lumenradio

AirGlow Manual

About AirGlow

AirGlow is an advanced lighting control solution developed for outdoor applications. It uses MiraMesh, LumenRadio's patented wireless mesh technology that ensures a strong and reliable connection. The system continuously scans and adapts to the frequency spectrum, automatically switching to the best available channel to minimize interference.

In ideal conditions, AirGlow nodes can communicate over distances of up to 1500 meters. However, due to environmental factors like weather and vegetation, an advised spacing of around 150 meters between nodes is recommended.
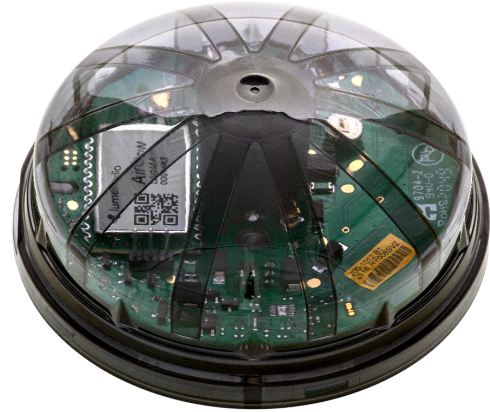
Each AirGlow node complies with Zhaga Book 18 standards and carries DALI-2 and D4i certifications. The platform supports scheduling via both Astro Clock, fixed times and DALI-2 sensors. It offers control of up to six DALI DT-6 channels, making it suitable for RGBW control, for example.

The system is commissioned and managed through the AirGlow mobile app, available for iOS and Android. The app connects to nodes via Bluetooth and can be downloaded free of charge from the App Store and Google Play.

Installation and Commissioning

To install, snap-in the AirGlow into the Zhaga socket on the luminaire, ensuring power is switched off beforehand. AirGlow can be mounted either on top or underneath the fixture.

Once installed, power up the system. Luminaires will start at 100% light output.

App and Account Set-Up

Download the AirGlow app (iOS or Android) from the App Store or Google Play. Scan the QR code here for quick access.

Open the app, choose "Create Account" and fill in the necessary details.

If you already have an account, log in with your credentials. Existing accounts can be reused across multiple installations.
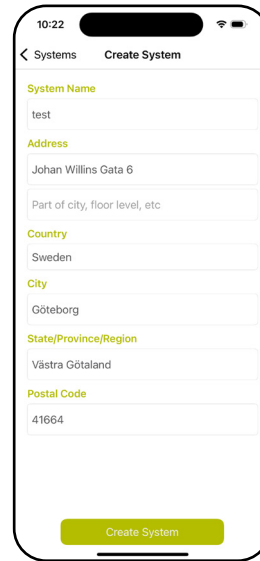

Devices per System

An AirGlow system can contain an unlimited number of zones

- Up to 200 AirGlow nodes per zone
- Up to 64 sensors per zone
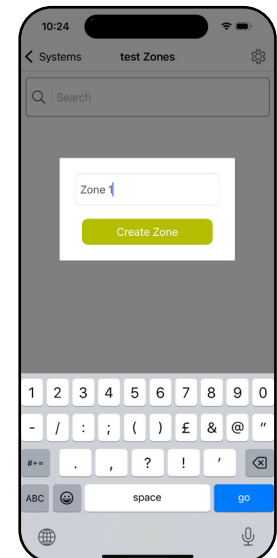- Up to 16 groups per zone
- Up to 16 scenes per zone

Progamming

A. Create a new system by tapping "+" and filling in the requested details. Now tap "Create System" and configure the created system.
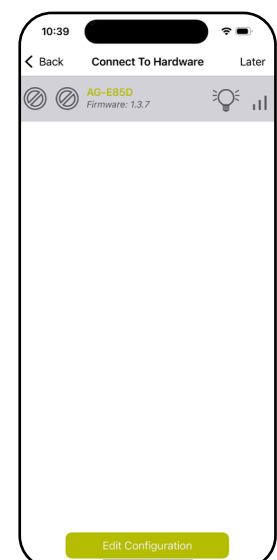
B. Now create a zone by tapping "+" and giving it a name. Tap "Create Zone" and configure the created zone.

