

Light360 Setup

User Manual Version 1.4.6

Contents

1	Access methods	3
1.1	Unregistred user	3
1.2	Registred user	3
1.3	Forgot password	3
2	General Settings	4
2.1	Settings	4
2.2	Global Template	4
2.3	User profile	4
3	Projects	5
3.1	xRF 868	6
3.1.1	xRF 868 - RFxGATE	7
3.1.2	xRF 868 - RFxULC	9
3.2	xZigbee	10
3.3	Gateway	11
3.4	Functionality	12
3.4.1	Network	12
3.4.2	Groups	13
3.4.3	Scene	20
3.4.4	Macros	21
3.4.5	Keypads	22

1 Access methods

1.1 Unregistred user

On login page (fig. "Access") click on "SIGN IN", then enter the data and press "REGISTER" button. You will receive a confirmation email (fig. "Confirmation email") on address inserted during registration phase; click on "CHECK NOW" in order to confirm your email address. Restart the app and enter in as a "Registered User".

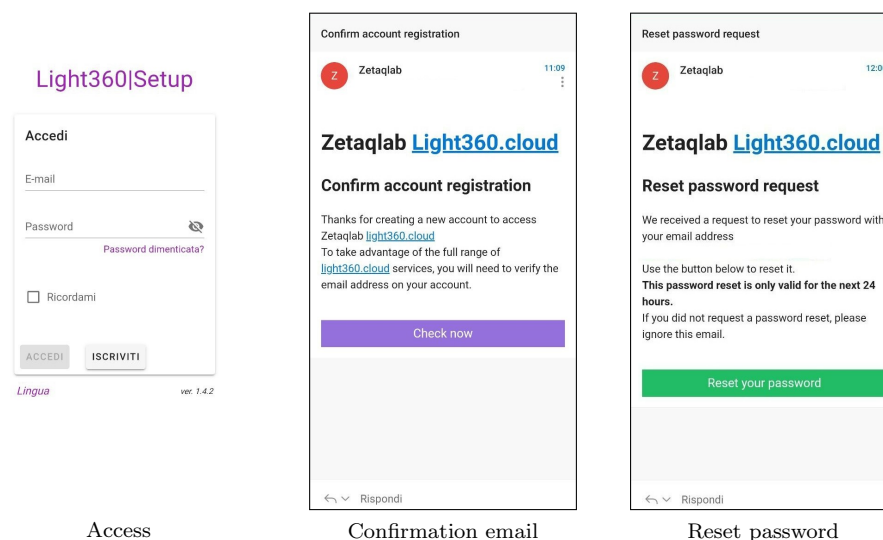
1.2 Registred user

In login page (fig. "Access") put credentials and click on "LOGIN" button. Checking the "Remember me" box, you can store your login credentials.

1.3 Forgot password

If you forget password to enter in your account, you must necessarily reset it by clicking on "Forgot password?". Enter the email associated to your account and then click on "RECOVER" to proceed with the reset of your password.

You will receive an email to create the new password (fig. "Email reset password"); pressing "Reset password" button you will be directed to a page where you can set the new password. Open again the app and enter in as a "Registered User".



2 General Settings

After logged in you will be inside the main page where you can find your (fig. "Projects").

Clicking on the icon at the top left of the page, "Menu" window will open (fig. "Menu").

"Disconnect" is used to exit from the profile with which you are connected, it takes you back to the login page (fig. "Login").

2.1 Settings

- **Themes:** You can select a color as you like among colors present
- **Language:** You can select a language between English and Italian
- **About ...:** You will find this manual, our company's email address and website to contact us

2.2 Global Template

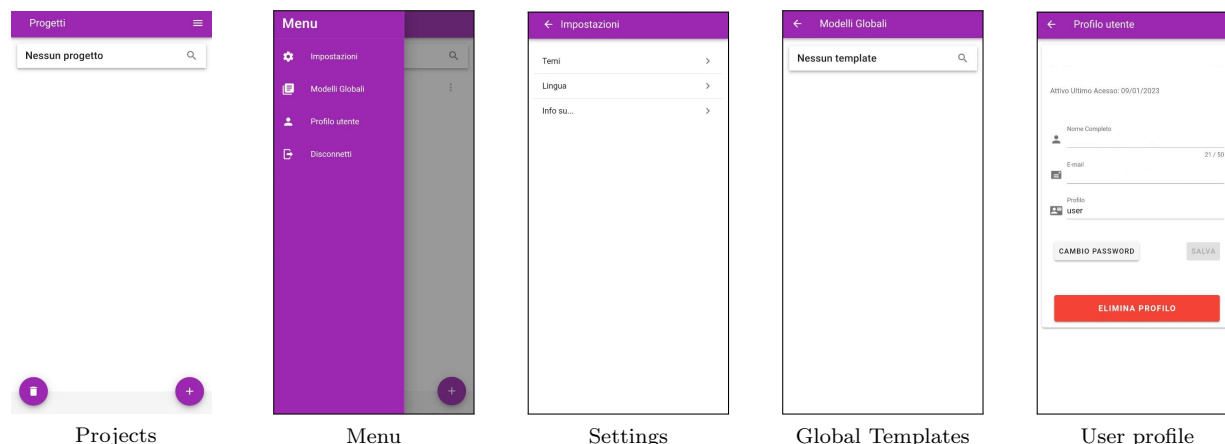
You will visualize a page (fig. "Global Templates") where you will find all templates exported from your projects which you can reuse by importing them into the project templates section.

2.3 User profile

You will find general information about profile currently in use (fig. "User profile").

Changes can be made and confirmed by pressing "SAVE" button; "user" field cannot be changed and its indicates the type of user profile, which can be "user" or "administrator".

If necessary, it's possible to change password clicking on "CHANGE PASSWORD".



3 Projects

Inside the main page (fig. "Projects") you will find all folders and projects created with projects shared by other users. To add a new folder or project, click on "+" button at the bottom right of the page (fig. "Add").

Clicking on "Project" you can select the category based on the type of devices that you want to control:

- xRF 868
- xZigbee
- Custom (if provided)

Clicking on the project settings icon it's possible to modify, mark the project as favorite, move it inside a folder, export it as a JSON file, or trash it. (fig. "Settings Folder o Project")

Clicking on the folder settings icon it's possible to modify or delete it.

