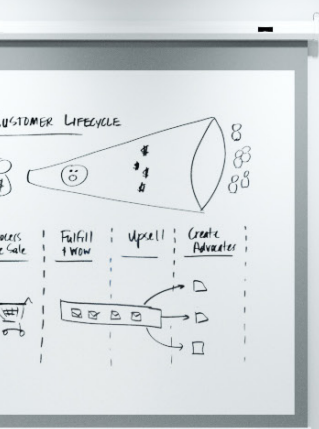


Helvar

freedom in lighting



freeDim App User Guide



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Overview

Welcome to the freeDim app – our app designed to work with Helvar’s freeDim system to give you personalised light and provide you with the optimal lighting conditions for an efficient working day.

The freeDim app is available for both iOS and Android devices. You can download it from App Store and Google Play.



Requirements

To configure your freeDim systems with the freeDim app, you need a Bluetooth®-enabled device, such as a smartphone or a tablet, running one of the following operating systems:

- Android 4.3 or later
- iOS 7 or later

System architecture

A freeDim system comprises of one master luminaire and, optionally, up to 10 follower luminaires.

All the master luminaires have two sensors: a PIR presence detector and a light sensor. The PIR presence detector helps to minimise energy consumption in unoccupied areas. The light sensor is used for daylight harvesting when the **Adapt** scene is selected.

Helvar’s freeDim app communicates with the system’s master luminaire using Bluetooth® wireless connectivity. The master controls the followers using an auxiliary IEEE 802.15.4 wireless connection.

This arrangement allows you to easily configure and control the entire system from a single Bluetooth®-enabled device. You can adjust and personalise both the light intensity and the colour temperature of individual luminaires.

The following diagram shows a typical freeDim system. The dashed lines represent wireless interfaces.

