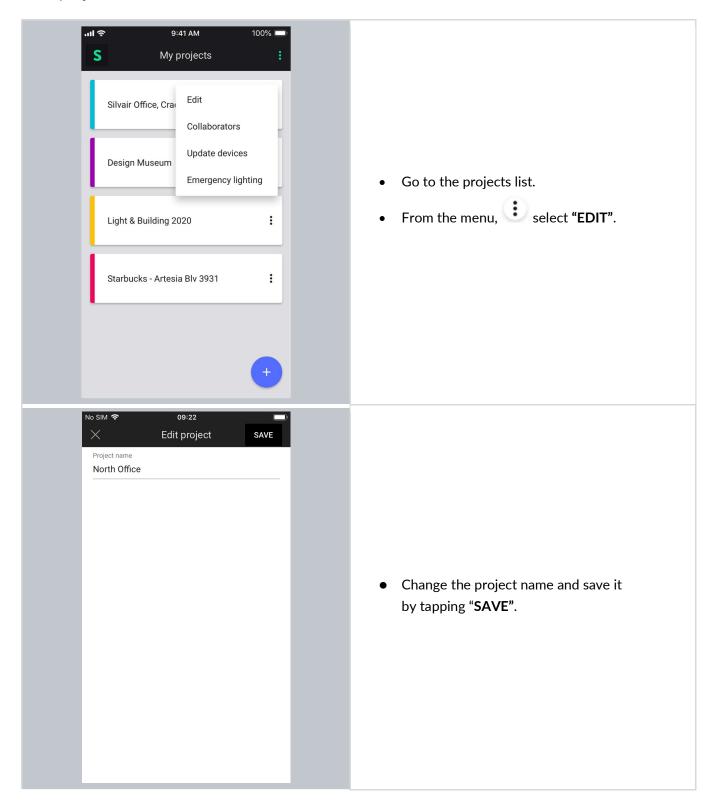
The AirLink Blue mobile app supports some basic project management features such as creating projects, creating areas and creating and editing zones, allowing users to commission an installation without having to first prepare a plan in the web app. It means that the basic commissioning steps can be performed on an iOS device without opening the AirLink Blue web app account.

Create a project





Edit a project

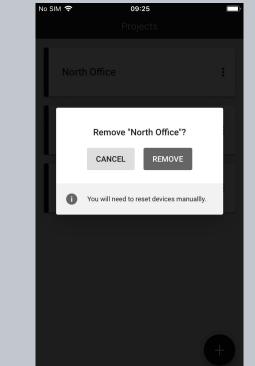




Remove a project



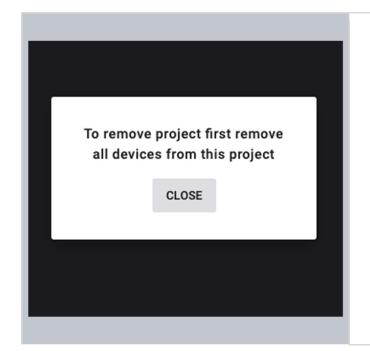
- Go to the projects list.
- From the menu , select "REMOVE".



In the confirmation popup, click "**REMOVE**". To prevent accidental removal of the project, the button will be available after 3 seconds.

The project will be removed and can no longer be accessed by any users collaborating on it.

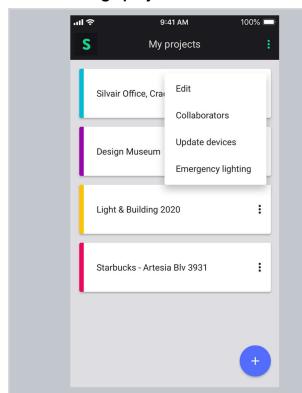




Note: You are not able to remove a project with active devices. Before doing it, you need to remove all devices.

For more information on how to do that, go to the section "Remove device".

Invite & manage project collaborators

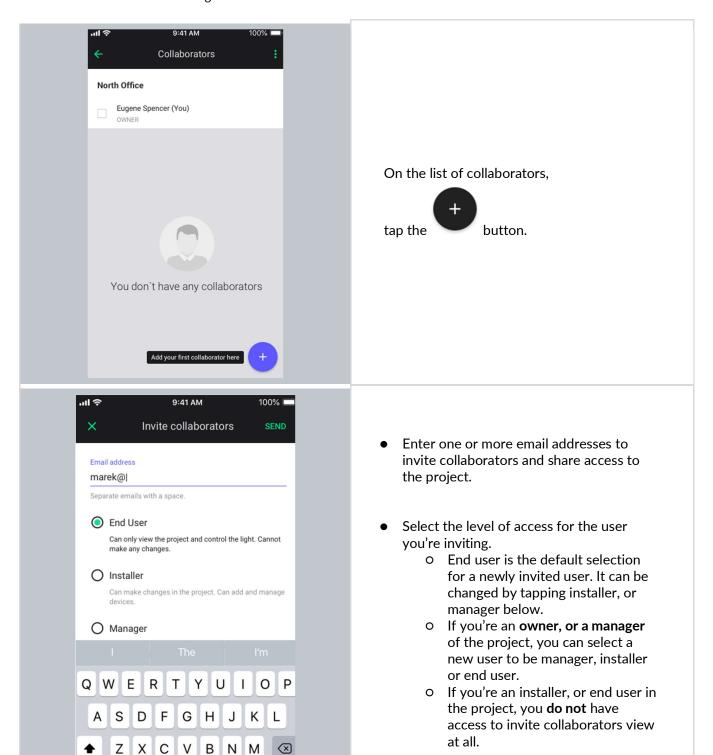


Multiple users can collaborate on a project by creating and editing the commissioning plan and, most importantly, in carrying out on-site commissioning thereby shortening the most critical part of the whole project.

