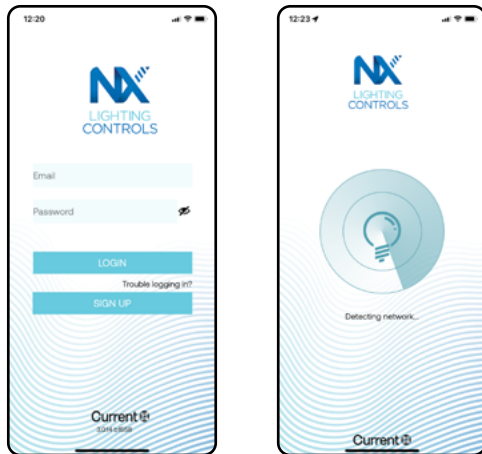




**NX Connect** wireless lighting controls solution provides zonal controls, allowing a group of wireless devices to communicate with each other directly, without the need for a separate hub, gateway or cloud operating system. NX Connect app can commission fixture embedded sensors NXC-WIZ20 & NXC-WHS20, battery powered ceiling sensors WOS3-PC, NXC-WA200 Series room controllers, NXC-WWD2-2 wall switch dimmer and NXC-WWD2-4 scene controllers connecting them as part of a room-based lighting control system. The system is commissioned into stand alone rooms, with one, two or three zones. The control parameters are set via the NX Connect app that can be downloaded on the Apple® App Store.



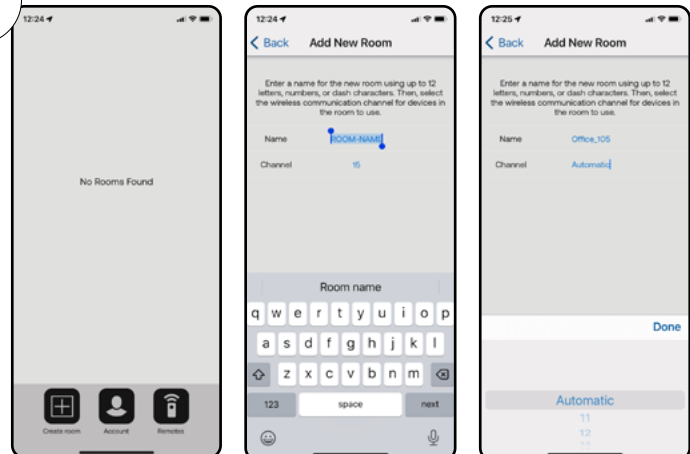
1



### Open Application

The first time when opening the application, the app will prompt to create a username and password. The username shall be a valid email address.

2



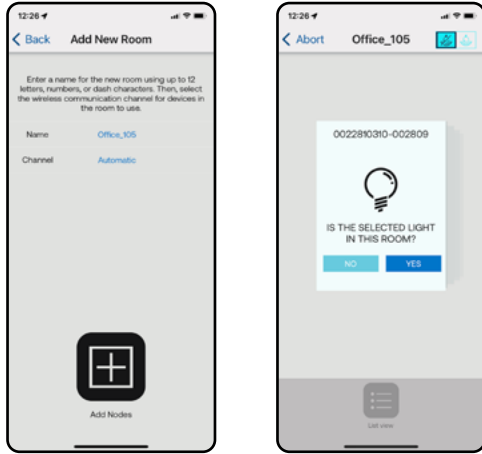
### Adding a New Room (network)

A room is a grouping of wireless devices that act together according to parameters that are set.

Select “Automatic” to allow NX Connect system to select the best wireless channel (recommended).

Different Rooms can be on same channel.

3



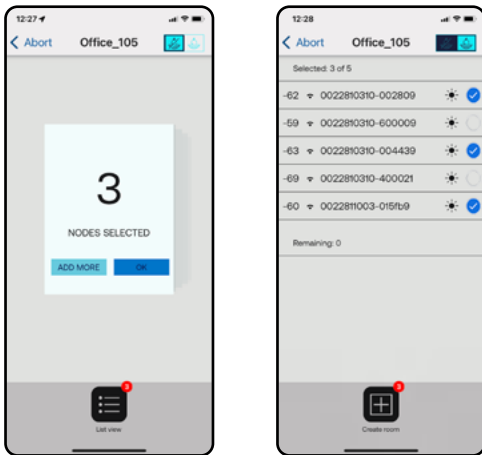
### Add Nodes to the Room

The NX Connect app will identify the nodes via Bluetooth (NXC-WIZ20 & NXC-WHS20 fixture embedded sensors or NXC-WA200s room controllers).

