

User Guide:

Operation of Helvar ActiveAhead[®] Mobile Application

The [Helvar ActiveAhead[®]](#) mobile application allows you to configure ActiveAhead Generation 2 solution. There is a separate mobile application for the ActiveAhead Generation 2018 solution.

To use this application, we recommend recent Android or iOS mobile device with up-to-date operating system equipped with Bluetooth low energy (BLE) and near-field communication (NFC). In addition, you need one or multiple devices supporting the ActiveAhead solution. With the mobile application you can view or configure a single device, group of devices or the network of devices.

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Introduction

USAGE MODES

There are three main uses of the ActiveAhead app:

Verify installation

1. You can browse to see the devices, groups, and settings of the ActiveAhead network.
2. Identify luminaires by blinking, to help you find the specific luminaire or group.
3. Use filters to narrow down your search by devices or groups.
4. Execute a Walk Test function for testing how the luminaires work.

Configure installation

1. You can configure the lighting installation. Make sure you have planned the configuration you want to implement before starting.

Emergency light testing

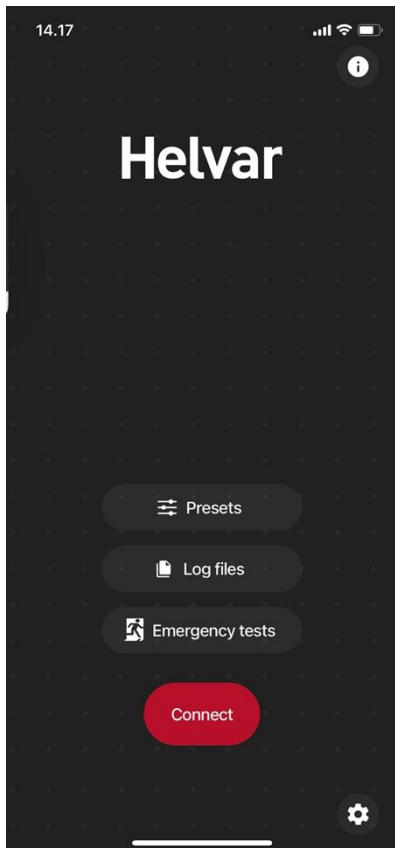
1. Create Emergency Lighting Function- or Duration test executions
2. Run tests
3. Create test reports

TARGETING

While viewing or making changes with ActiveAhead app, you can target

1. single device
2. group of devices
3. network with target filters for a floor and / or area type.

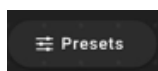
HOME SCREEN



The app has a “Home screen”, which you see as soon as the app loads. Choose whether you want to read application info, modify parameter presets, read log files, connect to the ActiveAhead network or change app settings.

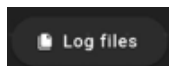


The application version, patch number, End-User License Agreement and this User Guide can be found in the “About” page, which is accessible via the “i” icon in the top right corner.

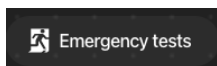


The Presets option will allow you to add, modify and delete presets before connecting to a network. Presets can be used while setting light levels and timings to a device, group, or the whole network. Predefined Eco, Comfort and Default presets (“factory presets”) are available.

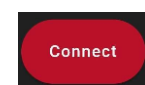
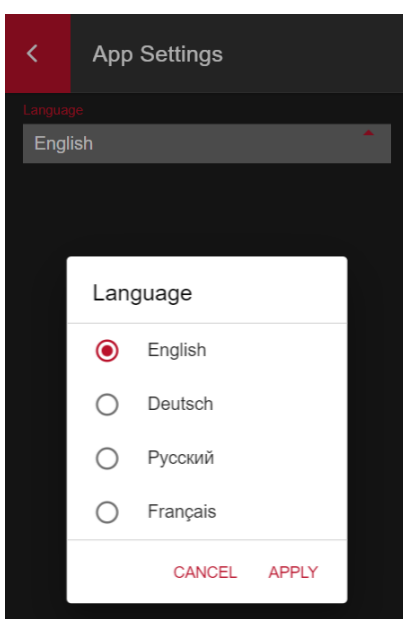
Note: Factory presets cannot be modified or deleted.



The Log files option will allow you to view the actions and related details done with the app on different dates and times. You can also use filter to limit the scope to what you want to see. These logs can be sent forward over email.



Emergency tests will allow you to run Function and Duration tests for Emergency devices. The feature is explained in more detail in [Emergency lighting](#).



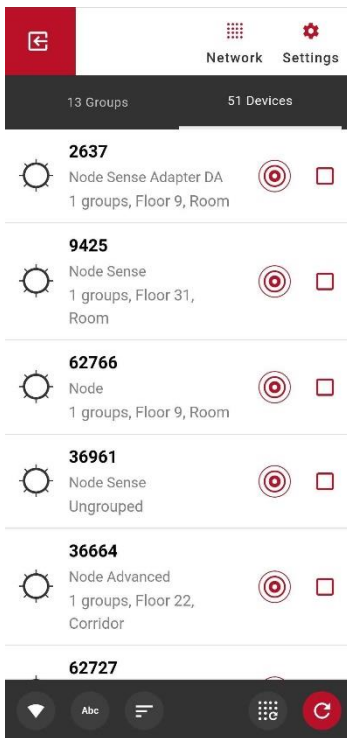
Connect will get you started with the browsing or configuration by opening the “Main screen”.




The App Settings icon at the bottom right corner will allow you to change the language of the app.

The desired language can be selected from options available in the menu.

MAIN SCREEN



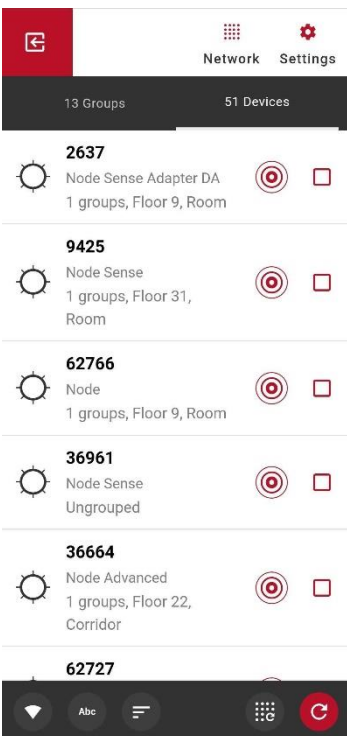
“Main screen” is the central view to navigate through the nearby devices and groups in the connected network. Here you can find a tab with a list of the discovered devices and another tab with a list of discovered groups. Filtering options are located at the bottom of the view.

“Exit” button -  will disconnect the app from the network and take you back to the Home screen.


From the top of the view, you can access

-  Network Network pages
-  Settings Settings pages

Browsing and Configuring devices



All ActiveAhead devices are part of the same network. This allows you to flexibly and easily install and setup the devices without needing to worry how to provision the devices, where to set network borders, etc. When you hit “Connect” on the mobile app Home screen, it starts to scan for the nearby ActiveAhead devices and will try to connect to the one which the app considers to be the nearest one. If the connection attempt fails, the app will automatically retry. Once the connection is established, the app will fetch information from the nearby devices to show you lists of found devices and groups.

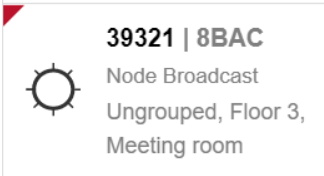
Tip: Use the filters  at the bottom of the “Groups” or “Devices” tab to find devices you are interested in based on the signal strength, name, floor, area type, device type or whether they are grouped or not.

If someone has already configured the nearby devices, you will see the configuration with groups etc. and you can continue to configure the installation.

Note: The devices and groups list may *not* show all the nearby devices and groups. Use the refresh and identification functions to scan again and check visually which are the group members.



- The Refresh button on the bottom right corner will allow you discover more nearby devices. Network and group-wide actions may work for a bigger area than the app discovers. If a device is missing from the list, the refresh button may help. Devices which have been found via refresh are shown with a small red highlight in the top-left corner:

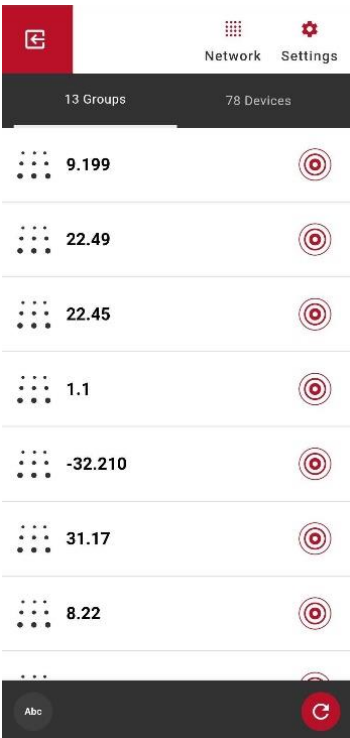


Only devices found through the latest refresh attempt are highlighted this way.



- The Rescan button renews the connection to the network by scanning for nearby devices and connecting to the nearest luminaire. Use it when you have finished working on an area and you have moved to the next.

IDENTIFY DEVICES



- The identify icon allows you to send luminaire (group or the whole network) a command to blink, so you can find it (identify) in the space around you. A pop-up note is shown on the screen and the icon will indicate the action for couple of seconds.

You can modify the duration of the identification in the Settings page. "Identify timeout" parameter sets identification duration temporarily. If you reopen the app, identification duration will be reset to default.


Tip: If there are multiple persons doing the configuration of a network at the same time, use different identify timeouts to know who started the identification. So that you do not mistakenly think you are configuring a device or group while it is your colleague.

SELF-LEARNING

By utilizing sensor data and AI, the system can recognise and remember space usage patterns and adapt lighting automatically and continuously to the changes in the space usage over time. That results in predictive lighting, which turns the ActiveAhead lights on ahead of the person moving in the space offering feeling of comfort and secure.

Learning is enabled by default on the ActiveAhead Nodes and it can be disabled where necessary. A luminaire continuously collects data about its neighbouring luminaires. Learning is based on data from own and neighbours' sensor data. The sensor data is collected from movement detection sensor, light sensor as well as from the radio interface. The closer the luminaires are and the more they have in common, the higher the resulting "follow strength" between the neighbours is. This "follow strength" is translated into light output level.