There are four user roles supported in the commissioning apps: owner, manager, end user and installer. To get more information about specific roles, click here.

Click context menu icon of the selected project and click on "COLLABORATORS".

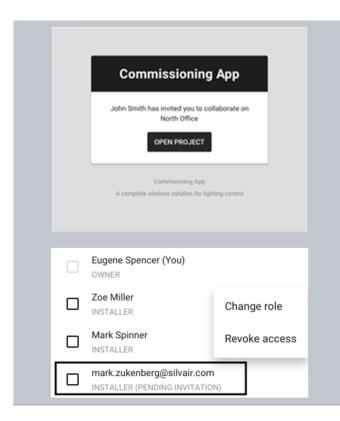






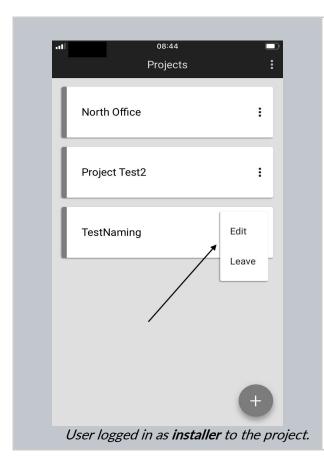
space

return



- All users invited to collaborate will receive an invitation email with a link to the shared project.
- Accessing the project requires the user to have a registered AirLink Blue web app account. Anyone without an account will be labelled with "Pending invitation" on the list of collaborators.

Change or transfer user role



Change user role:

The app allows to change the role of another project collaborator using the mobile app. This is possible only if there's more than one collaborator added to the project.

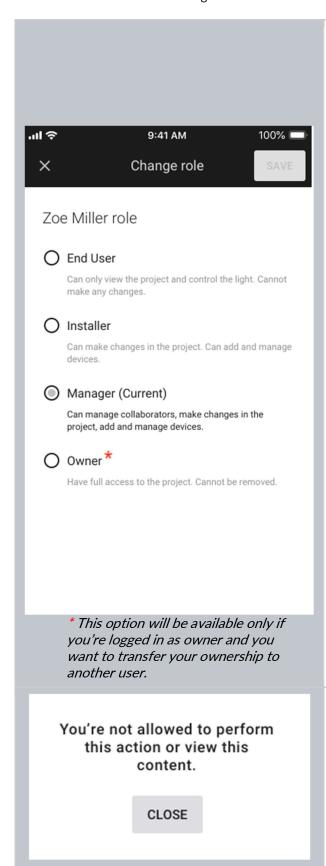
Changing roles is possible only for the following user roles:

- Owner
- Manager

NOTE:

- Installer or end user <u>do not</u> have access to the collaborators view.
- When a user is logged in as installer / end user, they can't even see the "Collaborators" button after pressing the project menu.
- They can only: edit the project name or leave the project.





Change user role:

- To change the role (available only for owner / manager role), select the correct project on projects list and press "Collaborators" from the context menu icon
- Next, press the button next to username and select "Change role".

North Office

Eugene Spencer (You) OWNER	
Zoe Miller INSTALLER	Change role
Mark Spinner	Revoke access

Select the desired role:

- Manager
- Installer
- Owner
- End User

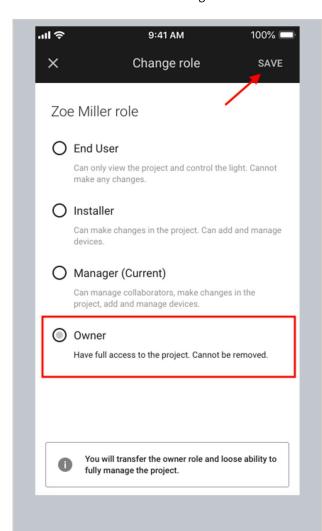
Confirm by pressing "Save". You'll see the confirmation: user role has changed.

It is also possible to change user roles in the web app.

NOTF:

- If a collaborator's role was changed from manager / owner to an **installer**, **or end user** role, this user will no longer be able to see the collaborators view in the app.
- The alert on the left is shown to the user whose role has been changed to installer / end user immediately after changing their role.
- After closing the alert, they will no longer be able to see the collaborators list.





Transferring project ownership:

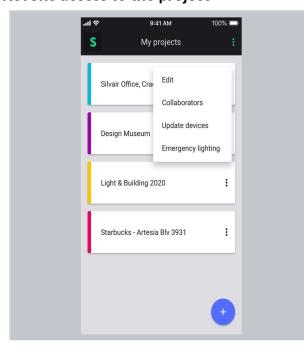
NOTE: This option is available only for "owner" users.