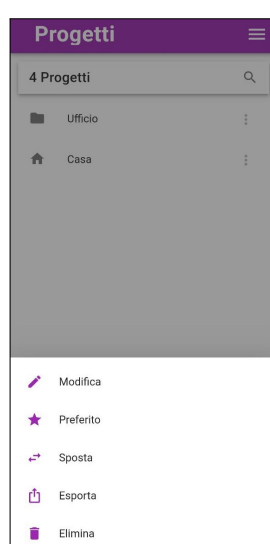
Clicking on the "basket" button at the bottom left of the page you can see deleted projects in order to recover them or to remove them permanently. (fig. "Remove Folder o Project")



Add



Add Project



Settings Folder o Project



Remove Folder o Project

3.1 xRF 868

Creating a project of this type, the relating page to that project will open (fig. "Project xRF 868").
To connect and control lights operating on 868MHz frequency there are two ways:

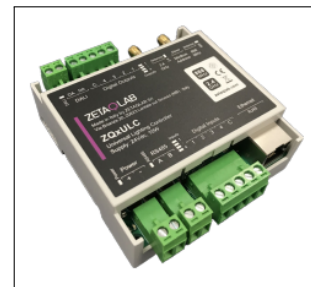
- **RFxGATE** (fig."RFxGATE")
- **ZQxULC** (fig."ZQxULC")



Project xRF 868



RFxGATE



ZQxULC

3.1.1 xRF 868 - RFxGATE

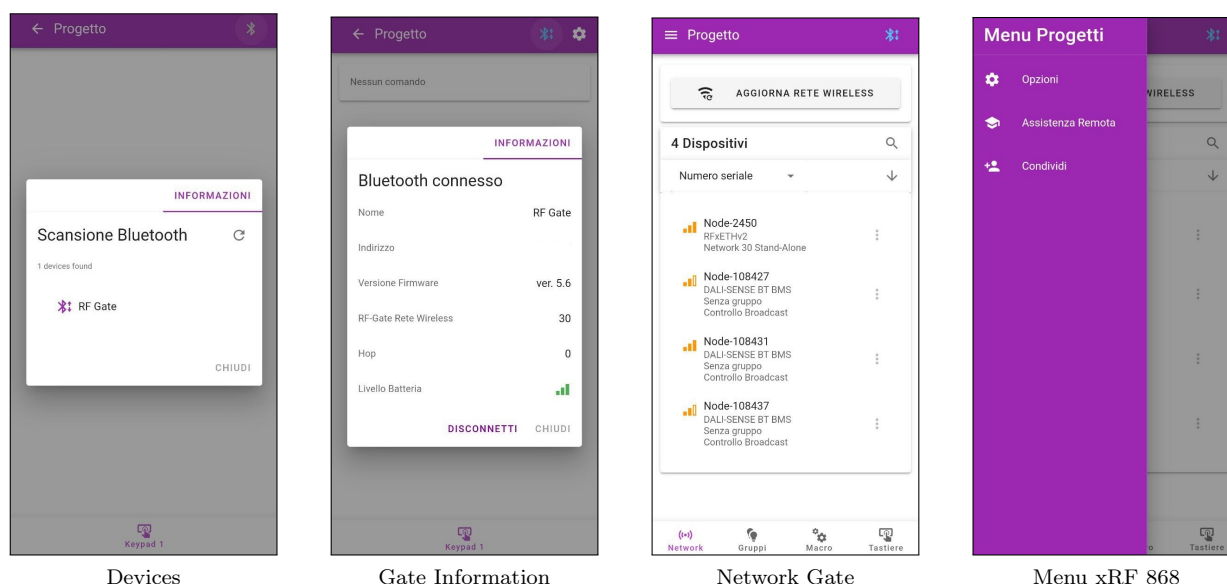
Turn on the Gate pressing the power button, a blue LED will light up to warn the correct start-up of the device, if this doesn't happen, check the battery.

Go back to application and check the communication status with the gate indicated by the color of the bluetooth icon at the top right of the page (fig. "Project xRF 868").

If the icon color is red, press the icon to access the bluetooth scanning section (fig. "Devices").

Scan and select the RF Gate device which will appear on the display in few seconds (fig. "Devices").

As soon as the smartphone and Gate are connected, it will be possible to see the information of the latter (fig. "Gate Information") pressing the bluetooth icon that will be blue.



Devices

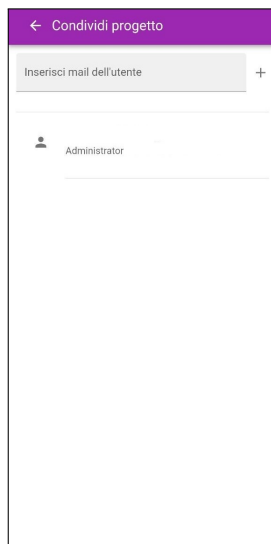
Gate Information

Network Gate

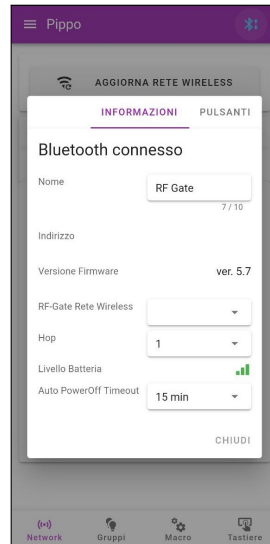
Menu xRF 868

To set the device press settings button. At the top left of the page that appears (fig. "Network Gate") you can open the "Menu" (fig. "Menu xRF 868") within which you can find the following items:

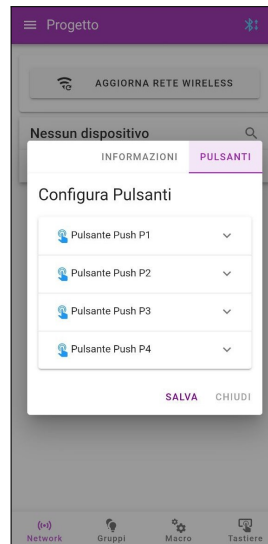
- **"Options"**: Select this item to set project options.
- **"Share"**: Selecting this item, page dedicated to sharing the current project will open (fig. "Share Project") in which it's possible to add a new user or project administrator by entering the email of Light360 account. If new user has been added correctly, it will appear on the screen (fig. "Share Project"); you can also remove a user if you are a project administrator by clicking on the "-" sign next to the user that you want to delete.
- **"Remote assistance"**: Select this item to go to the request page for remote assistance from our operators; click on "CONNECT" to connect to the cloud.