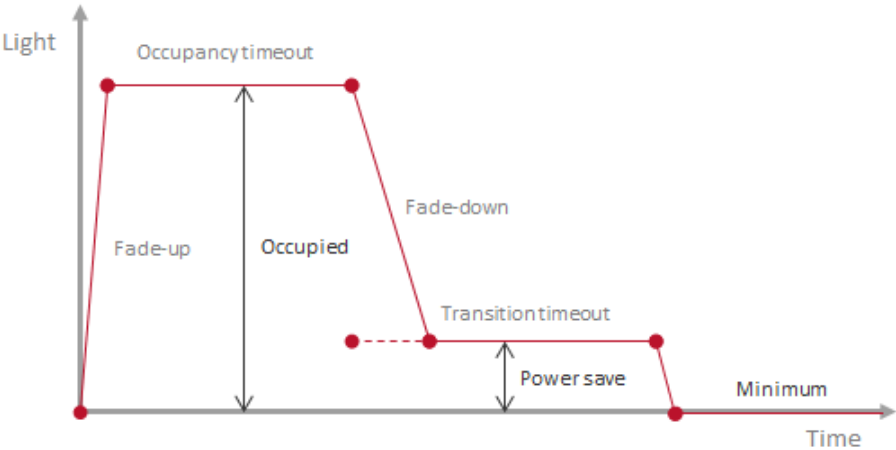
Learning does not consider potential grouping; meaning, some luminaires in the group (not the whole group) may lit up when their neighbours detect movement.

You can manage whether learning is enabled or disabled via the options menu, which can be accessed behind the three dots  at the top right corner when inside a device, group or network.

Settings

LIGHT LEVELS AND TIMINGS

You can adjust the levels, timeouts, fade times, as well as daylight harvesting and other rules for a device, group, or the whole network. The below picture describes the used terminology.



Settings	Groups	Rules
Levels		
Occupied		80%
Power save		20%
Minimum		0%
Timings		
Occupancy		30min
Transition		30min
Fade-up		240sec
Fade-down		240sec
Edit		
Changing these settings will override any inherited from groups		
Version 1.10.30	Mesh address 8BAA	

When you open a specific device or group, the Settings tab will show you the current parameters. “Edit” button allows you to enter the editing view where you will find different set of parameters on “Levels” and “Timings” tabs. You may also load the parameters from presets you have stored on the app. See Home screen section for more information on the presets.

Note: Group settings page shows the *individual* settings of one of the group members and does *not* show if settings are different in between the group members. It is possible that different group members have different values and thus the settings you see in the app are not necessarily valid for the whole group. Setting values for a group will override the previous settings on the group members.

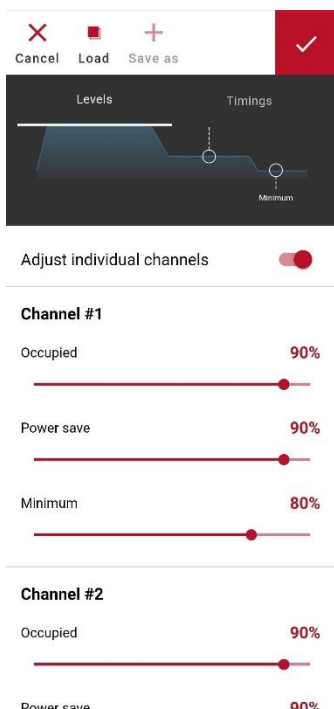
Tip: For Node Advanced devices, it is possible to adjust timings and not modify the current subdevice levels. Steps: Press “Edit”, change the timings, press “Apply” and select “No” when the app asks if you want to apply the unchanged levels too.

Colour Temperature

Via the mobile app you can define the default colour temperature for luminaires which support Tunable White. The colour temperature option is also visible when the system does not know if the connected LED driver supports Tunable White. This is the case with Node Advanced, and in general when one directional communication such as DALI broadcast is used.

The default colour temperature is 4000 Kelvin.

Channel Control

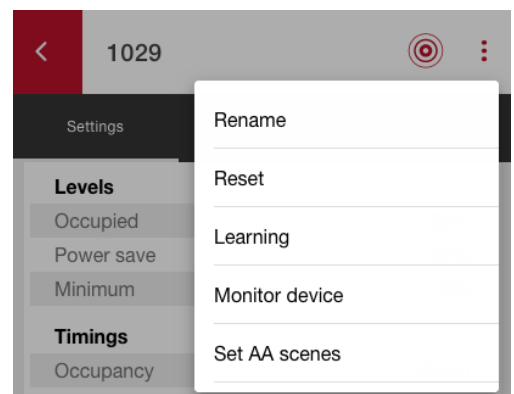


Luminaires built with the Helvar Freedom Dual Channel LED drivers can be used in two channel mode. In the most common use case, one channel is for the indirect light i.e “uplight” and the other for the direct light i.e “downlight”.

Each of two channels can be identified and controlled independently on a device, group, or network level by turning on the "Adjust individual channels" toggle (off by default). Channels can be used in Wall Panel scenes as well. You can set individual Occupied, Power Save and Minimum levels for each channel.

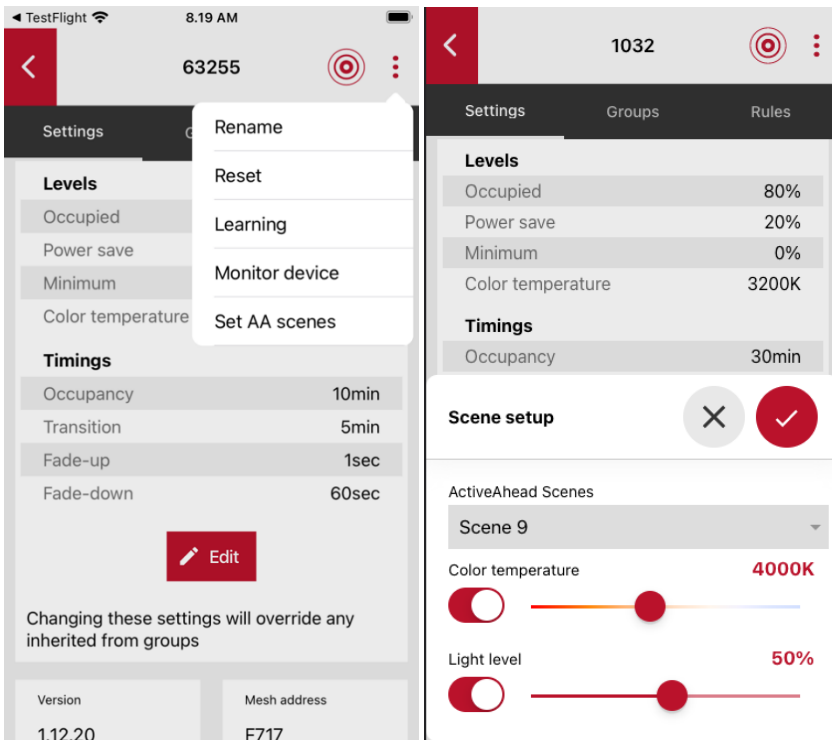
Options Menu

Three dots menu in the top right corner gives you options to rename ID / floor / area type, reset parameters / grouping / learning to factory values, enable / disable learning, remove the group, monitor device's sensors readings, or set AA scenes.



Set AA scenes

AA Scenes can be set to a device, group or network. The feature is available under the three dots menu in the device, group and network pages.



Each scene's values can be set individually. When modifying the scenes of a luminaire, they are queried first. A value can be set for light level and color temperature, or they can be set as "ignore" by disabling the toggle next to the slider.

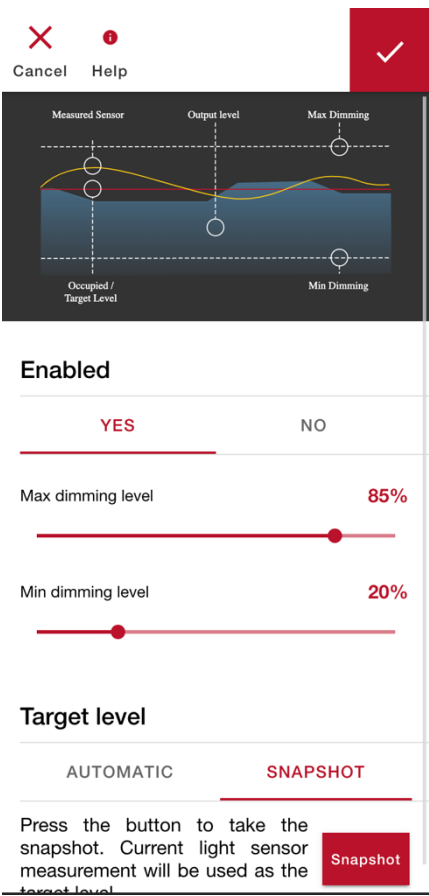
Note: AA scenes 1 – 8 are reserved for internal use, and they cannot be set.

RULES

ActiveTune

Helvar ActiveTune personal lighting solution allows space user to use their mobile device to adjust the light above their desk. ActiveTune can be configured in the Rules tab of a device. An ActiveTune sticker is required to configure ActiveTune. Separate stickers exist for intensity only and for intensity + colour temperature. Multiple devices can be paired with the same sticker but the configuration must be done one device at a time. To purchase ActiveTune stickers, contact your Helvar sales representative.

Daylight Harvesting



Purpose of the daylight harvesting (DLH) is to reduce the usage of artificial light when natural light is available. Light sensor measures the amount of light reflecting from the surface right below the sensor, so the luminaire can respond to the amount of natural light in the space by dimming the light, which helps to save energy and at the same time maintain the lighting level optimal for the user.

For DLH to work correctly the system needs a target level which should correspond to the light sensor reading when on occupied light level without daylight present. System will try to maintain that target level while on the occupied state and so can dim the light downwards when there is daylight present and upwards when more light is required.

You can find DHL options in a separate view under “Rules” tab in device, group, and network settings.

By default, target level is measured automatically within few days of space usage, but it is also possible to take a snapshot of light sensor reading and use it as the target level. Thus, you can select the conditions when you want to measure target level. When taking a snapshot, make sure that no daylight is present, the surface below the sensor is the intended one and that the lux level in the space is what you are aiming for.

Note: If target level is calculated using an automatic algorithm, the target level gets stored permanently only after some hours of active usage. Thus, do not turn off the mains power after enabling the automatic target level calculation.

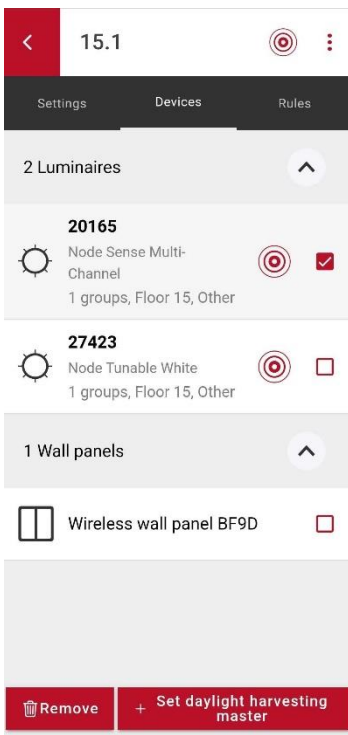
Set the occupied light output level to the wanted level first before taking a target level snapshot. If you change the occupied level, the DLH target is reset and will be recalculated automatically using the automatic algorithm or a new snapshot should be taken.

