# User Guide:
## Operation of ActiveAhead® Mobile Application

The ActiveAhead® mobile application allows you to do the optional configuration of an ActiveAhead solution. To use this application you must have an approved mobile device running Android (version 4.4 onwards and 6.0 onwards with NFC for wall panel configuration) or iOS (iPhone 4s / iPad 3rd gen onwards) equipped with Bluetooth low energy (list of tested and approved devices can be found on the application store (Google Play/App Store) description) and one or multiple devices supporting the ActiveAhead solution. With the mobile application you can configure a single device, group of devices or the network of devices.

The application includes the following features:

- Light levels and daylight harvesting adjustments
- Timeouts and fade time adjustment
- Preset parameters
  - Predefined eco and comfort modes
  - Add, edit and remove presets
- Factory reset
- Grouping
  - Create a new group
  - Add a device to a group
  - Remove a device from a group
  - Delete a group
  - Group member light level
  - Corridor hold
  - Remove corridor hold
- Security
- Wall panel configuration
  - Configure panel (requires an Android version 6.0 onwards device with NFC support)
  - Configure devices to work with the panel
  - Absence detection
  - Panel security (requires an Android version 6.0 onwards device with NFC support)

# Contents

# Features View (Main Screen)

Choose whether you want to configure devices, change presets or configure a wall panel.

The Presets option will allow you to add, modify and delete presets before connecting to a device. All the features of the Wall panel option are only available in the devices with NFC support running Android operating system.

The app will use the language of the phone. If the app is not available in that language, the app will use the default language which is English. To manually set the language tap on the globe icon at the bottom left corner.

App version number can be found from the About view which is accessible via the 🛈 icon in the bottom right corner.

**Features**

**Configure**
Connect to a device or device group and configure it

**Presets**
Add, remove and modify presets before connecting to a device or device group

**Wall panel**
Configure a wall panel to control devices
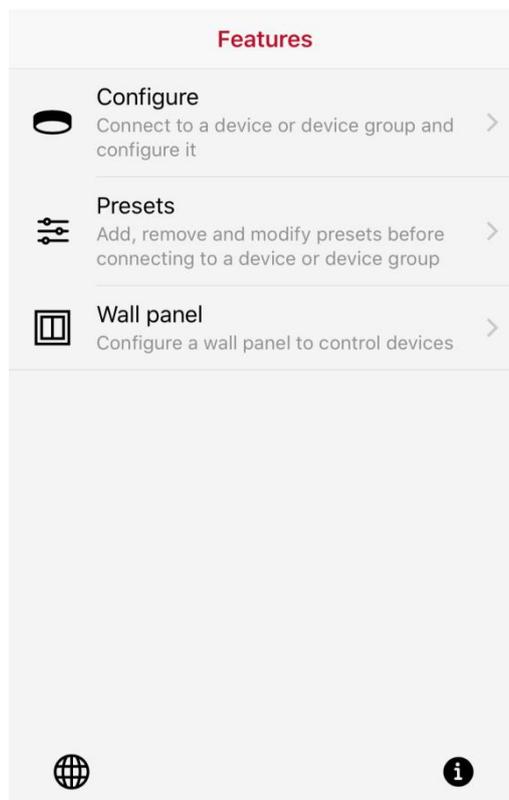
## Connecting to a device

Before you can configure a device, device group or a network of devices you will need to connect to it. The connect process is used in multiple functions in the app and is always fundamentally the same.

In case your mobile device is too far away from an ActiveAhead device, you will see a message stating that you need to move your device closer to the device to connect. Once your mobile device is close enough to the ActiveAhead device, you get to choose which device or device group you want to select.

Depending on the firmware of the ActiveAhead device the identification of a device will happen either when the device is selected from the Next list (the firmware v1.5 and onwards) or upon a successful connection (prior firmware v1.5). Once connected to a device the Connect view will list the options available for the device. Those options are the device itself, the possible groups the device has as well as the network. Choosing a group will identify the whole group. Choosing the device or the network will only identify the connected device. The firmware version of the connected device is shown at the bottom of the view. By pressing the "Select" button you will select the highlighted option.

In the Connect view, the ID of the currently connected device is shown as the first device on the "Previous" list. The "Next" list shows the other nearby devices in the order it considers to be the next closest based on the received signal strengths. You can connect to a device on the "Next" or "Previous" lists by selecting the ID from the list. The "Show all" link at the bottom of the "Next" and "Previous" lists will indicate the total number of nearby devices on the "Next" and "Previous" lists. It will become visible when all of the devices do not fit to the list on the view. Selecting that link will open a list view from which you can select the device you want to try connecting to.

The refresh icon in the middle of the view will allow you to do a fresh scan of nearby devices. It will empty the "Next" list and create it again. The devices on the "Previous" list will stay on that list. Note that sometimes you may need to refresh a couple of times to find a device.