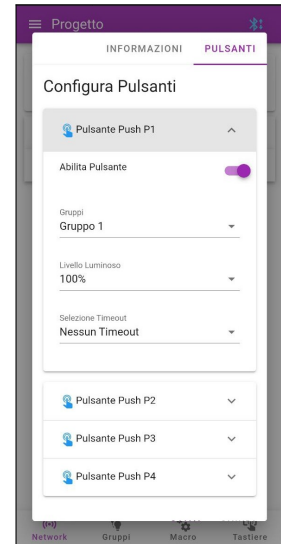
Share project



Bluetooth information



Bluetooth buttons



Button

Pressing the bluetooth icon (fig. "Network"), it's possible to check and modify information relating to the Gate (fig. "Bluetooth information") and configure each button on the Gate in "Buttons" section (fig. "Bluetooth buttons", "Button").

3.1.2 xRF 868 - RFxULC

After powering up the device, go back to application and check the communication status with the ULC device indicated by the color of the bluetooth icon (fig. "Project xRF 868").

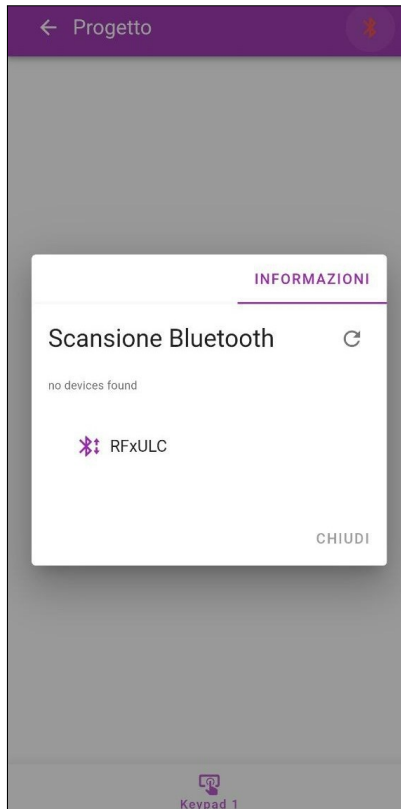
If the icon is red, press it to access to the bluetooth scanning section (fig. "Devices").

Scan and select the ULC device that will appear on the display in few seconds (fig. "Devices").

As soon as the smartphone and ULC are connected, it will be possible to see the information of the latter by pressing bluetooth icon, which will be blue.

To set the device press settings button. At the top left of the page that appears (fig. "Network") it's possible to open the "Menu" (fig. "Project menu").

Pressing bluetooth icon (fig. "Network RFxULC"), it's possible to check and modify information relating to ULC (fig. "ULC Information") and configure each Input/Output on the ULC respectively inside section "INPUTS" / "OUTPUTS".



Devices



RFxULC Network



ULC Information

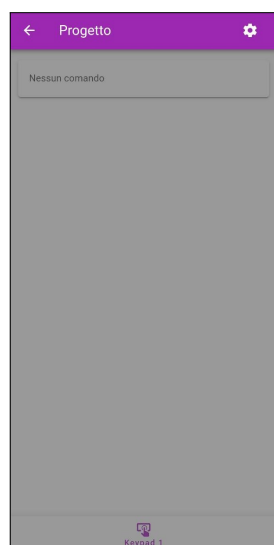
3.2 xZigbee

Creating a project of this type, page relating to that project will open (fig. "ZigBee Project").

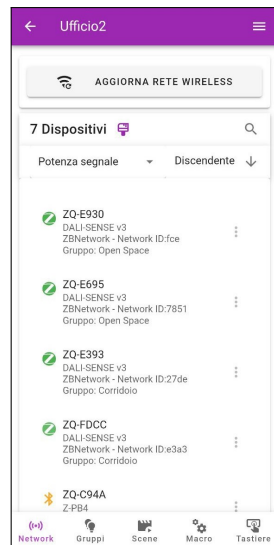
The creator and administrators will be able to access to the project settings by clicking on the gear icon in the upper right corner.

At the top left of the page that appears (fig. "Network ZigBee") you can open the "Menu" (fig. "ZigBee Menu") in which you will find the following items:

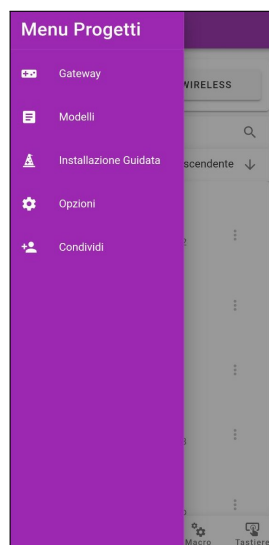
- **"Gateway"**: Select this item to manage all ZigBee Gateways present inside the project.
- **"Templates"**: Select this item to manage templates for configuring the working mode of a group. In addition to creating and modifying a template, it's possible to import or export it from those present inside "Global Models".
- **"Wizard Installation"**: Selecting this item will open a page where clicking on the "Scan and Associate" button will launch a bluetooth scan and will associate all devices without a network. You can also upload a predefined CSV file with a configuration inside that will be loaded into the project.
- **"Options"**: Selecting this item it's possible to set desired options.
- **"Share"**: Selecting this item will open the page dedicated to sharing the current project in which it's possible to add a new user or a project administrator entering the email of his Light360 account. If the new user has been added correctly, it will appear on the screen; you can also remove a user if you are a project administrator clicking on the "-" sign next to the user that you want to delete.