C. To detect AirGlows, position yourself near the luminaires and tap "+".

All detected AirGlow nodes within the device's Bluetooth range will now appear on a list. To identify which AirGlow the luminaire is connected to, tap the bulb icon and the luminaire will flash.
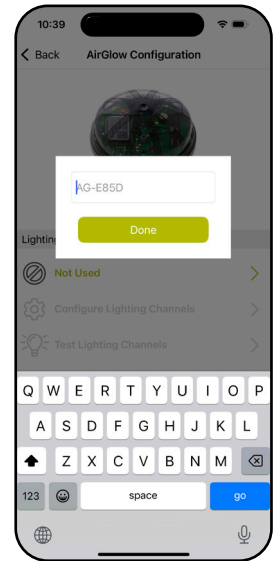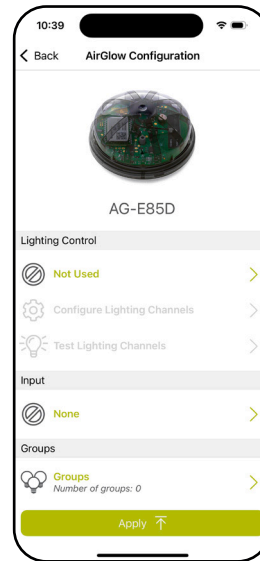
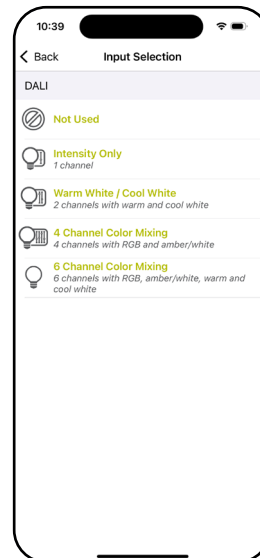To configure the AirGlow nodes, first select the AirGlow you want and then tap "Edit configuration".

IMPORTANT!

The first node will be the zone's "root node". For the best wireless performance, this node should be placed centrally.

D. Before you start configuring lighting control, input and groups, you can change the name of the AirGlow node. Its advisable to use the lamppost number to make it easier to identify later.
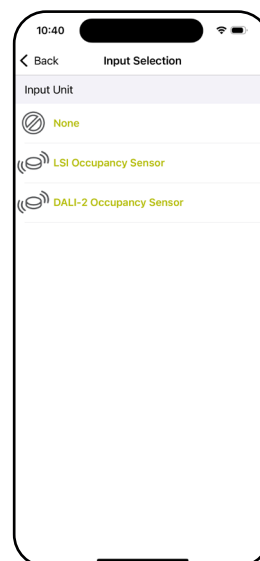
E. Under "Lighting Control" you can choose which channel or channels a specific luminaire has. This example shows "intensity only".
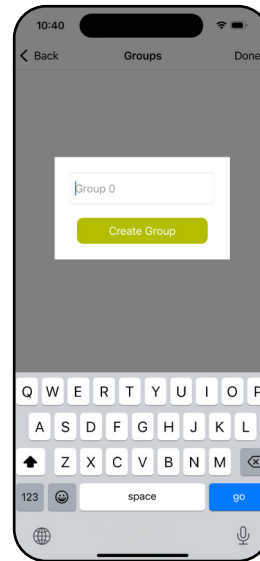
F. Under "Input" you can choose which type of sensors are used. AirGlow is compatible with both LSI and DALI-2 sensors.

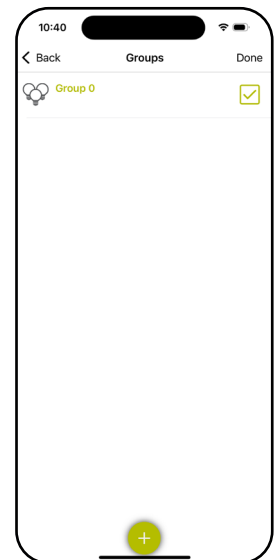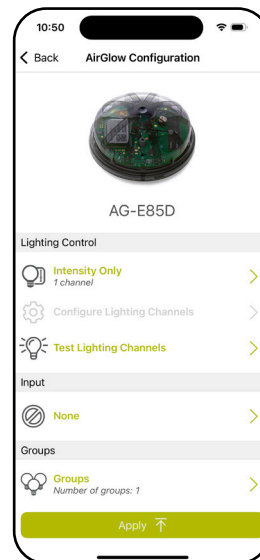In this example, no sensors are being used.