Note: Taking a snapshot should be the last step in DLH configuration process.

Minimum and maximum dimming levels are the limits in between which the light level will be kept while harvesting. Maximum dimming level is typically set to be higher than occupied light level. In case maximum dimming level is lower than occupied level the light will dim up and down freely till it reaches the maximum dimming level.

When minimum dimming level is set to 0 %, an option is shown to select whether to keep lights off when a movement is detected. The "keep off" option will not turn the light on when movement is detected when there is already enough light. Otherwise, the light will first turn on to occupied level, to see that luminaire is functional, and will then gradually dim down to 0 % if there is enough of light.

Note: In case the luminaire is in the two channels mode, DLH controls only channel 1 (typically direct light).



Daylight harvesting function is enabled by default on individual luminaires. To achieve an evenly dimmed ceiling, a group daylight harvesting master can be selected.

Firmware version: 1.0 - 1.11

Group DLH master controls the light level for the whole group when master has detected movement by itself.

Firmware version: 1.12 -

Group DLH master controls the light level for the whole group when group area is occupied (any group member has seen movement).

When Group DLH control is active, the other group members will not perform individual DLH control but instead will wait for Group DLH control commands from the Group DLH master.

Note: In case of Group DLH, always use Group Member Light Level = Occupied.

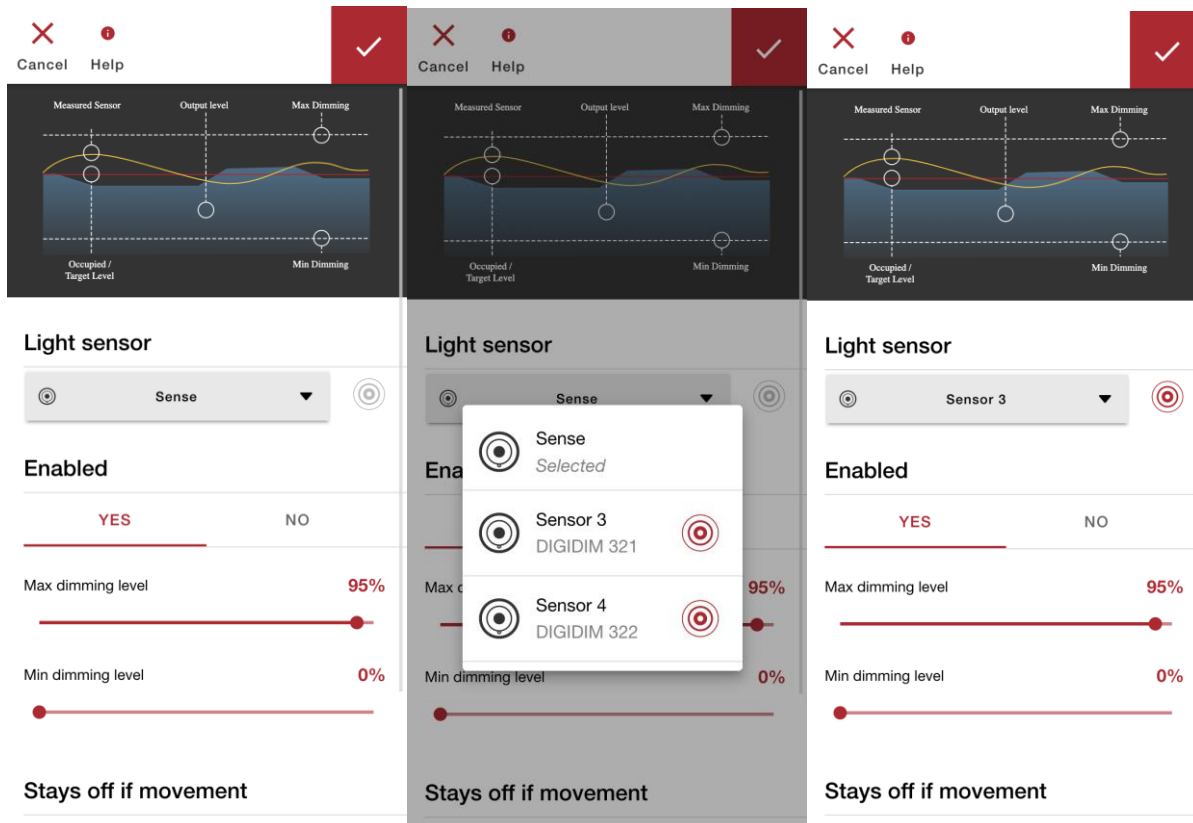
Note: In case of Group DLH, it is recommended to disable learning to avoid uneven light levels within the DLH group.

Note: Single Node must NOT be added to more than one DLH Group. In other words, single Node must not receive DLH Group control messages from two masters simultaneously. Instead, if you have for example a bigger open office area, you may group luminaires in rows and assign a separate master for every row.

Note: DLH is not supported with Wall Panel scenes or with ActiveTune control.

Daylight Harvesting with Node Advanced

The light sensor used for daylight harvesting can be changed to any connected sensor which supports the feature (5630 Sense, DIGIDIM 321 and DIGIDIM 322). Additionally, the currently selected light sensor can be identified if the device supports it.



Note: Changing the light sensor will reset current DLH target level and starts automatic target calculation.

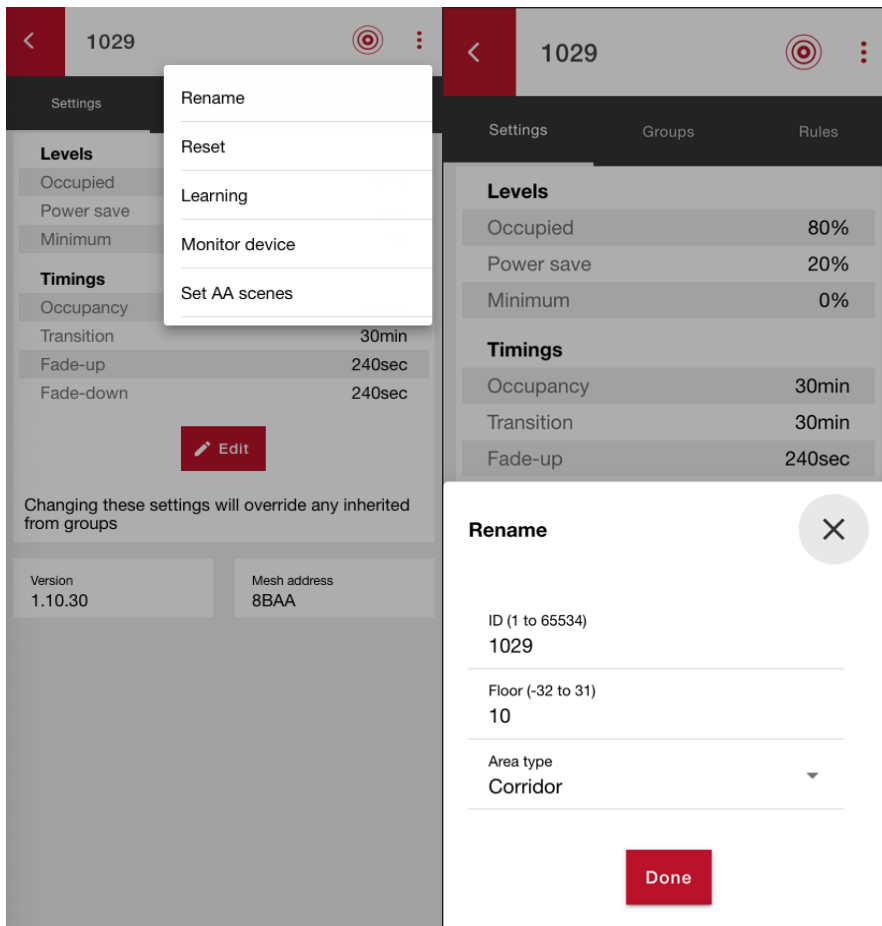
Daylight Harvesting with Node Multisensor


Node Multisensor works as a twilight switch when the built-in sensor is used as the light level source. The light level switches only between min and max without dimming. In case of group DLH this applies also to other group members when Node Multisensor is the Group DLH master. If you want gradual light harvesting (dimming) like with other ActiveAhead devices, attach and use a DIGIDIM sensor 321 / 322 as the light source.

If Node Multisensor is part of a group where the Group DLH master is capable of harvesting and dimming the light gradually also the Node Multisensor will follow the master and dim the light gradually.

CHANGING DEVICE DETAILS

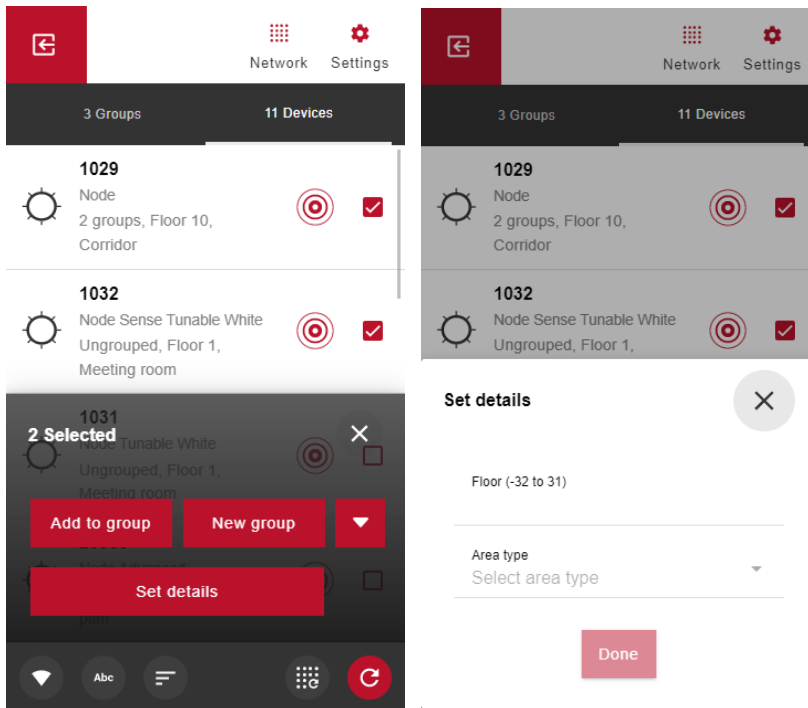
Change details of an individual device




An individual device's details can be changed via the *Rename* menu, accessible through the three dots  after opening a device.

An ID (name), floor and area type must be set. The ID (name) should be a number between 1 and 65534, and the floor between -32 and 31.