- If you're logged in as owner, you can transfer your project's ownership to another user.
- The new user who received the transfer will become a new owner. The former owner of a project will no longer have access to the project.
- To transfer the ownership:
 - O Log into the mobile app as owner
 - Select the project
 - o Tap and select COLLABORATORS
 - O Tap again next to another username
 - O Select "Change role"
 - O Select "Owner" as a new role
 - Confirm by pressing SAVE button
 - O You will see the below success message



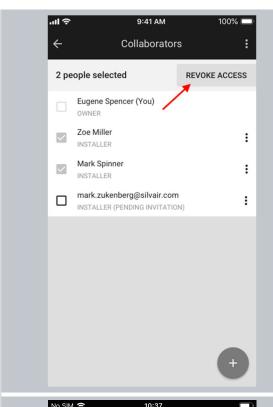
Project ownership transferred

Revoke access to the project



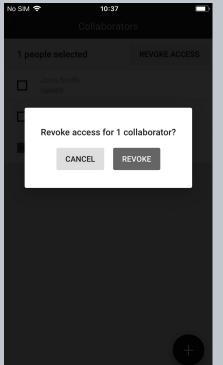
Tap fand select "COLLABORATORS".





Select one or more collaborators by pressing the checkbox.

Tap "REVOKE ACCESS".



Confirm by pressing "**REVOKE**" on the popup window.

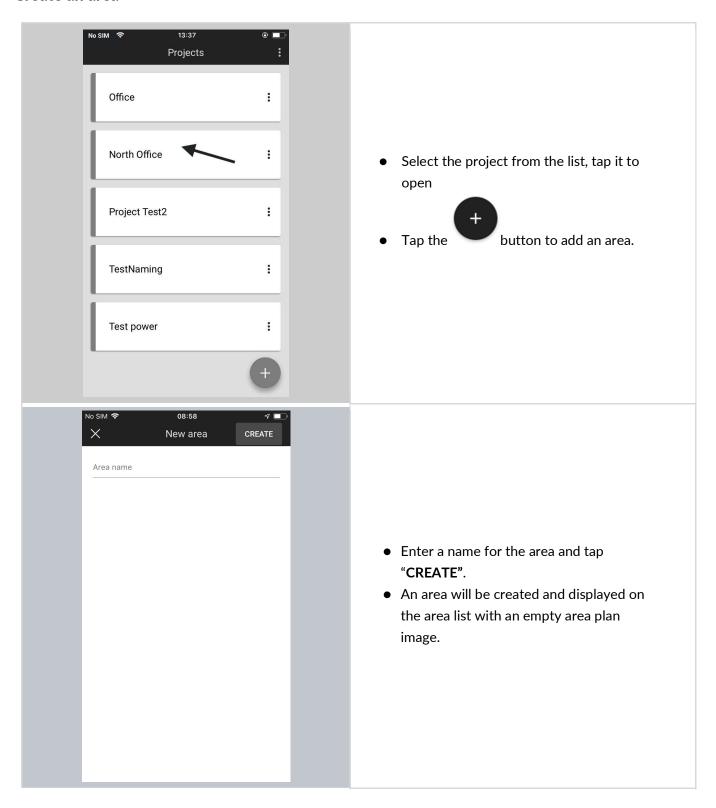


NOTE: Selected users will be removed from the project and will no longer have access to it from the web app and the mobile app. ¹⁴

¹⁴ AirLink Blue prevents the last collaborator from being removed from the project as there must always be at least one user with access to the project. When the original owner is removed as a collaborator, ownership is automatically transferred to the next collaborator.