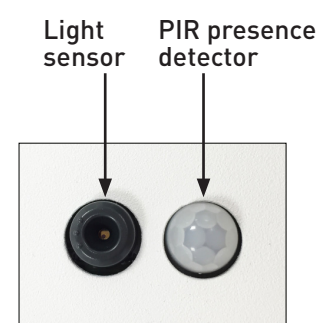


Figure 1. Sensors in the master luminaire

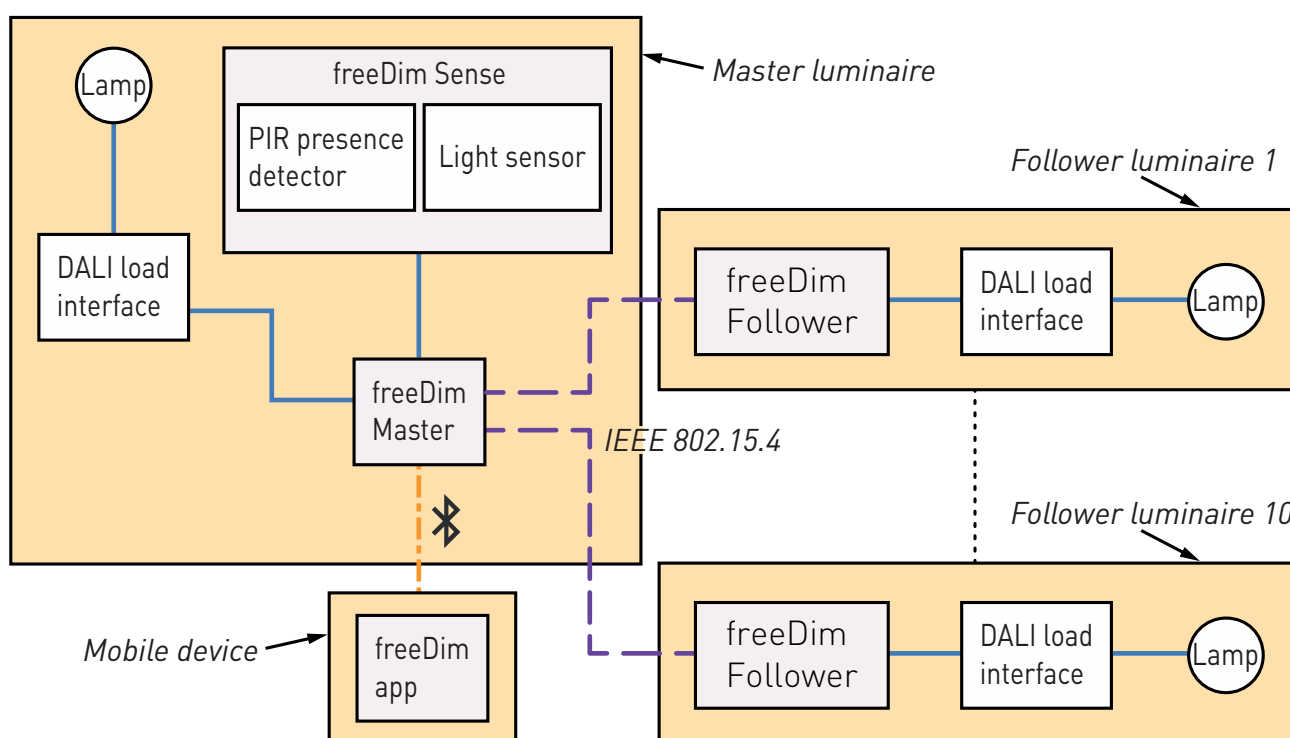


Figure 2. freeDim system architecture

The freeDim app doesn't store any information on your device. All the settings are stored in the active master luminaire, together with a file used to identify each device. Thus, you can use a single device on multiple freeDim systems without any conflict. If you use several devices, you can associate all of them (up to a maximum of five) to your profile on the same master luminaire.

Lighting control

How you connect to a freeDim system depends on the configuration set for its master luminaire. This USER GUIDE describes the default method known as 'Automatic BT + Sensor'. For information on the other connection methods, refer to the *Configuration Guide*.

When the 'Automatic BT + Sensor' method is set, a connection between your Bluetooth®-enabled device and the master luminaire is established as soon as you enter the area covered by the PIR detector. The system identifies the device and adjusts the light according to the profile associated with it.

Only one user at a time can control a freeDim system. So the first Bluetooth®-enabled device to connect to the master luminaire will take control of the system.

If someone without a Bluetooth®-enabled device, or without the freeDim app installed on their device, enters the room, the PIR sensor will detect their presence, and the lights will go to a default setting, or to that of the current profile if the system is already in use.

The following flowchart shows the various steps in the use of the freeDim app. Optional steps are represented with dashed boxes.