**Tip:** When you configure multiple devices in a row, always move close to the device you want to configure next and then press the refresh icon. This will allow you to find the right device faster as it will more likely be one of the devices at the top of the "Next" list.
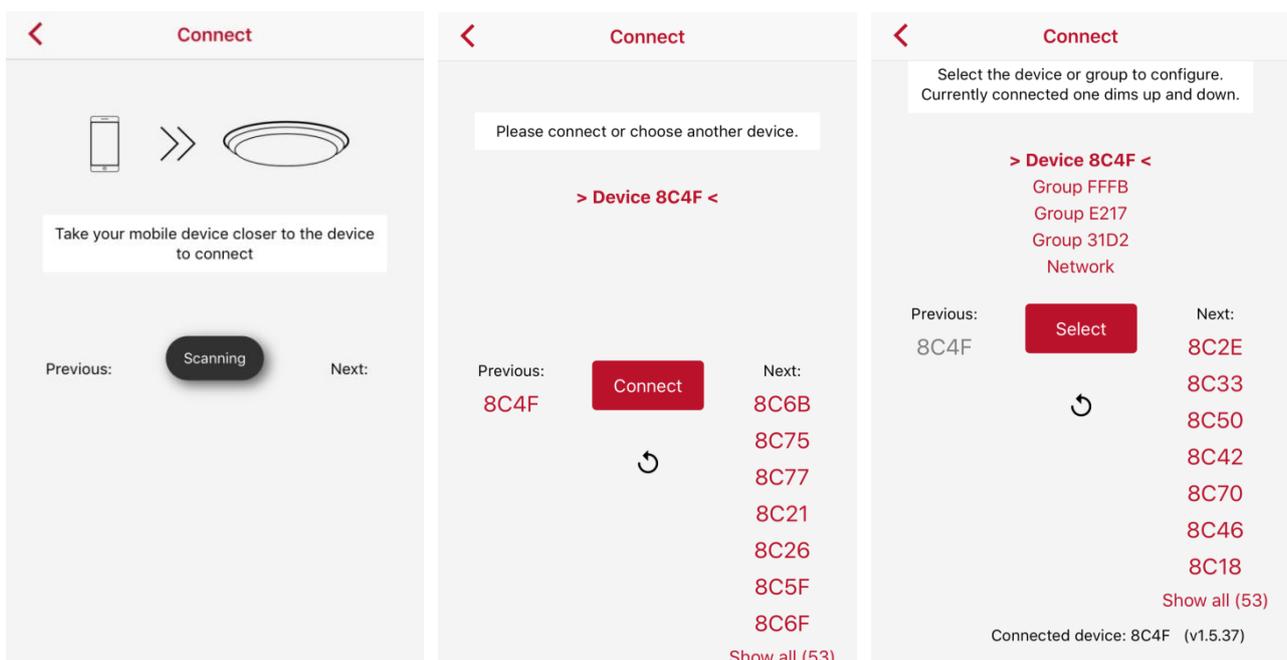
The ID of the currently connected device or group is shown at the bottom of the page in this and the views that follow. In the views that follow, you will have next to the ID an "Identify" icon ⊕ which can be pressed to make the device or device group dim down and up once.

## Configuring a device

When choosing "Configure" from the main screen, you can choose to configure light levels, timeouts, apply presets, do factory reset and manage security for the connected device, group or network. Group management is available only when connected to a group.
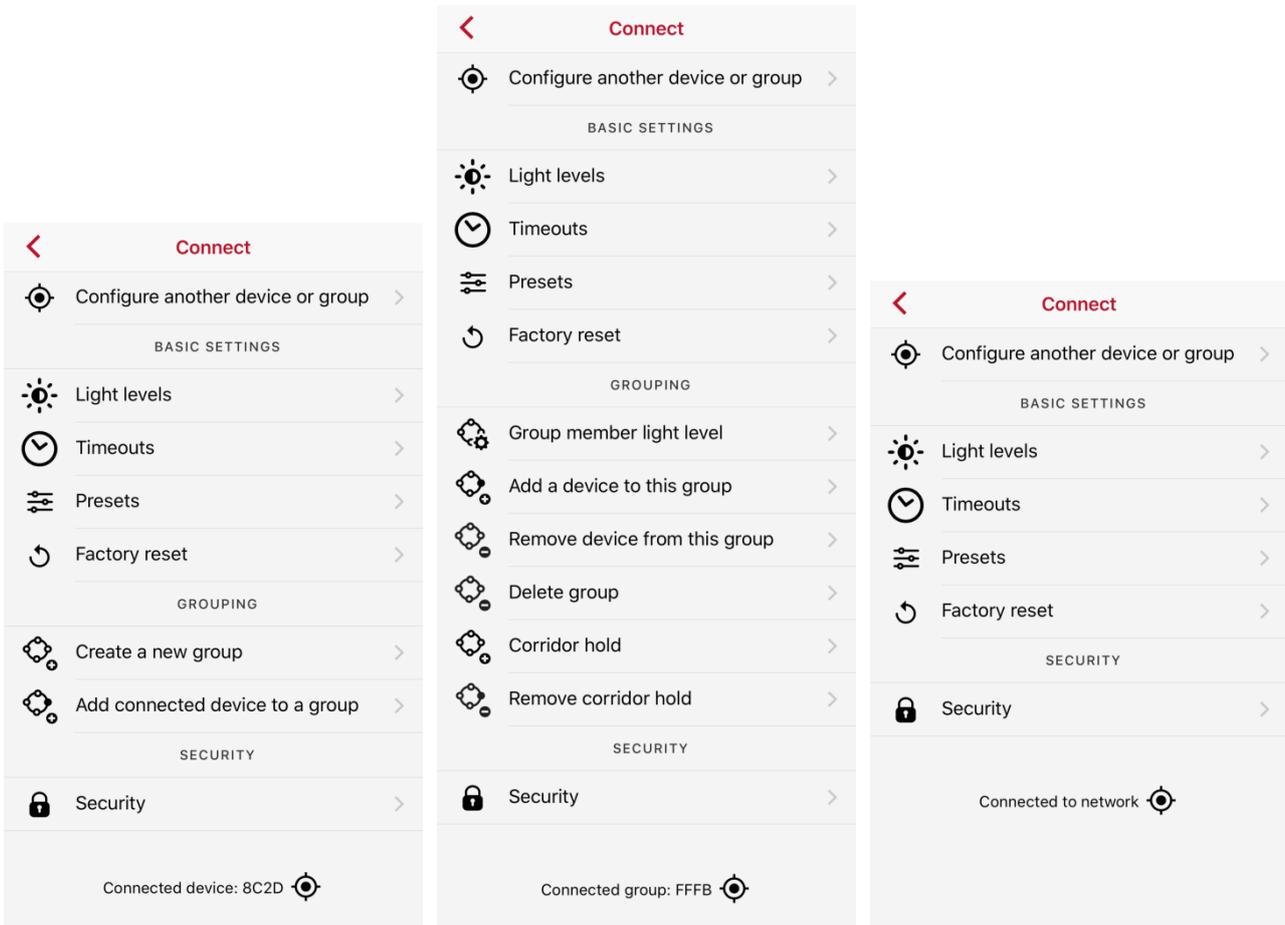