Once the node is identified, it will blink the fixture—in case of a fixture embedded sensor—or all fixtures connected to each zone for room controllers. If the nodes shall be assigned to the room, select YES else select NO. Repeat the process for all devices that belong to the same zone. It is recommended to start with 2,3-zones room controller but it is not a requirement.

Maximum 50 devices per room, including the battery operated devices.

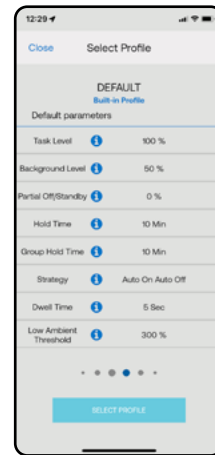
4



### Zone Commissioning

Once all devices that belong to this zone are selected, click **List View** and **Create Room**.

5



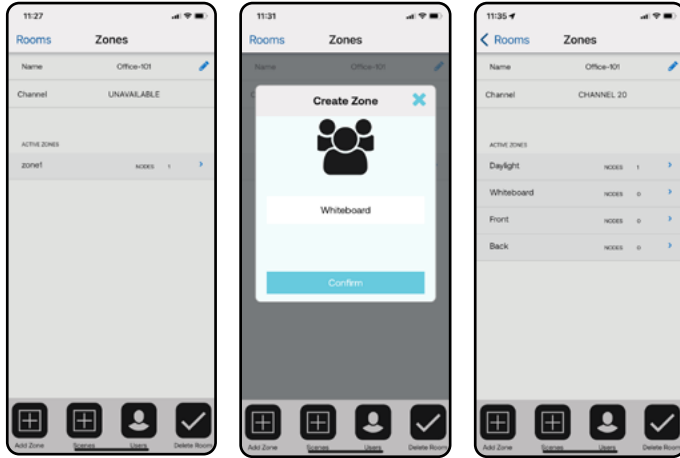
### Room Profile

The Create Room option will open the **Select Profile** screen. Slide to select from one of the five Default Profiles or up to four Custom Profiles then click Save.

For rooms with multiple zones, each zone can have its own profile.

If a desired profile is not in the list, select the closer one, update as needed and Save as **New Profile**.

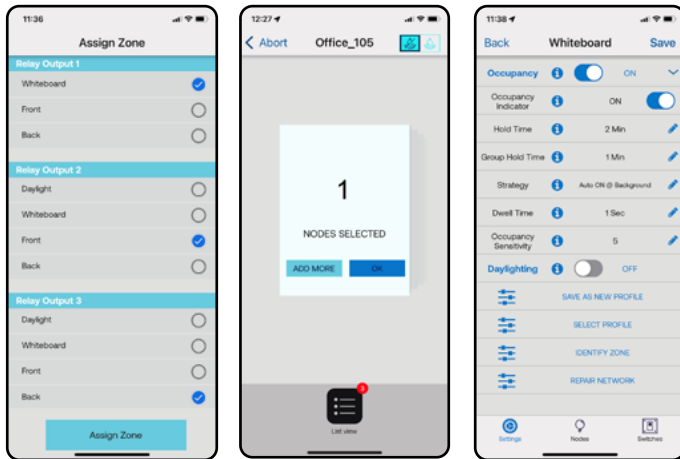
6



**Adding Zones to a Room**

To create new zones, re-enter the room and select **Add Zone** option in the Menu bar. In the new dialog box enter the name of the zone and Save. Repeat the process to create all zones as required. A room can have up to six zones.