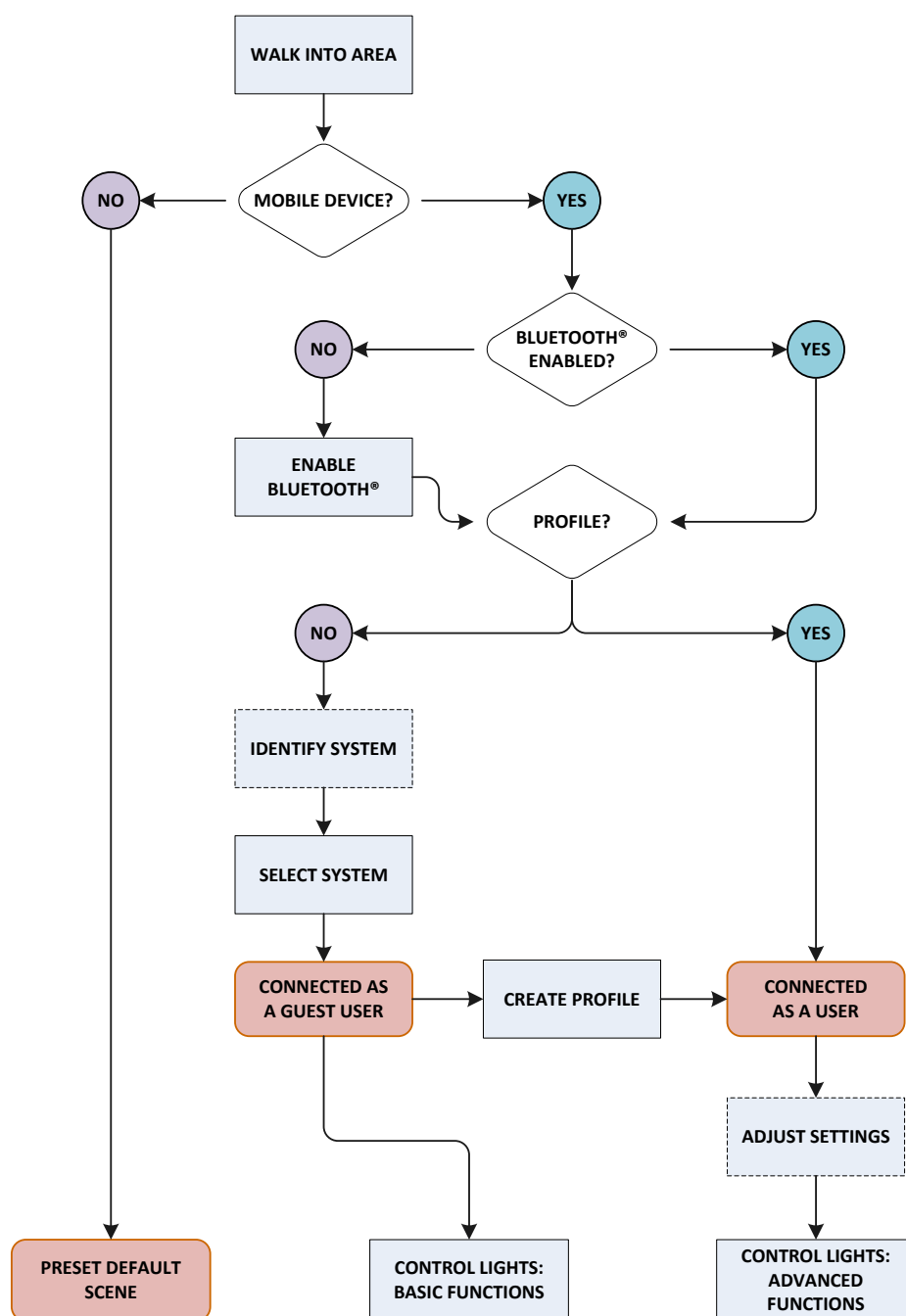


Figure 3. freeDim connection process

Identifying a freeDim system

To establish Bluetooth® communication between your device and the freeDim system, first walk into the area covered by the master luminaire's PIR detector.

If Bluetooth® is not enabled on your device, the freeDim app will automatically prompt you to turn it on.

If you're not within Bluetooth® range, or if no movement is detected, a screen will indicate that no lights have been found.

To search for a freeDim system, pull from the top of the screen. The names of the available master luminaires will appear.

If more than one freeDim systems are within the Bluetooth® radio range, the screen will display several entries. The signal strength determines the order of the listed master luminaires. The one with the best signal will appear at the top. For example, in [Figure 5](#) the system with the best signal is 'Ac'.

If you don't see the required freeDim system, it may already be in use.

To check which luminaire corresponds to a listed system, tap the lamp icon to identify it. That system's master luminaire will flash twice.

Subsequently, [Figure 5](#) will reappear.

Connecting to a freeDim system

If you have a user profile in a freeDim system, the freeDim app will automatically connect you as soon as you enter the area covered by the master luminaire's PIR detector.

If you don't have a user profile in that freeDim system, you can still connect to it manually as a guest user.

Connecting as a guest user

When you're sure which freeDim system you want to connect to, tap its name in [Figure 5](#). If you don't have a profile in the selected freeDim system, the freeDim app will connect you as a guest user, and the **Home** screen in [Figure 7](#) will appear.