Configure screen when connected to a device, group and network

## LIGHT LEVELS AND TIMEOUTS

In these views you can adjust the light levels, daylight harvesting as well as timeouts and fade times. The below picture describes the used terminology.
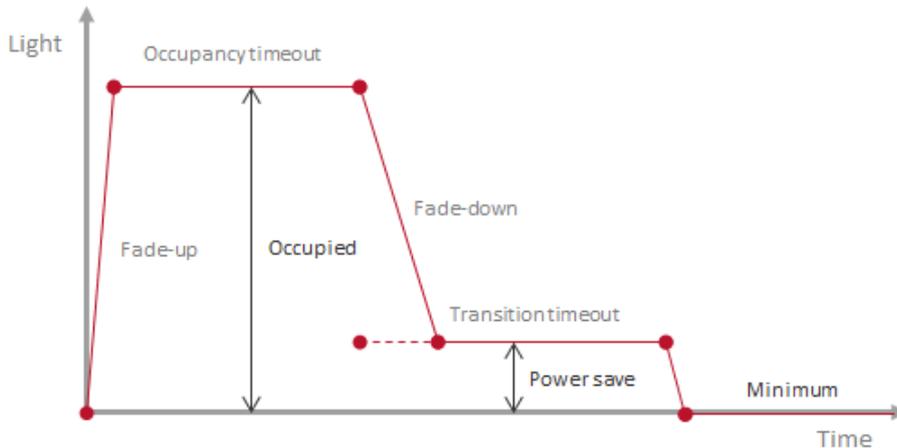


**Note**: Daylight harvesting and constant light reference values are linked to the occupied light level. When the occupied light level is changed with the mobile app the device will take a snapshot light level reference value for daylight harvesting. The device will try to keep that target level and will go over the set maximum light level if needed to reach the target value. From the ActiveAhead firmware v1.5 onwards the maximum daylight harvesting dimming level is set to be +15 percentage points on top of the occupied light level. In the earlier firmware versions the maximum is always 100 %.

**Tip:** If you want to use a lux meter when setting the occupied light level and thus the daylight harvesting reference value, do not stand below the sensor when you set the light levels. Your head and clothes may affect the detected light level value and the reference value may be set too high or low. Instead measure the lux level with a meter and then step back before changing the occupied light level value. Then you may measure the lux value again and repeat the steps again if needed.
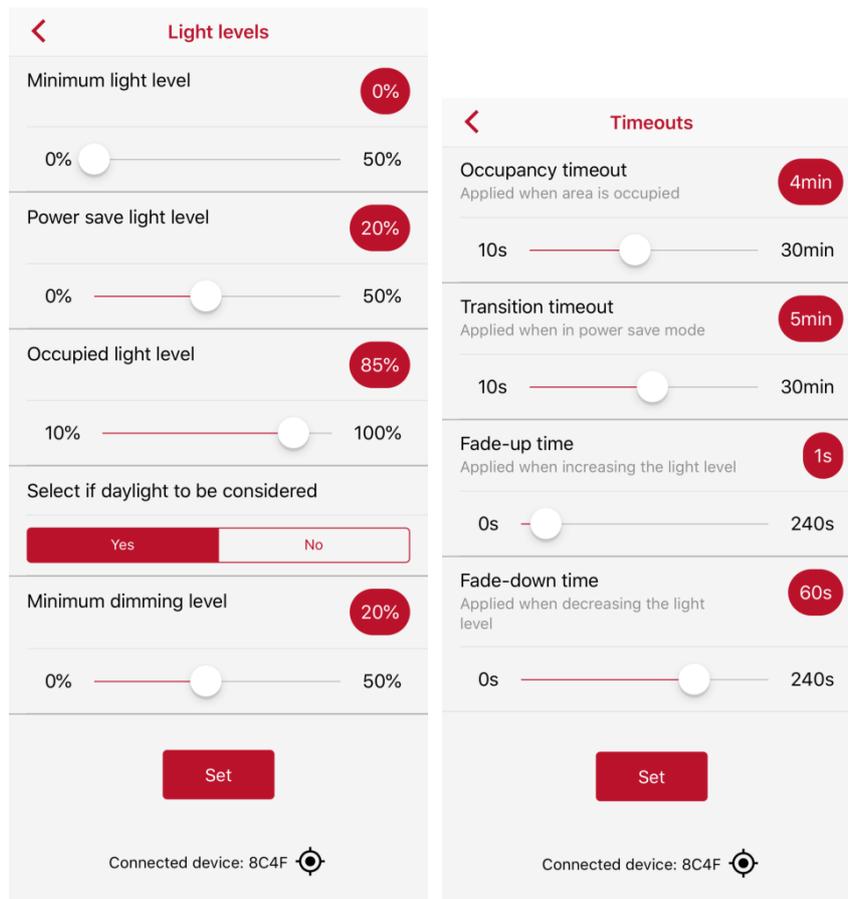
The settings are stored by pressing the "Set" button on the bottom of the screen.

### Daylight Harvesting

Daylight Harvesting parameters can be found from the light levels section. Select whether daylight is to be considered using the "On / Off" selection. When "On" is selected, from the slider you can adjust the "Minimum dimming level" which is the lowest light level the device will use when enough daylight is detected. The value refers to the maximum light output of the luminaire. By default daylight harvesting is considered and the minimum dimming level is 20 % (30 % for the ActiveAhead device firmware prior to v1.5).

When 0 % is selected, the "Stay off when movement is detected" option will become visible. From the "Yes / No" selection you can select whether the device or device group will stay off when movement and enough daylight is detected. Settings are stored by pressing the "Set" button.