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**Adding Devices to a New Zone**

Enter the room and select the zone the new device is part of. Under Nodes menu select Join More Lighting Devices. For room controllers with 2 or 3 zones, once the device is selected, it will open the **Assign Zone** screen allowing to select the zone controlled by each relay. Re-enter the room and save the profile for each zone as needed.

**System Settings and Definitions**

**Task Level (high end trim)** – Light level for the luminaires where occupancy is detected directly by the fixture embedded sensors.

**Background Level** - Light level for the luminaires whose sensors do not detect motion but are notified that at least one sensor in the room is detecting motion.

**Stand-by Level** – Light level when there is no motion in the room and all timers expired

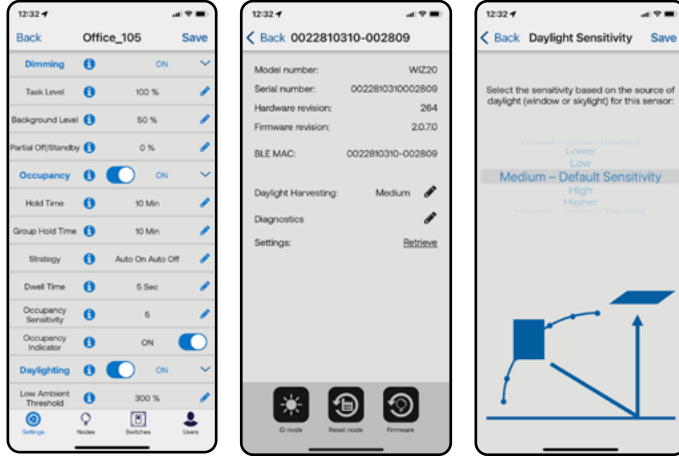
**Dwell Time** – Upon detecting motion by at least one sensor in the room, all fixtures will turn ON at Background level. The sensors that continue to detect motion past dwell time will activate the Task level for those fixtures.

**Hold Time** – Light level will remain at Task level if no motion is detected anymore until the Hold Time expires, then they will transit to Background level. Any motion detected will reset the Hold Time.

**Group Hold Time** – Light level remains at Background level once the room is completely vacated until the Group Hold time expires.

**Strategy** – Auto ON/Auto OFF; Manual ON/Auto OFF; Auto ON @ Background level (i.e. 50%)

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### Enabling the Daylight Harvesting

**Low Ambient Threshold** – The light level above which the daylight harvesting dimming will start, given as a percentage of the fixture’s own light output. As multiple luminaires are contributing to the total output, this number shall be above 200% (default 250%).

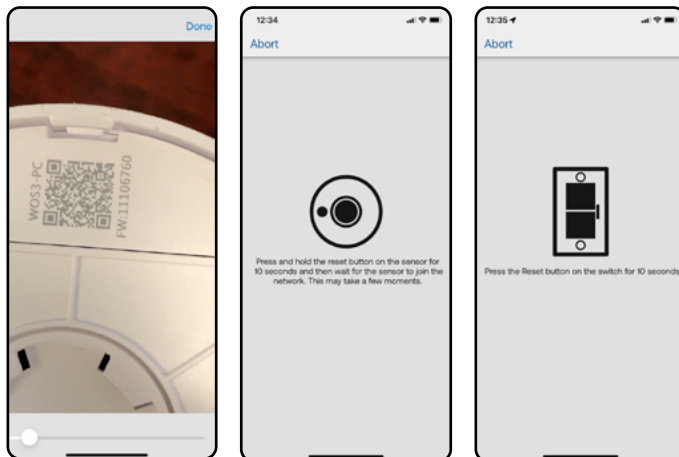
**High Ambient Output** – Indicates whether the light should be turned off or remain on at its min dim output when the high ambient threshold is exceeded (default ON).

Beside the room settings, for the fixture embedded sensors, under device menu, can fine-tune the daylight sensitivity based on sensor position relative to the windows/skylight.