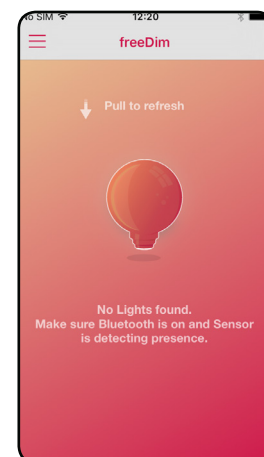


Figure 4. No lights found

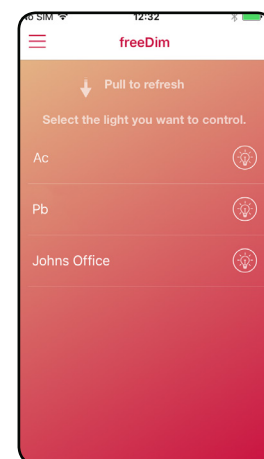


Figure 5. freeDim systems within Bluetooth® range

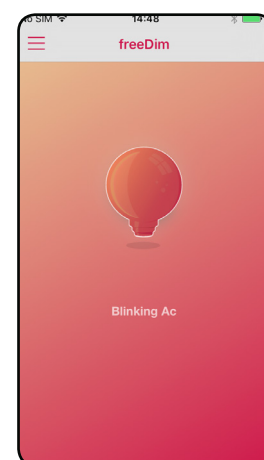


Figure 6. Identifying a freeDim system

From this screen, you can recall the **Activate**, **Focus** and **Mimic** scenes (see [Predefined scenes](#) on page 8) and slide along the dim wheel to adjust the intensity of the light. However, to get full control of the system, you need to create a user profile using the method described in the next section.

Connecting as a user

To access all the features of the freeDim app, you need a user profile. Each user profile is specific for a particular freeDim system and will be associated to the Bluetooth®-enabled device that you create it with. Profiles are stored in the system's master luminaire.

Once you have a user profile, the freeDim app will automatically connect you to the freeDim system as a user and display the **Home** screen in [Figure 7](#).

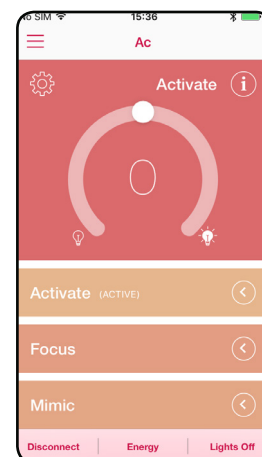


Figure 7. Home screen (guest user)

Creating a user profile

To create a profile, connect to the desired system as a guest user.

Then do one of the following in [Figure 7](#) to display the main menu ([Figure 8](#)):

- Tap the three-lined button in the upper-left corner.
- Swipe the screen from the left-hand edge.

Now tap **My profile** to display the **Choose Profile** screen ([Figure 9](#)).

Next tap **Create Profile** to display the **Create new user** screen ([Figure 10](#)). Then type a name for your profile and a name for the associated device. You'll need to set a security PIN. This protects your profile from unauthorised changes. When you're finished with the settings, tap **Save**.

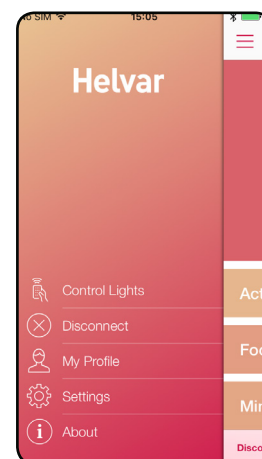


Figure 8. Main menu

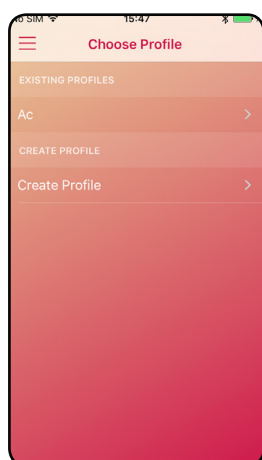


Figure 9. Choose Profile

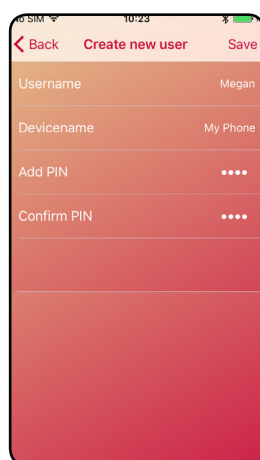


Figure 10. Create new user

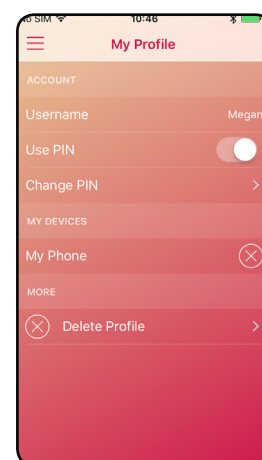


Figure 11. My Profile

Managing user profiles

You can delete or modify an existing profile at any time by selecting it from the profiles list ([Figure 9](#)). However, you may be required to enter a security PIN.

You can associate up to a maximum of five devices with a user profile.