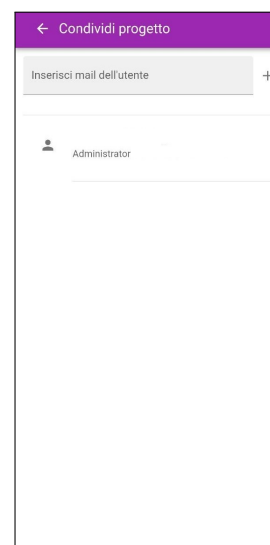
ZigBee project



ZigBee Newtwork



ZigBee Menu



Share project

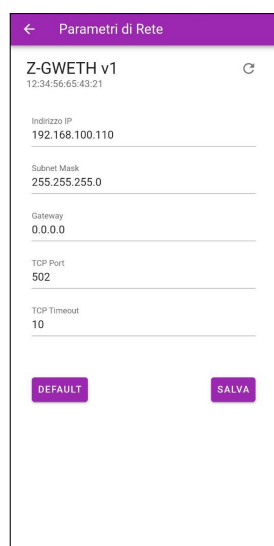
3.3 Gateway

Inside this page, as the "Network" section (fig. "Network ZigBee"), after scanning the network, you will find all ZigBee Gateways (Z-GWETH) if present.

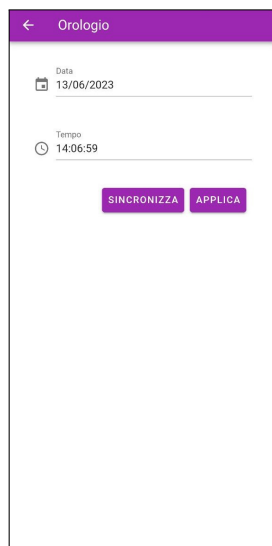
Going to Gateway settings (only for "Z-GWETH v1" and if the chip version allows it) and clicking on "Network Parameters" it is possible to read values and network addresses of the device and change them by clicking on "Save". Pressing the "Default" button instead, all network parameters will return to their "factory" (default) values and the Gateway will be restarted (fig. "Network Parameters").

Clicking on devices will open the properties window in which it's possible to:

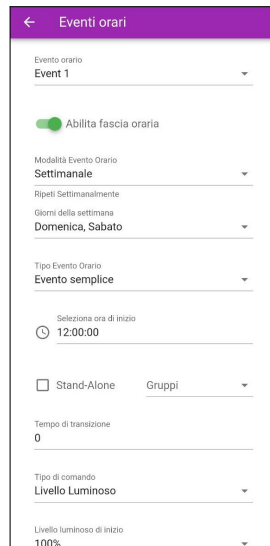
- Synchronize or set the device clock;
- Configure up to 3 Time Events;
- Set the light parameters of temperature and level of the Circadian Cycle (HCL: human centric lighting);
- Access the "Network information" section of the device (only for ZigBee devices);
- Read and write to device registers by enabling the "Debug" function (found within the project options).



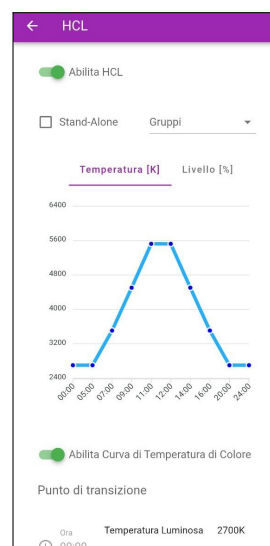
Network Parameters



Clock



Time Events



HCL

3.4 Functionality

3.4.1 Network

Inside this section (fig. "Network Gate", "Network RFxULC", "Network ZigBee") you will find all devices present in the network and, using the bar at the top of the page, you can scan the net for search new ones.

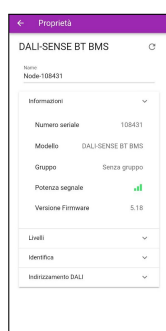
Clicking on the brush icon it's possible to remove all devices that are not associated with the network from the list. Going to device settings, you can identify it within the network (it will start to blink) using "identify", calibrate it (if the device has sensors), see its properties and delete it.

Clicking on devices you can:

- Update the firmware by clicking on the arrow icon next to the current version number;
- Check the status and the configuration of "Inputs" and "Outputs" (for "RFxETHv2", "Z-PB4" and "Z-PB2RL2");
- See the current light and motion levels clicking on "Levels" (for "DALI-SENSE and Z-SENSOR");
- Identify them inside the network (they will start to blink) with "Identify" (except for "RFxETHv2");
- Address or group drivers by clicking on "DALI Addressing" or "DALI Groups" (for "DALI-SENSE and Z-SENSOR", "RFxLT" and "Z-Node");
- Run the "Emergency" tests (only for "Z-Node");
- Set maximum and minimum dimming levels of the device using "Source Dynamic Offset" button (only for "Z-Node");
- See date, time and geographical coordinates in the "GPS information" section (only for "Z-NB18-M");



RFxETHv2,
Z-PB4 e Z-
PB2RL2



DALI-SENSE
BT BMS



RFxLT



Z-Node



DALI-SENSE
v3 and Z-
SENSOR



Z-NB18-M

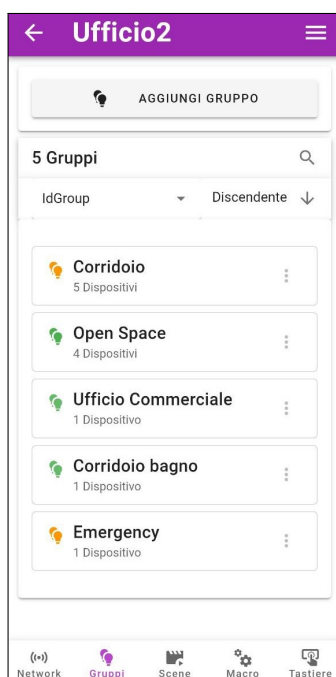
3.4.2 Groups

Inside this section (fig. “Group”) it’s possible to add (or delete) a group using the bar at the top of the page, modify its information and insert lamps inside it (fig. “Group properties”).