Daylight harvesting target value is linked to the occupied light level value. Out of the box the device will calculate a reference value for daylight harvesting during the first hours of occupancy. However, when the occupied light level is changed with the mobile app the device will take a snapshot light level reference value for daylight harvesting. When daylight is considered, the device will try to keep the light output on the level that the reference value is reached. If necessary the set maximum light level value is exceeded to reach the reference value. From the ActiveAhead firmware v1.5 onwards the maximum daylight harvesting dimming level is set to be +15 percentage points on top of the occupied light level. In the earlier firmware versions the maximum is always 100 %.

## PRESETS

Presets can be used to store personalised parameters in the app for re-use. This is particularly effective to change the parameters of multiple devices to the same ones.

Tip: Create all your required presets named by area/function before configuring the system

You can select between "Eco" and "Comfort" predefined pre-set values and the ones which you have created. To edit the selected preset choose the pen icon and to delete it choose the trash can icon. The parameters are stored to the connected device or group by pressing the "Set preset" button on the bottom of the screen.
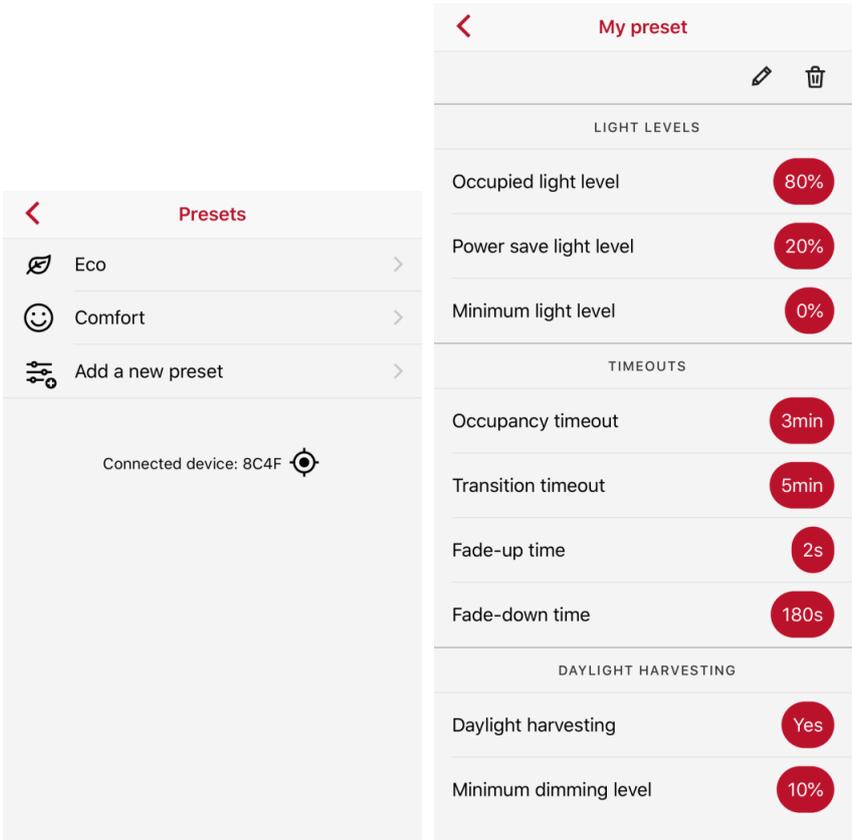
# FACTORY RESET

There are two levels of reset available. Select the reset you wish to undertake and press "Set". Confirmation of the reset will be displayed once applied.

**Parameters**
This option is to reset the device parameters to factory default values. This will also remove the groups that the device has.

This option is the more common option and useful when for example you are uncertain whether the device has been given unwanted values. This will restore default parameters listed below:

Maximum Light: 85 %
Power save Light level: 20 %
Minimum Light level: 0 %

Occupancy timeout: 4 min
Transition timeout: 5 min
Fade on time: 1s
Fade off time: 60s

Daylight harvesting: on
Daylight harvesting minimum dimming level: 20 %

**Learning**
This option is to clear the learnings the device has undertaken.

This option is useful when for example you have recently renovated the space and you want the device(s) to learn the new movement pathways in your space faster. Note that the device(s) will re-learn automatically any new movement pathways in their vicinity over an extended time period thus resetting the learnings is unnecessary. This option should only be used to clear any learning and create a new learning in a quicker time.
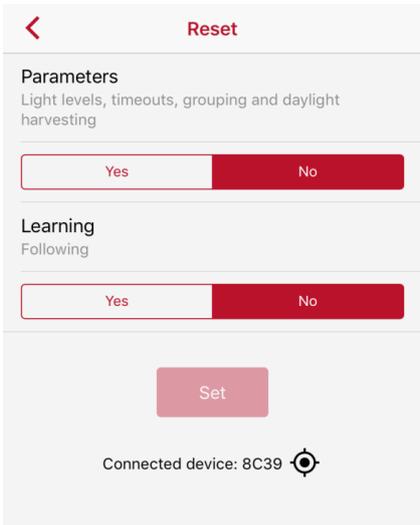
# Grouping

In the grouping view, you can choose to modify the group member light level, add a device to the group, remove the connected device, delete the group, add corridor hold, remove corridor hold or start a new group. One device can belong to three groups. In addition one device can belong to three corridor hold groups.