Set details in the device list



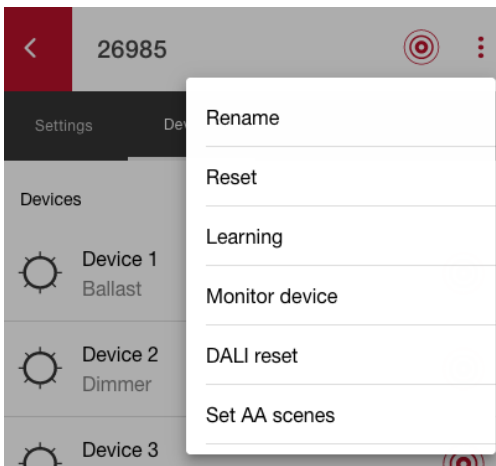
It is possible to set floor and area type for multiple devices at once. You can do this by first selecting the devices, pressing  to show the additional actions and selecting "Set details". The current area type or floor is used if the corresponding field is left empty. Device floor must be between -32 and 31. Setting area type "None" will make the device behave as if it has no area type.

Sub-devices (Node Advanced & Node Multisensor)

Node Advanced supports up to 16 *sub-devices* attached to its DALI bus (DALI devices + DIGIDIM sensors). They can be viewed, identified, and configured with the app. DALI devices and DIGIDIM sensors are found by the Node Advanced automatically only if they are in factory reset state without DALI short addresses when attached. When replacing old DALI control systems with Node Advanced, *DALI reset function* is required. Also, when adding a new DALI device or DIGIDIM sensor to the Node Advanced, re-commissioning of the parameters is required.

DALI RESET

DALI reset can be started with the AAG2 App to force Node Advanced to clear its memory, re-address and re-initialize DALI devices and DIGIDIM sensors attached to its DALI bus. This can be done through the three dots in the top-right corner of the device details screen, by selecting “DALI reset” in the menu.



When DALI reset is started, it may take some time before actual re-addressing starts. Device will erase the memory and it will start re-addressing once the memory is ready.

DALI reset can take few minutes depending on the amount of the sub-devices in the DALI bus. The Node Advanced will identify when the process is complete. If you have DIGIDIM sensors attached to the DALI bus, sensors will blink during the addressing stage.

DALI DEVICES

Supported DALI devices

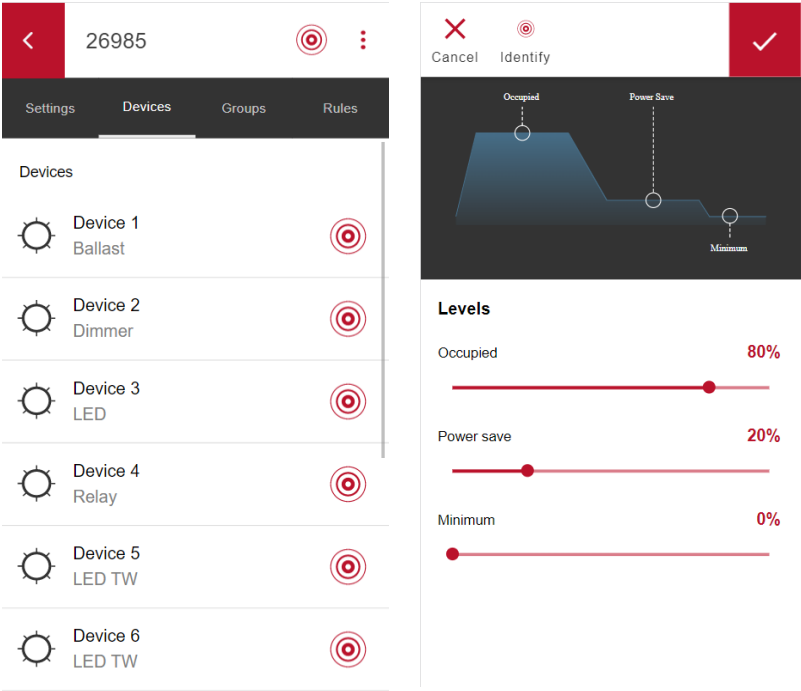
- LED drivers (DT6)
- Tunable White LED drivers (DT8)
- Legacy Ballasts (DT0)
- Dimmers (DT4)
- Relays (DT7)
- Emergency luminaires (DT1)

recognized by Node Advanced will show up under the Devices list.

Each sub-devices' identify button can be used to identify them individually.

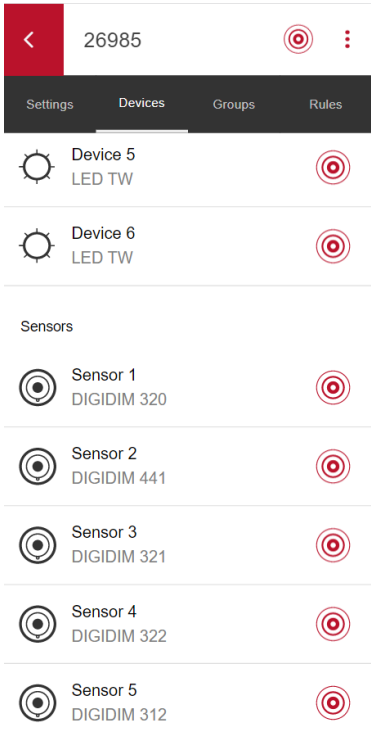
Tapping a device will open a settings view where its occupied, power save, and minimum light levels can be adjusted individually.

Note: DALI device types which are unsupported by Node Advanced will not appear in the list. Also, if there are more than 16 devices attached to the DALI bus, only 16 first devices are shown.



DIGIDIM SENSORS

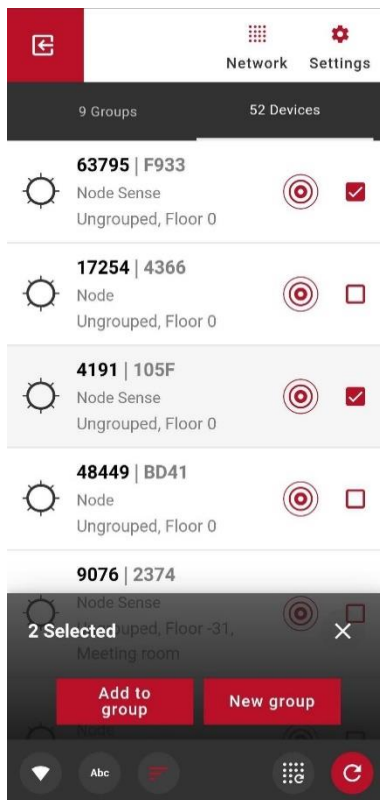
Supported DIGIDIM sensors (320, 321, 322 and 441 based sensors like 341 and 342) which are recognized by Node Advanced will show up under the sensors list. Each sensor can be identified individually if they support identification. Sensors



Grouping

Devices tab on the Main screen allows to select multiple devices and use the buttons at the bottom of the screen to either create a new group with the selected devices or add them to an existing group.

Floor, ID, area type and group member light level are required to create a new group. Floor + ID will be used as the group's unique ID by the system as well as the mobile app. Creating a group with floor + ID which match to an already existing group in the network, will add the selected devices to the existing group.

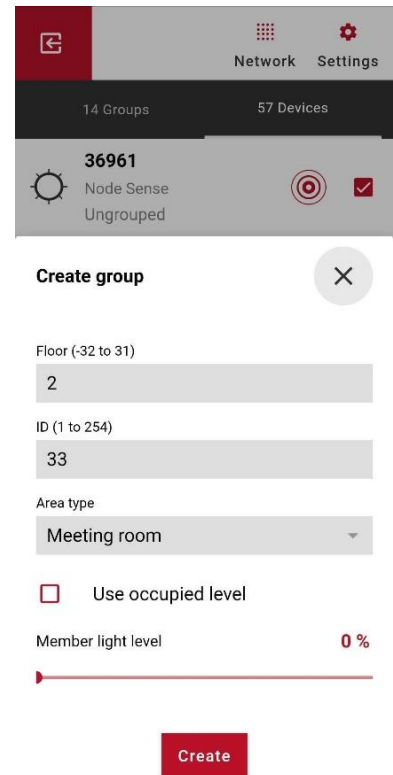


Note: You have the option to set the member light level to be the same as the occupied level. In this case, the member light level follows the occupied level of the device. Consequently, it will be different for different group members in case they have different occupied levels.

Note: The device will always follow the state which results in the highest light level. Usually, the state with the highest light level is the occupied state which is active when the device's own sensor detects movement. Consequently, group members may be on different light levels at any given point in time. An exception to this rule is the wall panel, which is always followed till the scene times out.

Tip: Setting 0 % as the value for the member light level will create a *logical group*. This group will not react to movement detections as a group, but you can use the group for other purposes, such as, setting parameters, corridor hold and wall panel.

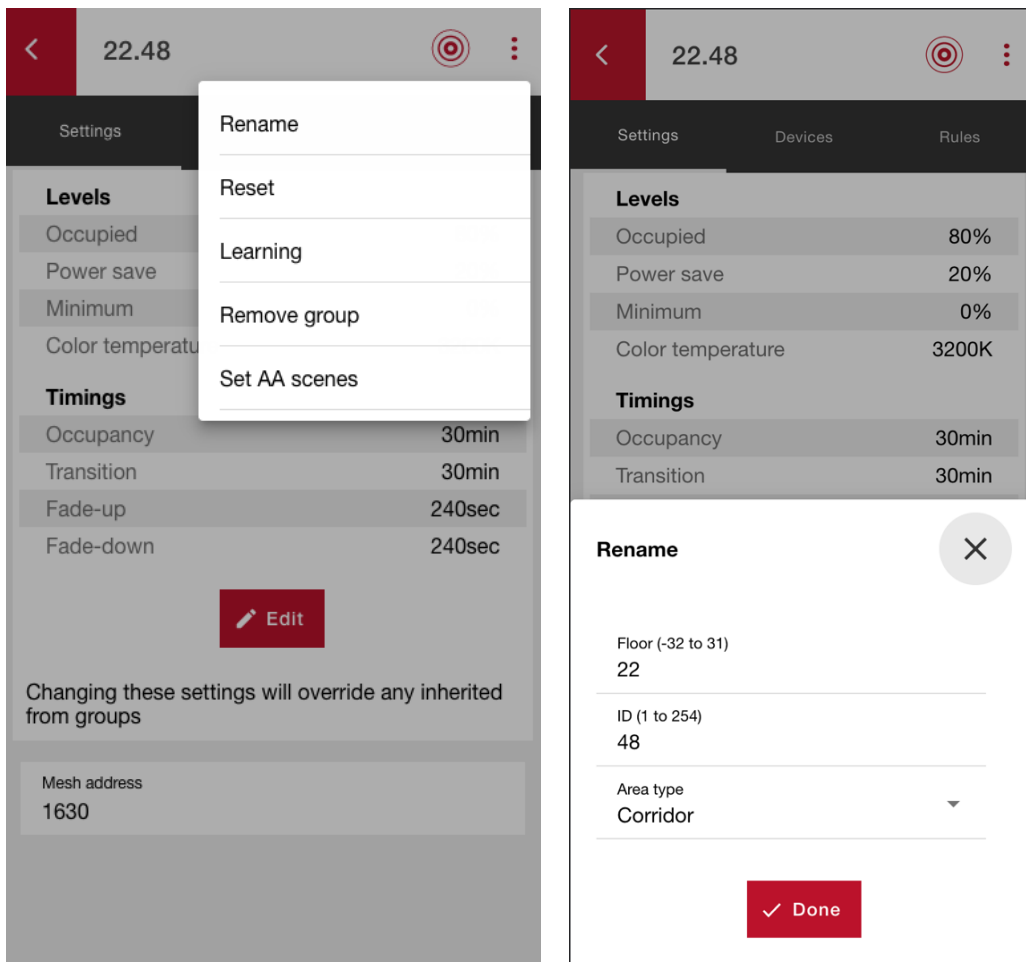
Note: After adding new devices to an existing group, previously configured wall panels and corridor holds in the




group must be reconfigured.