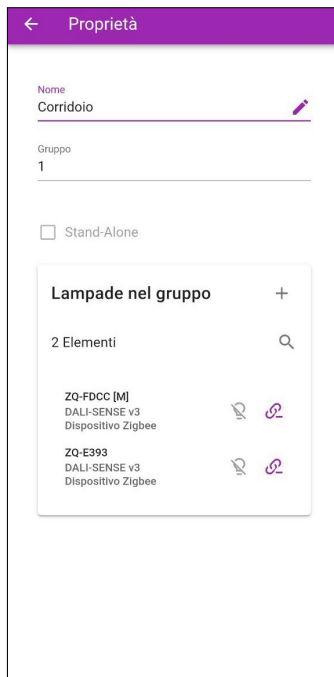
Before adding devices it’s possible to tick the ”Stand-Alone” box; in this way in the group it will be possible to insert (only) sensors that will act independently but with the same working parameters.

Going to settings of a group (fig. ”Group settings”) it’s possible to perform following actions:

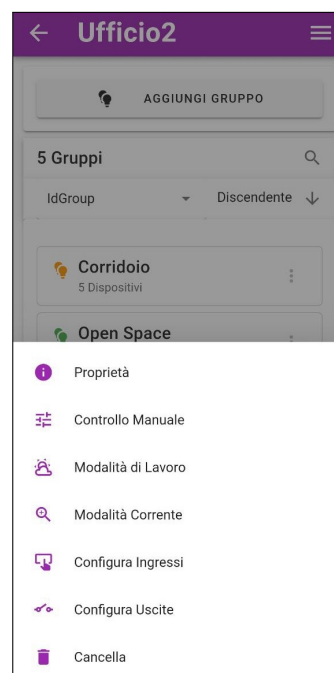
- Check group properties;
- Control and set manually the light level of group;
- Open the group working mode;
- Check the current mode of the group;
- Check the status and configure inputs of the group;
- Check the status and configure outputs of the group;
- Delete the group.



Group



Group properties



Group settings

Working Mode

If there is at least one sensor within the group, it is possible to configure the working mode of all the devices present.

In the selection bar at the top it's possible to select a "master" sensor among all those present (it will be indicated with the symbol [M] inside the group); if the master is modified all the parameters of its configuration will be reloaded in the page.

Working Mode - Sensors

The present graph indicates the current working mode of the group.

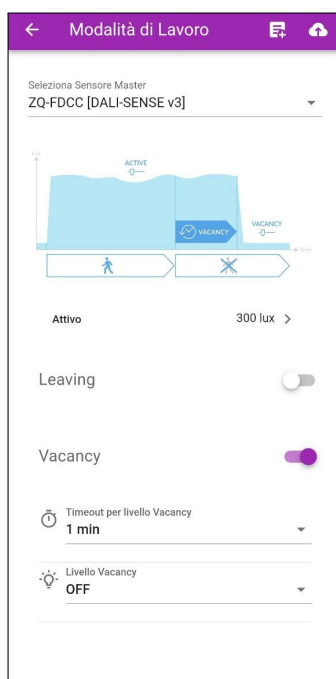
By enabling the "Leaving" and "Vacancy" sections, it's possible to select times and light levels if the device is equipped with a movement sensor (PIR).

Next to the "Active" item, the active level of the sensor is shown (in percentage or in lux). Clicking on it will open a new window where you can edit it.

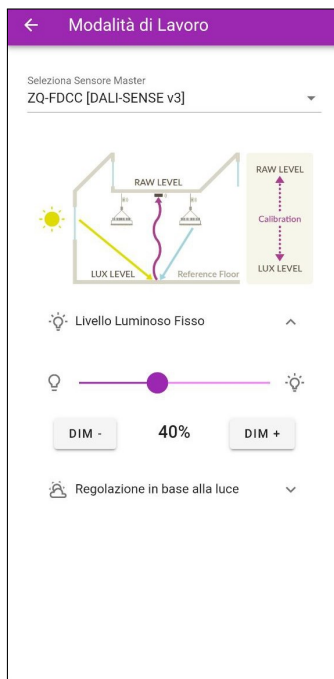
The new graph depicts the way the light sensor works.

Opening the "Fixed Light Level" panel, the group will keep the level in percentage obtained scrolling the horizontal bar when working inside the "Active" phase.

If you expand "Regulation according to daylight" instead, the group will start to adjust its light level based on the contribution of external light. The combination of natural and artificial light contribution allow the group to adjust their lighting level until reaching the value entered within the "Reference Lux Level".



Working Mode



Fixed Light Level



Regulation according to daylight

To ensure that this adjustment takes place correctly, it is **MANDATORY** to calibrate the "master" sensor with a Luxmeter by clicking on "Calibration with Luxmeter".

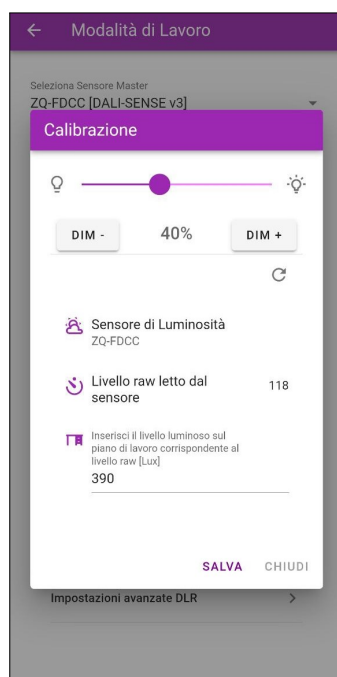
A dialog will open in which the device being calibrated (master) is indicated together with the "raw" level read by its sensor ("Raw level"). To calibrate it is necessary place the Luxmeter on a surface free from obstacles exactly under the device, then by modifying the light level of the lamps by acting on the bar at the top, make sure that the desired value is shown on the surface on the Luxmeter display; at this point, enter that value in the appropriate space and press "SAVE".

ATTENTION: to calibrate devices in the best possible way it's necessary do it when the contribution of natural light is null or not very significant.