**Tip:** The wall panel function will create a group automatically to the devices set to act on the wall panel button presses. Thus, in case you are configuring a room with a wall panel, use the wall panel function first to configure the panel and then reuse that group for possible other purposes; such as, corridor hold.
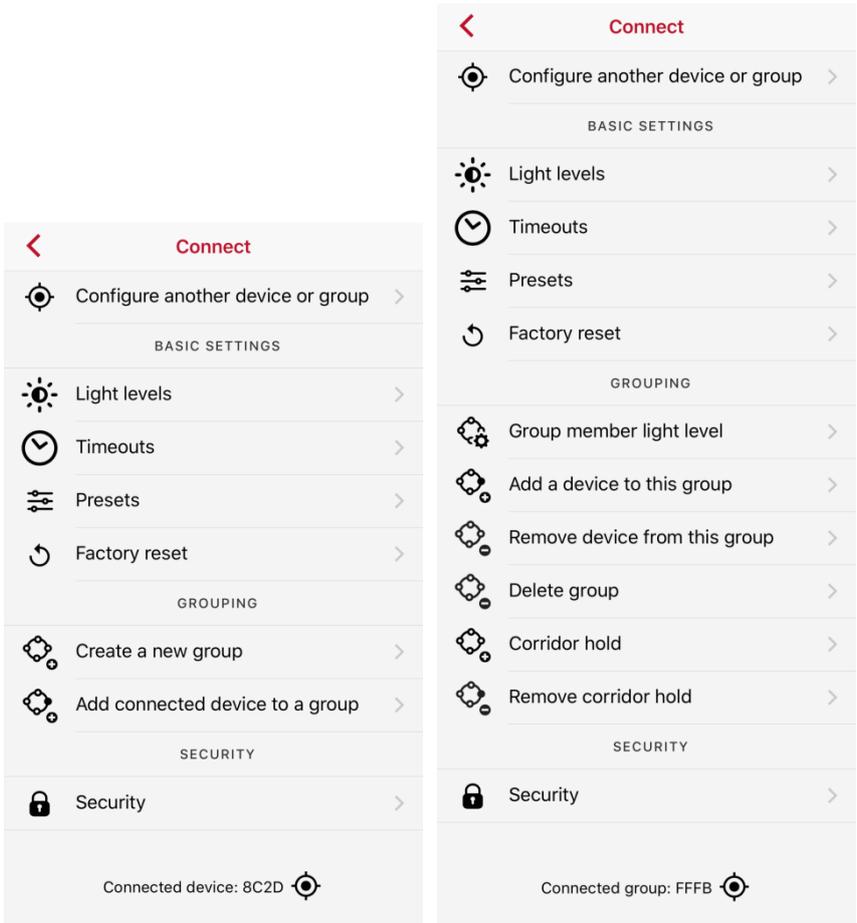


Grouping when connected to a device      Grouping when connected to a group

**Create a new group**
This option is available when connected to a device. A new group is created with the connected device as the first group member. In the process, you will define the group member light level for the connected device. Once the group has been created the app will automatically connect to that group.

**Add connected device to a group**
This will add the connected device to an existing group. Move close to a device in that group to find the group fast. Adding is done through the Connect process. In the process, you will define the group member light level for the added device.

**Group member light level**
This is the light level to which the device will go to when another group member detects movement. The

group member light level is defined originally when a group is created and later when adding new devices to it. From the ActiveAhead firmware v1.5 onwards changing the value will change the value for the whole group. The value which is set last will prevail in the whole group. In the earlier firmware versions, changing the value will change it only to the connected device even though you would be connected to a group. Thus, in the older firmware versions, the value can be different for each group member within a group.

**Note:** From the ActiveAhead firmware v1.5 onwards, you have the option to set the group member light level to be the same as the occupied light level. In this case, the group member light level follows the occupied light level of the device. Consequently, it be different for different group members in case they have different occupied light level values.

**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.

### Add a device to this group
Adding a device to the connected group is done through the Connect process. In the process, you will define the group member light level for the added device. Move close to the device you want to add to find it fast.

### Remove device from this group
You can remove the connected device from the connected group. If the removed device was the last device in the group the group will cease to exist. Once the device has been removed from the group the app will automatically connect to the removed device.

### Delete group
The whole group will be deleted with this option. The other groups that the devices may have will not be affected.

**Note:** Deleting a group which is used in a corridor hold will leave the corridor hold information to the devices. This does not have an effect on the devices but will continue to take one of the available corridor hold groups that the devices may have.

## CORRIDOR HOLD

With the corridor hold function you can set another group to follow the connected 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.

In this screen, you will define the group member light level for the group that will stay on. Those group members will stay on at least on that light level while any of the connected group members see movement. In order to find the group that you want to follow the connected group, you should move close to a device in that group. Once close to one of the devices in that group press the refresh icon to get the "Next" list refreshed.

**Note:** The corridor hold is available for groups only. Thus, create a group with one device if you want to follow a single device or want to have a single device to follow a group.
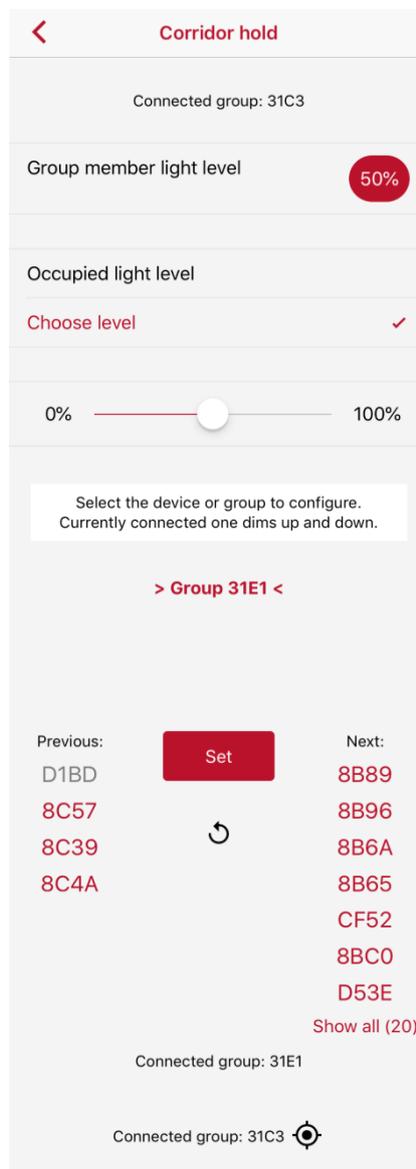


The corridor hold is stored to all of the group members by pressing the "Set" button.

## Security

In the security view, you can open and close the device, group or network of devices from mobile app connections as well as set a PIN code to them. By default the devices are open to connections. When PIN code is set, the mobile app will request for it when connecting to a such device. When connection is blocked, the mobile app will indicate this with a note. To open a blocked connection, please contact Helvar for service.