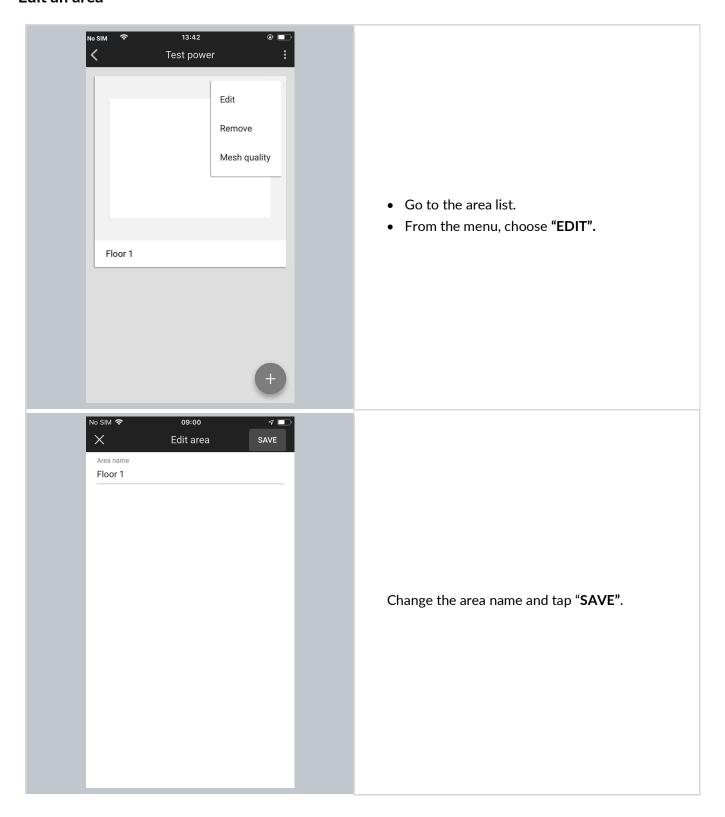


Create an area¹⁵



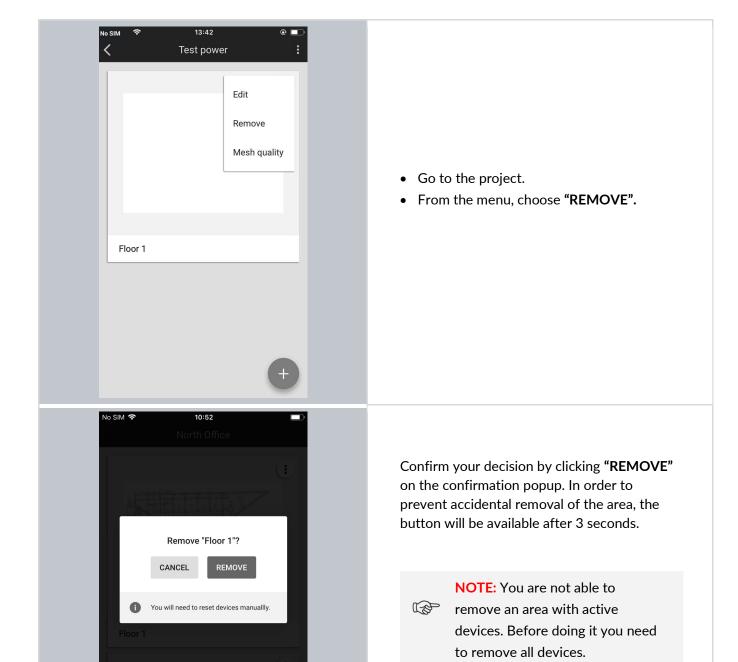
¹⁵ Please note that currently it is not possible to upload a plan to a project using a mobile app - this can only be done via the <u>AirLink Blue web app.</u>

Edit an area





Remove an area



Create a zone

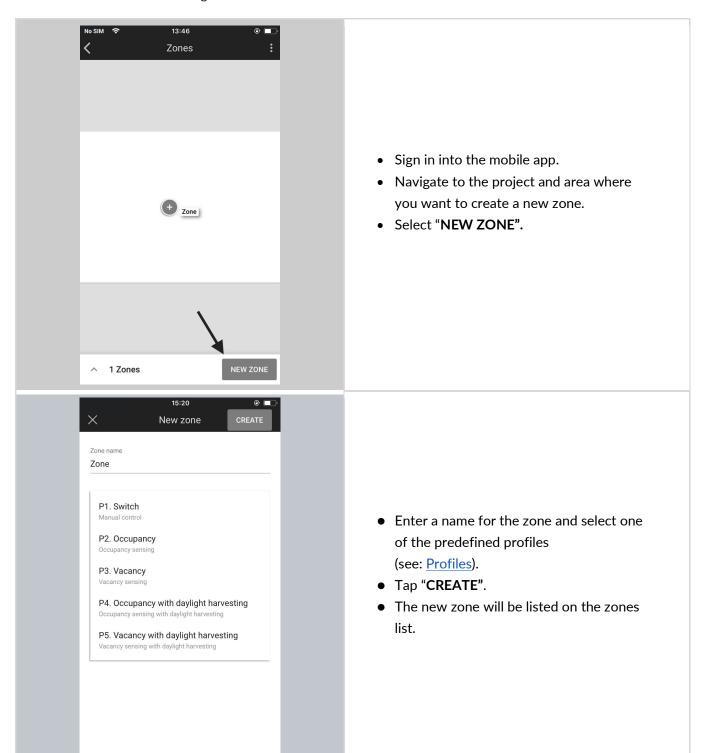
The mobile app also allows users to create new zones on-the-fly.



For more information on how to

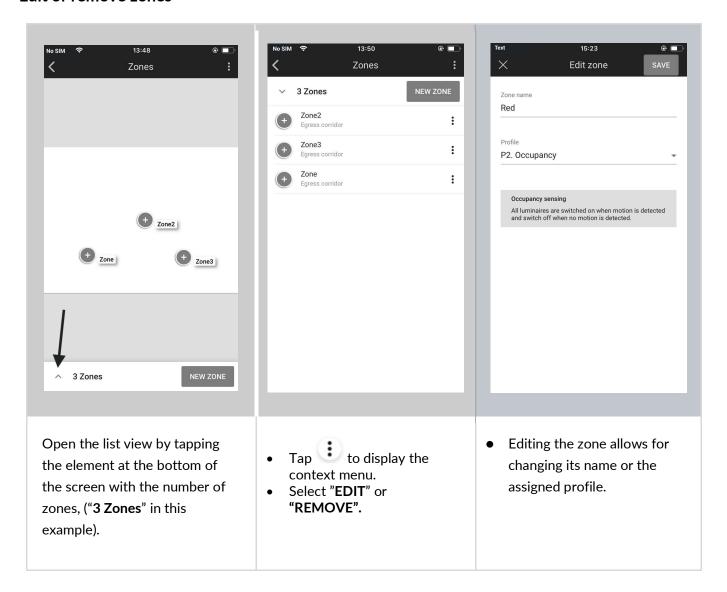
do that, go to the section

"Remove device".





Edit or remove zones





NOTE: You are not able to remove a zone with active devices. Before doing it you need to remove all devices.

This is the last step of the ad hoc commissioning without using the AirLink Blue web app.

The next steps to make your lighting project work is <u>adding devices</u> to the newly created zones. Go back to chapter 3 Commissioning on-site to continue reading about <u>adding devices</u> and the following steps.



5. Gateway Commissioning

The AirLink Blue gateway is a mesh enabled product that enables mesh-devices to cloud communication. Using a gateway allows the following features:

- 1. Scheduling
- 2. Energy & Occupancy monitoring

A gateway can be added to the project with the Commissioning web app.



For more information about the g ateway, see the *SGW-102 Gateway - set up and connection instructions*.