Note: The app prevents creating a group which the app has already discovered. In a large network, it's possible that some groups are not discovered, so you still need to pay attention not to create a group which you already have made earlier.

CHANGING GROUP DETAILS



A group's details can be changed via the Rename menu, accessible through the three dots  after opening a group.

A floor and ID must be entered. The floor should be between -32 and 31 and the ID between 1 and 254.

Note: The app prevents renaming to a group which the app has already discovered. In a large network, it's possible that some groups are not discovered so you still need to pay attention not to rename to a group which you already have made earlier.

Changing parameters via group view

The group view can be used to SET light level and timing parameters of group members with single action. It should NOT be used to check whether all group members have the same parameter values.

Note: *Group members can have different light levels and/or timings.* Parameters (light level and timings) shown in settings tab of the group view are queried from randomly selected single group member. This view does not reveal possible different parameters in between group members. Do NOT use parameters view inside group when verifying those parameters are set correctly. Instead, always check parameters in device view.

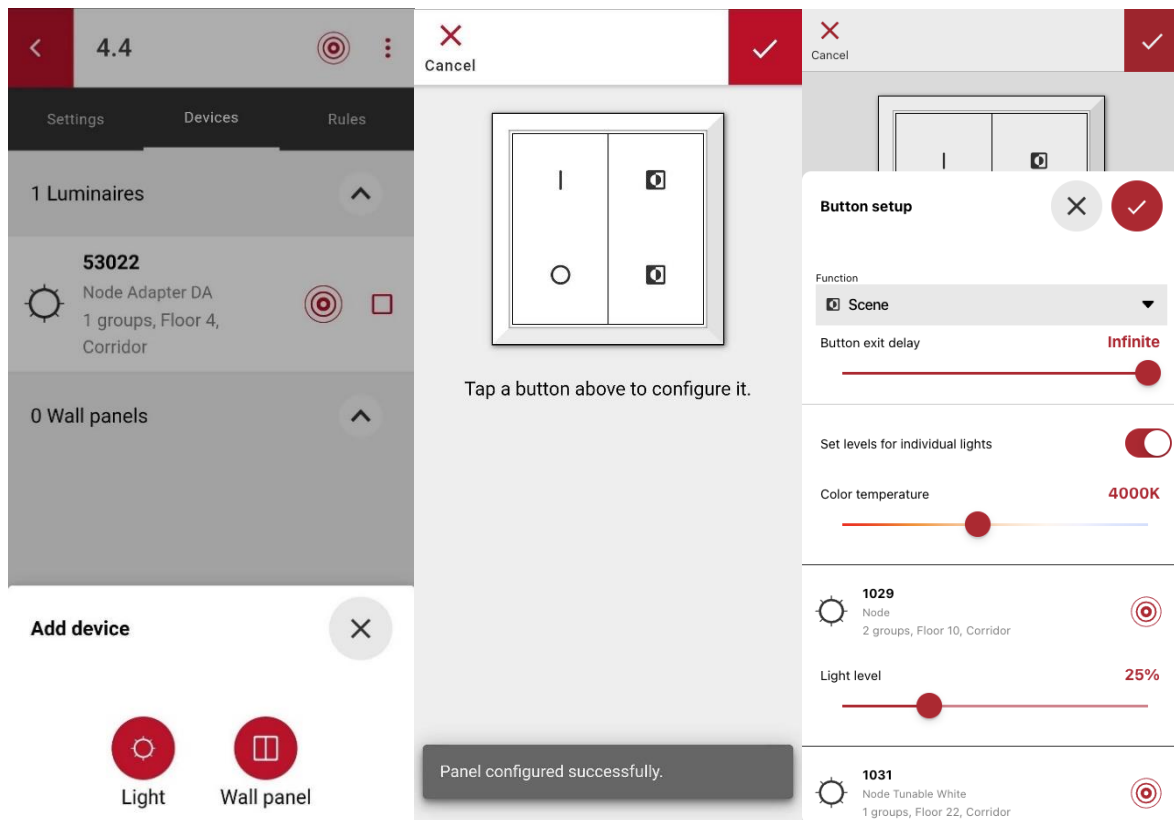
WALL PANEL

Wall panels can be added to a group. NFC is required on the mobile device to configure a panel. To add a panel to a group, click on the big red + button at the bottom of the group's Devices tab and choose "Wall panel". Then hold the back of your phone close to the panel for about two seconds. Once the wall panel has been recognised and security added to it, the app will show the existing configuration for an already configured panel or propose default button configuration for a new panel. Select a button to open the button setup and change its parameters.

Note: Always ensure that the wall panel has been correctly configured by physically pressing each of the buttons. Pressing a button first time after adding a new panel links the wall panel to the group, and therefore does not cause a reaction in the luminaires.

One group can have multiple panels configured to it. Each device can have maximum 8 groups and in total up to 8 unique wall panels.

Note: After adding new devices to the group, the existing wall panels in the group must be reconfigured.

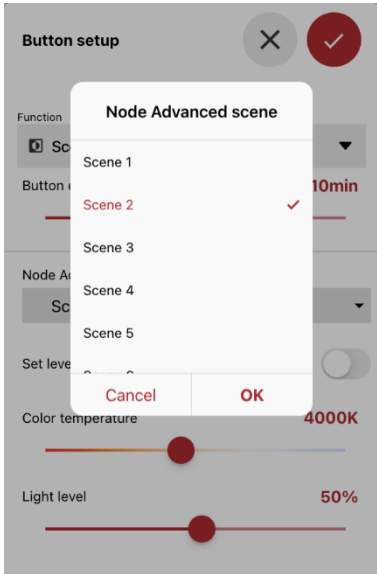


Available button types

Each button has a separate exit delay. In case movement is detected after the exit delay but during the transition timeout, lights will return to the previous scene.

- On:** *Short press* dims up light level to the configured level by using device fade-up time. *Long press* dims up light level to the configured level gradually. Colour temperature is not affected.
- Off:** *Short press* dims down light level to 0% by using device fade-up time. *Long press* dims down light level to 0% gradually. Colour temperature is not affected.
- Dim up:** Light level dims up to 100% gradually. Colour temperature is not affected.
- Dim down:** Light level dims down to 0% gradually. Colour temperature is not affected.
- Occupied:** Return to normal light automation by activating Occupied state.

Note: Pressing Occupied button causes no action when *Absence Detection* is enabled, and therefore should not be configured when planning to use Absence Detection. Occupied button type is available only from firmware version 1.10 onwards.
- No function:** No action is taken when pressing the button.
- Scene:** Recalls a scene with the configured light levels and colour temperature by using device fade-up time. Scenes can have individual light levels, but colour temperature is common to all devices.



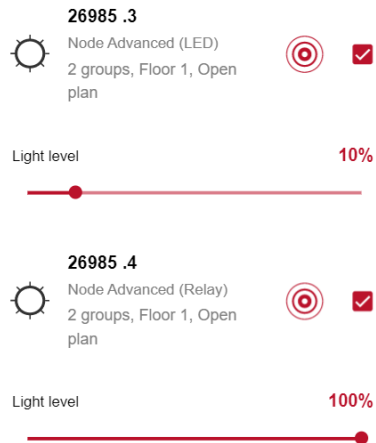
Note: Node Advanced requires selecting a DALI scene to be used with the Scene button. **DALI scenes are device specific, not button specific**, which means that light level and colour temperature modifications apply also to other buttons which have the same DALI scene configured.



Note: When loading a Scene, the light levels are queried from each device. It is possible that some of the light level responses are not received if there are many devices configured with the wall panel. The devices which have not responded are automatically assigned default light levels and highlighted as below when "Set individual lights" is toggled on.

Wall Panel for Node Advanced and Node Multisensor

When used with Node Advanced, the wall panel can be configured for each DALI device separately. Each device's checkbox defines if the device should react to the button press or not. The light level slider defines the individual light level.



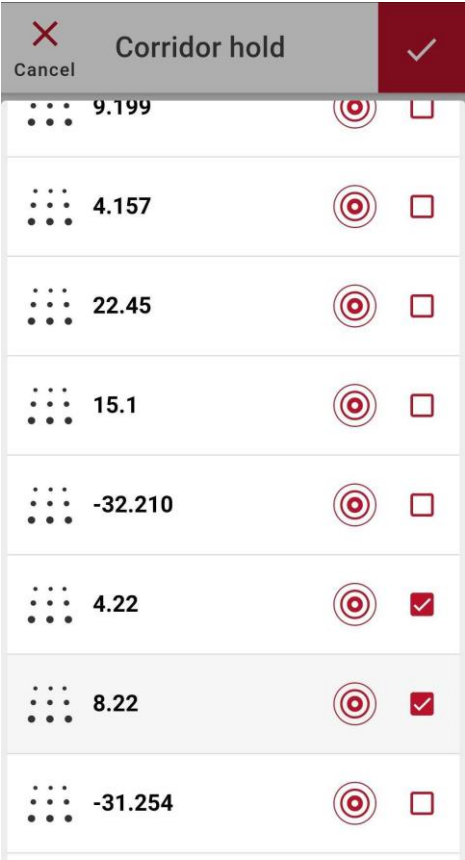
CORRIDOR HOLD

With the corridor hold function you can set a group to follow another group. An example use case for the feature is to keep the corridor lights on while there are people still in a meeting room. Another example use case is to keep the first row of lights next to the window or near an exit on while there is someone in the open plan office.