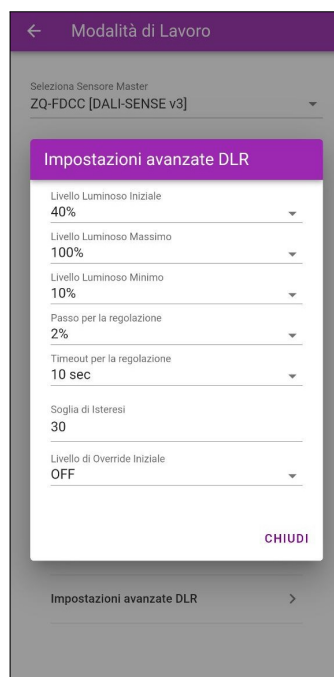
- **Starting Light Level:** Level from which the group will begin to regulate (following a switch-on).
- **Max/Min Light Level:** Maximum/minimum threshold level during the regulation phase.
- **Dimming Light Step:** Increasing/Decreasing step level following a reading outside the target.
- **Dimming Polling Time:** Sampling interval of lux read on the surface.
- **Hysteresis Threshold:** Lux threshold from the setted target within the group will not have to adjust its level.
- **Override Starting Level:** Difference in lux to be added to the target beyond which the group will not turn on.

When the configuration is complete, it is **NECESSARY** to click on the cloud-shaped icon at the top right to save the configuration in the master device and on any other "slave" sensors. If you want to save the current working mode in a model in order to be reused for other groups, click on the icon next to the cloud icon (you can view it in the "Models" section).

ATTENTION: if sensors are added/removed inside a group in which a working mode was previously configured, or alternatively the master sensor is changed, it is necessary to reload and save parameters again clicking on the cloud-shaped icon at the top right of the page (fig. "Work mode").



Calibration by Lux Meter



Advanced DLR Settings

Working Mode - Zhaga

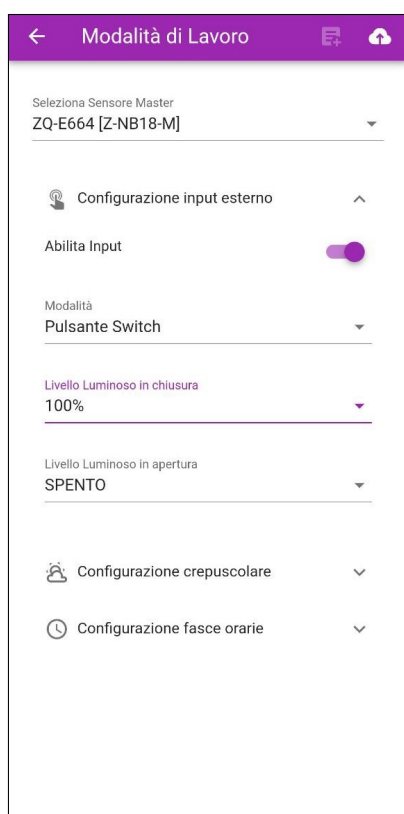
If one or more Zhaga nodes are present in a group, their parameters can be configured.

If the Standard version of the Zhaga node (Z-NB18-S) is present, it is only possible to configure its external input (fig. "External Input").

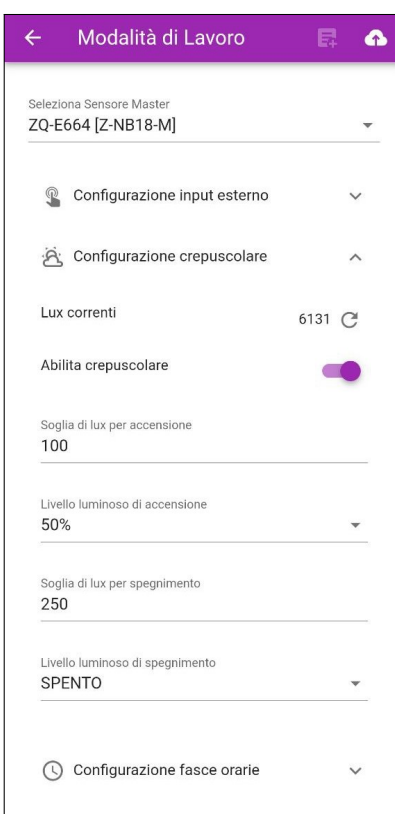
If, on the other hand, the Master version of the Zhaga node (Z-NB18-M) is present, that mounts GPS, RTC and sensors on board, it's possible to configure the crepuscular (fig. "Crepuscular") and events on time slots (fig. "Time Events").

Once all parameters have been configured, to save them in the "master" node and in all the other "slave" nodes of the group, click on the cloud-shaped icon at the top right and wait for the loading proceed successful by verifying that it is able to reach all devices correctly.

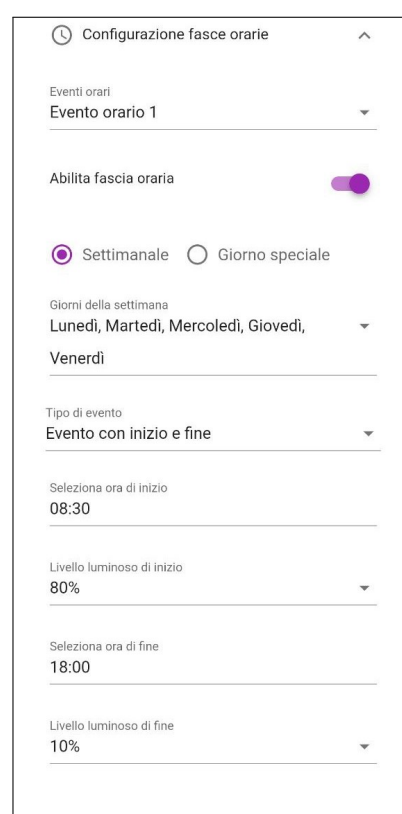
Unlike the working mode for sensors, it's not possible to save the configuration within a model and then reuse it inside other groups where there are Zhaga nodes.



External Input



Crepuscular



Time Events

Manual Control

The light level can be selected scrolling the vertical bar that will be sent to all the devices present inside the group.

Current Mode

Under the group name is reported the current configuration setted within the working mode. The main parameters are shown according to the type of configuration.

Clicking on the load icon at the top right of the page will load all the information again.