Adjusting your settings

Once you are connected to a freeDim system as a user, you can adjust the system's settings. To do this, tap the three-lined button in the upper-left corner of [Figure 11](#) to display the **Settings** screen ([Figure 12](#)).

The slide switches allow you to enable or disable **Configuration** mode and **Engineering Units**.

Configuration mode

This mode is only for system installers and system owners. The access to **Configuration** mode is protected by a security PIN. For more information, refer to the *Configuration Guide*.

Engineering units

By default, the freeDim app uses descriptive expressions such as 'Cool White' or 'Warm White'. However, if you enable the **Engineering Units** under **Settings**, the app will display the colour temperature in kelvins.

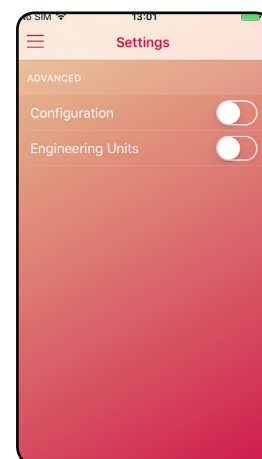


Figure 12. Settings

Controlling your lights

Once you are connected to the system as a user, you can take full advantage of all the features and functionalities of the freeDim app:

- Adjust the current intensity of the light.
- Recall any of the predefined scenes: **Activate**, **Focus**, **Mimic** and **Adapt**. For information on these scenes, see [Predefined scenes](#) on page 8.
- Personalise and recall any of the customisable scenes: **My Scene 1** and **My Scene 2**. For information on these scenes, see [Customisable scenes](#) on page 10.
- Set the default scene that you want to recall each time you connect to the current system with the current profile.

The starting point to carry out any of these tasks is the **Home** screen ([Figure 13](#)). To display the **Home** screen, tap **Control Lights** in the main menu ([Figure 8](#)).

Scrolling down the screen will reveal the scene selections shown in [Figure 14](#).

The toolbar is located at the bottom of the **Home** screen. It gives you the following options:

- **Disconnect**: Breaks the connection to the freeDim that you're currently connected to. You can use this feature to free the system for another user. For example, when you leave the room and don't intend to come back, but you're within Bluetooth® radio range.
- **Energy**: Shows a representation of how much of the total system's available power is currently being consumed.
- **Lights On/Off**: Toggles between 'all lights off' and 'all lights on' (to the last level used). This may be useful, for example, to black out the room for a presentation.

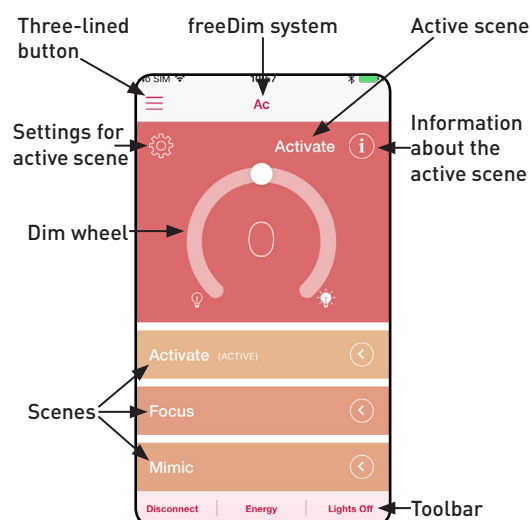


Figure 13. Home screen I (user)

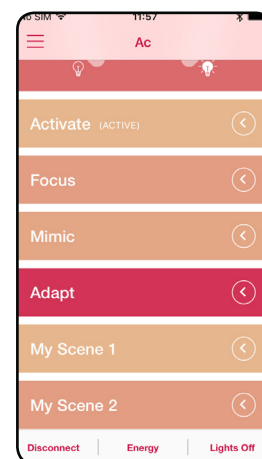


Figure 14. Home screen II (user)

Selecting a scene

To select a scene, tap it from the **Home** screen ([Figure 13](#) and [Figure 14](#)).

Tapping the **i** icon provides a brief description of the current scene ([Figure 15](#)). For more information, tap **Read More** and you'll be directed to Helvar's website.

Setting the default scene

To set a scene as the default scene, select it from the **Home** screen ([Figure 13](#) and [Figure 14](#)), and then tap the cogwheel icon to display that scene's screen ([Figure 16](#)).