G. You need to create a group for the first AirGlow node. This group can then be selected for all the remaining nodes at the programming stage. If you want to create a new group, you can do so by tapping "+" at the bottom of the screen.

Note: an AirGlow can be in more than one group.

H. When programming is complete, the screen will look like this example. Here one channel is being used, there are no sensors and the group is "Group 0". Repeat this process for all the remaining nodes which need programming.
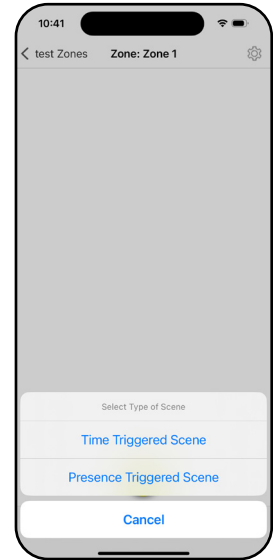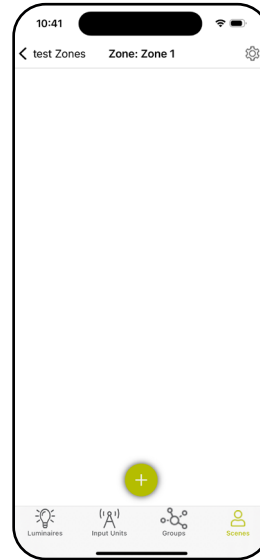
We recommend that you wait 20-30 minutes before the next step of installing lighting scenes. This is because the AirGlow nodes need to be able to communicate information like security keys and which group they belong to.

Scenes

A. To create a scene, tap the "Scenes" icon and then "+" at the bottom of the screen. Then select the type of scene (in this example a time triggered scene has been selected). Give the scene a name and tap "Create Scene".
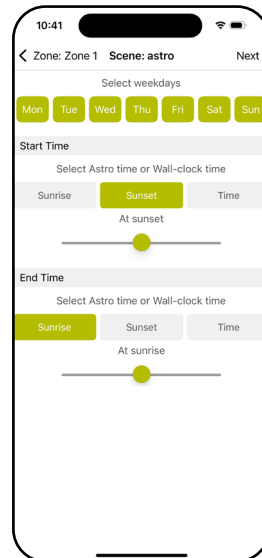
You can have multiple scenes activated at the same time, and with "Time Triggered Scene", it is always the most recently triggered scene that is prioritised and is activated.

B. The scene has been named "astro" and will be active every day of the week. This scene will be activated at sunset. You can also select an offset of how many minutes before or after sunset the scene should be activated (in this example, 0 minutes). The scene will be active until sunrise.
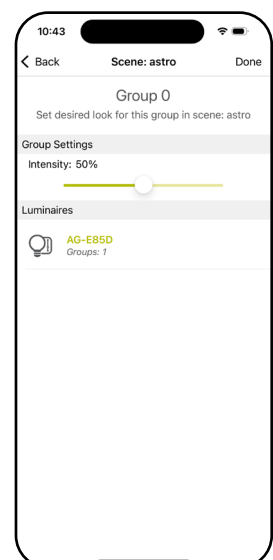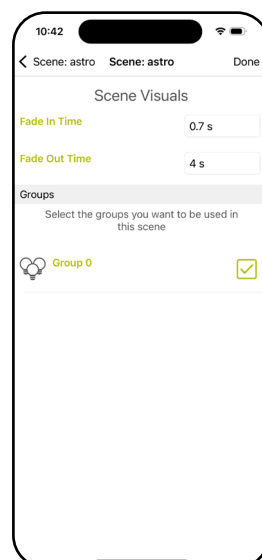
Once all selections are made, tap "Next" in the top right corner.