**Note:** in case setting parameters to group or network, only the devices with no PIN code or the same PIN code as the device through which the parameters are set, will accept the set parameters. Using different PIN codes in different areas allow you to isolate wanted areas from unwanted parameter changes. PIN code does not affect the learning that the devices do.
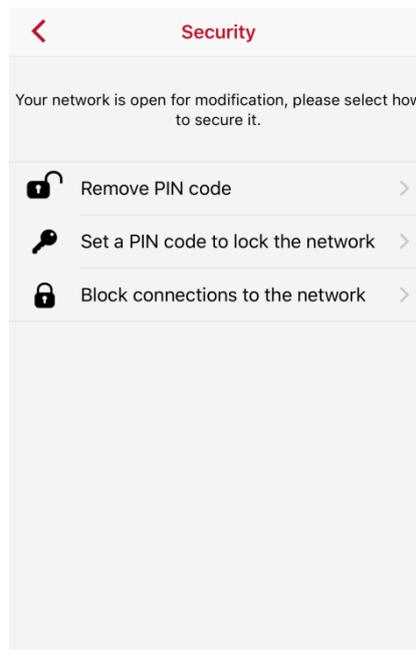


## Wall Panel

**Note:** Android device with Android 6.0 onwards and NFC support is required to configure the parameters and PIN code to the wall panel. iOS device can be used for the parts which do not require the usage of the NFC.

In the wall panel function, you can configure a wall panel and set the devices to act on the wall panel button presses.

**Tip:** The wall panel configuration process will automatically create a group for the room. Thus, first configure the wall panel in a room and then use the automatically created group for any other configuration; such as, parameter changes or corridor hold.

In case you want to configure multiple wall panels to the same room, repeat the below steps for each wall panel bearing in mind the maximum number of groups per device is three.

### IDENTIFY THE PANEL

First you will need to identify the panel. Follow the instructions on the screen to perform these actions. Once done you will see the main view of the panel configuration process.
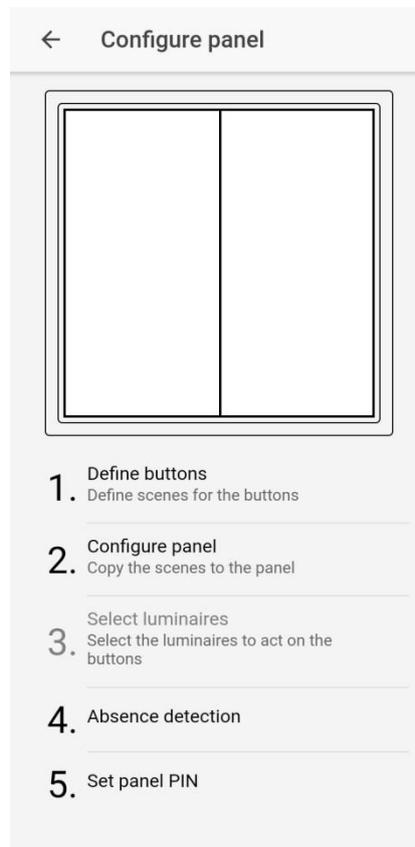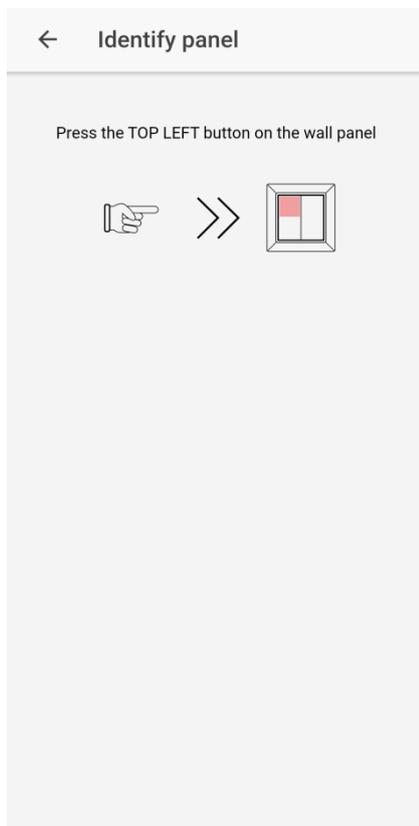
Once the wall panel is identified, configuration of the wall panel can begin. It has three mandatory steps.

First step is to define the buttons. Tap that row to get started with the step.

## DEFINE BUTTONS

In the define buttons step you will select a function for each button. Tap "Define buttons" and do the following to define the buttons:

   a) Tap a button on the image to define the button in question.
   b) Select a scene from the list of available scenes
   c) Set the desired parameters for the scene. Select the trash can icon at the bottom of the view to get to delete/reset and reselect another scene for the button.
   d) Tap the next button and repeat the steps for it.

Once you have defined all the buttons press the back arrow on the header bar to get back to the wall panel configuration main view.

The below table lists the wall panel exit delay parameters for on, off and dim buttons. The app shows always the values which are supported by the latest ActiveAhead firmware. Thus, in case you are using an earlier firmware version, you will need to use the table below to convert them.

| Slider index | Value in ≤ v1.0.36 | Value in ≥ v1.5.0 (shown in the app) |
|---|---|---|
| 0 | Infinite | Infinite |
| 1 | 30 s | 1 min |
| 2 | 1 min 30 s | 5 min |
| 3 | 5 min | 10 min |

**Tip:** In case you need a longer exit delay than ten minutes for the on, off, dim up or dim down buttons, you may use the general scene button instead. The scene and presentation mode buttons use the device's general occupancy timeout value as the exit delay value. That can be set to be longer than ten minutes.

**Note however that long press to dim only works for the on, off, dim up and dim down scenes.**

**Note:** 0 s exit delay means that the scene will stay on infinitely.  Use this feature consciously when such a scene is really needed. Only the next button press will set a new exit delay.

Define buttons

Tap a button on the panel below to configure it.