Tap **Use as default scene**.

From now on, that scene will be recalled each time you connect to this system with your device.

Predefined scenes

The predefined scenes are **Activate**, **Focus**, **Mimic** and **Adapt**.

This means that you can't make changes to them, apart from temporarily adjusting their light levels with the dim wheel.

However, you can copy a predefined scene to a **My scene** and then personalise that **My scene**. To do this:

1. Activate the desired predefined scene by tapping it from the **Home** screen ([Figure 13](#) and [Figure 14](#)).
2. Tap the cogwheel icon on the upper-left corner to display the current scene's screen:
3. Tap **Copy Scene** to display the dialog box shown in [Figure 17](#).
4. Tap the **My scene** that you want to copy the predefined scene to.

Later on, you can fine-tune that **My scene** as required. For information, see [Customisable scenes](#) on page 10.

The following sections give a brief description of the freeDim predefined scenes.

Activate

The **Activate** scene is designed so that you get a real energy boost. **Activate** provides a crisp white light with high intensity.

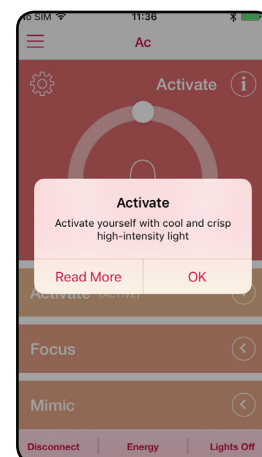


Figure 15. Scene description

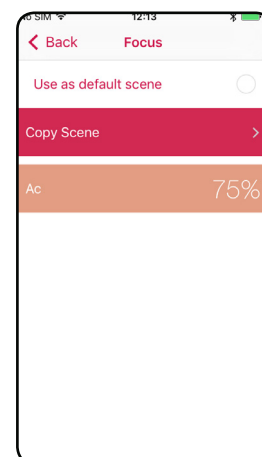


Figure 16. Scene screen

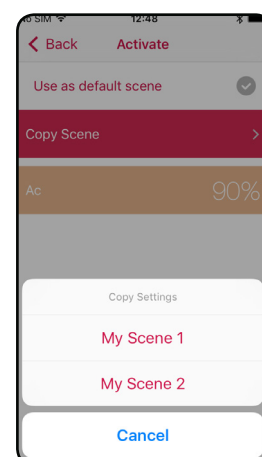


Figure 17. Activate scene

Focus

The **Focus** scene contributes to enhancing well-being and stimulating communication. It provides warm light with slightly lower intensity but still enough to keep you focused.

Mimic

This scene mimics the natural light cycle of a typical day. It does so by using a predefined daylight-mimicking curve to adjust the light's colour temperature over time. It begins in the morning with a warm light, then it changes to cooler light during the day, and by night it changes to warm light again.

The **Mimic** scene is designed to mimic nature and support the body's natural circadian rhythm. The time used to set the light's parameters from the curve is automatically synchronised to the clock on your device.

You can choose between a warmer or cooler colour temperature curve.

Adapt

Adapt is a predefined scene that uses the readings of the master luminaire's light sensor to regulate the light, in an attempt to maintain a constant illuminance under conditions of changing incidental daylight. This is often referred to as 'daylight harvesting'.

First, you need to set the target value for the **Adapt** scene. To do this, go to the **Home** screen ([Figure 14](#)), select **Adapt**, and then tap the cogwheel icon to display the **Adapt** screen ([Figure 19](#)).

To set the target value, we recommend that you use a lux meter and perform this operation when the room is darkened (late in the evening or with the blinds closed). On the screen in [Figure 19](#), you can also indicate whether you want a warmer or cooler colour temperature.

When you're finished with your settings, tap **Back**, and the settings will be saved upon confirmation.

As with all the other scenes, you can temporarily adjust the intensity levels from the **Home** screen. In this case, the regulation of the light will be suspended and its output will remain fixed. To re-enable this mode, simply select the **Adapt** scene again.

The **Adapt** scene is only available to users, not to guest users.