6. Microgateway commissioning

Required items

- Project version 202006+
- The Zone created using web or mobile app in the place where the microgateway is installed
- Remote gateway server needs to be installed and available by the microgateway in your network
- Network configuration needs to be provided by your network administrator
- Microgateway must be installed (connected to power) within the range of the mesh network



HINT: The microgateway doesn't need to be connected to the network via ethernet during adding and configuration. When it's done you may plug in the ethernet cable, and the device will start working properly.

Procedure

Adding microgateway to the project

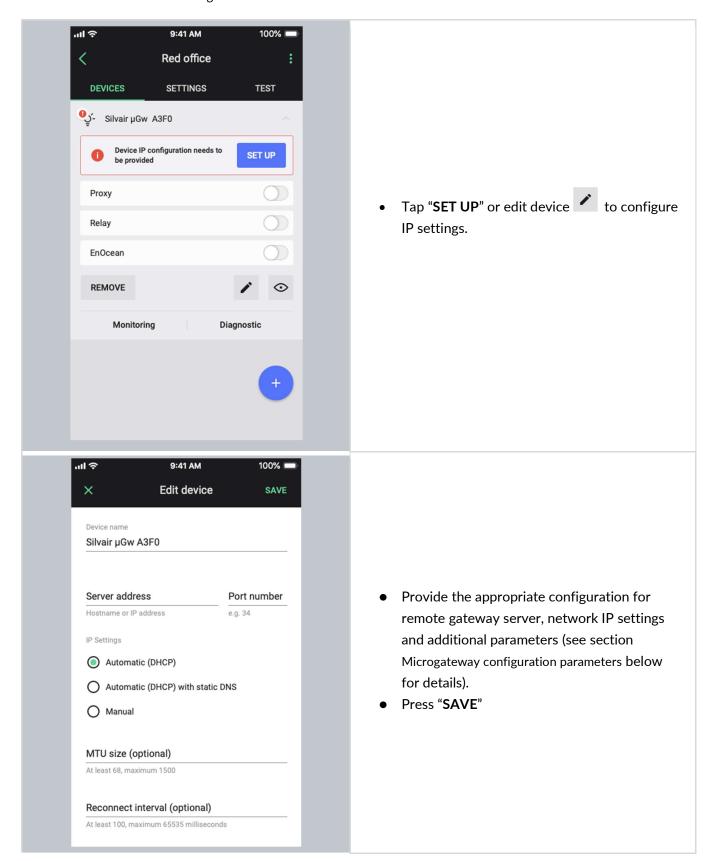
The microgateway is a mesh enabled product that enables mesh to cloud communication. Because the microgateway is a regular mech device, it must first be added to the mesh network similarly to other devices.

Follow the steps described in the first sections of the <u>Commissioning on-site</u> section to add the microgateway devices to the network and appropriate zones.

Providing IP configuration

When it's done there should be a microgateway available on the device list. It will be marked with an error, because the IP configuration is still required as the IP configuration is still required.







Microgateway configuration parameters

Server address and Port number

You must enter "Server address" and "Port number" - the address of the remote gateway server with which the microgateway communicates. The server address can be entered as a hostname (e.g. gateway.silvair.com) lub IP address (e.g. 192.168.0.1).

IP Settings

You can adjust the IP settings of the microgateway to your network by selecting the following options and providing related parameters:

- Automatic (DHCP) automatic IP configuration via DHCP, no additional parameters required
- Automatic (DHCP) with static DNS
 - DNS server address required
- Manual
 - O IP address of the microgateway on the network
 - Subnet mask
 - Default network gateway address
 - DNS server address



HINT: Please contact the building network administrator to provide the appropriate configuration.

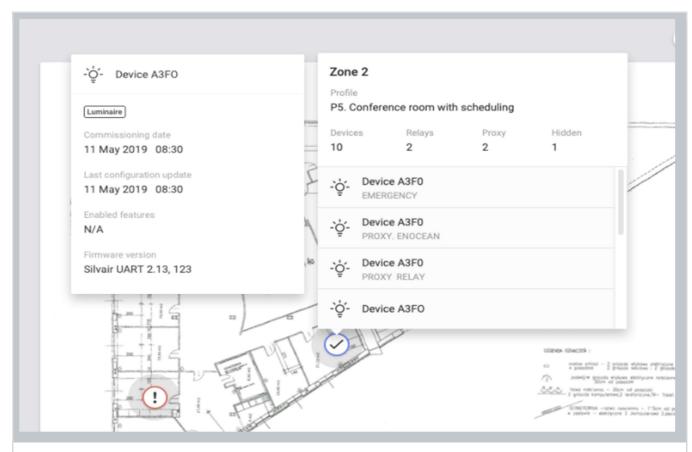
Optional and advanced network settings available:

- MTU Maximum Transmission Unit
- Reconnect interval



7. Commissioning status & troubleshooting

Check commissioning status

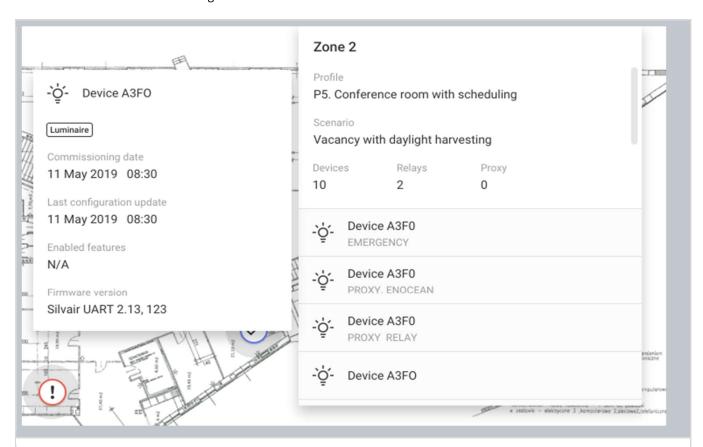


The status of commissioning can be checked at any time using the AirLink Blue web application which displays the status of each zone (see: Zones), as well as a summary for each zone that contains:

- Name of the Profile assigned to the Zone
- Scenario that the profile is based on
- O Alerts (when available) including errors and warnings in the zone if
- O Devices number of mesh devices added to the zone
- O Relays number of devices with the Relay feature enabled in the zone
- Proxy number of devices with the Proxy function enabled in the zone
- O List of devices with function label added to the zone
 - PROXY the device with mobile device proxy function enabled
 - RELAY the device with relay function enabled
 - ENOCEAN the device with EnOcean adapter function enabled
 - ALS the light sensor device selected as leading sensor controlling the zone
 - EMERGENCY the device with emergency lighting function

HINT: Zone details can be opened with *CMD + left click* shortcut on Mac OS or *CTRL + left click* on other systems.



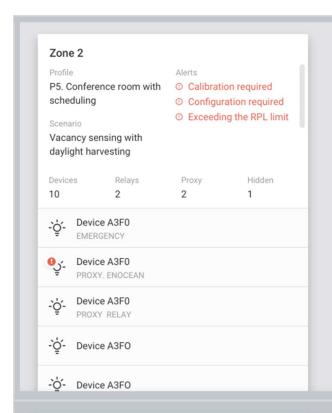


Device details

After clicking on the device's name, the information about the device's details will be displayed. It contains:

- Device function:
 - Luminaire
 - Occupancy sensor
 - Light sensor
 - Emergency
- Commissioning date the date when the device has been added to the zone
- Last configuration update the date of the last device configuration
- Enabled features The list of the features enabled in a device
 - O N/A none of the following features are enabled
 - o Proxy
 - o Relay
 - o EnOcean
 - o ALS
- EnOcean key the key of the EnOcean bluetooth switch paired with the device
- Firmware version the current firmware version in the device
- Alerts (see the section below)

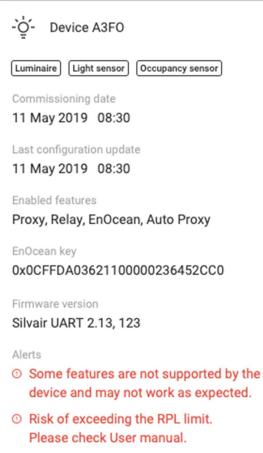




Zone alerts

There might be displayed the list of alerts in red on the right side. It means that an action is required from the user's side.

You can find more details in <u>Commissioning alerts</u> section.



Device alerts

Alerts are displayed in red at the bottom of the list. It means that an action is required from the user's side. You can find more details in Commissioning alerts section.



Commissioning alerts: errors and warnings

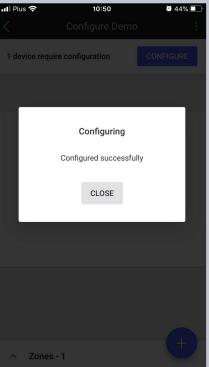
Area alerts



Configure all devices in an area

If there are unconfigured devices in the area, the "Configure" button is displayed with the number of devices that require configuration.

- Select the area
- Tap "CONFIGURE" to start the configuration

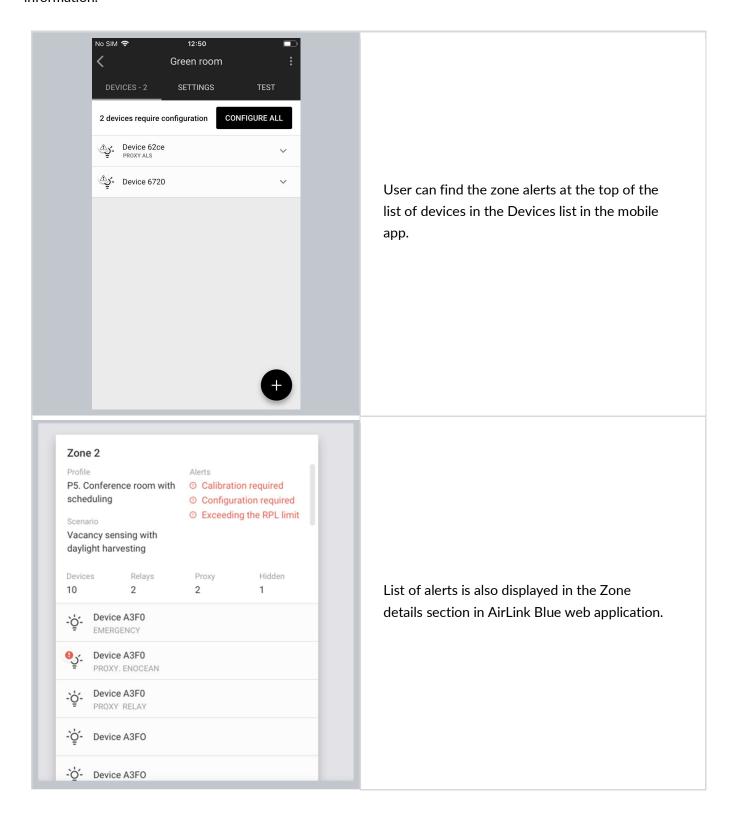


NOTE: If the configuration was not successful, go to the zone and check the alerts. For more information, please check "Zone alerts" in the section below.