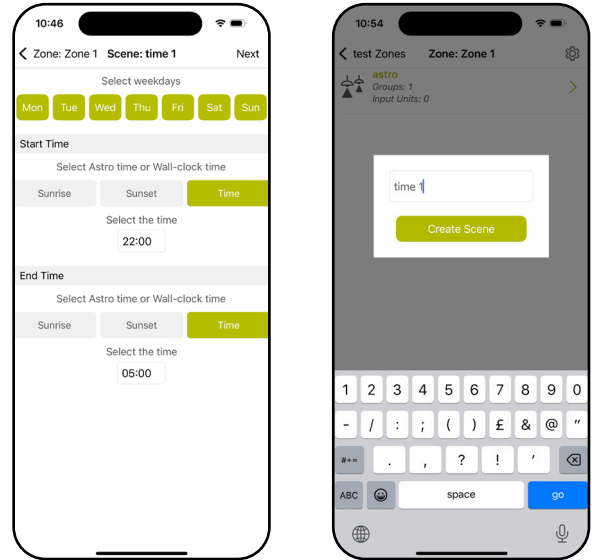Note: you cannot combine sunset/sunrise with time as part of the same scene.

C. Configure "Fade In Time" and "Fade Out Time" as required. The screenshot shows the standard settings.
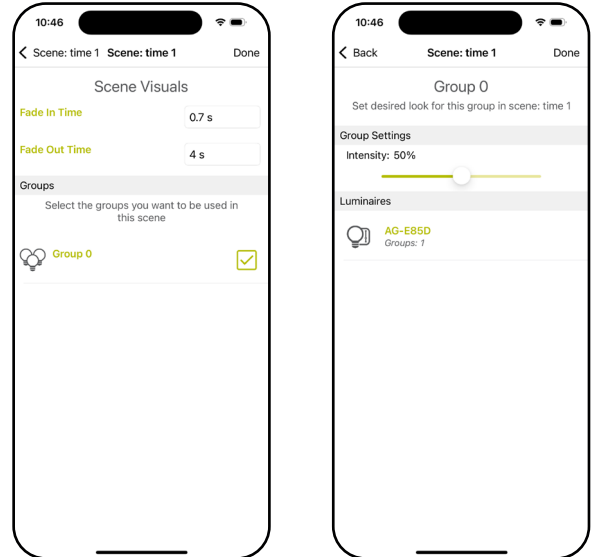
To configure intensity for a specific group, tap the group you want. On the next screen, the intensity can be configured and you can see which AirGlow nodes are part of the chosen group.
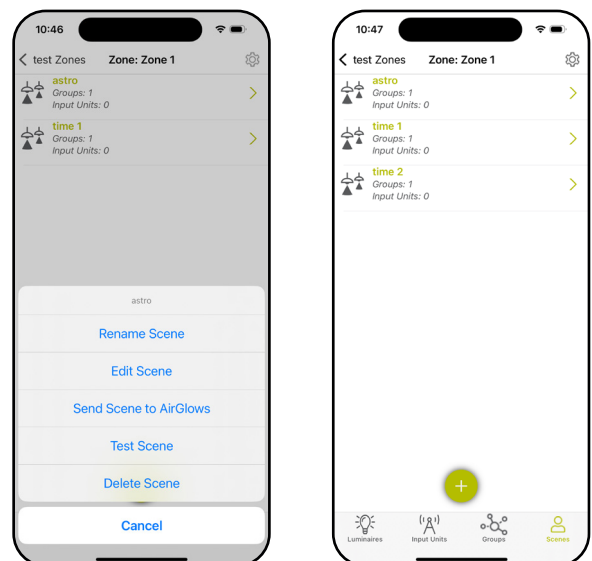
D. To create a time triggered scene, repeat the process as before, but instead you select your own time for sunrise and sunset. Then you can choose the period you want the scene to be active. In this example it has been set to 22:00-05:00

