

How to configure lighting control for a classroom setting

Before using the cheat sheet, please make sure you have the basic Casambi App knowledge for creating a network, pairing devices, creating groups and enabling control hierarchy. For more information, please refer to the tutorial videos on: <https://casambi.com/training/>

Scenario

Classroom with one lux/presence sensor and switch

- A classroom with tunable white luminaires and one presence/lux sensor. When the sensor detects presence, lights automatically switch on and try to maintain the illumination at 500 lux. After 5 minutes passed without detecting presence, the lights will fade out.
- To promote human well-being, the luminaries automatically adjust according to a defined profile graph.
- A 2-buttons EnOcean switch is used to activate a presentation scene and take the lighting back to automatic control.

Key Programming Overview

2 Scenes

- Class** - Daylight scene (Closed loop daylight with target lux level set to 500 lux) and Circadian scene.
- Presentation** - All luminaires are set to 15%, 3000K.

1 Sensor

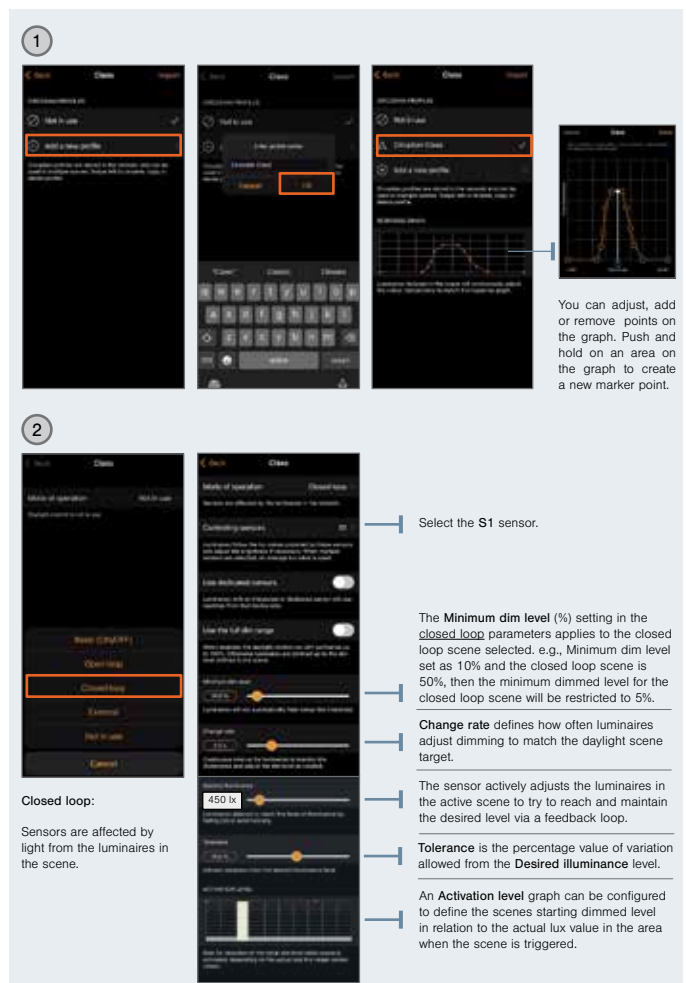
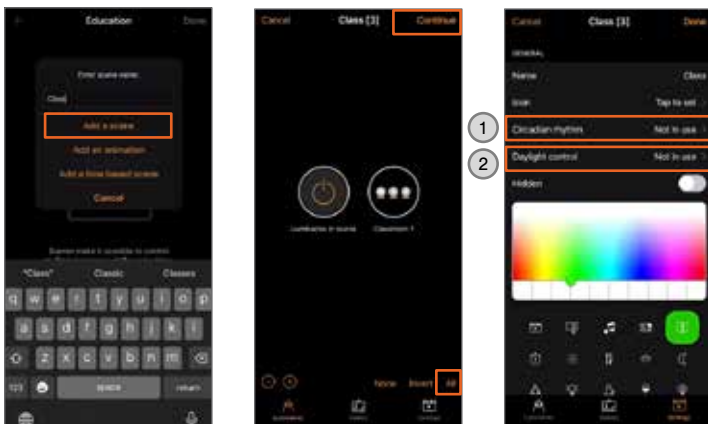
- S1** - Presence mode activates the **Class** scene while movement is detected. Daylight measures the lux level and adjusts the lights to maintain the target lux level set.