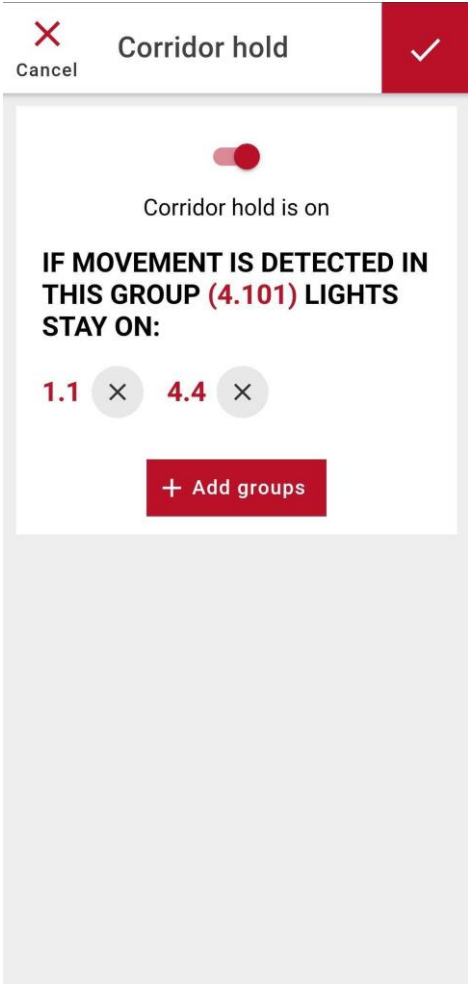
Corridor hold is set in the Rules tab of the group you want to be followed, for example, meeting room group's Rules tab. You can add one or multiple groups from the "Select groups" list. The "Select groups" list will show all the nearby groups which the app has found earlier; meaning, the ones listed also on the main Groups tab.

In the corridor hold state, group members will use their power save level when the followed group is in occupied state. In case other states are also active (e.g., movement in the corridor), the devices will use the state which offers the highest light output level.

Note: The corridor hold is available between groups only. A group can have just one member in it. Thus, in case of having one device which need to be followed or need to follow, create a group with that one device before setting up corridor hold.



✓ Done

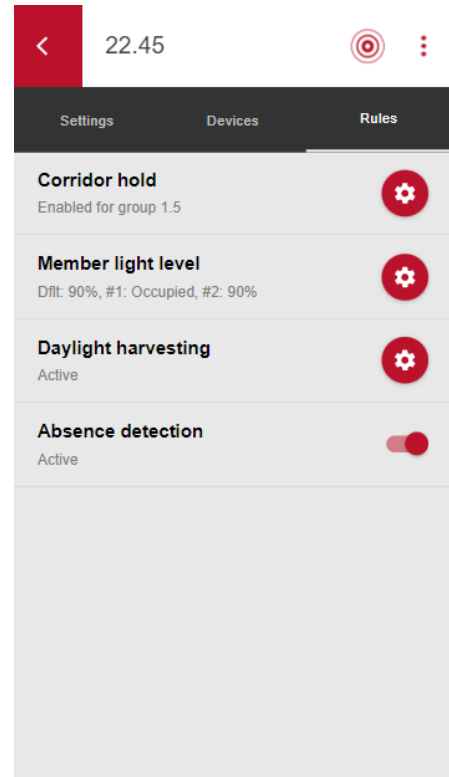


ABSENCE DETECTION

This feature maximises energy savings by turning lights on only when actively turning lights on using the wall panel. Sensors are used to keep lights on while the space is occupied. Absence is detected if sensors have not detected movement within occupied timeout time. When the group is on off state, detected movement does not trigger lights to switch on.

Absence detection can be toggled in the rules tab of the group view when at least one wall panel is configured. When absence detection is activated, luminaires of the group change their state and light level to unoccupied immediately.

Note: For Node and Node Sense, the absence detection feature is supported from 1.5 onwards and is reported as inactive if all group members have firmware version 1.4 or lower. For Node Advanced, absence detection is supported from 1.12 onwards.



Reset

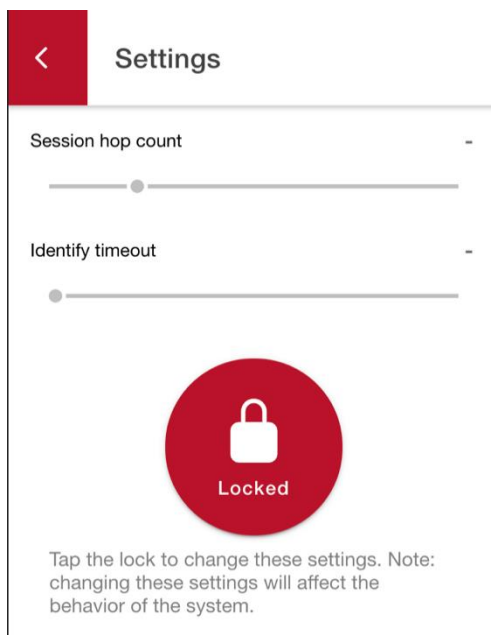
You may choose to perform reset on different levels: a device, group, or the whole network. You may choose whether to reset everything or a selection of configurations:

- 1) Parameters
- 2) Groups
- 3) Learning

Resetting learning will remove all the self-learning records and the learning process will start from the beginning. This option is useful when for example you have renovated the space recently and you want the device(s) to learn faster how the new space will be used. Note that the device(s) will re-learn anyway, since learning is a continuous process, thus resetting the learnings is not typically necessary.

Note: in case the space should not use self-learning, the correct option is to disable learning for the device or group in question.

Network Settings



“Session hop count” defines how many hops messages sent by your proxy Node travel in the mesh network. You can increase the session hop count if you want to make sure that the whole network gets the command you send. This setting is temporary and will be reset when you disconnect.

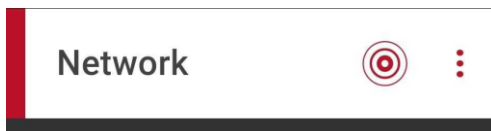
“Identify timeout” is the setting for controlling how long luminaires will blink when you use identification function. This setting persists between sessions, but will be reset when the application is closed.


Network Level Operations

App allows you to manipulate the whole network. You can access the network from the Main screen top header when viewing groups or devices lists.

Note: When you send commands for the whole network it depends on the size of the network whether all devices will get the command or not. Consequently, it is recommended to check that the action was received by all. This can be done by applying the change again from a different location and inspecting visually that the command was received (luminaires blink when they get a command). You may change the identification (blinking) time in the Main screen Settings to make the identification last longer to inspect a bigger area on one go.

WALK TEST



You can find walk test under Network page three dots menu . Walk test will force the devices to go to unoccupied state using the configured fade down time. In case movement is detected, the devices will immediately react to it and fade up to occupied light level. Consequently, walk test requires the space to be empty, so no one else would move there and disturb your test process.

Tip: Set shorter fade down time to get devices dim faster.

SECURITY

In the Network page Security tab, you can set a PIN code to the network to prevent actions from users not knowing the PIN code. This can be also used to separate different areas. By default, the devices are open to connections. When PIN code is set, the mobile app will request for it when connecting to such a device.

Note: Once PIN code is set, the devices will stay open for configuration for five minutes. This timeout is restarted on every action; such as, identify or configuration command, the device receives. Thus, to test the security after setting a PIN, please disconnect the mobile apps from the network and wait for over five minutes before reconnecting. The open network command will open the devices with the given PIN code similarly for five minutes.

Note: In case part of the network has a PIN code and the other part does not, only the unprotected (no PIN) devices and open devices (unlocked) will accept commands you send through the app. Identification and parameter reading still works for all the devices. Using different PIN codes in different areas allow you to isolate specific areas from unwanted parameter changes. PIN code does not affect the learning that the devices do.

Tip: It is recommended to store the set PIN code to a secure place so that people who should have access to modify the system settings can find the PIN code. See the Appendix 1 for more an example printout.

The function can be enabled for a group in the Rules tab when the group has at least one wall panel in it.

Emergency lighting (Node Advanced & Node Multisensor)

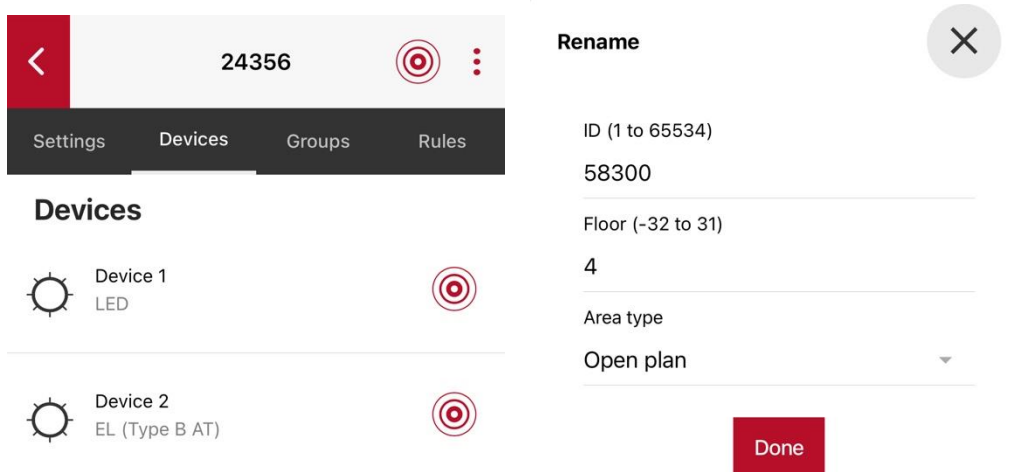
Node Advanced based Nodes (Node Advanced, Node Multisensor) support DALI device type 1 (DT1) emergency lighting devices. All DT1 self-contained emergency device types: A, B, C, and D are supported. The required function and duration tests can be run with Helvar ActiveAhead mobile application. Each Node can have multiple emergency devices connected to it while following the DALI line limits of the Node type in question.