Zone alerts



Zones are represented on the area floorplan with a circular icon which changes color depending on its status. When the zone has been commissioned but requires attention or action due to the error or warning, it's displayed in a warning state (exclamation point) in the web and mobile app. See <u>Zones</u> section for more information.



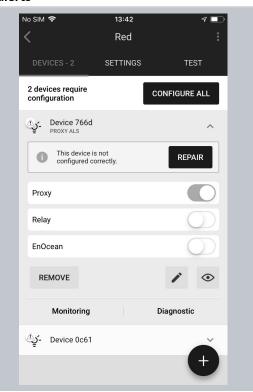


Follow the information listed in the table below when zone alerts have been raised:

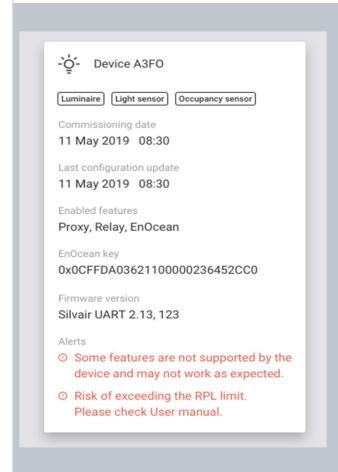
Alert	Possible causes Solution			
Calibration required	Daylight control in the zone has not been calibrated yet or there is no light sensor selected to control the light in the zone (e.g., the previously selected light sensor has been removed from the zone).	If the zone has a Daylight harvesting scenario based profile selected follow Daylight harvesting calibration If the zone has a Photocell scenario-based profile selected follow Photocell calibration		
Configuration require	 There has been a connection error (e.g., Internet problems) during the configuration process or it has been interrupted devices configuration (e.g., an iOS device powers off) Zone settings have been changed (e.g., changing profile, changing scenario settings, adding/editing zone linking). Project version has been udpdated and the zone configuration is modified in the new version. 	Use the mobile app to configure the device manually. Follow Configure all devices in a zone to see how to do that.		
Scenes configuration required	 Scenes in the zones were not configured correctly or scenes configuration has been interrupted Additional device has been added to the zone 	Configure scenes. Follow <u>Scenes</u> setup to see how to do that.		
Risk of exceeding the RPL limit	 The user may be affected by RPL (Replay Protection List) error when there is a risk that RPL limit may be exceeded. It might show up when: Adding device to the zone (a luminaire, a sensor or a switch) Configuring a device (due to changed scenario, or changed zone linking) Entering the project using the newly added mobile app 	User should contact our support at controls.support@lsicorp.com to get full assistance and recommendations suited to your project		



Device alerts



In some cases the device may encounter error or warning, e.g., when the device configuration process has been interrupted. The alert is then displayed in the app in the list of devices after the device element is expanded.



You can find a list of alerts displayed in the device details section in AirLink Blue web application.



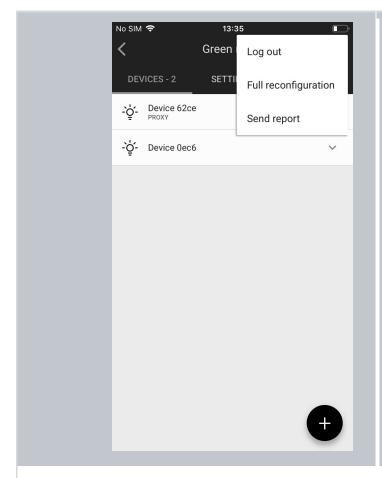
Follow the information listed in the table below when a device alert has been raised:

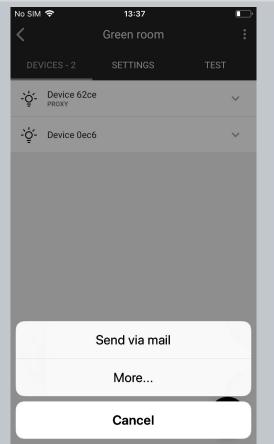
Alert	Possible cause	Solution	
Some features are not supported by the device and may not work as expected.	The device may not fully support the features required by the control profile or the AirLink Blue app and may not work as expected, e.g., some features have not been provided by the device manufacturer or the device firmware version is not up to date.	Check if the device has the newest firmware installed. If not please consider updating the device firmware. Full information about OTA (Over-the-air) update and configuration details in Application Note "SN-208 Over-the-air Update in the AirLink Blue mobile app".	
Risk of exceeding the RPL limit. Please check User manual.	You may be affected by RPL (Replay Protection List) error when there is a risk that RPL limit may be exceeded. It might show up when: Adding device to the zone (a luminaire, a sensor or a switch) Configuring a device (due to changed scenario, or changed zone linking) Entering the project using the newly added mobile app	User should contact our support at controls.support@lsicorp.com to get full assistance and recommendations suited to your project	
This device is not configured correctly.	The configuration of the device might have failed or was interrupted.	Repair the device. Follow Repair device to see how to do that.	
The scenes on this device are not configured correctly.	The configuration of the scenes might have failed.	Configure scenes, Follow Scenes setup to see how to do that.	



Send diagnostic report

In the event of any unexpected behavior when commissioning devices, you can send the application logs to AirLink Blue for further analysis.





- 1. In the upper right corner, select **Send report** from the menu.
- 2. Choose how the logs will be sent (by email is the default).
- 3. Briefly describe the problem (optional, but it helps).
- 4. Send the report.