**Note:**

*When commissioning battery operated sensors, the app will prompt to select one sensor for daylight reference.*

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### Adding 2-Button Battery-Operated Switches and Battery-Operated Sensors

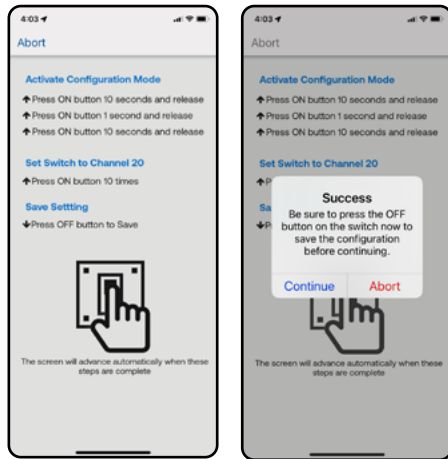
Select the zone to be controlled by the switch and under Nodes menu select Join a Battery Sensor or under Switch menu select Add New Switch. Switches/Sensors can be associated with the selected zone or can be assigned to the entire room.

Adding battery operated devices—switches & sensors—requires scanning the QR code on the device and depress the Reset button for 10 seconds.

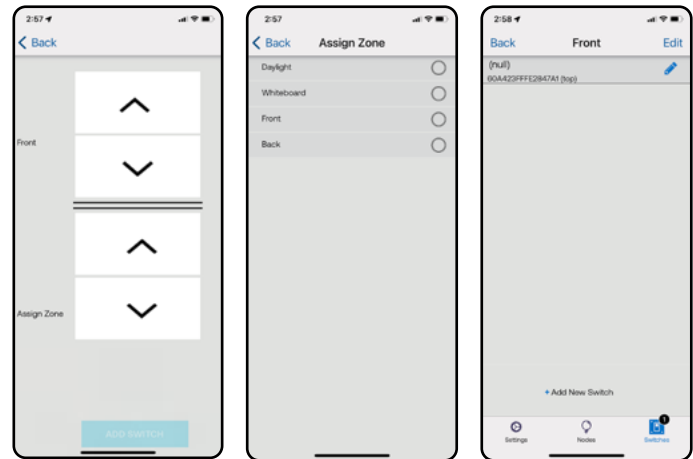
The app will indicate where the reset button is located on each device type.

Switches can be assigned to multiple zones.

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### Adding Self-Powered Switches (ZBT-S1AWH & ZBT-S2AWH)

Select the zone to be controlled by the switch and under Switch menu select Add New Switch.

Scan the QR code and the app will prompt to depress the switch button into a specific sequence to configure the switch on room's channel.

Once the channel selection succeeds, the app will confirm the Success and press the Off button to complete the setup.

### Four-Button Switch as Two-Zone Personality

Select one of the zones the switch needs to control and under Switch menu select Add New Switch.

When the QR code is scanned, the app will prompt to select each zones are to be controlled by the switch.

Tap top arrow for first zone—this will bring up the zone selection screen, then repeat for the lower arrow to select the second zone. The zone names appear on the left side.

Select Add Switch. The app will prompt to reset the switch while pressing second button to update the switch personality.

Tap the pencil to update switch name.

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### Four-Button Switch - Scene Controller

From the room main menu select add Scene.

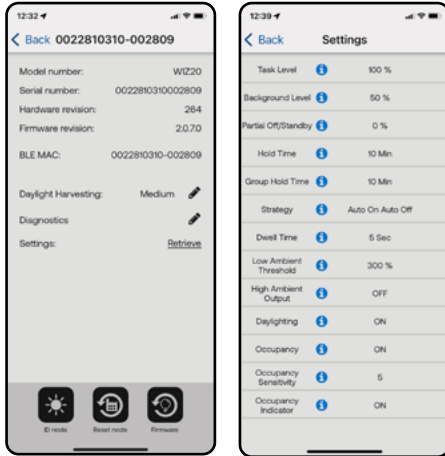
When the QR code is scanned, the app will prompt to reset the switch while holding button 4 depressed to update the personality to Scene Switch (by default the 4-button switches are configured as Scene type).

Once the switch is commissioned the app will bring up the scene selection screen.

For each scene can select the zones and the output level as well as the Fade rate in seconds.

Four scenes are available per room.