E. To configure intensity, tap the group you want (in this example, it is Group 1). Next, tap "Done" in the top right corner
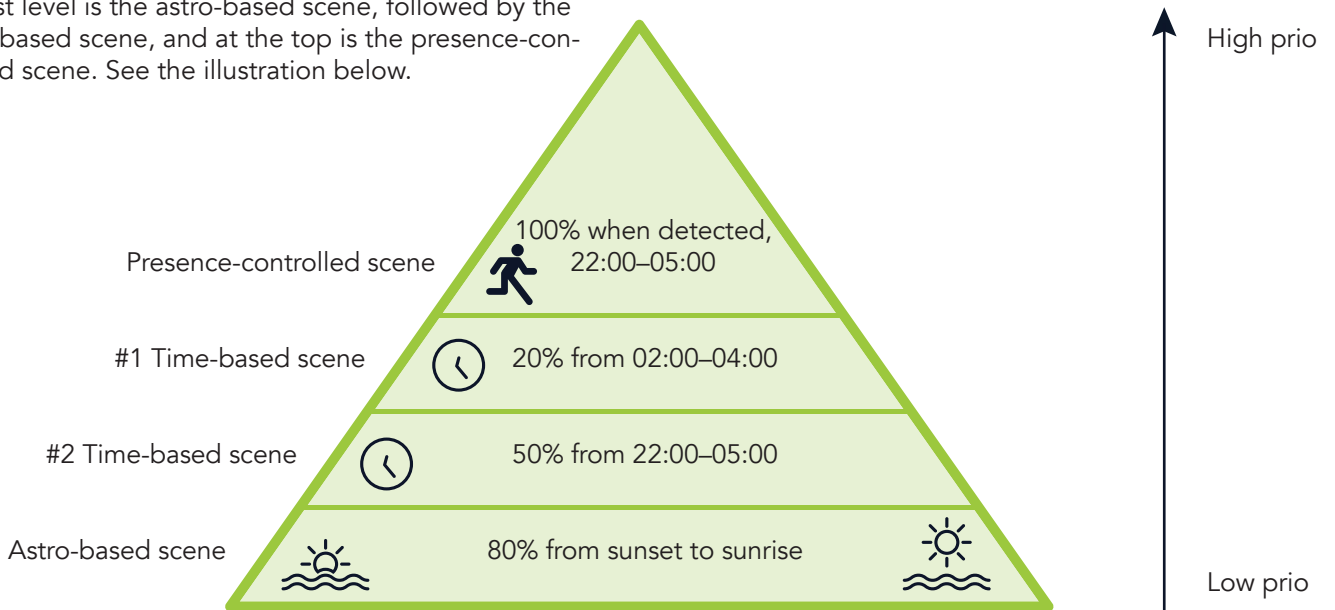
F. To test a scene, for example to check the light intensity, first go to the screen showing all the scenes and tap the scene you want to test. Then tap "Test Scene".

G. The scenes have a pre-determined hierarchy where an astro-based scene is lowest, followed by a time-triggered scene and then a motion-triggered scene at the top, as seen in this illustration.

Scene Hierarchy

The scenes have a predefined hierarchy, where the lowest level is the astro-based scene, followed by the time-based scene, and at the top is the presence-controlled scene. See the illustration below.

High prio

Presence-controlled scene — 100% when detected, 22:00–05:00

#1 Time-based scene — 20% from 02:00–04:00

#2 Time-based scene — 50% from 22:00–05:00

Astro-based scene — 80% from sunset to sunrise
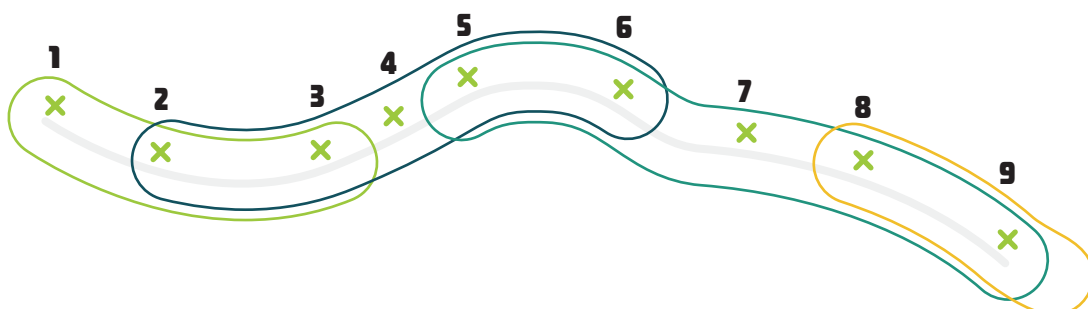
Low prio

Example Scene: Jogging Track

The main idea behind this layout is to ensure that a person never enters a dark section of the exercise trail.