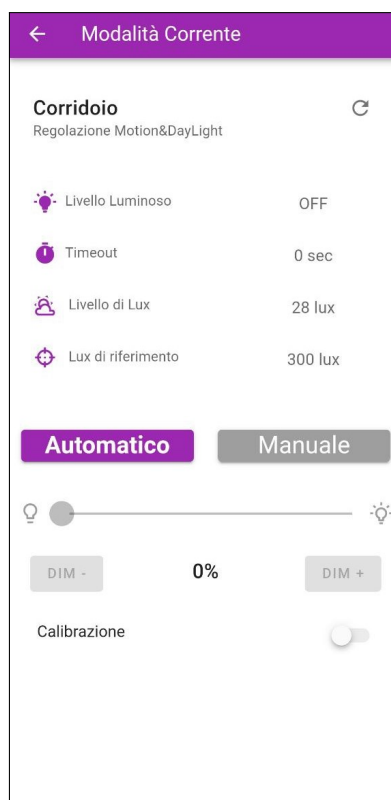
If there are devices equipped with sensors inside the group, using the "Automatic" and "Manual" buttons, it's possible to change the working mode temporarily.

In automatic mode the group will work exactly as configured inside the working mode.

In manual mode it's possible to control the light level of the group scrolling the horizontal bar. Enabling the "Calibration" it is possible to calibrate the master sensor of the group.



Manual Control



Current Mode

Inputs Setup

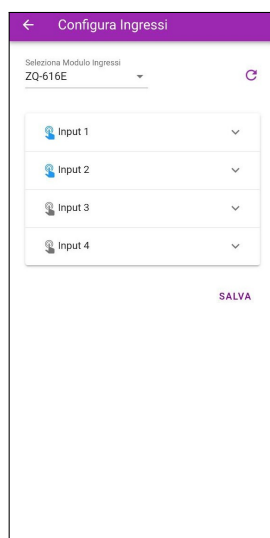
If one or more Z-PB4 or Z-PB2RL2 devices are present in the group, it is possible to configure each inputs in the same way as with outputs of the RFxULC device.

To activate and configure a specific button it's necessary to expand the panel of the interested input and enable it by clicking on the "Enable Input" switch next to it.

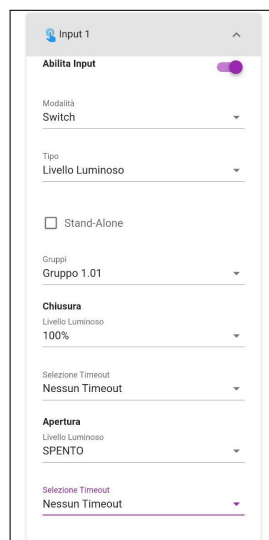
Parameters:

- **Mode:** Switch, Push, or Toggle;
- **Type:** Light Level, Scene or Virtual Push;
- **Stand-Alone:** Click only if you want to manage Stand-Alone groups, otherwise leave blank;
- **Groups:** Select one or more groups that you want to manage;
- **Closing/Opening:** Actions that you want to execute when you open/close the contact;
- **Light Level:** Automatic (only if at least one sensor is present in the group) or a percentage of level;
- **Select Timeout:** Time interval after which the group returns to working in automatic mode (with sensor);
- **Scene:** Recalls a scene stored within the groups (if setted);

ATTENTION: The "Virtual Push" type can only be used if at least one DALI-SENSE v3 device is present inside the group, otherwise it will have no effect. Its purpose is to invoke the functionality of the "Push Button" without it being physically connected.



Inputs Setup



Input

Outputs Setup

If one or more Z-PB2RL2 devices are present in the group, it is possible to configure each outputs in the same way as with push buttons of the RFxGATE device.

To activate and configure a specific output it's necessary to expand the panel of the interested output and enable it by clicking on the "Enable Output" switch next to it.

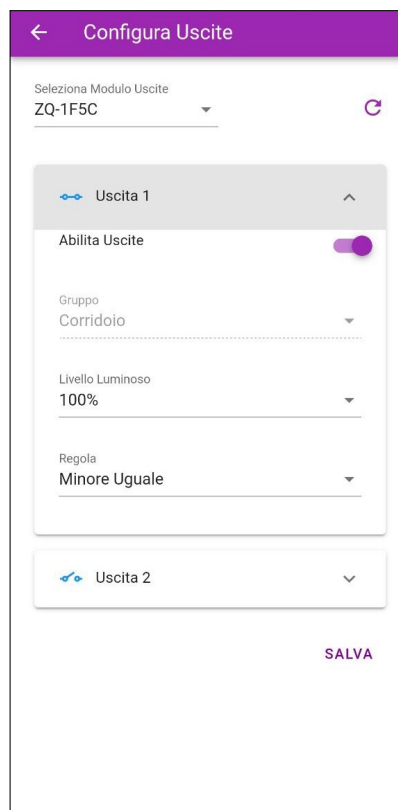
Parameters:

- **Group:** Select the group that you want to manage;
- **Light Level:** In percentage;
- **Rule:** You can choose to close the output when the level of the chosen group is "Greater" or "Less than" the selected one;

ATTENTION: The group relating to the first output refers to the group in which the device is located and can only be changed by moving the group of the latter.