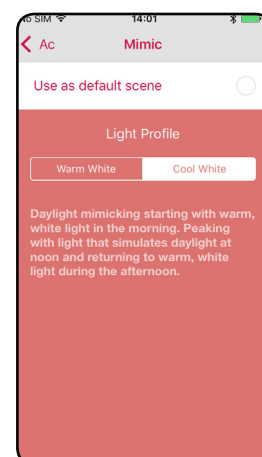


Figure 18. Mimic scene

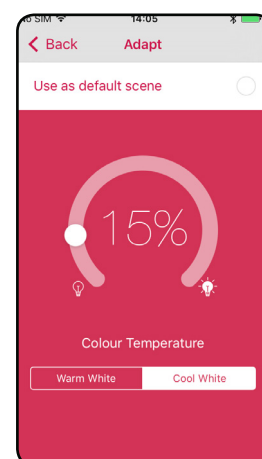


Figure 19. Adapt scene

Customisable scenes

With **My Scene 1** and **My Scene 2**, you can create two personalised intensity and colour-temperature settings for the master and follower luminaires. You can also switch off luminaires completely.

To display the luminaires connected in the system, tap the desired **My scene** button on the **Home** screen ([Figure 14](#)), and then tap the cogwheel icon to display the desired **My scene** screen ([Figure 20](#)).

To set the colour temperature and intensity of a luminaire in the list, tap it to display the corresponding settings screen ([Figure 21](#)).

Note that the colour temperature scale also gives you some presets that you can select. When you're finished with the settings, save them by returning to the previous menu.

My scene is only available to users, not to guest users.

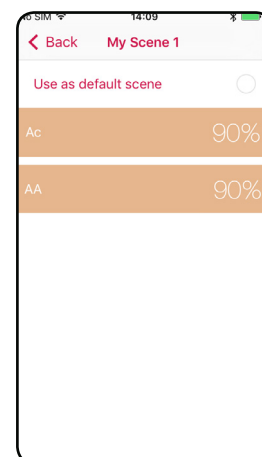


Figure 20. My Scene 1

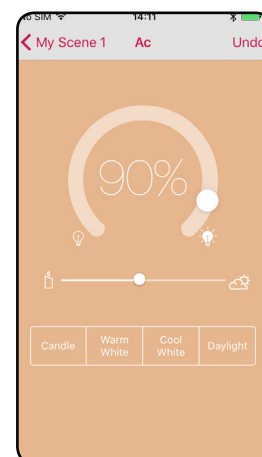


Figure 21. My Scene 1 settings

Updating freeDim

Over time, Helvar will develop updates for the freeDim system, providing enhancements and new features.

As soon as a new update is available, you'll be notified via App Store or Google Play. Download the latest version of the freeDim app. This will include all the required software to update the system.

If an update is available, a new item, called **Software Update**, will appear in the main menu ([Figure 22](#)) when you connect to the system.

Tap this item to start the download. During the download, the device must stay within Bluetooth® radio range of the system. A progress bar will indicate when the download is complete. If your device leaves Bluetooth® radio range before completion, the download will be cancelled.

After the download is complete, the freeDim app will automatically start the software installation. During this period, the system will be unavailable.

Once the installation is complete in all luminaires, the system will restart and function normally again. This process normally takes one to two minutes, although in some cases it may need up to 30 minutes.

To display the firmware version of the freeDim system that you are connected to, as well as the version of the freeDim app installed on your Bluetooth®-enabled device ([Figure 23](#)), you can use the **About** option. This option is located in the main menu.

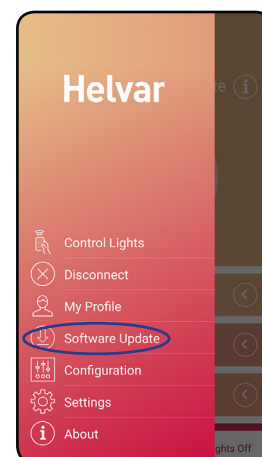


Figure 22. Software Update

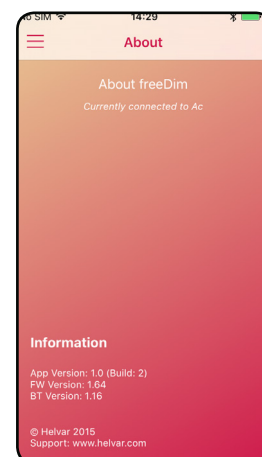


Figure 23. About