Define buttons

Tap a button on the panel below to configure it.

| Lights on
Lights will go on

O Lights off
Lights will go off

Scene
Lights will go on to the defined scene

Presentation mode
Ambient and near screen lighting

△ Dim up
Lights will dim up

▼ Dim down
Lights will dim down

Define buttons

Tap a button on the panel below to configure it.

Light level 1                              75%

0% ————————————————•——— 100%

Light level 2                              10%

0% ————————•—————————— 100%

## CONFIGURE PANEL

Next step in the process is to configure the panel. In this step, the information defined in the previous step will be stored on to the panel. Tap the "Configure panel" row.

Then touch the wall panel with the back of your mobile device.

When the panel has been configured successfully, a notification on screen will be given and you will be taken automatically back to the main configuration view.

Press any button on the panel. The first button press will take the configuration in to use in the panel.

**Tip:** The NFC transceiver may be located anywhere on the back side of the mobile device. To find it, you can slowly slide the panel against the back of your device.

You may sometimes need to repeat the process couple of times so that the configuration is received successfully by the panel. If your device vibrates shortly but the app view is not changed back to the main configuration view, then you know that you should try again.
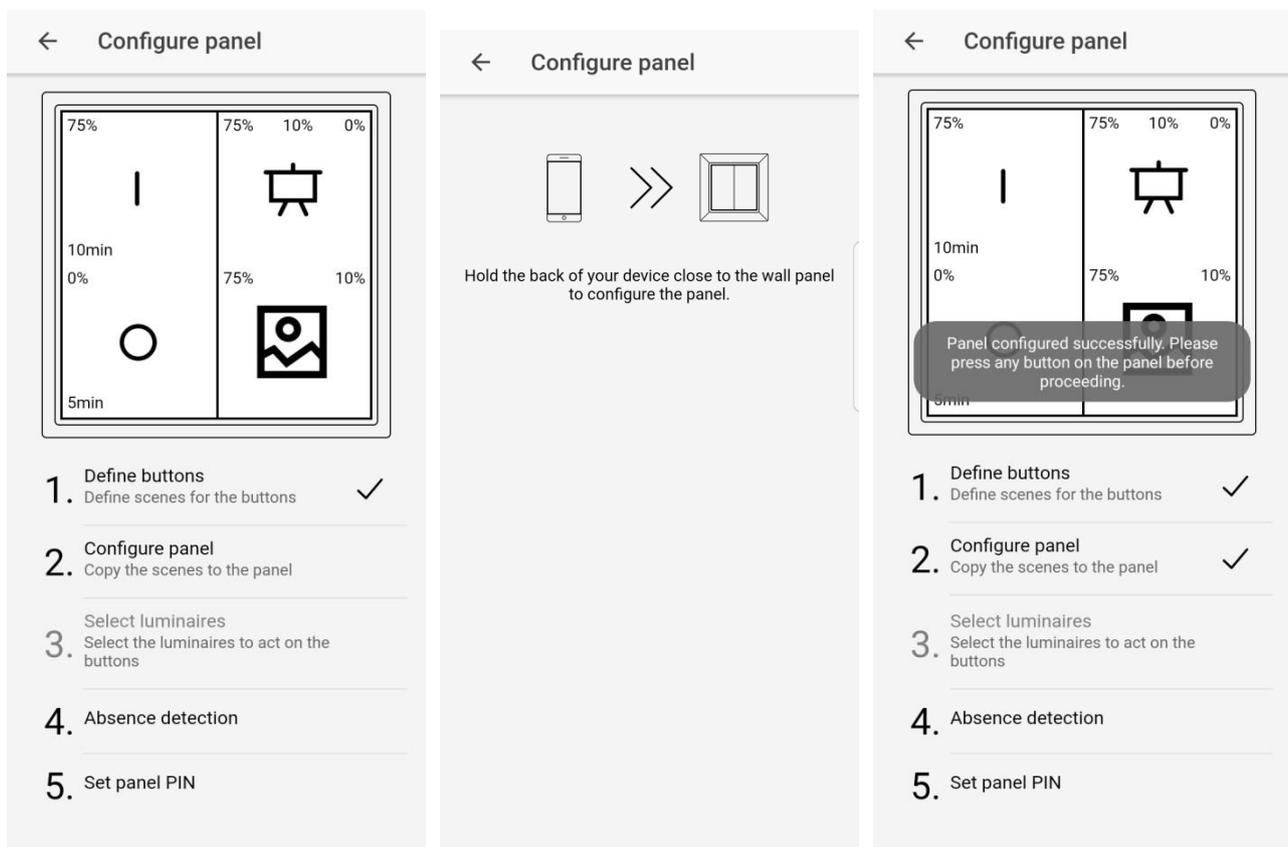
## SELECT LUMINAIRES

The last mandatory step in the process is to select the luminaires which act on the press of each button. Tap the "Select luminaires" row to get started.

**Tip:** Move closer to the device you wish to set to ensure you are setting the correct device.

At the top of the view you can select the buttons to which the device will react to. In case the button has a scene which has different light levels, you can select to which one of the light levels the device should go to.

The selected buttons and light levels are highlighted with red colour. Below the image of the panel you can select the group member light level for the group. From the ActiveAhead firmware v1.5 onwards changing the value will change the value for the whole group. The value which is set last will prevail in the whole group. In the earlier firmware versions, the value is only set to the connected device.

Finally connect to the wanted device and press the "Set" button to set this configuration to it. The app will automatically connect to the next device on the list. You can select different buttons and / or light levels to different devices.