BEFORE RUNNING ANY EMERGENCY TESTS

Before running any emergency tests, ensure that

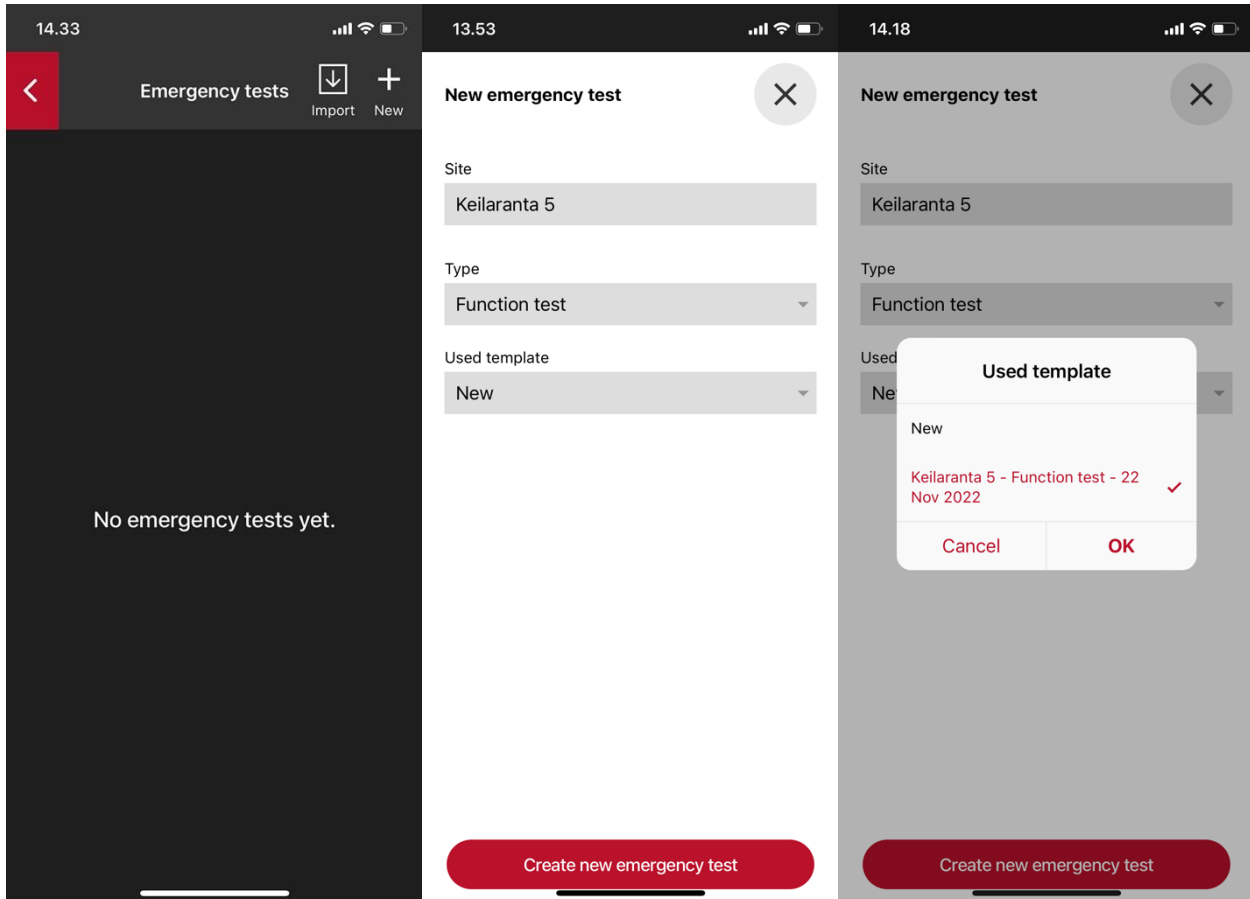
1. All DALI devices are connected to the DALI line on the Node Advanced.
2. The installed devices are visible in *Connect -> Device List -> Device Details -> Devices*
3. Appropriate floor and area type is set for the Node Advanced in the *Device Details -> Rename*

IMPORTANT: During testing new devices must not be connected nor DALI reset started on the Node Advanced under test.



CREATE A NEW TEST & IMPORT A TEST

Tap *Emergency tests* in the “Home” view to see the existing emergency tests in the “*Emergency tests list*” view. The tests are ordered by showing the most recent test first. If you want to continue from a test which someone else started, select “Import”. The same test can be imported only once.



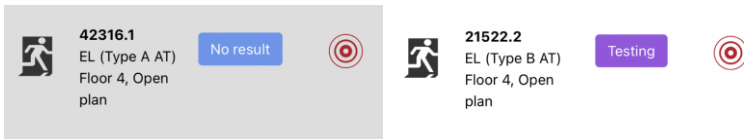
Select “New.” if you want to create a new test. Write the site name and select the test type (function or duration). Next, choose a template if you have previously completed tests from the same site. This is how all emergency devices, which were found during the previous test, are transferred from the template to the new test. We recommended to use the most recent completed test as the template to ensure that every device in the site gets tested. Finally, press “Start a new emergency test”.

RUNNING EMERGENCY TESTS

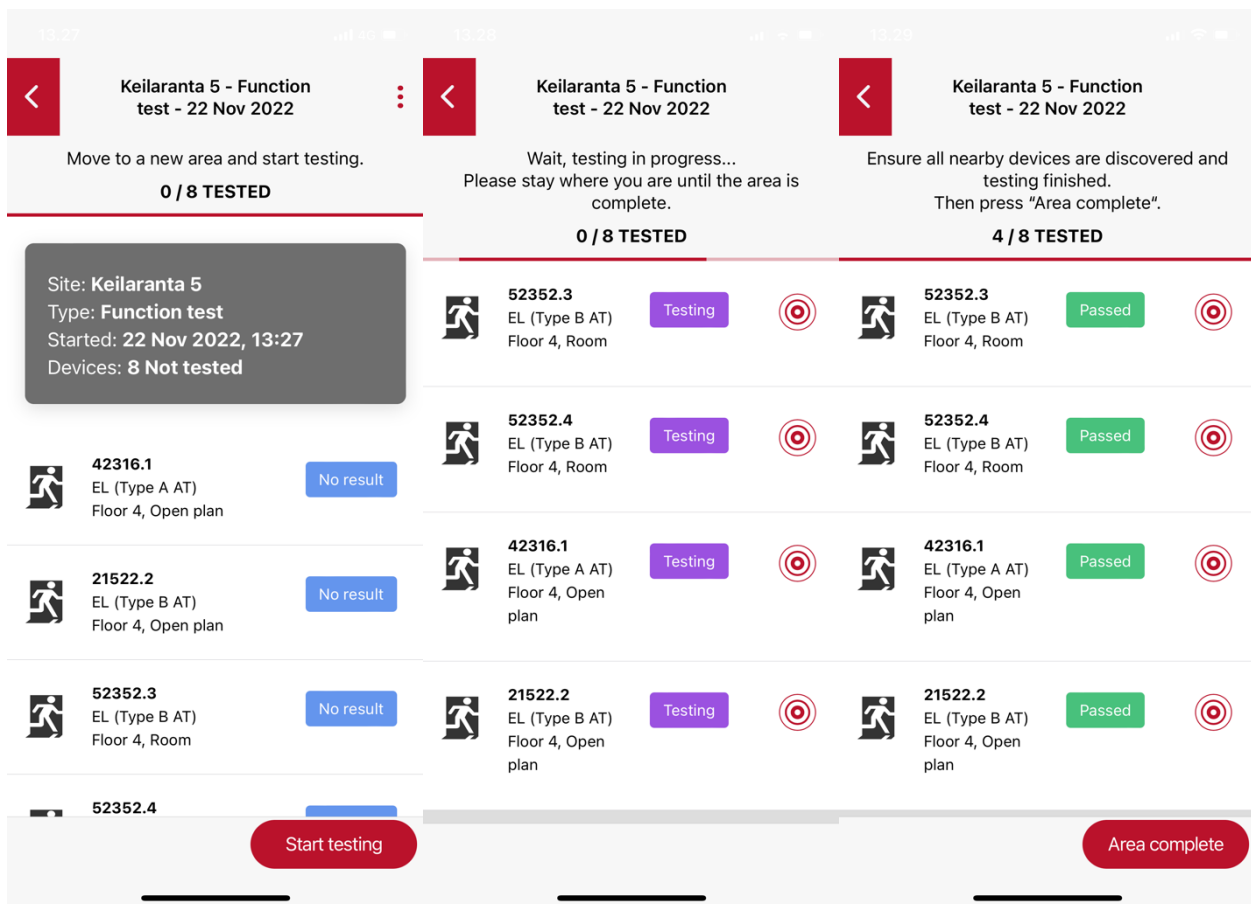
Press “Start testing” after creating a new test. The app starts scanning and connects to the nearest node, *proxy node*, in the ActiveAhead network.

Function test

The process for running the function tests is partly automated: the app will handle the work for starting the tests and gathering the results for all **nearby** devices. After starting testing, please wait until the app notifies you that the current area is ready and identify all listed devices to ensure no nearby device is missing. The non-discovered devices are marked with a grey background.



Finally, press “Area complete”, move to a new area and press “Continue”. Repeat the process until all devices in the site have been tested.



Note: Always keep the application at foreground during testing. Avoid moving since it may break the connection to the proxy node.

Note: Do not close the app during testing (progress bar moving and identify buttons visible) to avoid losing data.

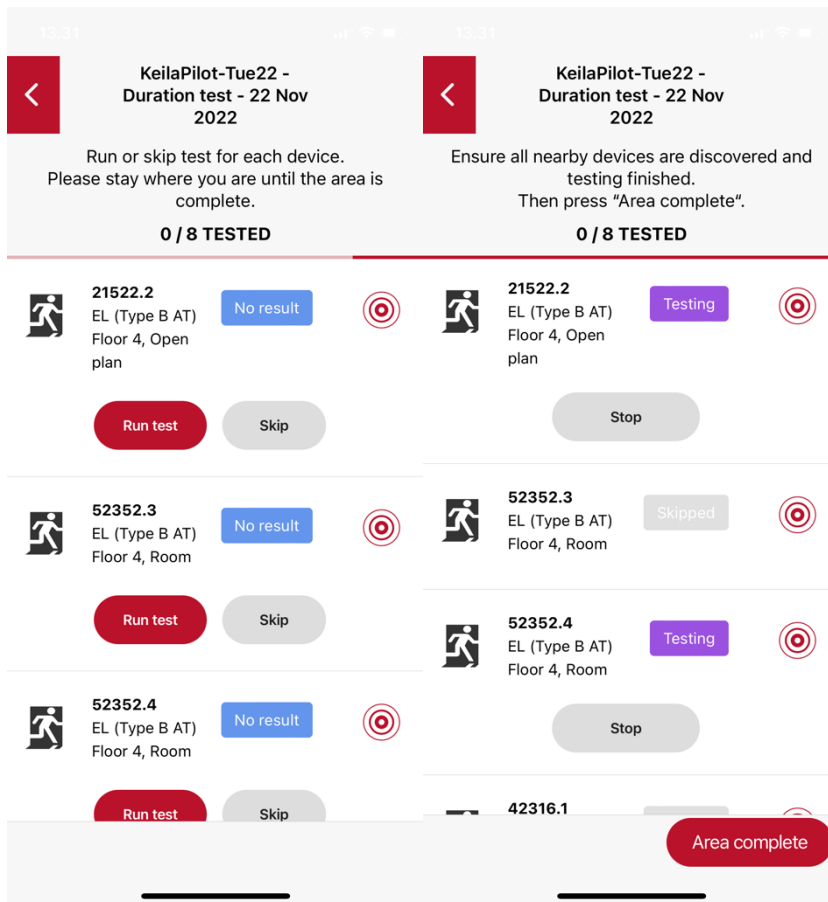
Duration test

In contrast to function test, the app does not start the duration tests automatically since the duration test drains the battery of the device. Running the duration test for all the devices at the same time could cause the whole building to be dark in case of a real emergency.