- **To activate Group 1**, the sensors on luminaires 1 and 3 are used.

- **To activate Group 2**, the sensors on luminaires 2 and 6 are used.

- **To activate Group 3**, the sensors on luminaires 5 and 9 are used.

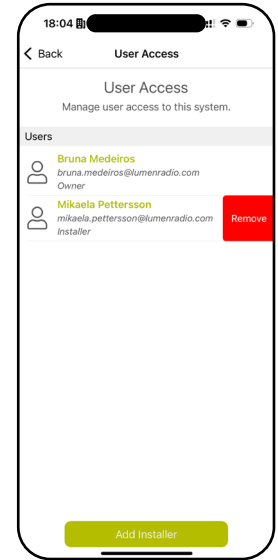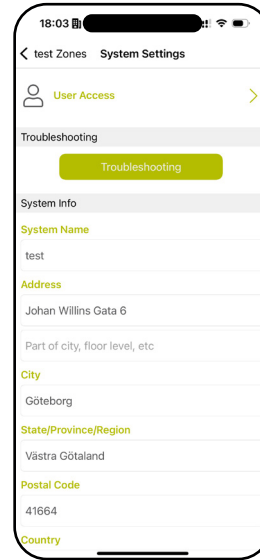- **To activate Group 4**, the sensor on luminaire 8 is used.

Note that in this setup, luminaires 4 and 7 do not need to have any sensors.

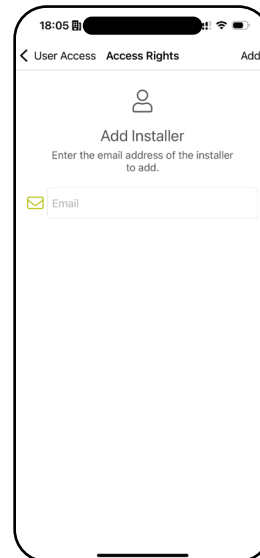**✕** Fixture

◯ Group 1

◯ Group 2

◯ Group 3

◯ Group 4

Adding an Installer

A. To add a new installer, go into the relevant system and click on the cog symbol in the top right. Then go into "User Access" and select "Add Installer".
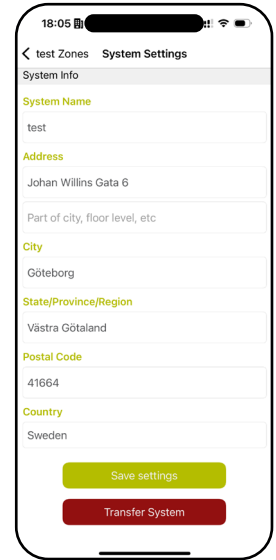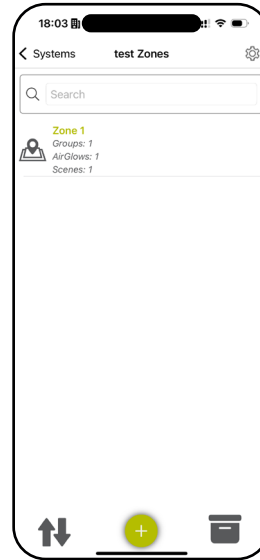
B. Enter the installer's email address. Note that the new installer must already have downloaded the app and created an account using that email address.

Changing Ownership

A. To add a new system owner, go into the relevant system and click on the cog symbol in the top right. Then scroll down to the bottom and select "Transfer System".

B. In the new window, enter the new owner's email address. Note that the new owner must already have downloaded the app and created an account using that email address. Here you can also choose if you still want to have access yourself as an installer.