Once you have configured all the luminaires you can go back to the wall panel main view by pressing the back button at the header bar.
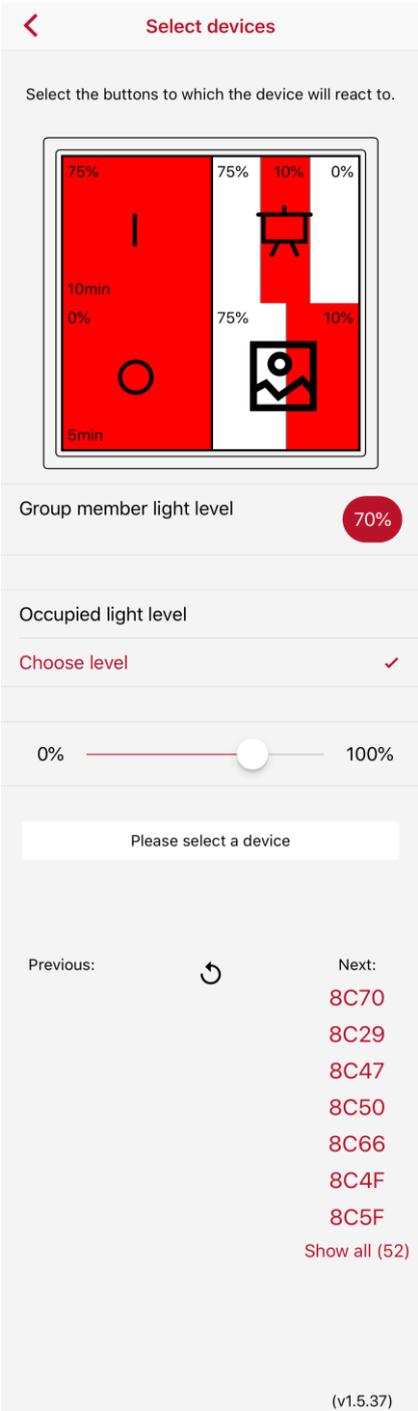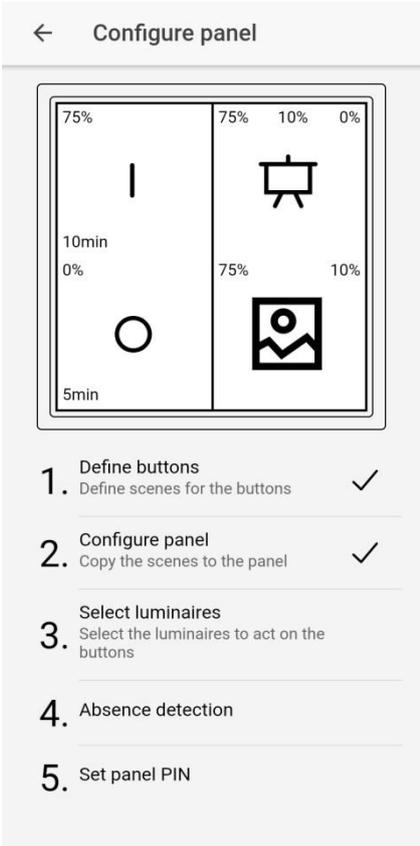
## ABSENCE DETECTION

You can activate and deactivate the absence detection mode. By default absence detection is deactivated for a wall panel group, in which case the wall panel group works in presence detection mode. In the absence detection mode, the lights will not turn on when person enters the room but only when a wall panel button is pressed. The lights will go off according to the defined exit delay and timeouts. To active or deactivate the absence detection you need to connect to one of the group members in the absence detection view and

press the Activate / Deactivate button on the view. The button will indicate in which mode the group is currently in.

**Absence detection**

Activate Absense Detection for the connected panel group.
Currently connected one dimms up and down.

Previous:
8C5F

**Activate**

Next:
8C75
8C67
8C21
8C42
8C47
8C46
8C70
Show all (53)
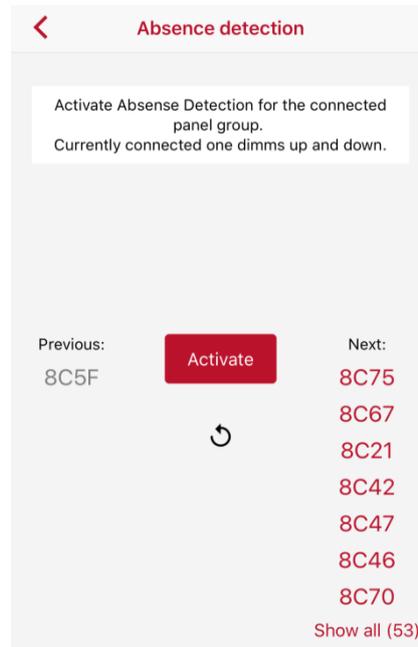
## SET PANEL PIN

In this step, you can set a PIN code to the wall panel to protect it from unwanted reconfiguration. When PIN code is set the panel cannot be reconfigured without knowing the PIN code. In case the panel already has a PIN code, you need to input that as well as the desired new PIN code. The PIN code is set to the panel in a similar way as the configuration in the "Configure panel" step.

**Note:** the panel PIN code is not linked to the PIN code that the devices may have. They both need to be protected separately when protection is needed.

## RECONFIGURING A PANEL

In case you want to reconfigure a wall panel, follow the same steps as when configuring a panel for the first time. The mobile app will show the existing button configuration.

**Note:** if you do not change the scenes on the buttons but only change the parameters inside an existing programmed scene, then you do not need to do the step "Select luminaires" of the process. The luminaires will automatically follow the new parameters.

# Practical Tips

## MEETING ROOM CONFIGURATION

Configure the panel first because that process will create a group for the luminaires in the meeting room. You can then utilise that group; e.g., for changing the parameters of the luminaires and for corridor hold. The general scene and presentation mode buttons utilise the occupancy timeout as the exit delay value. Thus, that is at least a parameter you may should consider changing in case you have any of those buttons in use in the room. Also, consider using the occupied light level as the group member light level. This will make the luminaires to go all on the same light level when a person enters the room.

## CORRIDOR

A normal corridor does not require any configuration and will work well with the predictive lighting that the ActiveAhead solution offers. But grouping is required in order to do corridor hold function. You should first create the group that shall be followed as well as the group that will follow the other group. After that you can follow the instructions given in the corridor hold chapter. If you want the group to be used just for the corridor hold function set the group member light level to be 0 %.