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### Device Menu – for Bluetooth devices

**Retrieve device configuration** – Displays the device information: dimming levels, occupancy timers, sensor sensitivity and daylight settings: Low Ambient Threshold and High Ambient Output.

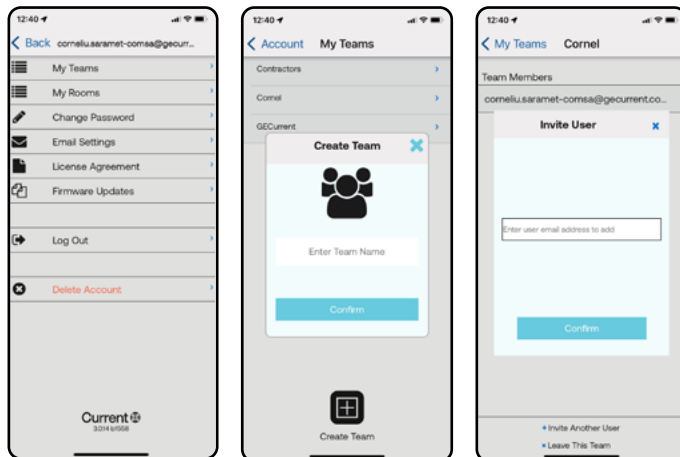
**Daylight Calibration** – for fine-tuning the daylight sensitivity for individual sensor.

**Firmware Upgrade** – allows to upgrade the individual device.

**Reset Device** – removes the device from the room (network) allowing to assign it to a different room.

Each device has a unique IEEE address which is displayed in the app.

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### Account menu

**My Teams** – Allows to create teams with members that would require access to rooms. Each room can be shared with different teams or individuals. If a person has no access to the room, the room will appear as “locked” in the app.

As the room permissions are stored into cloud, the system commissioning requires internet access.

**My Rooms** – Displays the rooms with access. This option allows to remotely add users to the room.

**Firmware Update** – Allows to upgrade devices prior to commission them into rooms. This option allows to upgrade up to three devices in parallel.

**Luminaire Level Lighting Controls** – If a fixture embedded sensor NXC-WIZ20 or NXC-WHS20 cannot communicate with the other sensors in the room, it will continue to operate based on its occupancy, daylight and dimming settings (task, background & standby). The background mode will become a two-step dimming as the sensor will not know the status of the other sensors in the room.

**Summary and Descriptions of Operating Parameters:**

Name	Description	Minimum Value	Maximum Value	Default Profile Value
<b>Dimming</b>				
<b>Task Level</b>	The output power level in Task state – in percentage of the full power.	0%	100%	100%
<b>Background Level</b>	The output power level in Background state – in percentage of the full power.	0%	100%	50%
<b>Partial Off/Stand-by</b>	The output power level in Standby state – in percentage of the full power.	0%	100%	0%
<b>Occupancy</b>				
<b>Hold Time</b>	The time (measured in minutes) that occupancy must NOT be detected for a fixture to transition from Task state back to Background state.	0 min	60 min	10 min
<b>Group Hold Time</b>	The time (measured in minutes) that any fixture in a room or zone of fixtures must NOT detect occupancy for the entire of fixtures to transition from Background state to Standby state.	0 min	60 min	10 min
<b>Strategy</b>	This parameter switches between Occupancy and Vacancy modes	Auto ON/OFF	Man On/Auto OFF	Auto ON/OFF
<b>Dwell Time</b>	The time (measured in sec) that occupancy must be detected for a fixture to transition from Background state to Task state.	0 sec	300 sec	5 sec
<b>Occupancy Sensitivity</b>	The sensitivity of the motion sensor.	1	5	5
<b>Occupancy Indicator</b>	This parameter switches between Indicator OFF Indicator ON mode.	OFF	ON	ON
<b>Daylight Harvesting</b>				
<b>Low Ambient Threshold</b>	The light level above which the daylight harvesting dimming will start, given as a percentage of the fixture's own light output.	10%	800%	250%
<b>High Ambient Output</b>	Indicates whether the light should be turned off or remain on at its min dim output when the high ambient threshold is exceeded.	OFF	ON	OFF