1 Switch

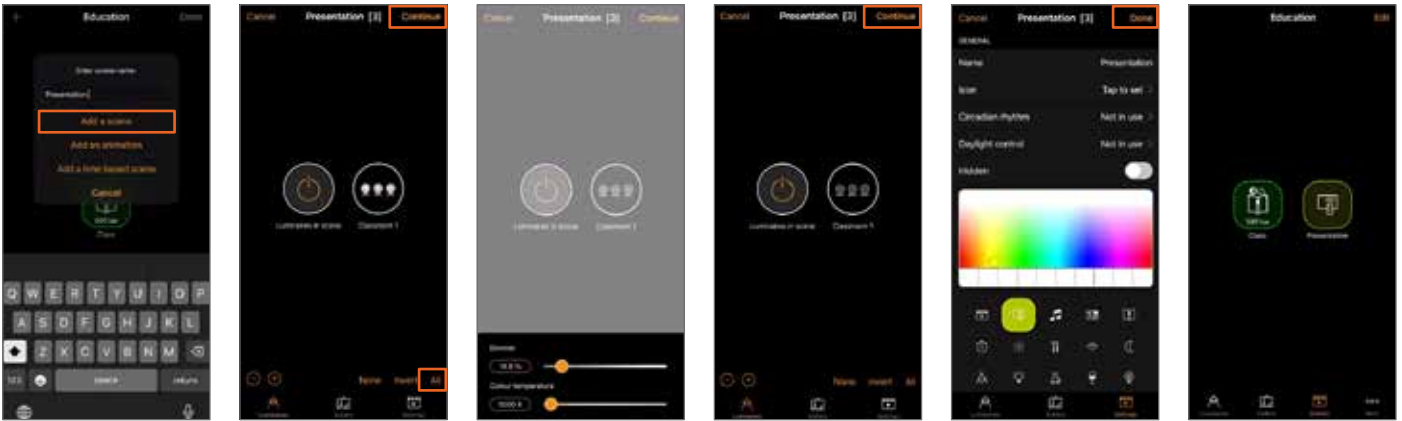
- Button 1** - Control **Presentation** scene.
- Button 2** - Resume automation for a group (Classroom 1).

STEP 1: SCENE

Casambi App → Scene



After creating **Class** scene, generate the **Presentation** scene:



Push and hold the group to open the screen configuration, where you can set the dim level and color temperature.

STEP 2: SENSOR Casambi App → More → Sensor

3 Select **Class** scene that will be triggered by the sensor when presence is detected.

The scene will be faded out after 5 minutes passed without detecting presence.

The fade off action will take 5 seconds.

Activating this function, the lights will automatically switch off when there is no movement, even if the **Presentation** scene is still active from the switch.

4 **Sensitivity** defines how quickly the sensor will react to changes in illumination. The default setting at 80% is ideal for testing; for regular use, lower the sensitivity.

Tolerance defines how large the changes in measured lux value need to be before the sensor will react. The default tolerance is 5%. For standard use, opt for a higher tolerance to accommodate more significant lux variations.

When measuring 500lx on a surface below the sensor, the lux level recorded at the sensor (450lx) should be set as the **Desired illuminance** in Daylight control scene configuration. Consequently, the "target lux" will not be the same as the "desired lux" in this case.

STEP 3: PERFORMANCE Casambi App → More → Network Setup → Performance & Security

Min sensor reporting time defines how often lux sensors report values to the network. Choosing a higher interval reduces network traffic, especially in networks with many sensors.

STEP 4: SWITCHES Casambi App → More → Switches

Button 1: It activates the **Presentation** scene only and it will not be possible to dim (**Dimming disabled**).

Button 2: When pushed, it takes the lighting back to the presence controlled scene. Resume automation for a group considering the classroom is part of a larger network.

Disabling **Use Toggle** means that pushing a switch will only activate the selected function, not deactivate.