Commissioning report

The report can be downloaded in the HTML format and includes key details of the current state of the project.

The report contains of 7 sections:

Section 1.: Project summary

o Details

A list of important terms:

Commissioned on	Date from - the date when the first device was added to the project (the device may still not be in the project)	
	Date to - the date when the last device was added to the project (the device may still not be in the project) Example: 20 February 2020 - 23 March 2020	
Last Update	The date of the last change in the project. Changes in the Area, Zones, Devices added to the project or configuration does not affect this date. <i>Example: 11 May 2020 10:12</i>	
Mesh devices	The number of mesh devices added to the project	
EnOcean switches	The number of EnOcean switches added to the project (number of unique EnOcean keys)	
o Mesh devices		
A list of important terms:		
Luminaires	Number of devices categorized as luminaire (controller)	
Occupancy sensors	Number of devices categorized as Occupancy sensor (sensor model with the ight property id)	
Light sensors	Number of devices categorized as light sensor (sensor model with the right property id)	



Emergency devices

EnOcean adapters

model)

key assigned)

Number of devices categorized as Emergency device (Emergency lighting

Number of devices with the EnOcean feature enabled (EnOcean switch paired,

Proxies Number of devices with the Proxy feature enabled

Relays Number of devices with the Relay feature enabled

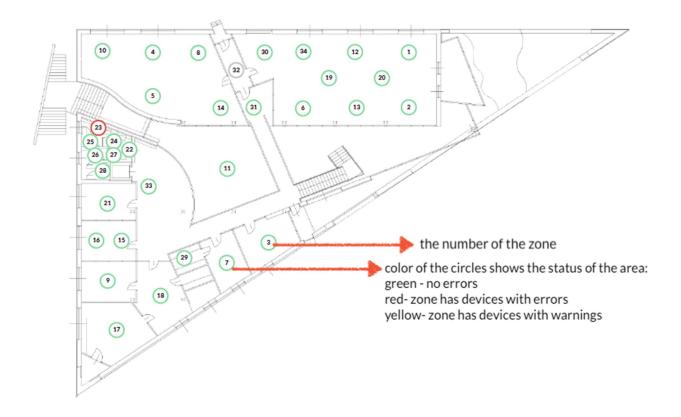
ALS Number of the light sensor devices selected as leading sensors controlling the

zone

O List of areas with basic details about them

Section 2.: Areas summary

Floorplan image



HINT: Press the circle with the zone number to move to the section with details of the selected zone.

- Details
- Summary of mesh devices in area
- List of zones with basic details

NOTE: Indexes of zones, profiles may vary (not be consistent) between the reports. E.g., if you download the report again after deleting one zone, the numbering of the other zones will change accordingly.



Section 3: Zones summary

- o Details
- O Summary of mesh devices in zone
- O List of devices with basic details
- o EnOcean switches

Section 4: Control profiles used in the project

A list of important terms:

Scenario	Name of the scenario used in the profile	
Devices Zones	Number of devices in the zones with the profile assigned Number of the zones with the profile assigned	
Settings	Array of parameters used in the scenario	
Scenes	Scenes A and B settings	

Section 5: Scheduling summary

Section 6: Zone linking summary

A list of important terms:

Zone name	Name of the zone with zone linking settings
Controlled by switches in zones	List of zones from which switches control this Zone.
Controlled by occupancy sensors in zones	List of zones from which sensors control this Zone.

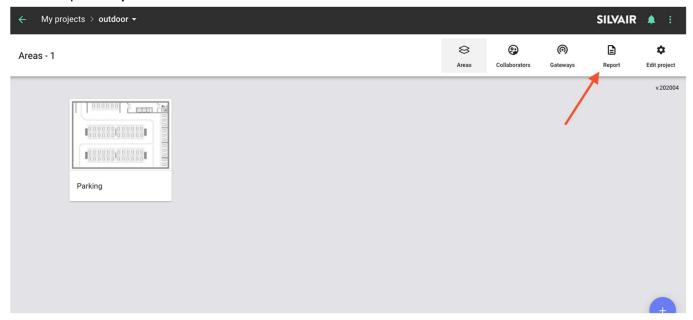
Section 7: List of collaborators in the project



Downloading the commissioning report

Users can download the commissioning report using the web application.

- 1. Select the project for which you want to download the report.
- 2. Tap the **Report** button.



- 3. Confirm by pressing the **DOWNLOAD** button.
- 4. The report will download in HTML file format.



8. Document Revisions

Rev	Date	Editor	Changes
2.5	14 April 2022	AS	Added chapter on scheduling
2.4	11 April 2022	AS,GM	Added notes about color temperature
2.3	29 October 2021	AS	Updated of chapter "Using the EnOcean switch"
2.2	30.09.2021	ZZ	Updated the following sections: Updating project to latest version Monitoring
2.1	12.08.2021	LR, ZZ	Updated the following sections: • Log in & sign up • Create an area • Edit an area • Profiles • Device mesh network settings
2.0	05.07.2021	LR	Updated the following sections: • UI of Zone linking • Adding devices process
1.9	27.05.2021	LR	Added the <u>Document revisions</u> section, updated the Mesh quality test information, updated the commissioning reports information, added zone linking tab, and made general updates of the document.



Contact information

Support:

Business development:

For more information please visit:

Our offices:

LSI Industries, Inc 10000 Alliance Rd Cincinnati, OH 45242 controls.support@lsicorp.com

www.lsicorp.com

www.lsicorp.com/products/controls