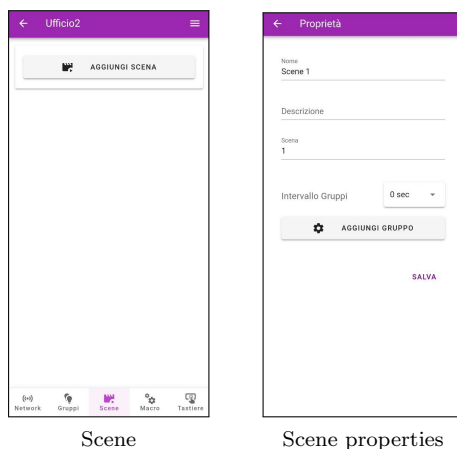
Outputs Setup



Output

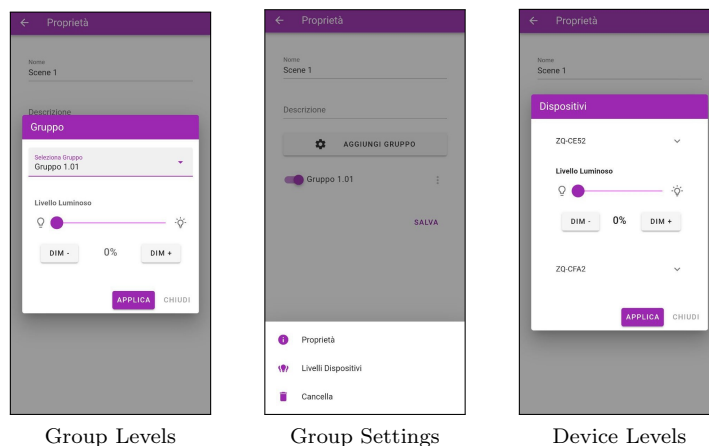
3.4.3 Scene

Inside this section (fig. “Scene”) it’s possible to add a scene using the bar at the top of the page, test, rename and delete it. By clicking on the ”ADD GROUPS” button, you can add groups in which the current scene will be stored (fig. ”Scene properties”).



Once the group has been selected, acting on horizontal bars, it is possible to change light levels and color temperature in real time; clicking on ”APPLY” button it’s possible to memorize these values in a scene (fig. “Group Levels”). Going on settings of a group you can: view properties of the scene, change levels of devices inside it or remove the scene (fig. ”Group Settings”).

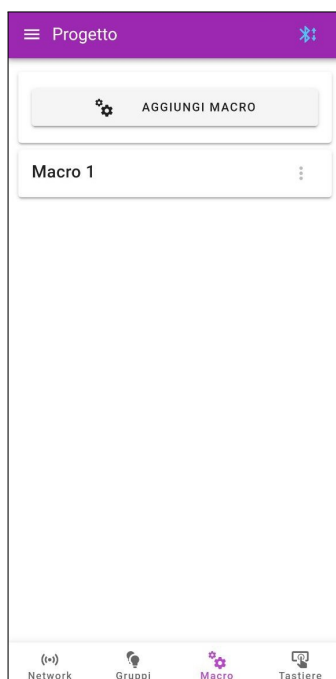
Clicking on ”Device Levels” will open a new window in which all devices of the group that support scenes will be present. Opening the detail of the single node, it’s possible to modify levels using horizontal bars and overwrite them in the current scene by pressing ”APPLY” button (fig. ”Device Levels”).



3.4.4 Macros

Inside this section (fig. “Macro”) it’s possible to add a macro using the bar at the top of the page, test, rename and delete it. New tasks can be added pressing ”ADD TASK” button (fig. ”Task”). With each task created you have the possibility to: check its properties, move or delete it (fig. “Task properties”). Tasks that can be performed through a macro are:

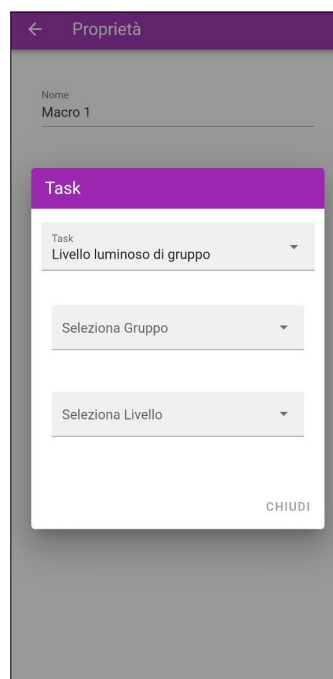
- Group light level: controls the light level of a single group;
- Manual Group Mode: sends the group to a manual light level for a certain time;
- Automatic Group Mode: send the group to automatic if configured;
- Node light level: controls the light level of a single node;
- Node Color: allows to choose the color of a single node;
- Scene: recall an existing ZigBee scene;
- Lamp light level: controls the light level of a single DALI driver.
- No operation: time interval in which no task will be performed.



Macro



Task



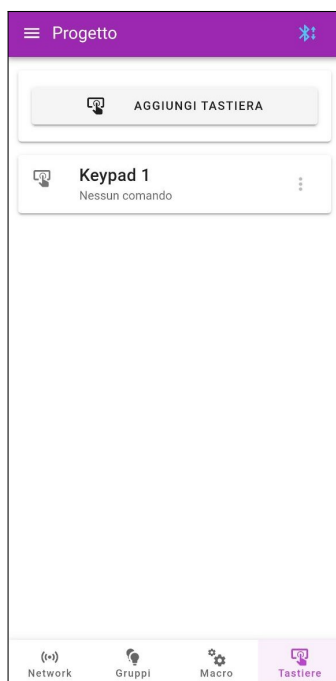
Task properties

3.4.5 Keypads

Inside this section (fig. “Keyboards”) it’s possible to add a keyboard using the bar at the top of the page, rename and delete it. You can add commands using the appropriate ”ADD COMMAND” bar (fig. ”Command”). Each command created can be modified, while accessing its settings it’s possible to move or delete it (fig. ”Command properties”).

Commands that can be executed with keyboards are:

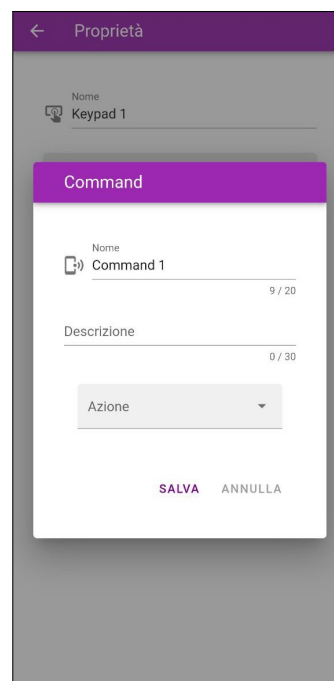
- Group command: send a light level to a single group;
- Dynamic group control: controls the light level of a single group using a slider;
- Dynamic color control: controls the color of a single group using a picker;
- Scene: recall an existing ZigBee scene.
- Macro: run an existing macro.
- Manual Sensor Command: sends the group to a manual light level for a certain time;
- Automatic Sensor Command: sends the group to automatic if configured;
- Brightness adjustment command: adjusts the levels of a single node or group;



Keypad



Command



Command prop