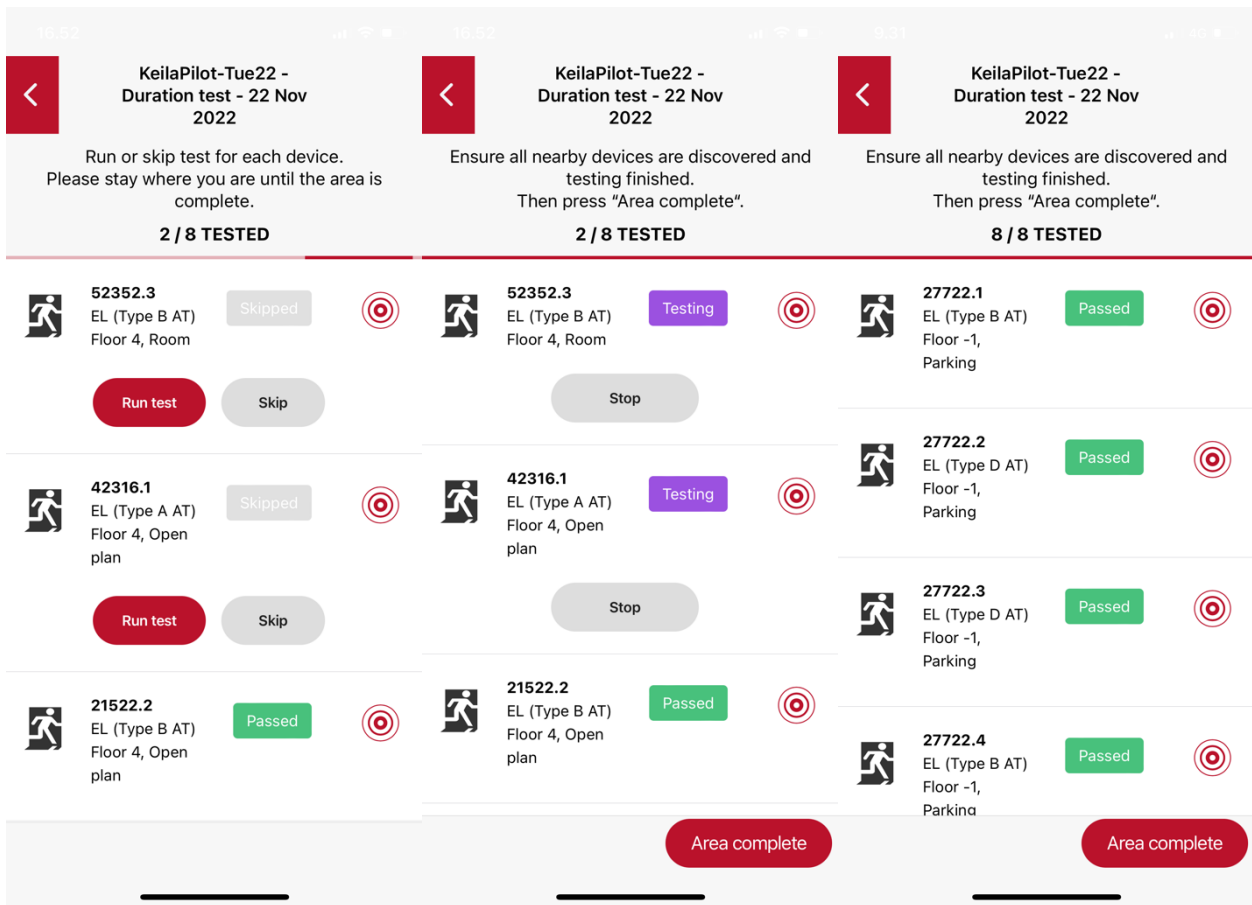
After starting testing, you will need to choose to either “Run” or “Skip” the test for each device. Select “Run” for the devices which you want to test now. Select “Skip” if you want skip the duration test. Please make sure that you will not run the test for more than half of the devices on the site simultaneously.

After you have either started or skipped the test for all **nearby** devices, the app notifies you that current area is ready. Ensure that all **nearby** devices are discovered and press “Area complete”. Then, proceed to the next area.

After the duration tests have been started the App will show status “Testing” until tests are finished even if the app is not connected to the ActiveAhead network. Usually, the duration tests should not run for more than 3 hours but will take longer if the device battery was not full when starting the test.



When the tests have completed, you need to collect the results. To do that, use the same locations where you have started the tests if possible. Select the ongoing test from the “*Emergency tests list*” and press “Continue.” The app will automatically fetch the results for the nearby devices which have finished the test, but again you need to take care of starting the test for devices which were previously skipped.

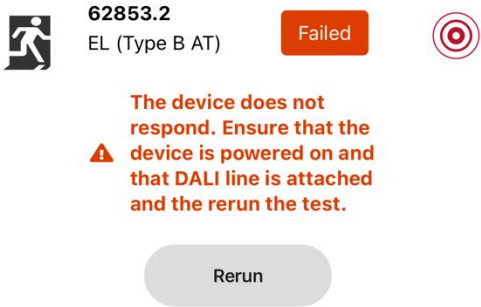


After the tests have run for the remaining devices, you will need to return to the site one final time to gather the results. At this point, all devices should be now tested.

Note: If you need to perform function test and duration test during the same site visit, always run the function tests first. Otherwise, function tests will not finish until the duration tests have been completed.

Handling failures

In case of a failure, read through the error message, solve the issue and rerun the test. Note that you will need to create and run a new test if the whole fitting needs to be replaced.



The table below lists possible reasons for the failure. The same table can be found from the generated emergency report.

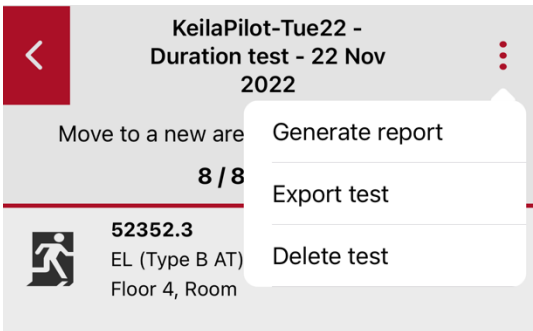
FAILURE RESOLUTION INFORMATION

The EL device does not respond.	Ensure that the EL device is powered on and that DALI line is attached and then rerun the test.
Control Node was powered off during testing	Control Node was powered off during testing and test results cannot be verified. Please rerun the test.
The emergency device is faulty.	Replace the emergency fitting, perform DALI reset with the control Node, create a new emergency test and run it.
There was not enough charge in the battery to complete the test.	Replace the battery, wait until the battery has been charged and then rerun the test.
The battery has failed.	Replace the battery, wait until the battery has been charged and then rerun the test.
The test was not able to complete due to the lamp not drawing any power from the battery.	Replace or reconnect the lamp and rerun the test.
The function/duration test has been running more than 48h.	Possible explanations: The battery charge level is low - Insufficient battery charge - Device is not in normal mode, e.g. Emergency, Rest, Inhibit. The test will be run automatically by the control Node whenever possible.
Unable to determine the failure.	Check the device and then rerun the test.

GENERATE A REPORT, EXPORT AND DELETE A TEST

After you have finished testing on a site, you can generate and share the test PDF report from *Home* -> *Emergency tests* -> *Open test* -> *3 dots* -> *Generate report*. We recommend having a specific place, for example a cloud storage service, for storing the reports since the tests will be removed if you uninstall the app from the mobile device.

The test can be exported and removed from the same view.



AFTER INSTALLING AND CONFIGURING THE SYSTEM

After the installation is ready and configurations have been done, we recommend running the function test to create a template for the future emergency tests on this site. Template can be exported and shared with the people who will run the tests regularly, such as the facility managers.

First run after the installation (Commissioning engineer)

1. Create a new emergency test run.
2. Run a function test and walk through each area on the site. Ensure all installed devices are discovered during testing and pass the test.
3. Export the test and send it to Facility Manager.

Maintenance run (Facility Manager)

1. Create a new emergency test. Use the previous test as a template to ensure all the devices in the site will be discovered and get tested.
2. Run the test. In the case of a failure, resolve the issue if possible and rerun the test.
3. Proceed through the site until every emergency device has been tested.
4. Finally, generate the test report and export it to a place you see fit.

EMERGENCY TESTING FAQ

Why can I not run the tests for all the devices from the same place?

The large installations may have gaps in the network in which case it is unlikely that all the emergency devices can be reached from a single location. However, running the tests from one location for a small site could be possible.

I needed to connect new emergency devices to a Node Advanced. Can I still use the previous test run as a template?

Yes. First, run DALI reset. Then ensure that the new devices are visible in *Connect -> Device List -> Device Details -> Devices*. Finally, create a new test using the previous test as a template. The app will query the new emergency devices when the Node Advanced is discovered for the first time during the test.

Can someone else fetch the results for a duration test I started?

Yes. Export and share the test with the person who is going to visit the site and fetch the results. This person needs to import the test and then they can fetch the results.

Why do I always need to physically be present at the site?

Remote scheduled emergency tests are available via the *Helvar Insights* cloud solution. If the site is not connected to the Helvar Insights, the tests must be run locally using the mobile app.

The function test has been running more than 5 minutes. What do I do?

Ensure that the device under test has mains power on. It is also possible that the device is already running a duration test in which case you need to wait until the current test has finished. The function test will run when there is enough charge in the battery. Node Advanced will clear potential inhibit and rest modes automatically.


The duration test has been running more than 48 hours. What do I do?

Ensure that the device under test has mains power on. Duration test can be performed only when the device battery is fully charged. Node Advanced will clear potential inhibit and rest modes automatically.

Appendix 1

Whenever a security PIN code is set, it is recommended to store the PIN code to a secure place where trusted people have access to it. Such a place may be with the facility manager or in an electrical cabinet. The below sheets can be printed out and used to store the relevant information.

Lighting in this premise is controlled by
Helvar ActiveAhead™ lighting control solution



CONFIGURED BY (COMPANY):

DATE:

SECURITY PIN CODE:

Keilaranta 5
FI-02150 Espoo
Finland
helvar.com

Lighting in this premise is controlled by
Helvar ActiveAhead™ lighting control solution

Helvar

CONFIGURED BY (COMPANY):

DATE:

SECURITY PIN CODE:

Keilaranta 5
FI-02150 Espoo
Finland
helvar.com